DEDICATION

I dedicate this dissertation to my father, Abdul Latif, my mother, Talat Noreen and my younger brother, Salman Latif.

Acknowledgements

In the name of **ALLAH,** who is most beneficent and merciful.

ALHAMDULILLAH

After a skype meeting with Wim and Frank, I was desperately waiting for their decision... Four days later I received an email from Rachel Moreau stating "Dear Bilal, I would like to congratulate you, you are accepted as a PhD student at Hasselt University under HEC Scholarship. Prof. Wim Voordeckers gave a positive advice. Congratulations and welcome to Hasselt University". So this journey started on 17 September 2014 and here I am today after four years of hard work. Words cannot express my feelings for these moments.

Indeed, a PhD is an emotionally difficult time for most of the students, especially for those coming abroad. However, if I summarize my experiences of the last four years in the PhD then I would love to say that these four years were filled with exploring and grasping the learning opportunities, academic freedom and transformation. All the credit of these splendid experiences goes to my promoter Prof. Dr. Wim Voordeckers. It would not be possible without his irreplaceable support and encouragement. I sincerely mean it when I say that I could not have imagined having a better promoter and mentor for my PhD. Wim, your guidance through this incredible journey was priceless. You gave me a lot of freedom in my research but at the same time your comments and directions always kept me on the right track. No matter how busy you were, you were always there for me when I needed guidance. Your door was open for my countless questions, even for the most sudden ones and you always provided me the best solutions for my concerns. Your attitude and commitment to work motivated me to work hard and to do my best to meet your expectations. Taken together, without your academic and non-academic support this PhD would not be what it is today.

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Bilal Latif

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1. Chapter - Introduction

How many hats one can wear?

1.1. Motivation and objectives of the dissertation

A controversial issue in the corporate governance debate is the phenomenon of multiple directorships and its impact on firm performance. Following the argument that multiple board seats may compromise the effectiveness of directors to perform their duties (Jiraporn, Singh, & Lee, 2009), governance reformers worldwide formulated recommendations in corporate governance codes to put restrictions on the number of board seats. One of the first discussions about the limits on multiple directorships was found in a 1991 *BusinessWeek* article that explained it as a "treatment to combat CEO disease"—with the latter defined as excessive egotism and/or perquisite consumption that can "breed corporate disaster" (Byrne & Symonds, 1991; Geletkanycz & Boyd, 2011).

During the last three decades, studies on boards of directors' characteristics have gained global attention and academics have rekindled their interest on a topical area concerning board memberships of directors. With the growing number of new firms listed on the stock exchanges around the world annually, the demand for knowledgeable, experienced and competent directors has intensified. The demand for directors with reputable backgrounds and experience (in anticipation of knowledge transfer) has also escalated. Questions as to whether such directors are able to discharge their duties effectively have emerged and scholars like Jiraporn, Davidson, DaDalt, and Ning (2009) and Fich and Shivdasani (2006) have argued that directors with many board seats are too busy to fulfill their role effectively as they are overstretched. Building on agency

theory, they consider multiple directorships as a curse and organizational slack and predict a negative relationship between multiple directorships and firm performance. Accordingly, they oppose the idea of having directors on board with multiple directorships. However, on the other hand, Carpenter and Westphal (2001) dismiss the "busyness" notion, claiming instead that, as the number of board seats a director is holding grows, firms are anticipated to benefit from the relevant experience, skills and knowledge transfer of such directors. This view and contention is shared by Ferris, Jagannathan, and Pritchard (2003) who disagree that the number of directorships should be limited. Thus, scholars supporting multiple directorships view it as a provision of resources (the "blessing" side of the story) and argue that multiple directorships are positively related to firm performance.

To date, evidence on the issue of multiple directorships mainly provided inconclusive results (e.g. Di Pietra, Grambovas, Raonic, & Riccaboni, 2008; Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Jiraporn, Kim, & Davidson, 2008; Perry & Peyer, 2005). Empirical studies found that multiple directorships can bring about both opportunities and threats. Arguments supporting multiple directorships ('quality' or 'reputation' hypothesis) are the reputational benefits (Di Pietra et al., 2008; Jiraporn, Singh, et al., 2009; Kiel & Nicholson, 2006), organizational legitimacy and access to vital resources (DiMaggio & Powell, 1983; Pfeffer & Salancik, 2003), valuable experience in active boards (Kor & Misangyi, 2008; Sarkar & Sarkar, 2009; Zajac & Westphal, 1996) and the source of knowledge in order to support key strategic decisions (Harris & Shimizu, 2004). For example, Harris and Shimizu (2004) concentrated on the contribution of busy directors on key strategic decisions and found that they are sources of knowledge and enhance performance.

On the other hand, a possible threat is that the workload of directors serving on multiple boards augments significantly ('busyness' hypothesis). Hence, the risk increases that they can no longer adequately perform their director roles, especially regarding their monitoring duties (Ferris et al., 2003; Jiraporn, Davidson, et al., 2009; Kiel & Nicholson, 2006; Loderer & Peyer, 2002). These ideas have also been supported in the literature. For example, Fich and Shivdasani (2006) found that firms with boards consisting of directors with multiple directorships (also called "busy" directors) are likely to have a decline in the quality of corporate governance, i.e. the effectiveness of outside directors as corporate monitors declines.

Further, corporate governance codes and guidelines worldwide generally impose limits on the number of director appointments for listed firms. As a consequence, the incidence of multiple directorships in listed firms may be endogenously determined making it hard to find much variation in directorship data (Sarkar & Sarkar, 2009). Therefore, we tested our hypotheses in the Pakistani context[1] because the Pakistani corporate governance code imposes a limit of ten directorships[2] which provides the necessary variation to investigate the consequences of multiple directorship. This context allows us to build a comprehensive and unique data set which make it more suitable for analyzing the performance effects of multiple directorships in general and more specific in emerging countries as compared to any other context.

Given these observations, the main objective of this dissertation is to examine the relationship between multiple directorships (measured with a wide range of

[1] More information about this context is provided in the forthcoming chapters.
[2] As per code of corporate governance 2002.

proxies on *the* ***board level*** *and* ***director level***, therefore also called 'busy board' and 'busy director' (Fich & Shivdasani, 2006)) and firm performance in Pakistani listed firms to find out whether multiple directorships is a curse or a blessing. Further, following the argument of Chi and Lee (2010) that the value of corporate governance is conditional in nature, we want to discuss some untold stories of this issue. Therefore, we investigate the multiple directorship-performance relationship conditional on context variables such as ***firm size and firm growth*** (chapters 4 and 6). Consequently, this dissertation adds to the debate of the conditional nature of corporate governance (Chi & Lee, 2010). Prior studies on multiple directorships in listed firms mainly used "types of agency conflicts" *as condition* (Perry & Peyer, 2005). This dissertation introduces new conditional variables in the debate which are theoretically more grounded in resource theories such as firm growth and firm size. Moreover, we contribute to the literature by examining the effect of multiple directorships on the board meeting attendance both at the *individual* director level and the *board level*, since most prior studies do not take into account this important variable. However, we take advantage of this shortcoming in the literature because we have a detailed pattern of the meeting attendance of each individual director. Therefore, we also want to examine the effect of multiple directorships at the ***individual director level*** (chapter 5) and to find out how it affects the director's board activities (more specific board meeting attendance) and what factors motivate an individual director to play their board roles more diligently.

Another main goal of this dissertation is to investigate the relationship between multiple directorships and firm performance, while taking into consideration the mechanisms underlying this relationship and demonstrate, empirically, ***how and when*** (Chapter 6) multiple directorships are a curse or a

blessing. This will lead to a more complete view about the issue of multiple directorships and its consequences.

1.2. Institutional context of Pakistan

The institutional context of Pakistan is important because an emerging economy would have some unique governance issues that are not prevalent in developed economies. Emerging markets are usually characterized by weak corporate governance practices and concentrated ownership with weak legal protection where family or controlling shareholders expropriate the interest of minority shareholders (Ghosh, 2006; González & García-Meca, 2014; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Hence, the institutional and legal structures that underpin the governance practices being employed in developed economies may not be applicable in emerging economies. Therefore, studies conducted in the Western world may have limited implications for the Asian countries because the Asian institutional settings and socio-economic and behavioral particularities may be substantially different (Fan, Wei, & Xu, 2011; Ghosh, 2006; Gibson, 2003; Sheikh, Shah, & Akbar, 2018; Van Essen, Otten, & Carberry, 2015).

The corporate governance structure in Pakistan resembles the Anglo-American system of corporate governance (Tariq & Abbas, 2013; Yasser & Mamun, 2015). However, in the Pakistani context, ownership structure is not widely dispersed as in the UK and US (Ahmed Sheikh & Wang, 2012) and is mainly characterized by family and concentrated ownership. Therefore, the main agency problem is not the shareholder versus manager conflict but rather the risk of expropriation of minority shareholders' interests by the family or dominant shareholders which suggest a principal-principal agency problem (Sheikh et al.,

2018). Moreover, in developing countries including Pakistan, control is often obtained through complex pyramid structures[3] and interlocking directorships. Hence, a dominant shareholder takes all major decisions but does not bear the full costs (Attiya Y Javid & Robina Iqbal, 2008).

By following the demand for governance reforms and to restore the confidence of investor in the capital markets, the government of Pakistan has taken various steps including new legislation to strengthen the equity market and the introduction and implementation of corporate governance codes. The most important initiative to improve the level of corporate governance and the protection of investors in Pakistan was the establishment of the Security and Exchange Commission of Pakistan (SECP) (Khan, 2016). The SECP started its operations in January 1999 with the mandate to regulate the corporate sector and capital market and to oversee the operations of stock exchanges and develop an efficient, fair and transparent regulatory framework built on the best practices and international legal standers to safeguard the interest of all the stakeholders and more specifically those of minority shareholders (Ahmed Sheikh & Wang, 2012; Ahmed Sheikh, Wang, & Khan, 2013; Khan, 2016).

The most important step taken by the SECP was the introduction of the code of corporate governance in March 2002 with the collaboration of the Institute of Cost and Management Accountants of Pakistan (ICMAP), the Institute of Chartered Accountants of Pakistan (ICAP) and three stock exchanges (Attiya Yasmin Javid & Robina Iqbal, 2008; Attiya Y Javid & Robina Iqbal, 2008; Qurashi,

[3] Pyramids are a form of inter-firm shareholdings in which firm A holds a stake in the firm B, which holds a stake in firm C. in pyramid arrangements the distinguishing characteristic is that firm A exercise control over firm C while minimizing it final investment in frim C.

2018). The requirements of the code of corporate governance are based on the experience of other countries with common law and traditions similar to Pakistan and specifically influenced by the requirements of corporate governance reform initiatives of South Africa and the Combined Code of UK (Ibrahim, 2006). In contrast, Pakistan has not adopted the Comply and Explain approach of the Combined Code but followed the rule-based US approach and made the requirements mandatory (Qurashi, 2018; Tariq & Abbas, 2013). The focus of the code is on the shareholder's model of corporate governance where the interest of shareholders are paramount (Khan, 2016) because in Pakistan ownership structure is highly concentrated and most companies are owned by the families (Qurashi, 2018). SECP had revised the code of corporate governance in 2012 and now listed companies are required to follow its requirements. The major changes in the revised code of corporate governance 2012 related to our study can be found in Table 1.1.

Table 1.1 Comparison of 2002 and 2012 codes

No	Issue	Code 2002	Code 2012
1	Independent Director	Encouraged a minimum of one independent director on the board of a listed company	One independent director is mandatory while preference is for 1/3rd of the total members of the board to be independent directors
2	Executive Directors	Number of Executive Directors not to be more than 75% of elected directors including CEO	Maximum number of Executive Directors cannot be more than 1/3rd of elected directors including CEO.
3	Number of directorships	A director can be on the board of no more than 10 listed companies at any one time.	A director can be on the board of 7 listed companies at the most at any one time. However, the limit does not include directorship in listed subsidiaries of a listed holding company

4	Office of Chairman and CEO	The Chairman of a listed company shall preferably be elected form among the non-executive directors of the listed company.	The Chairman and CEO shall not be the same person, unless specifically provided in any other law. The Chairman shall be elected from amongst the non-executive directors of the listed company.

Source: Code of Corporate Governance 2012 issued by SECP

Since family and concentrated ownership is a key feature of the Pakistani corporate governance environment the corporate governance codes (2002; 2012) focused on mitigating agency conflicts (Sheikh et al., 2018) with a special focus on the separation of CEO and chairman positions, board independence and number of directorships. Initially, at least one independent director on board and the separation of CEO and chairman positions were encouraged and limit imposed on the number of board positions not more than *ten* directorships, but in the revised code in March 2012, separating positions of CEO and chairman and the adoption of independent directors became mandatory and the number of board positions also has been reduced to a maximum of seven directorships. Furthermore, the code emphasizes the transparency and openness in corporate affairs and requires directors to execute their fiduciary duties in the best interest of all stakeholders (Ahmed Sheikh et al., 2013).

Moreover, the Pakistani context is different especially from Anglo-American countries for different reasons. First, the political and legal environment in Pakistan is less developed (Rehman, Hasan, Mangla, & Sultana, 2012). For example, during the last decade, the regulatory quality index and government effectiveness index remained negative and the Pakistani governance and the corporate environment have been under the foreign influence like the International Monetary Fund (IMF) and other funding agencies (Sheikh et al. (2018). Moreover, this context is also important from another perspective because

the economy of Pakistan is afflicted with more corruption than other Asian countries. According to Transparency International, the Corruption Perception Index for Pakistan never crossed 30 (100 shows no corruption). Furthermore, Chinese firms have more ownership concentration than in Pakistan. However, firms in China are different because the state holds a higher stake in larger firms (Bryson, Forth, & Zhou, 2014) while concentrated ownership in Pakistan is usually held by the non-government shareholders (Sheikh et al., 2018).

1.3 Key concepts related to multiple directorships

Many papers have discussed the number of directorships and defined this concept in different ways like: over-boarded directors, busy directors, multiple directorships and busy boards (Cashman, Gillan, & Jun, 2012; Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Kiel & Nicholson, 2006; Lee & Lee, 2014). There is a tie in all of above discussed concepts in that they all consider a director as busy if he/she holds three or more directorships at the same time and a board is considered as a busy board when the majority of directors on a board are busy. Multiple directorships refer to the number of director positions fulfilled by directors. A definition related to the number of director positions from which one speaks about multiple directorships differs depending on the source. The majority of academic scholars use a definition concerning this number ranging from 3 to 5, inspired by the multiple director's debate in practice. For example, the National Association of Corporate Directors (NACD) in the U.S. recommends that corporate executives and CEOs should accept no more than three outside directorships and the Council of Institutional Investors (CII) suggested that directors with a full-time job should not serve on more than two other boards (Ahn, Jiraporn, & Kim, 2010; Cashman et al., 2012; Harris & Shimizu, 2004).

Over-boarded directors are those directors serving on too many boards. In some situations, even two positions may be too many if a company is facing a difficulty (Kiel & Nicholson, 2006). Harris and Shimizu (2004) have examined the impact of over-boarded directors by using different membership levels of directors who sit on more than 3, 4, 5 and 6 boards. Here in this study, following the Fich and Shivdasani (2006) we also refer to a director as busy if he/she holds three or more directorships and a board is considered as busy when the majority of directors on the board are busy. We chose the three directorship cutoff because it is commonly used in the literature (Cashman et al., 2012; Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn, Davidson, et al., 2009) and it is also consistent with the best practice recommendations of CII. Moreover, Cashman et al. (2012) stated that the relatively straightforward definition of busy director (serving on three or more board seats) discussed in the prior literature is appropriate, empirically robust and it is as informative as other more complex and data-intensive proxies.

1.4 Outline of the dissertation

This dissertation is organized in three separate but interconnected empirical studies — there may be some content overlap between the different chapters, especially in the introduction sections— that are focused on multiple directorships and its impact on firm performance (*board level*) and director's board activities (*individual level*) for Pakistani public listed firms. Our overall research model is summarized in figure 1 which depicts the conceptual models used in three papers. We have gradually built the story and as the dissertation puts forward. First, we discuss the relevant existing literature on multiple directorships in general. Later, in the next chapter, we discuss the whole procedure of data collection and descriptive statistics. After that, we included three chapters of

empirical studies. The last chapter consists of the conclusions of this study along with some future research directions. In total, this dissertation encompasses seven chapters, including this first introductory chapter and the remaining chapters being structured and organized as follow:

In **Chapter 2** we review the multiple directorships literature in relation to board roles and board effectiveness. In addition, we discuss the monitoring role and the service role from different theoretical perspectives like agency theory, resource dependence theory, resource-based view and stewardship theory (Hillman & Dalziel, 2003; Lynall, Golden, & Hillman, 2003). Further, we position this research in the broader board demography-performance debate. Moreover, in this chapter, we also discuss the two opposing (curse and blessing) views of multiple directorships concerning the benefits and detriments of multiple directorships that underlie the research framework and hypotheses.

In **Chapter 3**, we provide an in depth view of the data set collected for this dissertation and also discuss the procedure and sources of data collection. We have a unique and very extensive hand compiled database which provides some insights of directors' characteristics, firm characteristics, and information about corporate governance as well as information of different performance measures. We spent almost more than two years on the collection and compiling of hand collected data and build a very rich database. Therefore, to provide deeper insights in the data by performing univariate analyses on the pattern of directorships and provide descriptive statistics of the whole data set (even some variables described in this chapter have not used in the later empirical studies). Moreover, we also describe in detail the measures of all the variables used in the three empirical chapters.

Accordingly, figure 1 shows that **Chapter 4** is the first empirical study that examine the relationship between multiple directorships and firm performance at the board level. Since we gradually build the story in three empirical papers, we started by addressing a basic research question: "*Is there an association between multiple directorships with firm performance? If yes, is it beneficial or detrimental for the firm and which factors can affect this relationship?".* Mostly, prior studies have focused on a direct effect of multiple directorships on firm performance or key strategic decisions and produce mixed results (Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Jiraporn et al., 2008). However, we propose that this relationship is not simple and direct but conditional in nature (Chi & Lee, 2010) and depend on the context. Therefore, we introduce firm size as a moderator in the debate. This study adds to the debate of the conditional nature of corporate governance and advance the knowledge on the relationship between multiple directorships and firm performance in an emerging country context. The Pakistani context is more suitable for analyzing the performance effect of multiple directorships since there are less limits on directorships as compared to other countries like the United States. Consequently, the incidence of multiple directorships is higher in Pakistan which creates an ideal research context to study this phenomenon. We find that multiple directorships have a negative effect on firm performance and we also found some indications that firm size moderates this relationship in such that negative effect become more pronounced in larger firms although this effect is not clear-cut.

In **Chapter 5** we take the challenge to go more in-depth and dig into the data to get more insights concerning "*How multiple directorships affect the activities of the individual director?".* Prior studies did not focus on the key

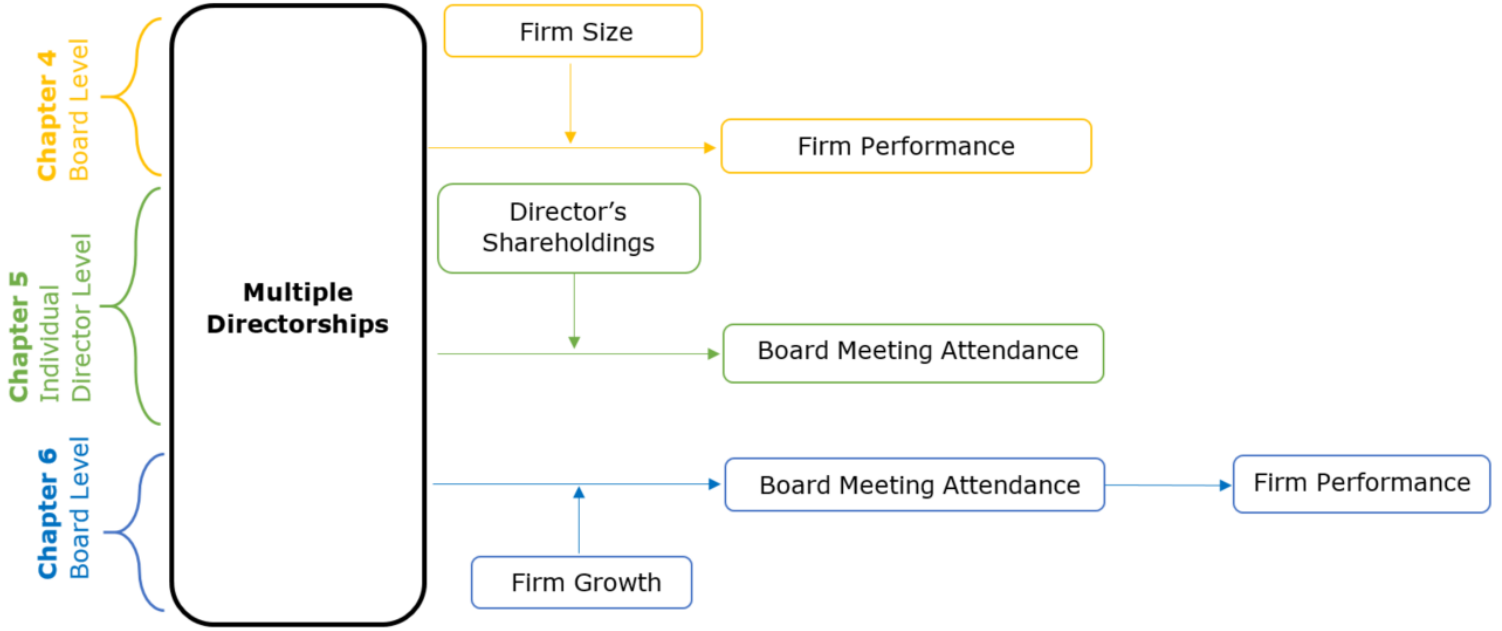
variables embedded in the busyness hypothesis (Ferris et al., 2003) namely an increasing workload and a lack of board meeting attendance. Therefore, this study contributes to the ongoing debate about multiple directorships by examining the effects of directors' busyness on the *board meetings attendance* by focusing on the individual director level. It is important to study the effect of multiple board appointments on the meeting attendance because individual directors can only exercise their duties during board meetings in order to perform their monitoring role, collect information and take strategic decisions for the firm (Renée B Adams & Ferreira, 2008; Chou, Chung, & Yin, 2013; Lin, Yeh, & Yang, 2014). Failure to attend may deter the directors from doing their job effectively (Jiraporn, Davidson, et al., 2009). Furthermore, Lin et al. (2014) and Jiraporn, Davidson, et al. (2009) found a significant difference between non-executive directors and executive directors in terms of board meeting attendance. Executive directors are employees of the company and they are under more pressure to attend board meetings (Jiraporn, Davidson, et al., 2009) while non-executive directors are not employees of the firm and invited to attend meetings as outside member. Therefore, we tested the relationship between multiple directorships and meeting attendance for both executive and non-executive directors to find out "*how the status of director affects the board meeting attendance?"*. Moreover, prior studies of Ang, Cole, and Lin (2000), Filatotchev, Lien, and Piesse (2005), Han and Suk (1998) and Krivogorsky (2006) foretells that agency cost will be lower when directors have higher ownership stakes. Thus, we address another important open research question *"How the alignment of interest of directors with shareholders affect directors' board activities".* Therefore, this study contributes to the existing knowledge by investigating the moderating effect of directors' shareholding on the relationship between multiple directorships and meeting attendance which has not

been tested before in the literature. We find that non-executive directors with multiple board appointments show a higher tendency to remain absent from board meetings while executive directors with multiple directorships regularly attend board meetings. Furthermore, our findings suggest that a higher percentage of ownership will lead to greater convergence of interests of directors and those of the firm.

Chapter 6 continues where chapter 5 ended. Chapter 5 discussed the effect of multiple directorships on board meeting attendance at the individual director level. However, in chapter 6 we study this relationship at the board level. In this study, we started with the unanswered question of chapter 5 whether a higher frequency of missed meetings affects firm performance? Therefore, we further investigate the negative effect of multiple directorships on firm performance by addressing the following question: *"How do multiple directorships affect firm performance and when can this negative effect be reduced?"* More precise, we study the effect of multiple directorships on firm performance, while taking into consideration board meeting attendance as possible channel or mechanism of influence of directors' multiple directorships (mediating variable) on firm performance and firm growth as a context (moderating variable) which can mitigate this negative effect. The integration of both channels of influence and context is important in order to formulate an answer on the *how* and *when* elements of our research question. We find that board meeting attendance mediates the negative effect of multiple directorships on firm performance. In addition, we find that the negative effect of multiple directorships on board meeting attendance is mitigated by firm growth.

Finally, in **Chapter 7** we summarize the empirical findings of each chapter and discuss the main theoretical and practical implications of this dissertation. Furthermore, recommendations for future research are provided.

Figure 1.1 Research model of this dissertation



2 Chapter - Literature review and theoretical background

The purpose of this chapter is to review the multiple directorships literature in relation to the board roles from different theoretical perspectives and position this research in the broader board demography-performance debate. Further, we also discuss advantages and detriments of multiple directorships (both theoretical and empirical views) that trigger the framework for this research. We selected studies from different sources, e.g., EBSCO, Google Scholar and Business Source Complete, which are related to the multiple directorships, buys boards, board roles and different performance measures and board decisions. We are not striving for the completeness of the literature, but to provide an overview and discuss the majority of the evidence related to several topics and outcomes on the issue of multiple directorships. We will not discuss the findings of all the studies, but provide a table with a wider set of empirical studies in the field from different contexts. In general, this chapter reviews the prior literature in order to establish the reasons for conducting a study on multiple directorships.

2.1 Board roles

Board roles are defined as those activities which boards perform and fulfill in practice, identified based on - or related to - specific theoretical perspectives. Boards of directors primarily perform two types of roles: the control role and the service role. A board's performance on these roles is assumed to be related to firm performance (Basco & Voordeckers, 2015). The control role of the board is mainly explained by agency theory, while the service role of the board embraces a range of theoretical perspectives (Van den Heuvel, Van Gils, & Voordeckers, 2006) such as resource dependence theory, the resource-based view and

stewardship theory (Hillman & Dalziel, 2003; Lynall et al., 2003). In the following paragraphs, we will discuss these two board roles in more detail.

2.1.1 Monitoring role

The monitoring role is also described as "control" role (Boyd, 1990; Johnson, Daily, & Ellstrand, 1996; Pearce & Zahra, 1992; Zahra & Pearce, 1989). The monitoring role of the board refers directly to the obligations of directors to monitor the top management of the firm on behalf of the shareholders and such effective monitoring can reduce agency costs which in turn lead to improved firm performance.

Scholars have discussed a number of director's monitoring activities, including monitoring the strategy implementation (Rindova, 1999), monitoring the CEO (Boyd, 1995), rewarding and evaluating the managers and CEO (Conyon & Peck, 1998) and CEO succession planning (Pitcher, Chreim, & Kisfalvi, 2000). The key motivation behind all of these activities is the obligation to make sure that managers operate in the best interest of the owners— an obligation that is met by regulating, scrutinizing and evaluating the actions of managers by the board of directors.

The theoretical underpinning of monitoring role of the board of directors stems from agency theory, which discusses conflicts of interest in the firm due to the separation of ownership and control. Agency theory emphasizes the principal–agent problem, in which it is a fiduciary duty of the directors to protect the interest of shareholders by monitoring the activities of agents (Eisenhardt, 1989; Fama & Jensen, 1983). At the one side, a firm's owners expect from their agents dedicated efforts toward maximizing the interests of the firm, whereas, at the other side, its agents are assumed to subordinate the interest of the organization to their own personal benefits. Such divergence of interests exacerbates agency costs (Jensen

& Meckling, 1976) and is the result of a separation of ownership and control (Berle & Means, 1932). These agency costs can be reduced by the *effective monitoring* of the top management by the board (Fama, 1980; Zahra & Pearce, 1989).

According to agency theory, incentives are the primary antecedent of the board monitoring function and adherents of the agency perspective described that when incentives of directors are aligned with shareholder's interest, then boards become more effective monitors of the top management team and firm performance will be improved (Fama, 1980; Hillman & Dalziel, 2003; Jensen & Meckling, 1976).

2.1.2 Service role

Another role performed by the board is the provision of resources to the firm which finds its roots in multiple theories (Boyd, 1990; Daily & Dalton, 1994; Gales & Kesner, 1994; Hillman, Cannella, & Paetzold, 2000; Pfeffer, 1972; Pfeffer & Salancik, 2003). Boards as providers of resources can perform a variety of particular activities, including provision of expertise (Baysinger & Hoskisson, 1990), counsel and advice on administrative issues (J. W. Lorsch, and Elizabeth MacIver., 1989), access to external resources like capital (Mizruchi & Stearns, 1988), developing relations with external related elements and diffusing innovation (Haunschild & Beckman, 1998), providing an expert opinion in strategy formulation or any other important firm decision (Judge & Zeithaml, 1992). In addition, Hillman et al. (2000) describe that important function of the board as securing resources through linkages to the external environment. All of above discussed activities have a theoretical tie in a sense that they focus on the board as a provider of resources rather than as a monitor of the top management team.

The theoretical underpinning for this role of the board is mainly embedded in the work of Pfeffer and Salancik (2003) on resource dependency. Pfeffer and

Salancik (2003, p. 163) noted that "when an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, will variably present it to others, and will try to aid it". According to these authors, boards primarily can provide four benefits to the firm: (1) advice and counsel, (2) legitimacy (3) medium to communicate information between the firm and external organizations and (4) support from some key elements outside the company. For example, directors can fulfill these roles by providing easy access to capital; by introducing a value adding governance policy which they have observed in other firms where they sit as a director; and they can provide a help to a newly floated firm by their established business reputation (Kiel & Nicholson, 2006).

Board capital is a primary antecedent of the board's role as a provider of resources. This capital encompasses both *human capital* (e.g. Directors' experience, reputation, skills, knowledge, and expertise) and *relational capital* (e.g. Network of relations, political contacts and external ties with other firms) (Hillman & Dalziel, 2003). Directors who are well-connected to the other outside groups would have greater *relational* or *social capital* because they have "quick access to timely information, diverse ideas, and critical instrumental, political, and emotional resources" (Oh, Labianca, & Chung, 2006, p. 578). Accordingly, directors' participation in the multiple boards provides a help to build directors' social capital through connectivity with other executives and directors (Beckman & Haunschild, 2002; Nahapiet & Ghoshal, 2000). Therefore, proponents of a resource dependence theory contend that board capital leads to the provision of resources —by having social ties between board and CEO which increase the frequency of advice and counsel exchanges— and this provision of resources is directly linked to firm performance (Westphal, 1999). These resources provide a

help to reduce the uncertainty for the firm by providing timely and valuable information (Pfeffer, 1972). External ties provide an edge to the executives in the formulation of the strategy and they also reduce the dependency between the firm and its external contingencies. Board capital is also very helpful in order to acquire resources from the external environment such as financial capital on favorable terms (Boeker & Goodstein, 1991; Pfeffer & Salancik, 2003). Hillman and Dalziel (2003) argue that board capital (human capital and relational capital) or board ability affects the provision of resources to the firm (and the monitoring role), which in turn leads toward improved firm performance. Incentives (e.g. Equity compensation and board dependence) to monitor can motivate the directors to provide more resources and also increase the monitoring activities of managers. When the interests of directors and owners are aligned due to equity compensation, they would be motivated to be better monitors and thus have a positive impact on the board effectiveness.

2.2 The board demography-performance relationship & multiple directorships

Boards of directors play a vital role in the governance of large corporate entities and boards have been considered as an economic institution that helps to resolve the agency problem inherent in the managing of an organization (Hermalin & Weisbach, 2003). Therefore, they have appealed a considerable attention from researchers in the last three decades. Researchers have performed a series of empirical studies with an aim to answer some integral questions related to different attributes of the board, like, "*how board demography affects the performance of the firm*" or "*how different board characteristics do affects the actions of the boards*". Consequently, prior research on the board of directors has been predominantly characterized by the studies examining the relationship

between board demographic variables and different firm outcomes. Most of this research focused on the independence/composition of the board, board size, board tenure and CEO duality (Basco & Voordeckers, 2015; Bhagat & Black, 2000; Brickley, Coles, & Terry, 1994; Coles, McWilliams, & Sen, 2001; Forbes & Milliken, 1999; Gilson, 1990; Hermalin & Weisbach, 2003; Klein, Shapiro, & Young, 2005; Lipton & Lorsch, 1992; Perry & Peyer, 2005; Rechner & Dalton, 1991; Shivdasani, 1993; Weisbach, 1988; Yermack, 1996).

However, at the same time, there is also a growing body of literature that investigates the performance consequences of busy boards and multiple directorships of directors, which is also an important board demographic characteristic which needs to be discussed in detail in order to answer some very important questions about the functioning of directors as for example "How do their multiple directorships affect their actions?", "How do their multiple directorships affect the performance of the firm?", "Is the relationship between multiple directorships and firm performance simple and direct or rather indirect and complex (Forbes & Milliken, 1999)?", "Do boards as a whole become busy and do multiple directorships become a constraint in performing the assumed roles of directors?". These are examples of some very important questions related to the board and directors that need to be answered. In this dissertation, we attempt to answer some of these questions. In the next sections, we will discuss the state-of-the art in the field and the gaps in the literature that will be addressed in the empirical chapters.

2.3 Multiple directorships are a blessing: a multi-theoretical perspective

Different theoretical perspectives (e.g. Agency theory, resource dependency theory and resource-based view) argue that multiple directorships may be beneficial. Agency theory predicts that the key role of directors is to monitor the behavior of agents. Therefore, boards having independent outside directors would be an effective instrument to monitor the management and as such, reduce agency cost (Fama & Jensen, 1983). From this perspective, directors having multiple directorships on several boards signal their reputation as monitoring specialists (Fama & Jensen, 1983) and they can offer better monitoring of management in order to avoid wealth impairing decisions (Ferris et al., 2003). However, it is not only through monitoring duties that boards add value (Zahra & Pearce, 1989). Besides the control role, there are numerous tasks related to service, resource dependency or strategy- often labeled as the "service role''- which can be deducted from other theoretical perspectives. For example, as per resource dependency theory, the key role of directors on boards having multiple directorships is their linking role of the firm with its external environment (Huse, 2005a). Resource dependence theory considers a firm as an open system which depends on the environmental contingencies and external organizations and boards are considered as a tool to manage the external dependency (Pfeffer & Salancik, 2003).

An implication of the resource dependence view on multiple directorships, then, is that multiple directorships are considered as a way to help directors in building connectivity with the other firms in the external environment which thus allows the directors to have quick access to information and resource networks (Beckman & Haunschild, 2002). Therefore, directors having multiple board

appointments may serve the board by performing the linking role by providing access to resources from the external environment and appointment of such well-connected directors would have a positive effect on the reputational ratings of the *appointing firm* (Davis & Robbins, 2005). Conyon and Read (2006) describe that accepting outside board seats could be valuable for the *home firm* as well. It will serve the shareholder's interests by enhancing the knowledge, skills, and abilities of executives. Such benefits to the employing firms outweigh the costs of accepting outside board memberships by the CEOs. Boyd (1990) concluded that, in firms coping with greater environmental uncertainty, those firms having directors with more interlocks—a large number of multiple directorships— show superior returns than others. Therefore, careful attention should be given to the appointment of ''resource-rich'' individuals during the director selection process who can equip the firm with some invaluable linkages to the external environment. Multiple board seats may create resource richness by enlarging the directors' network, experience, and commercial contacts. It also gives an opportunity to the firm to enter new markets and have access to key resources (e.g. Bank finance) at more attractive terms. Westphal (1999) stated that directors having ties (multiple directorships) with strategically related firms, can provide better advice and direction to their firms, which in turn have a positive impact on firm performance.

Furthermore, the Resource Based View states that through the personal and professional qualification of individual directors and especially outside directors, a board could be a valuable resource leading to a competitive advantage for the firm (Gabrielsson & Huse, 2005). Hence, busy directors have more knowledge and can provide advice on key strategic issues. From this perspective, (Harris & Shimizu, 2004) argue that "busy directors may be busy because they

are good contributors". We can conclude from the resource dependency and resource based views that boards are perceived as an intellectual and networking resources and they can perform their service role by providing access to the human and financial capital resources, counsel and timely advice when needed and make the decision making process less intuitive (Gabrielsson & Huse, 2005; Huse, 2005a). Busy directors have more capabilities (e.g. Networking, advice) as compare to single directorship. Hence, it is assumed that busy boards have more *board capital* - comprised of director's experience, reputation, expertise, and network ties - having a positive effect on the provision of resources and the monitoring of the board. In a nutshell, multiple directorships may enhance the value of a director and can help him/her to perform the different board roles.

Next, we discuss how labor market for directors is associated with the multiple directorships.

There are abundant studies (e.g. Fama, 1980; Fama & Jensen, 1983; Ferris et al., 2003; Gilson, 1990; Kaplan & Reishus, 1990; Mace, 1986) in the literature which support the view that the market for directors serve the shareholder's interest and give credence to what has been called *the reputation hypothesis*. Indeed, directors usually make a significant investment in developing a reputation as monitoring and decision-making specialists. They continually put more efforts to maintain and enhance their reputation in this market, which motivate them to work hard and be vigilant which in turn serve shareholders' interests (Ahn et al., 2010; Ferris et al., 2003).

In the early literature on multiple directorships, Fama (1980) and Fama and Jensen (1983) contended that the external market of outside directors buttresses the firm and provides incentives to outside directors to develop a reputation as expert referees and monitoring specialists. This reputation is the

principal compensation for serving on corporate boards. The directorial labor market - by the means of ex-post settling up - encourage directors and managers to act in the best interest of the shareholders of the firm where they are currently office bearers. Mace (1986) reported that an executive's contacts, visibility, and future opportunities are broadened when he/she holds outside directorships. They accept other board memberships as it is a matter of prestige for them as well as a signal that they have been accepted by their peers.

In addition, several previous studies also found that the number of outside directorships is related to the own-firm performance, i.e. The performance of the firms in which the directors serve as executives or as outside directors. For example, Kaplan and Reishus (1990) found that top executives of companies that cut their dividends - which is a sign that they are poorer performers - are fifty percent less likely to obtain additional board seats as an outside director in any other firm as compared to the top executives of companies with better performance. Gilson (1990) concluded that outside directors who resign from the boards of financially distressed companies, hold approximately one-third fewer directorships in other companies three years after their departures. One plausible explanation given by Gilson is that, if directors are held responsible for the distress, they may be less able directors of the firm. Financial distress will also affect their reputation in the market of outside directorships as expert monitor, and as a result, they are less likely to serve in other companies. Furthermore, J. Coles and Hoi (2003) studied the services of directors for the three years following the enactment of stringent state antitakeover provisions and found a statistically significant and economically important relation between the subsequent directorships of non-executive directors and the decision to keep or reject protective provisions. Non-executive directors of the boards that decided to reject

all or some part of provisions, secured more board seats than individuals who served firms that decided to retain all of the provisions of law. The external market for directorships rewards the non-executives who voted in favor of opting out and considers them as having had a meaningful impact on the decisions. Harford (2003) studied the impact of takeover bids on the target directors in terms of the number of future board seats held by targeted directors and report that outside board members of the firms that have faced a hostile takeover attempt holds fewer board seats going forward. Shivdasani (1993) argued that directors of the firms that face a hostile takeover bid are considered as less valuable monitors in the market and they also serve less on the other boards of large corporation.

Farrell and Whidbee (2000) examined the ex post rewards in the period of four years following a "forced CEO turnover" and provided evidence that such a forced CEO turnover affects the number of directorships positively. Indeed, the external market for outside directorships seem to reward outside directors (holding a substantial proportion of equity and not been closely aligned with departing CEOs) who made a good replacement decision about the successor and whose firms performed very well after the removal of the CEO by providing additional board seats in other firms. By removing a CEO on the account of poor performance, outside directors send an observable and unambiguous signal to the labor markets and shareholders about their willingness and effectiveness to discipline and monitor the top management. Similarly, Eminet and Guedri (2010) stated that directors having a strong reputation of being active in increasing control over management are more likely to be rewarded by the market with larger the number of subsequent appointments to the (1) boards with a nominating committee; (2) to the boards with a nominating committee having majority of outside directors; (3) to the boards that exclude CEO from the

nomination committee. Brickley, Linck, and Coles (1999) garnered the data of retiring CEOs and conducted a study to track their service on corporate boards in the post-retirement period and argued that firms consider ability and merit in the appointment of board members. They found a significant and strong relationship between CEOs post-retirement board services and the performance of their home firms. Stock market returns and accounting performance in the last two years of a CEO's term have ample power to explain the likelihood of a CEO to serve as an outside director in other firms or to remain on his own firm's board after his retirement. They also suggested that time horizon problems of a CEO's term in the final years can be reduced with the chances of continued board service and it would be a motivation for managers to exert their maximum efforts on behalf of shareholders.

In line with Fama and Jensen (1983) contention —the market for outside directors provide incentives to develop a reputation as a monitoring experts— Ferris et al. (2003) also found that previous firm financial performance has a positive effect on the number of seats subsequently held by the directors and suggested that reputation matters in the market for the directors.

2.4 Multiple directorships are a curse: an agency view

The positive effect of multiple directorships has been questioned from an agency point of view. It is rational to say that the cognitive abilities and time availability are limited for any individual. Therefore, multiple board seats may increase the likelihood that directors would not be able to accomplish their assigned tasks and fail to fulfill their board roles (control and service roles) because they are overcommitted and too busy which has been labelled in the literature as the *busyness hypothesis*. Time constraints are one of the main detriment of multiple directorships, which can lead to poor managerial oversight

and exacerbate agency conflicts. It could hinder directors from performing their monitoring role and induce managers to take their own private benefits even at the expense of shareholders (Harris & Shimizu, 2004). Therefore, due to time constraints when boards of directors do not perform their monitoring roles adequately, their firms have to face negative performance effects. These arguments related to time constraints are also valid when we discuss the service role of the board. For example, Huse (1998) stated that sometimes the time availability of directors is just as important as their experience and knowledge. Similarly, Kroll, Walters, and Wright (2008) argue that just relying merely on the vigilance of directors —with respect to monitoring of management— without related experience will not ensure board effectiveness therefore, directors having appropriate knowledge gained through experience, will be good monitors as well as better advisor to top management.

An agency cost view considers multiple directorships as a form of perquisite consumptions due to the high fees and prerogatives associated with board memberships. Directors enjoy the prestige and fee associated with board memberships by overcommitting themselves by sitting on numerous boards. According to Ahn et al. (2010) and Jiraporn et al. (2008) such overcommitted directors could not monitor and advise the management and as a result, the higher managerial discretion can impose a greater agency cost on shareholders which leads towards lower firm performance. This effect is exacerbated at firms having more pronounced agency problems with weaker shareholder rights. The busyness hypothesis states that multiple board affiliations might reflect organizational slack due to agency conflict (Ferris et al., 2003). Similarly, Core, Holthausen, and Larcker (1999) suggested that directors may become less effective when they serve on multiple boards and they are not able to perform all the duties

adequately. Less effective boards are not able to give an expert opinion and they cannot control, monitor and evaluate the behavior of top management, which would enhance agency problems since top managers prefer to pursue their own objectives and benefits instead of shareholders.

Table 2.1 Prior studies on multiple directorships

Author (Year)	Title	Aims (context)	Method	Dependent Variables	Findings
(Carpenter & Westphal, 2001)	The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making	How the appointment on the other boards affects the capability of the board members to advise and monitor their own management in the strategic decision making process. (US)	OLS regression	Directors' perceived ability to contribute to board discussion, board monitoring and board advice interactions	The strategic context of social network ties has an important influence on the corporate governance. Board with the directors having ties to strategically related firms, are able to better advise and monitor in the firms facing relatively stable environments and strategically heterogeneous board ties enhance board involvement in the relatively unstable environment.
Loderer and Peyer (2002)	Board overlap, seat accumulation and share prices	Effects of board overlap firm value (Switzerland)	Multivariate regression	Tobin's Q, ROA	Board seat accumulation is negatively associated with firm value
Ferris et al. (2003)	Too busy to mind the business? Monitoring by directors with multiple board appointments	Effects of multiple directorships on firm performance and directors' professional responsibilities (US)	Multivariate logit regression analysis	Market-to-book ratio	No significant relationship between multiple directorships and firm performance
Harris and Shimizu (2004)	Too busy to serve? An examination of the influence of overboarded directors	Effect of multiple (overboarded) directors on key strategic decisions such as corporate acquisition (US)	Regression analysis and event study	Cumulative abnormal return (CAR)	Overboarded directors (those serving on too many boards) are associated with informed and enhanced acquisition performance.
Perry and Peyer (2005)	Board seat accumulation by executives: A shareholder's perspective	Effects of multiple directorships of executives on firm Performance (US)	Multivariate regression	Sender firm's cumulative abnormal return	Multiple directorships of executives are associated with increased firm value through positive announcement return when

					the executive's firm has few agency concerns.
Fich and Shivdasani (2006)	Are busy boards effective monitors?	Effects of multiple directorships (busy directors and busy boards) on firm performance (US)	Firm-fixed effect regression	ROA, Market-to- book ratio, return on sale and sales over assets	Multiple directorships have a negative impact on corporate value, governance, quality and operating profitability when a director and board become busy due to multiple directorships. Departures of busy outside directors from board generate positive abnormal returns
Kiel and Nicholson (2006)	Multiple directorships and corporate performance in Australian listed companies	Impact of multiple directorships on firm performance (Australia)	Descriptives Correlation Matrix	Risk adjusted shareholder return	Multiple directorships are due to related entities which share common directors and it is not harmful for the firm performance
Jiraporn et al. (2008)	Multiple directorships and corporate diversification	Impact of multiple directorships on firm diversification and firm value (US)	Two stage estimates and Fixed effects regression analysis	Firm value for diversified firms (excess value measure)	Inverse relation between directors' busyness and excess value attributable to diversification. Negative effects are more pronounced where agency costs are more severe.
(Di Pietra et al., 2008)	The effects of board size and 'busy'directors on the market value of Italian companies	Study the influence of the quality of corporate governance on the firm's market value in a country that is characterized by the concerted and family ownership, pyramidal groups and weak legal protection of investors. (Italy)	Fixed effects regression	Share price	The level of directors' busyness as a measure of board effectiveness is positively related to the firm's market perfoacmen. In the Italian business context, investors consider busy directors as more effective in signaling the success in the firms' business activities to the capital market.

Sarkar and Sarkar (2009)	Multiple board appointments and firm performance in emerging economies: Evidence from India.	Analyze the effects of multiple directorships on firm performance in an emerging economy (India)	Spline regression	ROA, Market –to-book ratios, Tobin's Q and Net value added to assets	Firm performance is positively influenced by multiple directorships of independent directors, while negatively by multiple directorships of inside directors
Jiraporn, Davidson, et al. (2009)	Too busy to show up? An analysis of directors' absences.	Effects of multiple directorships on directors' board and committee meeting attendance (US)	Logistic regression	Directors' attendance in the board/committee meeting	An individual director with multiple directorships is more likely to be remain absent from board meetings
Jiraporn, Singh, et al. (2009)	Ineffective corporate governance: Director busyness and board committee memberships	The impact of multiple directorships on directors' performance effectiveness through examining the relation between board members busyness and their committee memberships. (US)	Two stage least square regression	The average number of committee memberships	Multiple directorships are related to a reduced number of committee memberships; after a threshold a higher number of multiple directorships are associated with higher number of committee memberships. The results indicate that the relation is non-linear, U-shaped, and in support for both the busyness and the reputation hypotheses
(Kor & Sundaramurthy, 2009)	Experience-based human capital and social capital of outside directors	Effects of outside directors' social and human capital on the firm growth (US)	Fixed effects regression	Thea rate of sales growth	When outside directors are well connected and have extensive external connectivity to the other directors and executives through multiple board appointments the firm growth is enhanced.
Ahn et al. (2010)	Multiple directorships and acquirer returns	Effects of multiple directorships on	Multivariate regression	CAR of bidding firm and multiple directorships of an individual director	Significant detrimental effect on the acquirer's announcement return when

		acquirer' announcement return (US)			multiple directorships exceed a certain threshold (non-linear).
(Masulis & Mobbs, 2011)	Are all inside directors the same? Evidence from the external directorship market	Explore the role of inside directors and investigate the characteristics of inside directors that affects their incentives, and positively reflects on their managerial skills and measures their external reputation. (US)	OLS regression, probit regression, Maximum likelihood estimation, multivariate analysis	Market-to-book ratio, operating performance, cumulative abnormal returns	When inside directors hold multiple directorships firm have better market-to-book ratio and operating profit, especially when the monitoring role is more difficult. Shareholders' wealth is improved with the announcement of the outside board appointment of inside director while it departuer announcement reduce it. Firm with busy inside directors make better acquisition decisions and have greater cash holdings.
(Geletkanycz & Boyd, 2011)	CEO outside directorships and firm performance: A reconciliation of agency and embeddedness views	Whether CEO outside directorships are beneficial for the source firm or not by exploring both agency and embeddedness view. (US)	LISREL VII	Long-term (5-year) firm Performance (ROA, ROS)	Outside directorships of CEO are positively related with the long-term performance of firms facing competitive constraints on growth and also more beneficial for the focused firms than highly diversified firms.
(Cook & Wang, 2011)	The informativeness and ability of independent multi-firm directors	Examine the ability and information of independent directors to perform their monitoring and advising function by analyzing the trades of outside directors before, during and	Fixed effect regressions	Trading performance	Directors, having multi-firm appointments outperform single-firm directors and the difference between their performance is attributable to the directors' superior ability than informativeness.

		after becoming multi-firm directors.			
Cashman et al. (2012)	Going overboard? On busy directors and firm value	Impact of busy directors on firm performance, with a focus on reconciling the contradictory findings in the prior literature. (US)	Multivariate regression analysis Firm Fixed effect regressions	Tobin's Q, ROA, return on sales and sales as percentage of assets	Busy directors are negatively associated with firm performance.
Clements, Neill, and Wertheim (2013)	The effect of multiple directorships on a board of directors' corporate governance effectiveness.	To find the effects of multiple directorships on corporate governance effectiveness (US)	Simple linear Regression	Number of Material Weakness in Internal Control	Multiple directorships positively influence corporate governance effectiveness of large firms, while it is detrimental for small firms.
Field, Lowry, and Mkrtchyan (2013)	Are busy boards detrimental?	Effects of busy boards on performance of IPO firms (US)	Two-stage regressions	Market to book ratio and Return on sales	Busy boards are more common in IPO firms and positively contribute to the performance of newly public firms
(Andres, Van Den Bongard, & Lehmann, 2013)	Is busy really busy? Board governance revisited	Revisit the relationship between directors' business and of governance by considering a directors' position in the social networks. (Germany)	Fixed effect regression	Tobins'Q and executive compensation	Boards constitute with well-connected directors are associated with lower firm performance and higher executive compensation. Busy directors are associated with poor monitoring.
Lee and Lee (2014)	Are multiple directorships beneficial in East Asia?	Effects of multiple directorships on the firm performance and to identify the firm characteristics that might have influence on this link (East Asia)	Fixed effects regression model	Tobin's Q (market –to book-ratio), the industry adjusted return of firm's common stock	Multiple directorships have a positive effect on the firm value in the firms having high advising needs and financial needs. The beneficial aspects of multiple directorships are stronger in widely held firms

					and in the countries with weak shareholder rights
(Masulis & Mobbs, 2014)	Independent director incentives: Where do talented directors spend their limited time and energy?	To investigate whether independent directors with multiple board appointments value each directorship differently on the basis of reputational benefits each board offers. (US)	Probit regression, multivariate analysis	ROA, Tobin's Q, forced CEO departure, board meeting attendance, audit or compensation committee memberships	Reputation is a powerful incentive for the independent directors in the labor market, therefore, they distribute their efforts on each board unequally based on the relative prestige of a board membership. When there is an exogenous increase in the ranking of a directorship, the directors board meeting attendance rate is also increased and subsequent firm performance.
(Baccouche, Hadriche, & Omri, 2014)	Multiple directorships and board meeting frequency: evidence from France	Investigate the impact of multiple directorships on the board meeting frequency. (France)	Probit model	Board meeting frequency	Multiple directorships are positively associated with the number of board meeting frequency. This indicates that the board will be motivated to meet more frequently when its members hold too many outside board appointments. The accumulation of outside directorships may improve the knowledge and experience of directors. Therefore, the board may be encouraged to have more board meetings in order to provide more occasions for the busy directors to, facilitate information and knowledge sharing and support coordination between

					busy directors and other board members.
(Lei & Deng, 2014)	Do multiple directorships increase firm value? Evidence from independent directors in Hong Kong	Examine the effect of multiple board appointments of independent directors on the firm value. (Hong Kong)	Fixed effects regression, Pooled OLS and Quadratic model	Market-to-Book Value and Tobins' Q	Multiple directorships of independent directors have a positive effect on the firm value this effect is stronger under better corporate governance standers. However, the positive effect of multiple board appointments declines at the higher level of busyness especially when independent non-executive directors have a CEO position.
(López Iturriaga & Morrós Rodríguez, 2014)	Boards of directors and firm performance: the effect of multiple directorships	Analyze the effect of busyness on the firm value in the Spanish listed firms. (Spain)	OLS	Tobins' Q and ROA	A nonlinear relation is found between multiple directorships of independent directors and firm performance. At lower levels of directorships, reputation effect prevails and a positive association exists, however, after a threshold (four directorships) the association become negative due to the dedication effect because directors become too busy by sitting on many boards and can no longer perform.
(Falato, Kadyrzhanova, & Lel, 2014)	Distracted directors: Does board busyness hurt shareholder value?	Examine the effects of independent directors busyness on the shareholder value by using a natural experiment to generate an	OLS	Announcement returns (Cumulative Abnormal Returns)	*Attention shock* has negative and significant effect on the value of *treated firms* and not for the firms in the *control group*. The adverse effects of such shock on the shareholder value persist over

		exogenous increase in the demand of independent directors' time, which is labeled as director 'attentaion shock' while holding the talent of directors constant. (US)			time and accompanied by the decline in the monitoring, e.g., lower earning quality, higher CEO rent extraction. Therefore, results indicate that busnyess of independent directors is detrimental for the monitoring quality and shareholder value.
L.-Y. Chen, Lai, and Chen (2015)	Multiple directorships and the performance of mergers & acquisitions	The effects of directors' busyness at the different level of multiple directorships on firm performance (US)	Cross sectional regression	Cumulative Abnormal return of M&A announcements	A horizontal S-shaped relation is found between multiple directorships and firm performance: at low and high levels of multiple directorships directors' busyness is negatively associated with firm performance, while the relationship becomes positive at moderate levels of multiple directorships.
C. E. Clements, J. D. Neill, and P. Wertheim (2015)	The impact of company size and multiple directorships on corporate governance effectiveness	The effects of multiple directorships of larger of smaller firms on governance effectiveness (US)	Simple linear Regression analysis	Number of Material Weakness in Internal Control	Governance effectiveness is positively related to the multiple directorships experience of larger firms and the effect is stronger for small firms than large firms.
C. Clements, J. D. Neill, and P. Wertheim (2015)	Multiple directorships, industry relatedness, and corporate governance effectiveness	The relationship between industry relatedness of directors' and effective corporate governance. (US)	Tobit regression model	Number of Material Weakness in Internal Control	Positive correlation between the industry relatedness of multiple directorships and effectiveness of corporate governance and busyness have a negative effect for the small firm hose directors sit

					on non-industry related boards.
(Liu & Paul, 2015)	A new perspective on director busyness	Examine the effect of multiple directorships held by the inside directors on the firm performance while controlling for the directorships held by the outside directors and to investigate how firm-specific information asymmetry mediates the relationship between busyness and firm performance (US)	Evernt study analysis, fixed effects regression, OLS regressions	ROA, Tobins'Q, cumulative abnormal returns	The negative effect of busyness is more pronounced for the inside directors that for the outside director and inside directors with multiple directorships have a greater effect on the decisions of a board than outside directors.
(Pandey, Vithessonthi, & Mansi, 2015)	Busy CEOs and the performance of family firms	Examine the effect of the busyness of CEOs and /or chairman on the firm performance of family firms and to explore the conditions under which CEO/Chairman busyness affect to the firm performance differently. (India)	OLS regression	ROA, ROS Tobin's Q CEO/Chairman attendance	CEO busyness has a negative effect on the perfroamcne of firm measured by Tobin's Q and this effect is not different between family firms with family members as CEO/Cahirman or a non-family member as CEO/Chairman. Further, the busyness of CEO/Chairman is not associated with the Toabin's Q in the firms with low lower growth opportunities while it has a negative effect on the perfroamcne in the firms with higher growth opportunities.
(Méndez, Pathan, & García, 2015)	Monitoring capabilities of busy	To analyze how and to what extent the	Pooled OLS regression,	CEO remuneration, external	The directors with multiple directorships appointed either

	and overlap directors: Evidence from Australia	multiple board appointments and multiple committee memberships of non-executive directors on a board is related to the board supervisory decision outcomes. (Australia)	logit model and 2SLS simultaneous equation	auditor opinion, audit fees and CEO turnover	on the board or in the audit committee or remuneration committee are detrimental to the effective monitoring of management. The presence of such busy directors is associated with the low pay-performance sensitivity and higher CEO remuneration. The negative association between busyness and poor monitoring is more pronounced in the larger firms where over-commitment issues are more severe.
Rouyer (2016)	Family ownership and busy boards: impact on performance	To assess the effect of busy boards and family ownership on firm performance and cash holdings (France)	Multiple regression analysis	Tobin's Q and Cash holdings	Multiple directorships are not negatively related to firm performance in France. Busyness may have a positive impact on the firm performance as busy directors extend their contacts and find new ideas for the growth of the company.
(Eulaiwi, Al-Hadi, Taylor, Al-Yahyaee, & Evans, 2016)	Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC	Investigate the relationship between outside board appointments and family ownership concentration in the listed non-financial GCC. Firms and to discuss whether the existence and quality of a nomination committee restrain the boards having	Tobit, ordinary least-squares and logistic models	Busyness	Family ownership is positively related to the number of outside board memberships of directors because board monitoring capabilities reduce with the family ownership. The existence, quality, and characteristics (e.g., independent directors, size) suppress the positive relationship between family ownership and appointment of busy directors.

		family members to appoint directors with multiple outside directorships Gulf Cooperation Countries (GCC)			
Chakravarty and Rutherford (2017)	Do busy directors influence the cost of debt? An examination through the lens of takeover vulnerability	To find out the effects of board busyness on the firms' cost of debt by analyzing the relationship through a hostile takeover framework. (US)	Poisson regression models	Takeover vulnerability and cost of debt	Board busyness is inversely related to the cost of debt. Economically, the cost of debt for firms whose board is comprised of 40% busy directors is lower, compared to those without busy directors.
Baatour, Ben Othman, and Hussainey (2017)	The effect of multiple directorships on real and accrual-based earnings management: Evidence from Saudi listed firms	Examine the effect of multiple directorships on accrual-based earnings management and real earnings management. Whether earning management practices increase or decrease with the number of board appointments (Saudi Arabia)	OLS regression models	Accrual-based earnings management and real earnings management	Multiple directorships have a positive and significant effect on real earnings management and no significant impact of multiple directorships on accrual-based earnings management
Bravo and Reguera-Alvarado (2017)	The effect of board of directors on R&D intensity: board tenure and multiple directorships	Examine the relationship between directors' characteristics such as: board tenure and multiple directorships with strategic decisions regarding	Multivariate analysis	R&D intensity (Ratio R&D expenditures to total sales)	Number of board memberships are positively related with the R&D intensity and board members with multiple directorships have an influence on the R&D corporate strategies.

		R&D investments. (US)			
Hauser (2018)	Busy directors and firm performance: Evidence from mergers	Whether director appointments to multiple boards impact firm value (US)	OLS and reduced-form regressions	ROA and Tobin's Q	A reduction in multiple board appointments is associated with higher, market-to-book ratio and an increase in operating profits because the performance of the firm is affected by its directors' appointments to other boards. When directors work lies elsewhere, they do more to benefit of the company.
Iliev and Roth (2018)	Learning from directors' foreign board experiences	Whether directors' outside experiences gained from their appointments on foreign firms' boards serve as an important channel that shapes firms' governance Practices (US)	Fixed effects regression	Corporate Governance score	Number of directors with foreign directorships are positively related with the governance practices, learning and the effect is stronger for firms domiciled in less-developed governance markets
(James, Wang, & Xie, 2018)	Busy directors and firm performance: Does firm location matter?	To find out whether the effect of directors' busyness on firm performance varies with the location of firm headquarter locations and investigate the effect of directors' busyness on firm policies.. (US)	OLS regression	Tobin's Q, ROA and Firm policies (Default risk, tax management and earnings management and asset turnover)	Metro firm busy directors enhance the firm performance and associated with lower default risk, lower real earnings management and associated with efficient utilization of assets. Firm location significantly effects to the effectiveness of busy directors and metro firms get more benefits from directors with multiple board appointments.

(Ferris, Liao, & Tamm, 2018)	The compensation of busy directors: An international analysis	Examine the compensation structure of busy directors and to investigate how directors' busyness effect their own compensation. (49 countries)	Fixed effects regression	Director compensation, ROA, profit margin and market-to-book ratio	Firms employ different compensation structure for the busy directors. Therefore, busy directors receive higher compensation because of their experience, connections and knowledge. However, there are some concerns about their monitoring abilities. To mitigate these issues, busy directors are compensated with more equity, which thus enhances the directors' incentive to provide effective monitoring. This compensation structure is associated with the higher firm performance.

2.5 Effects of multiple directorships

Table 2.1 depicts that there is a large body of literature on multiple directorships (Ahn et al., 2010; Cashman et al., 2012; Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Jiraporn, Davidson, et al., 2009; Jiraporn et al., 2008; Loderer & Peyer, 2002; Sarkar & Sarkar, 2009) discussing whether a director with multiple board appointments is beneficial for a firm or not. These studies examine the effects of multiple directorships by employing two competing hypotheses, namely, the reputation hypothesis and busyness hypothesis. Based on these hypotheses two opposing perspectives— Reputational (quality) perspective and busyness perspective—have emerged regarding the effects of multiple directorships.

2.5.1 The reputational perspective: an empirical view

This line of research considers multiple directorships as a blessing for the firms and recognizes the benefits derived from multiple directorships. According to this perspective, taking additional outside directorship by the directors will give a help to learn different business practices through communication with other directors and to make a comparison about policies being implemented in their own firms with the one adopted by other firms (Carpenter & Westphal, 2001). It also provides exposure to innovation and an opportunity to seek help and guidance from other CEOs in running their own firms (Bacon & Brown, 1974). Therefore, such directors are better connected and more experienced, so potentially add value to the firm. (Clements et al., 2013; Ferris et al., 2003; Harris & Shimizu, 2004; Sarkar & Sarkar, 2009). Likewise, the outside directorships of the CEO also

add value to the long-term performance of the firms those facing competitive constraints on growth (Geletkanycz & Boyd, 2011). Advocates of the reputational perspective argue that multiple directorships signal the expertise of directors (Fama & Jensen, 1983) and professionally skilled directors are in the high demand with the expectation that such directors can provide better monitoring and advice on various critical issues and would be able to contribute to the effective functioning of the board which thus have positive effect on the firm performance (Hillman & Dalziel, 2003). Similarly, Ferris et al. (2018) contend that due to the knowledge, expertise, and connections, busy directors receive higher total compensation and a significant part of their compensation is equity-based. This approach enhances the directors' monitoring effectiveness, which thus improves firm performance.

In the support of this view prior literature has found supportive results, for example, Harris and Shimizu (2004) focused on the role of "overboarded directors" on important *strategic issue* such as corporate acquisitions and found a positive effect of the proportion of over-boarded directors on abnormal returns. This study revealed that busy directors are key sources of knowledge and that directors prior to the acceptance of additional directorships, take into account the schedule of board meetings. Similarly, Brown and Maloney (1999) stated that firm performance is better when board members held other directorships in a sense that firms receive higher acquisition returns because these firms are likely to be well managed due to directors with multiple board appointments. Further, Cook and Wang (2011) contended that directors with multiple appointments outperform the directors with single-firm directorship in terms of *trading performance* and

such performance difference is attributable to their business skills and not to the informativeness (by sitting on multiple boards, directors would be better-informed which thus allow them to make better trading decisions based on the information they obtained). Directors with multiple directorships continue to perform better even after they have changed their status from multiple to single directorships because of their abilities to process information which thus suggest that directors' ability is a factor to consider while evaluating a potential director.

Further adding in the support of the reputational view of multiple directorships, Rosenstein and Wyatt (1994) also conclude that financial firms have significant abnormal returns by sending their directors to non-financial firms, and suggested that these relationships permit the directors to build a network. It may also serve as a tool for generating new business. Individuals holding multiple board seats are more experienced and competent, thus they are high-quality directors. They can efficiently perform their board roles, which leads toward more rigorous managerial oversight, and as a result, fewer wealth diminishing decisions (Ahn et al., 2010). Furthermore, Di Pietra et al. (2008) provide empirical evidence that the director's busyness has a significant positive effect on the firm's market performance. Results are in line with the view that directors having multiple seats are well connected with each other and have a good reputable social, corporate and political contacts and investors viewed them as more effective in ensuring the success of the firm.

In addition, Ferris et al. (2003) report that market participants do not give any negative reaction on the appointment of a busy director on board, and no

evidence is found that busy directors shirk their board activities. In fact, they attend more meetings and appear on more board committees in comparison to their non-busy counterparts. They found no significant result of multiple directorships and the likelihood that a firm will be named in a securities fraud lawsuit. Likewise, Lee and Lee (2014) have also cast doubts on the notion that busy boards are disastrous for all firms and claimed that firms with higher advising needs and higher external financing needs have a positive relation between multiple directorships and firm value.

Prior literature has also discussed the other competing perspective – the busyness perspective - of multiple directorships. The next section reviews those studies.

2.5.2 Busyness perspective: an empirical view

Naturally, skepticism is evoked when we discuss the added value of the directors appointed on multiple board seats, particularly in the light of the burgeoning responsibilities of directors. This line of research is based on the cost associated with multiple directorships and predicts a negative relationship between multiple directorships and firm performance because of time constraints that would adversely affect the abilities to contribute to board decisions. Therefore, busy directors are likely to diminish board oversight and contribute to weaker corporate governance (Kiel & Nicholson, 2006; Lee & Lee, 2014). This is known as the busyness perspective of multiple directorships and proponents of this perspective consider multiple directorships as a curse for the firm (Ahn et al., 2010; Fich & Shivdasani, 2006; Méndez et al., 2015).

For example, Fich and Shivdasani (2006) focused on the costs of holding multiple directorships and suggested that the quality of corporate governance is deteriorated by heavily relying on the busy directors. Similarly, Ahn et al. (2010) document the effect of multiple directorships on acquisition performance and conclude that acquiring firms in which independent directors hold multiple outside board seats face more negative abnormal returns. Since directors' time is finite and sitting on many boards make them busier and impinges ability to monitor and advise, managers take advantage and enhance their own personal benefits by promoting empire building, making a value-reducing acquisition. Similarly, Jiraporn et al. (2008) derived an inverse relation between outside director's busyness and firm value by suggesting that overcommitment of directors will result in poor performance as monitors. It gives a chance for managers for the expansion of a firm through diversifying into unnecessary businesses. Such diversification gives rise to the diversification discount and this unnecessary and value reducing diversification is exacerbated when shareholder's rights are weak. In this line, Andres et al. (2013) stated that boards populated with the well-connected directors, who are more embedded in their social networks, tend to have lower Tobin's Q and higher executive compensation. A firm with such well-connected directors, who play an important role in their social networks, face poorer monitoring and weaker governance.

Some studies supported the busyness hypothesis by examining the performance of directors in terms of their willingness to participate in board-related activates when they are serving on multiple boards and find that busy directors are less likely to attend board meetings (Jiraporn, Davidson, et al., 2009)

and hold a lower number of memberships in board committees (Jiraporn, Singh, et al., 2009). This lack of involvement in board related activities may be consequences of the directors' busyness and may have an adverse impact on the performance of the firm.

Expanding on this, Core et al. (1999) contended that excess CEO compensation is positively related to the busyness of directors, implying that when directors wear too many caps, they cannot work effectively and a CEO becomes able to extract excess compensation from the firm and busyness is also positively related with the low pay-performance sensitivity of CEO (Méndez et al., 2015) . Similarly, Shivdasani and Yermack (1999) also argue that CEOs seek to influence the director selection process and found a positive and significant relation between CEO involvement in the director selection process and appointments of busy directors. When the CEO is involved, directors with multiple appointments on different boards are chosen for an additional board seat. These selected directors are not able to monitor and advice the management effectively because their available time is limited which eventually does little to reduce agency cost. At the same time, the busyness of CEOs is also associated with lower firm performance, for example, Pandey et al. (2015) found that multiple board appointments of CEOs have a negative effect on the performance of the firm, especially in the firms where growth opportunities are higher. Therefore, firms having higher growth rate must be managed by the less busy CEOs.

Adding to this, some other studies have examined the effect of a change in the level of directorships of directors on firm value by measuring the market

reaction. These studies report a positive market reaction of investors to a decrease in the number of directorships or workload (Bar-Hava, Feng, & Lev, 2013) while a negative reaction was found upon an increase in the number of directorships of directors (Falato et al., 2014). It shows that investors perceive directors with a higher number of directorships as stretching their capacity and may not be effective monitors and advisors. Adding to this, Rosenstein and Wyatt (1994) document significantly negative abnormal returns when executives join the board of other firms because executives may be distracted from the objective of maximizing the wealth of their own shareholders. Joining the board of other firms gives a signal that they are available for other firms.

The studies reviewed above provide empirical support to the busyness perspective of multiple directorships and the findings show the types of negative effects that may derive from the directors' busyness when they are serving on multiple boards.

2.5.3 Multiple directorships: no effect

Some studies have not found any relationship between multiple board seats and its effects on firm performance. For example, Ferris et al. (2003) did not find any significant relation between the average number of directorships of outside directors on the board and the market-to-book ratio of the firm and concluded that busy boards are as effective as non-busy boards at monitoring. Likewise, Kiel and Nicholson (2006) also did not find any relationship between multiple directorships and financial performance of the firm and suggest that, having multiple board seats not mean that directors will be unable to meet their

commitments. The study further contends that investors shouldn't perceive multiple directorships as a threat, in fact, it can be an asset for the company and regulators should also carefully examine before the consideration of imposing limits on the number of board seats. The fear of over-commitment can be allayed by conducting regular evaluations of individual directors and the board to ensure that they are able to carry out their perceived role and duties.

2.6 Conclusion and future research direction

By reviewing the literature, we find that prior studies have produced mixed and inconclusive evidence on the relationship between multiple directorships and firm performance which provides interesting opportunities for further research. Previous literature mostly focused on a direct effect of multiple directorships on firm performance or strategic decision making. However, we propose that this relationship is not simple and direct, rather the effects of multiple directorships are conditional on certain characteristics of the context within which they exist. Therefore, we state that the organizational context is important to study and it should be considered because corporate governance is generally found to be contextual in nature (Chi & Lee, 2010). There is no one best way of designing the board or governance system, thus, an appropriate corporate governance design for a specific firm depends on the context (Huse, 2005a, 2005b).

Prior studies have also discussed some contextual variables that moderates the multiple directorships and performance relationship, such as firm financing needs, level of agency conflict, firm's group affiliation and firm age

(Chakravarty, Marisetty, & Veeraraghavan, 2011; C.-W. Chen, 2009; Field et al., 2013; Lee & Lee, 2014). In line with this, James et al. (2018) contend that the differences between the impact of directors' busyness depend on the location of the headquarters. Firm's location affects the effectiveness of busy directors, for example, the busy directors of metro firm enhance firm performance. Furthermore, such busy directors are associated with lower default risk, lower real earnings management and better asset utilization in metro firms.

In this dissertation, we postulate the mixed results reported in the prior studies point to the need to better contextualize the busyness-performance relation. That is, we argue that by recognizing the moderating effect of firm size and firm growth, we can uncover evidence for a conditional relation that is more persuasive than revealed by the literature to date. Firm size and firm growth are important context variables that have been tested as moderators in the general corporate governance and firm performance debate (Arnegger, Hofmann, Pull, & Vetter, 2014; Chan, Faff, Khan, & Mather, 2013) while these variables have not been mostly overlooked as moderator in the multiple directorships and firm performance relationship.

An increase in firm size would lead to a complex environment (Lawrence & Lorsch, 1967). Such complexity can affect the multiple directorships-performance relationships. Further, firm growth is also a key condition that can moderate this relationship because growing firms may get benefits from directors with multiple board appointments as they would provide access to required critical resources (Kor & Sundaramurthy, 2009). Therefore, further in this dissertation,

we concentrate on firm size and firm growth as firm contingency variables and presume that the association between multiple directorships and firm performance is conditional on the size and the growth of the firm, i.e. moderate the impact of multiple directorships on firm performance. Prior research on boards and corporate governance has also used several other contextual variables such as geographical and cultural differences, country and legal system, industry, and environment of the firm, organizational life cycle, ownership structure and industry size (Huse, 2005a; Uhlaner, Wright, & Huse, 2007). However, these contextual variables are beyond the scope of this study.

Moreover, previous studies did not take into consideration behavioral aspects of the multiple directorships and firm performance. More specifically, prior literature was mainly neglected, on the individual director's and general board attendance behavior. We contend that behavioral dynamics can mediate the board demography-firm performance relationship (Forbes & Milliken, 1999; Huse, 2005b). We have detailed information about the patterns of board meeting attendance, which is an important behavioral variable and one of the key variables behind the arguments that we use concerning the detrimental/beneficial effects of multiple directorships. Therefore, we focus in this dissertation on board meeting attendance as a behavioral variable that mediates the multiple directorships and performance relationship

3 Chapter - Descriptive statistics

The purpose of this chapter is to provide an in-depth view about the whole data collected for this study. In this chapter, we will discuss all those steps which were taken and sources used for the data collection. We will also discuss how we measured all the variables and we will also discuss descriptive statistics.

3.1 Data collection process and sample size

The data for the analysis is obtained from the firms of non-financial sectors listed on the Pakistan Stock Exchange (Formerly Karachi Stock Exchange). We collected data in different steps and from several sources. In the first step, we checked the sector details from the website of the Pakistan stock exchange and Business Recorder. Then, we obtained the annual reports from the website of the respective firms. In the second step, if we did not find annual reports from the website of the company, we consulted other sources including, Opendoors.pk and DSpaceRepository. We began with the collection of data from 419 non-financial firms listed on the Pakistan Stock Exchange across 28 different sectors during the 6-year period from 2006-2011. By using all the available online sources we were able to get complete data only for 66 firms. There were 262 firms for which we found annual reports for partial years and for 94 firms we didn't find any annual report from online sources. In our third step, we decided to collect all the missing annual reports of 356 firms by hand. For this purpose first, we tried to contact each firm by phone or through email and requested to provide missing reports. After using all the available contacts of firms, we were not able to collect the required reports because most of the firms didn't respond. Then we decided to request to the respective Company Registration Offices (CRO) of Securities and

Exchange Commission of Pakistan (SECP) where a firm is registered. By law, firms are required to submit annual financial reports to their respective CRO, therefore, we were expecting to get all missing reports from this source. However, only Karachi CRO responded to our request and officials were willing to provide reports of the firm registered in Karachi CRO. Out of 356 missing firms 174 firms were registered in Karachi CRO but, the procedure to get the reports of 174 firm for 6 years in digital form was very complicated and time-consuming process. Then we decided to request Pakistan Stock Exchange (PSX) to provide missing reports but they refused since they don't have a record in the digital form and the only available option was the book form of the report. Since we need reports of 356 firms for the 6 years, which would result in 2,136 reports. It was almost difficult to carry 2,136 annual reports from PSX because they had only one copy for their own record. As they have almost all the reports that we were looking for, we decided to take the pictures of the required pages in each report and officials granted us permission to do this. From PSX we collected data of 244 firms for which we requested to the SECP head office to provide remaining reports. Since getting the digital form of reports from SECP system was a complicated and time consuming process, we again decided to take the pictures of required reports. Thus, we took almost 13,648 pictures of the required pages from 1,890 reports from both PSX and SECP. We started the collection of data from 419 firms and were able to get data of 381 firms because 38 firms were delisted during this period for which we don't have any information when and why these firms were delisted.

We selected the period of 2006-2011 due to two different reasons. First, before 2006 the ''Statement of Compliance with the Code of Corporate Governance'' was not available for most of the firms. Secondly, in 2012, the Code of Corporate Governance was revised in Pakistan. In order to avoid the inconsistency in data due to non-availability of compliance reports and changes in the code of corporate governance, we selected the period of 2006-2011.

We needed information on corporate governance variables, and therefore, for each firm, we obtained data on both the director and board-level from the annual financial reports of 381 firms, collected from the mentioned sources above. We utilized these reports to hand compile details of: board size, name of directors, different measures of multiple directorships, alternate directors, gender of directors, directors' membership in audit committee membership, directors' membership in other board committees, board composition, CEO duality, individual director's equity ownership, board ownership, board meetings, directors attendance in board meetings, board committees, ownership and firm age. In addition to the data on corporate governance variables, we needed information on (1) accounting indicators, including; Return on Assets (ROA), Return on Equity (ROE), Profit Margin (PM) and Net Sales (2) market measures including; Tobins' Q and (3) other firm characteristics like; firm size, firm age, measured by number of years since a firm is incorporated, for our analysis. We source these data from the Financial Statements Analysis of Companies (Non-Financial) Listed at Pakistan Stock Exchange (Formerly Karachi Stock Exchange) to measure accounting indicators and stock price details of the companies available in the Business Recorder to measure Tobin's Q.

We excluded financial companies because of their regulatory requirements and unique financial structure. We also eliminated the observations with extreme values of some variables such as ROA, ROE, PM and Tobin's Q by trimming of data. Through, visualizing the data and with the help of graphing techniques such as, histogram and scatterplot, we adopted different criteria ranging from 1% to 3.67% trimming of data in order to remove the extreme values and ensuring a normal distribution, 1% trimming of ROA, 3.67% trimming of ROE, 3.12% trimming of PM and 2.50% trimming of Tobin's Q. Additional tests will be done on outliers and robustness checks on different outliers thresholds in the later chapters. After removing outliers, we obtained a master list which yields a final sample of 425,827 observations of 53 variables. As we collected data both at the firm level and at the director level, therefore, we got 356,246 director level observations of 21 variables and 69,581 firm-level observations of 32 variables. We collected the data for 381 firms from 28 sectors across the 6 years which yield 2,286 firm-year observations.

3.2 Measures

In the following paragraphs, we provide the operationalization of all the key elements of the study including, measures of busyness; corporate governance indicators, used as control variables in the study, and firm performance.

3.2.1 Measures of busyness

In order to capture the concept of director busyness, we used several measures and all of these measures of multiple directorships only include appointments to the boards of our sample firms. Each measure is calculated at the firm's board level, thereby permitting us to match the data from firm-level

with these measures of directorships. Furthermore, all the data on these measures of multiple directorships had to be hand-compiled.

There are numerous ways to gauge the director's busyness and based on the empirical studies by Harris and Shimizu (2004) Ferris et al. (2003) Fich and Shivdasani (2006) Jiraporn et al. (2008), Lee and Lee (2014), Cashman et al. (2012), Ahn et al. (2010), we employ nine alternative measures of director's busyness. First, *Average Number of Directorships* measures, for a given firm, the average number of sample firm directorships held by the directors of that firm and calculated as the total number of directorships held by directors divided by the total number of directors on board. Second, *Percentage of Busy Directors* which is the total number of busy directors on board divided by the total number of directors on board multiplied by 100. As in Ferris et al. (2003), Fich and Shivdasani (2006), (Lee & Lee, 2014), Jiraporn et al. (2008) and inspired by the guidelines of the US National Association of Corporate Directors (NACD)[4] and following the recommendation by the Council for Institutional Investors (CII)[5], we consider a director busy if he/she holds three or more directorships. Third, *Busy Board* for which we construct a dichotomous variable, dummy for the busy board, which is equal to one if 50 percent of directors are busy (i.e., are holding three or more board seats), and zero otherwise. Fourth, *Maximum Number of Directorships*

[4] The NACD is a not-for-profit trade group that offers guidance to boards and directors. NACD suggested a limit of three outside directorships for those directors who serves as a full time employee

[5] The CII is a nonprofit, nonpartisan association of corporate, public and union employee benefit funds. CII suggest that individuals with full-time jobs should not serve on more than two other boards and current CEOs should only serve on one other board

calculated as the largest number of total directorships held by any director on board. Fifth, *Maximum Number of Executive Directorships* calculated as the largest number of total directorships held by executive directors on board (in practice, usually the CEO), where executive directors include "paid executives of the company from among senior management" or "working or whole time directors" ("Code of Corporate Governance," 2002 & 2012).

Following the premise of prior empirical studies (Ahn et al., 2010; Cashman et al., 2012; Fich & Shivdasani, 2006; Lee & Lee, 2014), that if non-executive or outside directors are primarily responsible and central to effective board monitoring of management while executive or inside directors are potentially on the board of firm for other reasons, we calculated some additional measures of multiple directorships in order to focus on the external monitoring and to provide a more particularized assessment of the effect of director business on the performance of the firm. Therefore, we compute this additional measure only for non-executive or outside directors. Sixth, *Average Number of Directorships (Non-Executives)* calculated as the total number of directorships of non-executive directors divided by the total number of non-executives on board. Where, non-executive or outside directors are directors who are not classified as executive or inside directors. Seventh, *Percentage of Busy Directors (Non-Executives)* which is calculated as the total number of busy non-executive or outside directors on board divided by the total number of non-executive directors on board multiplied by 100. A busy non-executive director is a director who holds three or more board seats. Eight, *Busy Board (Non-Executives)* is a dummy variable, which is equal to one if 50 percent of non-executive directors on board

are busy, otherwise zero. Ninth, *Maximum Number of Non-Executive Directorships* is measured as the largest number of total directorships held by any non-executive director on board. We also collected information about the *CEO Directorships,* which is computed as the total number of directorships of a firm's CEO.

3.2.2 Measures of corporate governance

To apprehend the effects of numerous corporate governance mechanism on the performance of a firm and their relationship with multiple directorships, we have also included various measures of corporate governance in the study. In later chapters, we have used them as control variables in different models.

Board size

The sample included board size of a firm and is measured by the total number of directors serving on a board of a firm in a given year.

CEO duality

This variable is measured by whether the CEO is also Chair of the board of directors or not. It is a dummy variable which is equal to 1 if an individual held both seats, otherwise 0.

Board composition

Board composition refers to how many non-executive directors are on the board and it is measured by the number of non-executive directors on board divided by board size multiplied by 100.

CEO/Directors shareholding

CEO/Director Shareholding means the number of shares held by the directors, CEO and their spouses and minor children. It is measured by the number

of shares held by them divided by total number of outstanding shares and multiplied by 100.

Board meetings

Board meetings are measured as the frequency of total board meetings in a year.

Board committees

This variable was intended to account for the number of board standing committees in a year in which directors sit as a member. We count for the board committees, that how many committees were formed in a year at board level, like the Audit committee, Nomination committee, HR committee, Corporate Governance Committee, CSR Committee etc.

Family ownership

This variable is included to check for whether a firm is owned by a family or not. It is a dummy variable which is equal to one if a firm is family owned and zero otherwise. We have followed the criteria adopted in previous studies (Anderson & Reeb, 2003; Lam & Lee, 2012; Villalonga & Amit, 2006; Yasser, 2011) in which the authors have considered a firm as a family owned if a family owned a minimum 20% ownership in a firm.

Alternate directors

As per section 192 sub-section (2) of Companies Ordinance 1984, ''the appointment by a director, with the approval of the directors, of an alternate or substitute director to act for him during his absence from Pakistan of not less than three months, shall not be deemed to be an assignment of office''. In this study,

we also included the number of alternate directors on board who are working in the absence of the actual director of the firm.

Gender

To count the number of male and female directors on board we also take into account the gender of directors. It is a dummy variable which is equal to one for male and zero for female directors.

3.2.3 Firm characteristics

Firm age

Firm age is the number of years since an organization is incorporated.

Firm size

Firm size is measured by the natural log of total assets which includes both current assets and non-current assets of a firm in a given year. Values of total assets were spread and data were skewed toward one side. Therefore, in order to avoid the problem of heteroscedasticity in the regression analysis due to a large variability in the observations and to make the distribution more normal, we used the natural log of total asset.

Net sales

Net sales is measured by the natural log of net sales of a firm in a given year. Data of net sales were skewed toward one side and values were too large. Therefore, we used the natural log of net sales to make the distribution more normal and to mitigate heteroscedasticity issues in the regression model due to the large variability in the observations.

3.2.4 Firm performance

To analyze firm performance, we employ both accounting-based and market-based measures. We use Tobin's Q as a market measure. Furthermore, we explicitly include predominantly used accounting-based measures of firm performance including, Return on Assets (ROA); Return on Equity (ROE) and Profit Margin (PM), because managers are often provided more incentives to respond to the accounting figures rather than more conventional market benchmarks (Ferris et al., 2003; Gaver, Gaver, & Battistel, 1992; Kumar & Sopariwala, 1992).

Tobin's Q

We calculate Tobin's Q as market value of the firm's equity at the end of the year plus the difference between the book value of the firm's assets and the book value of the firm's equity at the end of the year, divided by the book value of the firm's assets at the end of the year and multiplied by 100. This calculation of Tobin's Q is also consistent with (Renée B Adams, Almeida, & Ferreira, 2005; Cashman et al., 2012; Güner, Malmendier, & Tate, 2008; Lee & Lee, 2014).

Return on assets

We used Financial Statements Analysis of Companies (FSA)-(Non-Financial) Listed at Pakistan Stock Exchange (Formerly Karachi Stock Exchange)-issued by State Bank of Pakistan to take the values of Return on Assets for the analysis. It is calculated by dividing the net profit before taxes by the average of the beginning and year-end book value of total assets and multiplied by 100.

Return on equity

We also used FSA to take the values of return on equity for the analysis. It is calculated by dividing the net profit before taxes by the average of the shareholder's equity and multiplied by 100.

Net profit margin

The net profit margin is achieved as a ratio of profit earned by a firm from its sales and we seek this value from FSA. It is calculated by dividing the net profit before taxes by the net sales and multiplied by 100.

Table 3.1 Annual distribution of companies & missing data

This table provides annual distribution of 381 firms from 2006 to 2011

Year	Total number of Companies	Firms for which Annual Reports are Found	Firms for which Annual Reports are not Found	Percentage of Available Data	Percentage of Missing Data
2006	381	353	28	92.66%	7.34%
2007	381	355	26	93.18%	6.82%
2008	381	361	20	94.75%	5.25%
2009	381	374	7	98.17%	1.83%
2010	381	372	9	97.64%	2.36%
2011	381	374	7	98.17%	1.83%

Table 3.1 is representing a broader overview of the number of sample firms included in the study and a yearly distribution of firms having complete and missing annual reports. We face the problem of missing reports in the earlier years 2006-2008 ranging from 20 to 28 firms. The number of missing reports was dropped in the later years from 2009-2011 ranging from 7 to 9 firms. We have data for 381 firms in total, for the year 2006 we found 353 (92.66%) firms with complete annual reports and only 28 (7.34%) firms for which we didn't find any

annual report. In the year 2007, there were 355 (93.18%) firms having complete annual reports and only 26 (6.82%) firms having the problem of missing annual reports. In the year 2008, for 20 (5.25%) firms we were not able to find any annual reports and found complete annual reports of 361 (94.75%) firms. Later in the year 2009, the missing figure dropped and there were only 7 (1.83%) firms with missing annual reports. In 2010, the missing figure was 9 (2.36%) and in 2011 it was only 7 (1.83%) firms.

Table 3.2 Industry distribution

This table provides industry distribution of 381 firms and frequency of family and non-family owned firms in each industry. Where a firm is family owned if family directors owned minimum 20% ownership in the firm.

No.	Industry	No of Companies	Percentage	Family firms	Non-family firms
1	CEMENT	19	4.99%	16	3
2	GLASS & CERAMICS/MINERAL PRODUCTS	8	2.10%	4	4
3	FERTILIZER	5	1.31%	3	2
4	CHEMICAL SECTOR	30	7.87%	15	15
5	PHARMA SECTOR	8	2.10%	7	1
6	SUGAR SECTOR	34	8.92%	23	11
7	TEXTILE SPINNING	86	22.57%	79	7
8	TEXTILE WEAVING	10	2.62%	7	3
9	TEXTILE COMPOSITE	39	10.24%	34	5
10	TEXTILE WOOLEN	2	0.52%	2	0
11	TEXTILE SYNTHETIC & RAYON	9	2.36%	7	2
12	JUTE	3	0.79%	2	1
13	TOBACCO	3	0.79%	1	2
14	REFINERY	4	1.05%	3	1
15	POWER GENERATION AND DISTRIBUTION	12	3.15%	4	8
16	OIL AND GAS MARKETING COMPANIES	6	1.57%	1	5
17	OIL & GAS EXPLORATION COMPANIES	4	1.05%	0	4
18	ENGINEERING	10	2.62%	7	3
19	AUTOMOBILE ASSEMBLER	11	2.89%	5	6
20	AUTOMOBILE PARTS & ACCESSORIES	8	2.10%	5	3
21	CABLE & ELECTRICAL GOODS	7	1.84%	4	3
22	TRANSPORT	3	0.79%	1	2
23	TECHNOLOGY AND COMMUNICATION	8	2.10%	3	5
24	PAPER & BOARD	9	2.36%	6	3
25	LEATHER & TANNERIES	5	1.31%	4	1
26	VANASPATI & ALLIED INDUSTRIES	5	1.31%	1	4
27	FOOD & PERSONAL CARE PRODUCTS	16	4.20%	12	4
28	MISCELLANEOUS	17	4.46%	13	4
	Total	381		269	112
			100%	70.60%	29.40%

Table 3.2 displays sample frequency by industry, out of 28 sectors, the textile spinning sector is the largest by representing 22.57% of the whole data set and include 86 firms. Similarly, the textile composite sector contains 39 firms and it is 10.24% of the whole data. On the other hand, textile woolen, jute, tobacco, and transport sectors have the least number of firms and represent 0.52% to 0.79% of the data.

In this table, we also report the number of family and non-family owned firms in each sector. Overall, 70% of firms in the data are family owned firms and approximately 30% of firms are non-family owned. The chemical sector includes the largest number of non-family owned firms by containing 15 non-family owned firms, while the textile spinning sector contains the largest number of family firms by having 79 family-owned firms. All firms in the woolen sector are family firms while oil and gas exploration firms included in the sample are non-family owned.

Table 3.3 Descriptive statistics

Descriptive statistics for key variables for the 381 companies are presented in Table 3.3. Panel A shows directors' characteristics, Panel B shows different measures of director busyness and Panel C includes measure of director busyness only for non-executive directors, we repeat all of the same measures of director's busyness within Non-Executive directors. Panel D indicate measures of corporate governance while, Panel E Show Firm Characteristics and Panel F includes performance measure.

variables	**N**	**Mean**	**Median**	**SD**	**Min**	**Max**
Panel A. DIRECTORS CHARACTERISTICS						
Total Number of Directors	3652					
Number of Male Directors	3155 (86.38%)					
Number of Female Directors	497 (13.62%)					
Number of Alternate Directors	65					
Panel B. MEASURES OF DIRECTORS' BUSYNESS						
Average Number of Directorships	2,189	2.003	1.571	1.206	1	7.714
Percentage of Busy Directors	2,189	24.24	14.29	30.58	0	100
Busy Board	2,189	0.215	0	0.411	0	1
Maximum Number of Directorships	2,189	3.757	3	2.684	1	10
Maximum Number of Executive Directorships	2,189	2.187	1	1.813	1	10
CEO Directorships	2,189	1.986	1	1.697	1	10
Panel C. MEASURES OF DIRECTORS' BUSYNESS (ONLY OUTSIDE DIRECTORS)						
Average Number of Directorships (Non-Executives)	2,127	2.124	1.750	1.327	0	8.250
Percentage of Busy Directors (Non-Executives)	2,127	27.33	16.67	32.65	0	100
Busy Board (Non-Executives)	2,189	0.253	0	0.435	0	1
Maximum Number of Non-Executive Directorships	2,121	3.590	3	2.702	1	10
Panel D. CORPORATE GOVERNANCE MEASURES						
Board Size	2,189	7.740	7	1.359	7	15
CEO Duality	2,189	0.428	0	0.495	0	1
Board Composition	2,110	65.53	71.42	18.46	0	93.33
Equity Ownership of Board	2,162	29.79	24.43	27.39	0	97.75
Number of Board Meetings	2,142	5.384	5	2.533	1	35
Number of Board Committees	2,177	1.262	1	0.828	1	11
Family Ownership	2,189	0.693	1	0.461	0	1

Panel E. FIRM CHARACTERISTICS						
Firm Age	2,189	31.95	27	16.73	1	145
Firm Size	2,180	8.02	1.70	21.97	0	262.68
Net sales	2,180	9.02	1.60	36.41	0	820.53
Panel F. PERFORMANCE VARIABLES						
Return on Assets	2,146	4.255	2.535	12.66	-49.38	49.26
Return on Equity	2,101	11.19	9.170	33.55	-147.7	145.8
Net Profit Margin	2,113	2.909	2.440	17.73	-99.95	89.38
Tobin's Q	2,103	112.4	93.50	64.59	-1.960	497.8

Table 3.3 contains the descriptive statistics of all the key variables for 381 companies included in the study. Several results are noteworthy. Panel A displays the director's characteristics. The total number of directors in our sample are 3652 directors and 3155 directors are male members, which are 86.38% of a total number of directors, only 497 directors in our sample are female and they are about 13.62% of the total directors. There are 65 alternate directors in the study, the alternate director is a director who is appointed in case of absence of actual director from Pakistan for not less than three months. Panel B presents descriptive statistics for measures of director busyness. Looking at the firm-level average number of directorships, panel B of Table 3.3 shows that the median of this variable is 1.57 and mean is 2.03 with a minimum 1 to the maximum of 7.714 directorships. Using the definition of busy director "we consider directors busy if they serve on three or more boards" on average, 24.24% (the median is 14.29%) of directors in the sample are considered as busy directors. Similarly, the proportion of firms with more than 50 percent of their directors classified as busy are 21.5%. We count the directorships in the sample firms only. On average, the maximum number of directorships in the sample is 3.76 (median is 3) and the maximum number of directorships is 10. Furthermore, on average the maximum number of executive directorships in the sample is 2.19 (median is 1) with a

maximum of 10 executive directorships. Similarly, on average a CEO holds 2 (median is 1) directorships and the maximum number of directorships held by any CEO in the sample is 10 directorships.

If non-executive directors are primarily responsible and central to effective board monitoring of management, following the proposition of prior empirical studies (Ahn et al., 2010; Cashman et al., 2012; Fich & Shivdasani, 2006; Lee & Lee, 2014), we focus on the external monitoring to provide a more particularized assessment of the relationship of director busyness and firm performance. Therefore, we calculated some additional measures of multiple directorships focusing only on non-executive directors and found some interesting descriptive statistics reported in panel C of Table 3.3. Looking at the average number of directorships, non-executive directors hold 2.12 directorships and the median amounts to 2, while the maximum number of average directorships is 8.3. On average, every firm has 27% (the median is 16.67) busy directors on their boards. About 25% of the firms in our sample have busy boards. The mean value of the maximum number of non-executive directorships is approximately 4 directorships and the median is 3.

Panel D exhibits descriptive statistics for several corporate governance measures. On average a typical board has 8 members (median is 7), no firm has less than seven members and a maximum board size in the sample is fifteen members, of whom 66% (median is 71.42) are non-executive directors. About 43% boards have CEO duality, the mean (median) number of board meetings is 5.38 (5) and no firm had less than 1 meeting and the maximum of 35 board meetings in a year. Typically, a board has 1.26 (median is 1) board committees

and no firm has less than one committee (which is the audit committee) and no more than 11 committees in the sample. About 30% of equity shares are held by the board of directors and their families and 69% of firms in the total sample are family owned firms.

Panel E presents firm characteristics, the average age of a firm is about 32 (median is 27) years and on average the firm size measured by book value of total assets is Rs 8.02 billion (median is Rs 1.70 billion) and Average sales volume is Rs 9.02 billion (median is Rs 1.60 billion). Panel F indicates the descriptive statistics of performance measures. The average value of return on the asset in the sample is 4.25% (median is 2.53%) and similarly, the return on equity has a mean of 11.19% (median is 9.175) and the profit margin has a mean value of 3% (median is 2.44). On average the firms in the sample have a Tobin's Q ratio of 112.4%.

Table 3.4 Comparison of firms with busy directors and without busy directors (univariate comparison)

Table 3.4 compares the means and medians of several corporate governance and financial measures and characteristics of firms between firms with a multiple director and without multiple directors. A director is considered as a multiple director if he/she holds three or more directorships in the sample firms. All financial variables are calculated at the end of financial year. Panel A shows directors' characteristics, Panel B shows different measures of director busyness and Panel C includes measure of director busyness only for non-executive directors, we repeat all of the same measures of director's busyness within Non-Executive directors. Panel D indicate measures of corporate governance while, Panel E Show Firm Characteristics and Panel F includes performance measure. *Statistically significant at the 10% level. **Statistically significant at the 5% level. ***Statistically significant at the 1% level

	Firms Without a Busy Director		**Firms with a Busy Director**		**Difference t-statistic**
VARIABLES	Mean	Median	Mean	Median	t-test
Panel A. DIRECTORS CHARACTERISTICS					
Total Number of Firms	148		233		
Number of Alternate Directors	44		90		
Panel B. MEASURES OF DIRECTORS' BUSYNESS					
Average Number of Directorships	1.12	1	2.60	2.28	-35.47***
Percentage of Busy Directors	0	0	40.82	28.57	-40.63***
Busy Board	0	0	0.36	0	-22.42***
Max. Number of Directorships	1.39	1	5.37	4	-49.72***
Max. Number of Executive Directorships	1.19	1	2.86	2	-23.72***
CEO Directorships	1.13	1	2.56	2	-21.19***
Panel C. MEASURES OF DIRECTORS' BUSYNESS (ONLY OUTSIDE DIRECTORS)					
Avg. Number of Directorships (Non Executives)	1.11	1	2.80	2.50	-36.83***
Percentage of Busy Directors (Non-Executives)	0	0	45.55	37.98	-43.17***
Busy Board (Non-Executives)	0	0	0.42	0	-25.64***
Max. Number of Non-Executive Directorships	1.32	1	5.09	4	-43.12***
Panel D. CORPORATE GOVERNANCE VARIABLES					
Board Size	7.45	7	7.93	7	-8.22***
CEO/Chairman Duality	0.55	1	0.34	0	9.74***
Board Composition	60.88	62.50	68.62	71.42	-9.63***
Equity Ownership of Board	37.45	39.12	24.56	14.12	11.04***
Number of Board Meetings	5.70	5	5.16	5	4.85***
Number of Board Committees	1.14	1	1.34	1	-5.68***
Family Ownership	0.73	1	0.66	1	3.20***

Panel E. FIRM CHARACTERISTICS					
Firm Size	5.30	1.70	9.90	1.70	-4.81***
Firm Age	30.09	26	33.22	29	-4.32***
Net Sales	3.71	1.41	12.67	1.77	-5.66***
Panel F. PERFORMANCE VARIABLES					
Return on Assets	2.60	1.65	5.37	3.35	-5.00***
Return on Equity	7.75	6.85	13.47	10.99	-3.83***
Profit Margin	1.16	1.61	4.09	3.21	-3.74***
Tobin's Q	110.4	93.61	113.7	93.40	-1.13

In Table 3.4, we report summary statistics and made a univariate analysis of the various characteristics of a firm. As in Jiraporn, Singh, et al. (2009) and Ferris et al. (2003) we have reported descriptive statistics of the two groups. One group includes firms without a busy director and other group represents those firms who have a busy director on board. The criteria of three directorships, to classify a director as busy, may seem arbitrary, but there are two reasons for this selection of this criteria. We have adopted the same definition used by prior studies (Core et al., 1999; Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn, Singh, et al., 2009; Perry & Peyer, 2005). Therefore, we would be able to make the results comparable with them. Second, it is also in line with the recommendations by CII. Out of 17,236 director level observations, 4,136 are busy director's observations and 13,101 are non-busy director's observations.

Panel A presents directors' characteristics for both groups of firms. In the sample of 381 firms, 233 firms have at least one busy director on board while 148 firms have no busy director on board. Firms with a busy director hold more alternate directors as compare to other group by having 90 alternate directors versus 44 alternate directors. This may be a sign that some directors of firms

having a busy director, spend more time out of Pakistan or they are resident of a foreign country and mostly remain outside of Pakistan.

Panel B depicts the univariate analysis of different measures of director's busyness between two subsamples. Median of the Average number of directorships is 2.28 (mean is 2.60) in firms having at least one busy director and 1 (mean is 1.12) in firms without having a busy director and the difference is highly significant. On average, 36.2 percent of boards are busy within the firms having a busy director and 40.82 percent directors are busy. Furthermore, the mean value of the largest number of directorships is 5.37 (median is 4) in the firms having a busy director while the figure is 1.39 (median is 1) in the firms without a busy director. Similarly, the largest amount of executive directorships and CEO directorships is also higher in the firms having a busy director. The mean value of largest directorship of an executive director is 2.86 (median is 2) and CEO directorships having a mean value of 2.56 (median is 2) in the firms having a busy director. While, in the other group of firms without any busy director, the mean value of the largest directorships of executive director is 1.19 (median is 1) and CEO directorships are 1.13 (median is 1).

Panel C shows the comparison of measures of director's busyness only for non-executive directors. Median of average number of directorships is 2.50 (mean is 2.80) and mean value of largest number of non-executive directorships is 5.09 (median is 4) in firms having a busy director, while median of average number of directorships is 1 (mean is1.10) and largest number of non-executive directorships is 1.32 (median is 1) in the firms without a busy director. The

difference in the mean values of both variables within the two groups is statistically highly significant at the one percent level. Likewise, about on average 45.55 percent of directors are busy and about 42.50 percent boards are busy within the firms having one busy director.

Panel D exhibits the measures of corporate governance for both groups and several results are noteworthy. In terms of equity ownership, on average firms with busy directors hold 24.56% (median is 14.12%) equity shares whereas firms without busy directors hold 37.45% (median is 39.12%) equity shares and the difference is statistically significant at the 1% level. The most important observation is that boards having busy directors hold a relatively lower ownership stake in the firm. As per Ferris et al. (2003), if boards and executives hold equity ownership then their interests might align more closely with the interest of shareholders. Bhagat, Carey, and Elson (1999) found that when outside directors hold a large amount of equity, they are more likely to replace the CEO if the performance of the firm is too poor. Similarly, if directors accept excessive board seats as a form of perquisite consumption then, in the firms with busy directors we should observe a lower amount of equity ownership of the board. Equity holding directors would be reluctant to accept additional board seats since impaired monitoring of management would lead to impose a direct cost to the directors in the form of low equity prices. We have found in the sample that firms with busy directors have a lower amount of equity shares and these findings are consistent with the view that directors consider additional board seats as a prerequisite and they are deterred from taking excessive board seats when they have to face direct personal costs from such consumption. In an agency

framework, directors of firms with busy directors prefer to hold a lower amount of equity shares as their personal private benefits by serving on outside boards are much larger than the loss they suffer for lower monitoring (Jiraporn, Singh, et al., 2009). Furthermore, Yermack (1996) argue that larger boards are mostly unwieldy whereas boards having a small size can monitor the management in a better way. Looking at the board size of our sample and comparing it within two groups, on average, firms with a busy director has approximately 8 (median is 7) members on board while for the firms without a busy director, average board size is 7 (median is 7). Firms with busy directors have, on average, a significantly larger board size than firms without a busy director. This result shows that busier directors tend to be mostly on larger boards. This supports the conjecture that multiple directorships can be a form of perquisite consumption, a finding consistent with the busyness hypothesis. Alternatively, from another point of view, firms having larger board size would provide more opportunities to the directors to build relations and connections which would lead to more prospects to serve on other boards. If this point of view is correct then directors who are serving on larger boards are likely to hold a higher number of directorships.

For firms without busy directors, non-executive directors constitute 60.88% (median is 62.50%) of the board, while for firms with a busy director, they represent 68.62% (median is 71.42%) of the board and the difference of board composition is statistically significant at 1%. Boards of firms with a busy director seem to be more independent as compare to the boards of firms without a busy director. Family ownership is more prevalent in firms without busy directors, like 73.10% of firms without busy director are family owned firms while

66.70% of the firms having at least one busy director are family owned firms. The difference is statistically significant at the 1 % level and results show that firms having busy directors are mostly non- family owned. Family firms tend to have the lower number of busy directors. The proportion of firms with CEO duality is 34.50% in the subsample of firms with busy directors and 55% in the subsample of firms without busy directors respectively and their difference is also significant at the 1% level. The results indicate that firms having busy directors on boards practice a separate leadership style instead of CEO duality as it is more pronounced in the firms without busy directors.

On average boards of firms with busy directors meet 5 (median is 5) times in a year while boards of firms without busy directors conduct approximately 6 (median is 5) meetings in a year. The difference of board meeting in a year is significant in both subsamples at the level of 1%. Although the difference is statistically significant, economically it's not a big difference, while the median is also the same for both subsamples. Looking at the number of board committees, firms with busy directors have on average 1.4 (median is 1) board committees, while firms without busy directors, on average have 1.14 (median is 1) number of board committees. The difference is statistically significant at 1% level. It shows that busy directors tend to serve more the standing board committees and it could be considered as preliminary support of the reputation/expertise hypothesis, which suggests that busy directors have more experience and expertise and they are more qualified to sit on the board committees.

Panel E presents firm characteristics for both subsamples. Results depict that multiple directorships are more found in larger firms, where firm size is measured by total assets and net sales. As far as size and sales of the firm, firms without busy directors on average have Rs 5.30 billion (median is Rs1.70 billion) of total assets and sales volume of Rs 3.71 billion (median is Rs 1.41 billion). On the contrary, firms with busy directors have a significantly larger amount in terms of assets and sales. On average, the value of total assets is Rs 9.90 billion (median is Rs 1.70 billion) and the mean value of sales volume is Rs 12.67 billion (median is Rs 1.77 billion). The difference between firms with busy directors and without busy directors are statistically significant in both measures and shows that the larger firms have a higher number of busy directors. This result supports the view that large firms have more contracting relationships in the external environment compared to smaller firms. Hence, it provides an opportunity to the firm to gain from the well-bonded relationships which would likely be a result from outside directorships. It may also indicate that directors who sit on the board of larger firms may earn a reputation of good monitors and have more expertise gain from the directorship at the larger firm, hence they are more sought-after in the market of corporate directors (Ferris et al., 2003; Jiraporn, Singh, et al., 2009). The average age of firms having a busy director is 33.22 (median is 29) years while the average age of firms without busy directors is 30.09 (median is 26) years, the difference is significant.

Panel F exhibits the most notable results of financial measures of firms having the busy director and without a busy director. As measured by Tobin's Q, return on assets, return on equity and profit margin firms having busy directors

are highly valued as compared to the firms without busy directors. On average firms without busy directors have a return on assets of 2.61% (median is 1.65%); return on equity is 7.76% (median is 6.85%); profit margin is 1.168% (median is 1.61%); and Tobin's Q is 110.4% (median is 93.61%). On the contrary firms with busy directors are more highly valued on all profitability ratios and enjoy higher Tobin's Q, return on assets, and return on equity and profit margin. On average firms with busy directors have a return on asset of 5.34% (median is 3.36%); return on equity is 13.47% (median is 11%); profit margin is 4.10 % (median is 3.21%); and Tobin's Q is 113.7% (median is 93.40%). The difference between the two sample groups on all these ratios are statistically significant at the 1% level, except Tobin's Q, which is not significant.

In summary, it can be deduced that these comparisons are in line with the contention of Fama and Jensen (1983) that multiple directorships is a large firm phenomenon. But these results are less informative about the multivariate relationship between multiple directorships and firm performance. Therefore, we will explore the nature of this relation between multiple directorships and firm performance in greater detail in the next chapters with a multivariate analysis.

Table 3.5 Correlation

Table 3.5 presents Spearman Correlation between all key variables included in the study. *Statistically significant at the 10% level. **Statistically significant at the 5% level. ***Statistically significant at the 1% level.

	1	2	3	4	5	6	7	8	9	10	11	12
Average Number of Directorships **(1)**	1											
Percentage of Busy Directors **(2)**	0.870***	1										
Busy Board **(3)**	0.770***	0.900***	1									
Max. Number of Directorships **(4)**	0.773***	0.593***	0.441***	1								
Max. Number of Executive Directorships **(5)**	0.770***	0.669***	0.641***	0.539***	1							
CEO Directorships **(6)**	0.787***	0.689***	0.674***	0.493***	0.901***	1						
Avg Number of Directorships [Non-Executive] **(7)**	0.963***	0.822***	0.701***	0.811***	0.637***	0.678***	1					
Percentage of Busy Directors [Non-Executive] **(8)**	0.844***	0.961***	0.839***	0.623***	0.575***	0.613***	0.856***	1				
Busy Board [Non-Executive] **(9)**	0.734***	0.858***	0.851***	0.466***	0.566***	0.598***	0.722***	0.876***	1			
Max. Number of Non-Executive Directorships **(10)**	0.758***	0.582***	0.431***	0.959***	0.404***	0.443***	0.833***	0.639***	0.464***	1		
Board Size **(11)**	0.029	0.014	-0.029	0.194***	-0.041	-0.026	0.042	0.038	-0.011	0.216***	1	
CEO Duality **(12)**	-0.195***	-0.208***	-0.166***	-0.176***	-0.113***	-0.093***	-0.190***	-0.214***	-0.171***	-0.165***	-0.210***	1
Board Composition **(13)**	0.239***	0.231***	0.183***	0.222***	0.058*	0.159***	0.174***	0.181***	0.139***	0.258***	0.247***	-0.171***
Board Meetings **(14)**	-0.091***	-0.095***	-0.086***	-0.112***	-0.064**	-0.073**	-0.102***	-0.098***	-0.067**	-0.114***	0.049*	0.011
Board Committees **(15)**	0.014	0.021	-0.025	0.086***	-0.0743**	-0.048*	0.055*	0.079***	0.077***	0.106***	0.329***	-0.204***
Equity Ownership **(16)**	-0.163***	-0.061**	0.015	-0.279***	-0.001	-0.047*	-0.195***	-0.101***	-0.031	-0.309***	-0.256***	0.211***
Family Ownership **(17)**	0.115***	0.183***	0.226***	-0.081***	0.218***	0.187***	0.064**	0.137***	0.162***	-0.115***	-0.253***	0.084***
Firm Age **(18)**	0.051*	0.009	-0.017	0.109***	0.075**	0.036	0.062**	0.032	-0.032	0.101***	0.168***	-0.076**
Firm Size **(19)**	0.175***	0.152***	0.106***	0.155***	0.101***	0.107***	0.186***	0.179***	0.144***	0.163***	0.381***	-0.222***
Total Sales **(20)**	0.114***	0.096***	0.064**	0.121***	0.081***	0.076**	0.116***	0.104***	0.086***	0.114***	0.189***	-0.084***
Tobin's Q **(21)**	-0.078***	-0.071***	-0.088***	0.004	-0.115***	-0.083***	-0.058*	-0.063**	-0.049*	0.019	0.136***	-0.030
Return on Assets **(22)**	0.009	0.039	0.026	0.073**	-0.021	-0.028	0.021	0.051*	0.033	0.070**	0.161***	-0.208***
Return on Equity **(23)**	-0.008	0.021	0.009	0.056*	-0.030	-0.04	0.007	0.043	0.030	0.051*	0.128***	-0.150***
Net Profit Margin **(24)**	0.005	0.021	0.021	0.066**	-0.039	-0.049*	0.016	0.034	0.008	0.064**	0.142***	-0.122***

Table 3.5— Continued												
	13	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Average Number of Directorships **(1)**												
Percentage of Busy Directors **(2)**												
Busy Board **(3)**												
Max. Number of Directorships **(4)**												
Max. Number of Executive Directorships **(5)**												
CEO Directorships **(6)**												
Average Number of Directorships [Non-Executive] **(7)**												
Percentage of Busy Directors [Non-Executive] **(8)**												
Busy Board [Non-Executive] **(9)**												
Max. Number of Non-Executive Directorships **(10)**												
Board Size **(11)**												
CEO Duality **(12)**												
Board Composition **(13)**	1											
Board Meetings **(14)**	-0.129***	1										
Board Committees **(15)**	0.070**	0.035	1									
Equity Ownership **(16)**	-0.309***	0.001	-0.275***	1								
Family Ownership **(17)**	-0.184***	0.039	-0.288***	0.565***	1							
Firm Age **(18)**	-0.034	-0.074**	0.082***	-0.083***	-0.069**	1						
Firm Size **(19)**	0.043	0.138***	0.336***	-0.271***	-0.170***	0.058*	1					
Total Sales **(20)**	-0.038	0.066**	0.177***	-0.102***	-0.075**	0.031	0.542***	1				
Tobin's Q **(21)**	0.085***	-0.037	0.135***	-0.198***	-0.244***	0.049*	-0.072**	-0.037	1			
Return on Assets **(22)**	0.054*	-0.022	0.183***	-0.185***	-0.242***	0.078***	0.204***	0.241***	0.340***	1		
Return on Equity **(23)**	0.035	-0.016	0.128***	-0.098***	-0.149***	0.039	0.129***	0.143***	0.261***	0.698***	1	
Net Profit Margin **(24)**	0.099***	0.036	0.163***	-0.169***	-0.216***	0.038	0.192***	0.129***	0.209***	0.710***	0.491***	1

In table 3.5, we present the Spearman correlation between all key variables. The results of the correlation matrix are consistent with the predictions of agency theory about the multiple directorships and firm performance relationship. Agency theory predicts that multiple directorships are negatively associated with firm performance. Furthermore, the results are in line with the findings of Jiraporn et al. (2008) and Lee and Lee (2014) Kiel and Nicholson (2006). Several striking observations emerge. First, all our ten measures of director's busyness including measures for only non-executive directors are highly correlated at 1 percent level, implying that our all measures are consistent. This finding is also in line with Jiraporn et al. (2008).

Second, the market indicator of firm performance is negatively correlated with all the measures of multiple directorships and significant at the level of 1 percent. Tobin's Q is negatively correlated with the average number of directorships, the percentage of busy directors, the busy board, the maximum number of executive directorships and CEO directorships. This correlation is significant at the 1 percent level. Similarly, it is also negatively associated with the percentage of busy directors (non-executive), the average number of directorships (non-executive) and busy board (non-executive) but significant at the 5 percent and the 10 percent level respectively. In contrast, correlations between Tobin's Q and the maximum number of directorships, maximum number of non-executive directorships are positively correlated but not statistically significant.

Third, all our accounting based indicators of firm performance including return on assets, return on equity and profit margin are positively correlated with the average number of directorship, percentage of busy directors and busy boards

but none of them is statistically significant. Likewise, we observe a positive but statistically insignificant correlation between return on assets, return on equity, profit margin and the average number of directorship (non-executive), the percentage of busy directors (non-executive) and busy board (non-executive) only return on asset and percentage of busy directors (non-executive is significant at the 10 percent level).

The aforementioned results of correlation between our variables of interest, i.e. director's busyness and firm performance indicate that multiple directorships are not significantly associated with various measures (Return on asset, Return on equity and Profit margin) of firm performance except one market indicator (Tobin's Q). One probable reason of this relation with accounting and market measure would be that multiple directorships have a direct effect on the perceived value/performance of the firm while the effect on the real performance would be rather indirect. In chapter 4 and chapter 6 we have provided some indications about this direct and indirect relation. Further, these results of correlation are consistent with Lee and Lee (2014).

Fourth, board size, board composition, board committees, firm size, and total sales are positively correlated with all performance indicators including both market and accounting- based measures and statistically the correlation is highly significant at 1 percent level these results are in line with Kiel and Nicholson (2006) and Lee and Lee (2014). On the contrary, we observe that Tobin's Q, return on asset, return on equity and profit margin are negatively correlated with, equity ownership, CEO duality and family ownership and the correlation is highly significant at the 1 percent level which is in line with Jiraporn et al. (2008).

Table 3.6 Patterns in the number of directorships held by directors

This table describes the distribution of directors for our sample companies, in terms of the number of directorships held. The sample comprise of 381 companies listed on Pakistan Stock Exchange for the year 2006 to 2011 across 28 sectors. Distribution of directorships held by individual director is computed only based on the directorships observed within the sample firms.

Directorships Held	Number of Directors	Fraction of Directors	Total Number of directorships	Fraction of Total Directorships	Numb of directors (cumulative)	Percent of directors (cumulative)
1	2794	76.51	2794	52.71	2794	76.51
2	477	13.06	954	18.00	3271	89.57
3	212	5.81	636	12.00	3483	95.38
4	70	1.92	280	5.28	3553	97.30
5	37	1.01	185	3.49	3590	98.31
6	23	0.63	138	2.60	3613	98.94
7	14	0.38	98	1.85	3627	99.32
8	14	0.38	112	2.11	3641	99.70
9	6	0.16	54	1.02	3647	99.86
10	5	0.14	50	0.94	3652	100
Total directors			3652			
Total directorships			5301			
Number of firms			381			

Form the Table 3.6 we may construe the pattern of directorships. Similar to the Cashman et al. (2012), Ferris et al. (2003), Sarkar and Sarkar (2009), Kiel and Nicholson (2006) and Jiraporn, Davidson, et al. (2009) we have also reported the distribution of directors based on the number of directorships held within the sample firms included in the study. In our sample there are 3,652 directors, holding 5,301 directorial positions (an average 14 of per firm). Multiple directorships are quite pervasive in Pakistan as compare to the US context. In Pakistan about 24.50 percent directors have multiple directorships by holding more than one board seat while corresponding estimates in a US-based study of 3,190 firms show that there are only 16 percent of directors holding more than one board seats (Ferris et al., 2003). If we adopt the benchmark of three directorships to define a director as a busy director, then about 11 percent of directors are busy in our study. Whereas, Ferris et al. (2003) report that only 6

percent of directors are busy. Further, the positive feature of our data is that there is ample variation in the directorships per director within the sample firms that make it empirically possible to find the relationship between varying degrees of director's busyness and firm performance if indeed such a relationship exists.

Consistent with Sarkar and Sarkar (2009), Ferris et al. (2003) and Jiraporn, Davidson, et al. (2009), we observe that as the number of board seats held increases, the percentage of directors holding multiple board seats falls. For example, we find that 13.06 percent of directors hold two board seat while only 0.14 percent directors hold 10 seats; corresponding statistics of Jiraporn, Davidson, et al. (2009) is 17.9 percent directors holing two board seats while 0.1 percent hold ten board positions. Similarly, Ferris et al. (2003) report that 10.07 percent directors holding two board positions while only 0.01 percent directors hold 11 board seats. Furthermore, Sarkar and Sarkar (2009) has also reported a decreasing pattern of directorships by computing directorships within the sample of 500 companies and found that 12.18 percent of directors hold 2 directorships and only 0.5 percent directors hold 6 or more than six directorships.

3.3 Conclusion

The purpose of this chapter was to give an in-depth view of the data set collected for this dissertation. We have collected data on several corporate governance variables (both at individual and board level), firm characteristics and different measures of firm performance from 381 firms listed on the Pakistan Stock Exchange across 28 different sectors for the period of 2006-2011. Results reveal that the majority of firms in Pakistan are family owned and the textile industry is the largest sector in the data set. There are 3,652 directors and the majority of these directors are male directors while 13.62% directors are female. Descriptive statistics show measures of busyness for the whole board as well as

for the non-executive directors. It also includes different measures of corporate governance, firm characteristics and performance measures. Results of the univariate analysis show that firms with a busy director are significantly different from the firms without a busy director on almost all the variables. Correlation analysis depicts that multiple directorships are negatively correlated with firm performance. Patterns of the number of directorships indicate that 3,652 directors hold 5,301 director positions and multiple directorships are quite pervasive in Pakistan as compared to the US context and there is much variation in the data directorships data which makes it empirically possible to determine the relationship between busyness and firm performance.

4 Chapter - The effects of multiple directorships on firm performance in Pakistani listed firms: the moderating effect of firm size

ABSTRACT[6]

This paper investigates the effect of multiple directorships on firm performance in Pakistani listed firms. Literature disagrees on the link between multiple directorships and firm performance. We posit that this relationship is conditional in nature and that it depends on the context whether multiple directorships are advantageous or not. Results reveal that multiple directorships have a negative effect on firm performance. We also found some indications that firm size moderates this relationship in such a way that the negative effect becomes more pronounced in larger firms although this effect is not clear-cut. The results of this study support the notion of the busyness hypothesis.

[6] This study has been presented at the 14th EIASM WORKSHOP ON CORPORATE GOVERNANCE.

4.1 Introduction

Boards of directors are considered as a key corporate governance mechanism and play a vital role in the governance of large corporate entities. Indeed, boards have been considered as an economic institution that help to resolve the agency conflict inherent in managing an organization (Hermalin & Weisbach, 2003). Therefore, boards have attracted significant attention from the research community which led to a number of empirical studies with the aim to answer some key questions related to different attributes of boards, such as, how board characteristics affect the actions of the board and consequently the performance of the firm.

Prior studies on the board of directors have been focusing on the relationship between different board demographic variables and firm performance by examining variables such as board composition, board size, board tenure and CEO duality (Basco & Voordeckers, 2015; Bhagat & Black, 2000; Brickley et al., 1994; Coles et al., 2001; Forbes & Milliken, 1999; Gilson, 1990; Hermalin & Weisbach, 2003; Klein et al., 2005; Lipton & Lorsch, 1992; Perry & Peyer, 2005; Rechner & Dalton, 1991; Shivdasani, 1993; Weisbach, 1988; Yermack, 1996). However, at the same time, the phenomenon of multiple directorships has garnered the attention of scholars and has led to a growing body of literature that investigates the consequences of board busyness, building on two opposite arguments. On the one hand, scholars supporting multiple directorships view it as a provision of resources and argue that multiple directorships are positively related to firm performance. On the other hand, researchers building on agency theory consider multiple directorships as organizational slack and oppose to the idea of having directors on board with multiple directorships. They predict a negative relationship between multiple directorships and firm performance. The

results of the studies that examine the effect of multiple directorships based on these two opposing perspectives state that, multiple directorships bring about both opportunities and threats and neither perspective has produced strong empirical evidence. Thus, we find arguments in support of both views. Arguments supporting multiple directorships are reputational benefits, organizational legitimacy and access to vital resources (Kiel & Nicholson, 2006; Pfeffer & Salancik, 2003), valuable experience and a source of knowledge in order to support strategic decisions (Harris & Shimizu, 2004; Zajac & Westphal, 1996). On the contrary, critics of multiple directorships state that, when the workload of directors increases significantly due to multiple board appointments, the risk increases that directors will no longer adequately perform their roles, such as their monitoring and advising roles (Ferris et al., 2003; Kiel & Nicholson, 2006). Likewise, different corporate activists have recognized that the time of an executive is finite and as a consequence, they proposed to place a specific limit on the number of directorships that an individual may hold. For instance, *The Council of Institutional Investors* 1998) recommends that, directors with full time jobs should not serve more than two other boards. Similarly, the National Association of Corporate Directors guidelines (NACD, 1996) argues that, CEOs and senior executives should not sit on more than three outside boards.

To date, both in academia and in practice, the two opposite theoretical prediction have led to an empirical debate about the detriments and advantages of multiple directorships and the effects on firm performance. However, this empirical debate about the detriments and advantages of multiple directorships provided mixed and inconclusive empirical results (e.g. (Di Pietra et al., 2008; Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Jiraporn et al., 2008; Perry & Peyer, 2005).

Following the argument of Chi and Lee (2010) that the value of corporate governance is conditional in nature and that there is not a one best way to design the board and governance system (Huse, 2005a, 2005b), we assert that a possible reason for these mixed results is that the relationship between multiple directorships and firm performance is not simple and direct but rather conditional in nature and depends on the context of the firm. Therefore, this study investigates the multiple directorship-performance relationship with Pakistani publicly listed firms, conditional on an important context variable such as firm size, therefore, this paper adds to the debate of the conditional nature of corporate governance. Prior studies mostly neglect the moderating role of firm size while determining the effect of multiple directorships on firm performance. Hence, different from earlier studies, we are particularly interested in the moderating role of firm size in determining the relationship between busyness and firm performance with a large sample of listed firms in Pakistan. We focus on firm size as moderator because firm size is an important determinant of different corporate governance activities (Gong, Zhou, & Chang, 2013; Green & Peloza, 2014; H. Li & Chen, 2018; Xie, 2014). Larger firms have more hierarchical structure (Blau, 1970; Nahavandi & Malekzadeh, 1993; Nelson, 2009) and an increase in the size of the firm generates an administrative complex environment (Lawrence & Lorsch, 1967; Miller, Minichilli, & Corbetta, 2013) which thus creates a higher demand for more intense monitoring and advising (Arnegger et al., 2014). In general, an increase in firm size will demand more attention from the directors in terms of monitoring and advising. Furthermore, prior studies have considered firms size as a contingency factor in the debate of corporate governance and its related activities, such as creativity (Gong et al., 2013; Zona, Zattoni, & Minichilli, 2013), decision making (Hannan & Freeman, 1984; Tripsas & Gavetti, 2000), corporate

social responsibility (Bhattacharya & Sen, 2004; Green & Peloza, 2014) and choices related to ownership modes (Xie, 2014). Therefore, we also state that firm size would have an effect on the multiple directorships and firm performance relationship.

Moreover, we focus on Pakistan for different reasons. First, in a survey of the literature on the board of directors, Oshry, Hermalin, and Weisbach (2010, p. 101) stated that "the vast majority of the literature focuses on US firms. Studies of boards across countries outside The United States is, in contrast, an understudied area". Our study attempts to fill this void. Second, the prevalence of multiple directorships in Pakistan is higher as compared to the United States. For instance, in the US, the percentage of busy boards is about 21 percent[7] (Fich & Shivdasani, 2006) whereas according to our study in the Pakistani context, the percentage of busy boards is about 27 percent. Third, this is the first study– as far as our knowledge - that investigate the issue of multiple directorships in the Pakistani context. Fourth, to date, corporate governance codes and guidelines worldwide generally impose limits on the number of director appointments for listed firms. For example, the limit in the United States is defined as maximum three directorships whereas in Belgium the limit is five directorships. As a consequence, the incidence of multiple directorships in listed firms may be endogenously determined making it hard to find much variation in directorship data (Sarkar & Sarkar, 2009). Since the Pakistani governance code imposes a limit of 10 directorships[8] as per "Code of Corporate Governance" 2002), this

[7] Following the prior empirical studies of (Ferris et al., 2003; Fich & Shivdasani, 2006), we consider a director as busy if he/she holds three or more directorships.
[8] Code of Corporate Governance was revised in 2012 and the limit has been reduced from ten to seven directorships but we have taken the data from the period of 2006-2011, therefore we follow the limit defined in that time period.

context is more suitable for analyzing the performance effects of multiple directorships.

Further, in the next section, we will discuss arguments that are theoretically in favour or against multiple directorships and postulate the hypotheses. In the subsequent section, the data and the methodology are discussed. Finally, we present and discuss the results.

4.2 Literature review

A controversy exists regarding the impact of multiple directorships on firm performance and the evidence on this relationship is mixed and inconclusive. A first point of view in the literature is reflected in what has been called the reputation hypothesis. This hypothesis builds on the idea that directors having multiple board seats have diverse experience, can provide better advice on various critical issues and offer better monitoring of top management. Therefore, adherents of the reputation hypothesis conjecture multiple directorships as a blessing for firms and argue that multiple directorships are positively related to firm performance. They also contend that individuals having multiple board seats are viewed as high quality directors, "They hold multiple board seats because they are good at being a director" (Jiraporn et al., 2008, p. 420). Accordingly, multiple directorships have been considered as a proxy of reputational capital (Gilson, 1990; Kaplan & Reishus, 1990; Lee & Lee, 2014; Vafeas, 1999).

The theoretical underpinning of the reputation hypothesis is embedded in resource dependency theory. From the resource dependency theory perspective, the primary role of directors is to serve as a provider of resources which include advice from experts having experience on a variety of strategic issues such as legitimacy, provision of support in order to obtain resources or commitments from

important elements outside the firm, channels of communication between firm and external environment (Pfeffer & Salancik, 2003). An implication of the resource dependence view on multiple directorships is that each additional board seat may bring new linkages and resources to the board. Directors may gain new expertise from the external environment. Thus, multiple directorships will be beneficial for the firm and it will have a positive effect on firm performance. Similarly, from an agency point of view, multiple directorships are beneficial because directors having multiple appointments can offer better monitoring of management in order to avoid wealth impairing decisions (Ferris et al., 2003).

There are several studies (e.g. Fama, 1980; Fama & Jensen, 1983; Ferris et al., 2003; Gilson, 1990; Kaplan & Reishus, 1990; Mace, 1986) in the empirical literature which concluded that multiple directorships and firm performance have a positive relationship. Fama and Jensen (1983) stated that, directors who exhibit their ability as good monitors will be rewarded with additional board appointments. Brickley et al. (1999) found a significant and strong relationship between CEOs post-retirement board services and the performance of firms where they are incumbent. Ferris et al. (2003) argued that if the performance of the firm is better according to which directors are serving, there are more chances that directors are going to have more board seats going forward. Conversely, Shivdasani (1993) stated that when firms face hostile takeover bids, directors of such firms are not considered as valuable monitors in the market and consequently they called less to serve on the board of larger firms. In addition, Harris and Shimizu (2004) found a positive effect of the proportion of overboarded directors on abnormal returns. Brown and Maloney (1999) state that when directors hold multiple directorships, firms receive higher acquisition returns because firms having these quality directors are likely to be well managed firms.

In contrast to the reputation hypothesis, recently, numerous studies have raised questions on the wisdom of holding multiple directorships by connoting that it adversely affects the abilities of directors and they consider multiple directorships as a curse for the firm. Proponents of the busyness hypothesis state that as directors increase their board appointments, they become over-stretched and it would have a negative effect on firm performance because of a diminished board oversight and advisory function. Further, they conjecture that busy boards will lead to weaker corporate governance (Kiel & Nicholson, 2006; Lee & Lee, 2014).

Theoretical underpinnings of the busyness hypothesis stem from agency theory. Agency theory predicts a conflict between the interest of principals (shareholders) and agents (managers). According to this theory, firms' owners expect from their agents that they dedicate their efforts toward maximizing the interests of the firm and its owners, whereas, its agents subordinate the interest of the organization to their own personal benefits. Such divergence of interests exacerbates the agency cost (Jensen & Meckling, 1976). Time and cognitive abilities are limited for the individuals; therefore, multiple directorships may increase the likelihood that directors will not be able to fulfil their duties to govern the firm in an appropriate manner. An agency cost view takes multiple directorships as a form of perquisite consumptions due to the high fee and prerogatives associated with board membership. Directors overcommit themselves at the expense of shareholders and enjoy the prestige and fee associated with board memberships. Thus, they will raise agency costs by reducing their efforts in monitoring and advising the management team. The busyness hypothesis states that multiple board affiliations might reflect organizational slack due to agency conflict (Ferris et al., 2003).

Empirical evidence by Jiraporn et al. (2008) and Fich and Shivdasani (2006) support the busyness hypothesis and suggest that busy directors have a negative effect on firm performance. Morck, Shleifer, and Vishny (1988) discussed that it is the fiduciary duty of all directors to protect the interests of shareholders but, outside directors are in particular responsible for monitoring the performance of top officers of the firm. It requires time and efforts to advise and monitor the performance, but when the directorships in different firms accumulate, the available time and efforts to fulfil the monitoring and advising roles at a single firm starts to decrease. Likewise, Ahn et al. (2010) lend credence to the busyness hypothesis by studying the effects of multiple directorships on bidder announcement returns and concluded that acquiring firms in which independent outside directors hold multiple outside board seats face more negative abnormal returns. They suggested that director's time is finite and sitting on many boards make him/her busier and impinges the ability to monitor and advise. As a result, managers take advantage and enhance their own personal benefits by promoting empire building, making value reducing acquisition. These arguments related to director's time constraints are equally valid when we talk about the different service related task of the directors. Indeed, Huse (1998) postulated that the availability of time of a director is just as important as his experience and knowledge.

Furthermore, related to this, Core et al. (1999) concluded that when outside directors sit on multiple boards, CEOs become able to extract excess compensation, while Fich and Shivdasani (2006) stated that when the majority of outside directors are busy, firms are less likely to fire a CEO as a result of poor performance. Shivdasani and Yermack (1999) found a positive relation between CEO involvement in the director selection process and the appointments of busy

directors. When the CEO is involved, directors with multiple appointments on different boards are chosen for an additional board seat. These selected directors would not be able to monitor and advise the management effectively because their available time is limited which eventually does little to reduce agency cost. Fich and Shivdasani (2006) also found evidence that incumbent firms face negative announcement return in the response to the news of a director accepting a third board seat and they also observe positive announcement returns when a busy director leaves the board. Additionally, Jiraporn, Davidson, et al. (2009) also buttress the argument of the busyness hypothesis that directors become overcommitted as they acquire more board seats and postulate that busy directors are more likely to miss the board meeting.

In sum, although additional directorships are expected to add value and enhance the abilities of a director, we expect that the detriments (e.g. over commitment, less time available, poor monitoring, less attention to a specific firm) will outweigh the benefits of multiple directorships. Therefore, we propose the baseline hypothesis that:

H1: Director's busyness is negatively related to firm performance.

The above discussion highlights the contradictions in the literature and outlines the debate of the benefits and detriments of multiple directorships. Both viewpoints are appealing and both have support in the empirical literature. One plausible reason of mixed evidence may be that the relationship is not really direct and simple. By following the argument of Chi and Lee (2010) that the value of corporate governance is conditional in nature, we presume that the relationship between director's busyness and firm performance is conditional on the context. It is the specific context which determines whether busy directors are advantageous or not. In this study, we posit that firm size is one of the important

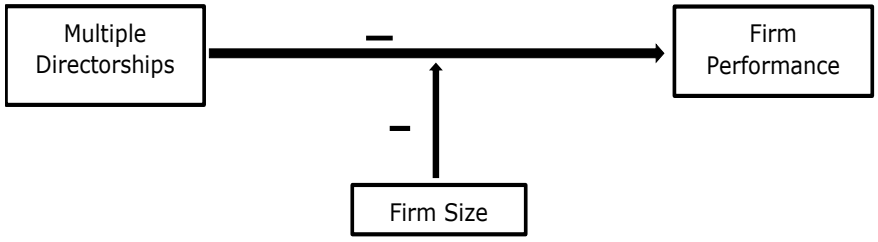
context variables that affects the relationship between busyness and firm performance. In the prior literature, firm size has been considered as a key moderating variable which may facilitate or restrain firms' activities, including, group information-processing, decision making and firm innovation (Damanpour, 2010; H. Li & Chen, 2018; Zona et al., 2013). Firm size is also considered as an important determinant of corporate governance and its related activities (Gong et al., 2013; Green & Peloza, 2014). Furthermore, an increase in size of firm leads to the organization and environmental complexity (Blau, 1970; Lawrence & Lorsch, 1967), thus creating a higher demand for administrative inputs and intense monitoring and advising (Arnegger et al., 2014; Lawrence & Lorsch, 1967). Hence, as the size of the firm increases, it becomes more complex and difficult for a busy director to pay attention and monitor and advise the management. Booth and Deli (1996) argue that larger firms have wider environments, which require more negotiations with more parties. Therefore, it becomes difficult for busy directors to really understand the issues and pay attention to the affairs of the board as they are shortening with time. Concerning the hypothesized negative impact of director's busyness on firm performance, this effect is expected to be more pronounced as firm size increases.

Therefore, we postulate:

H2: Firm size will moderate the negative relationship between director's busyness and firm performance such that the relationship is more negative when firm size is larger.

The research model is illustrated in Figure 1 below.

Figure 4.1 Research model



4.3 Methodology

4.3.1 Data set

The data for the analysis is obtained from the firms in non-financial sectors listed on the Pakistan Stock Exchange (Formerly Karachi Stock Exchange). We obtained the annual reports from the website of the respective firms and from other sources including, Opendoors.pk, DSpaceRepository, Pakistan Stock Exchange, Karachi and Securities and the Exchange Commission of Pakistan, Islamabad. We excluded financial companies because of their regulatory requirements and their unique financial structure.

We also eliminated the observations with extreme values by trimming the data. Through visualizing the data and with the help of graphing techniques such as, histogram and scatterplot, we adopted a criteria of 2.5% trimming of Tobin's Q in order to remove the extreme values. We also adopted other criteria of trimming like 4% and 3% but the results were same. Further, we also performed the *rreg* command (robust regression) in STATA as a robustness check, which is suitable when the dependent variable has outliers (which is the case in our study) rather than the independent variable and results show that 3% values were

dropped. Since we also find the same results at 2.5% trimming, we decided to continue our statistical approach with the 2.5% trimming and keep the maximum number of observations in the analysis. Furthermore, to detect the outliers in the independent variable we used residual statistics to calculate *Influence Measures*— DFBETAs— to find out how much a coefficient would be changed if a case is dropped from the data. As per Belsley, Kuh, and Welsch (1980, p. 28) "observations with dfbetas>2/Sqrt(N) should be checked as deserving special attention" but it is also common to use 1 (Bollen & Jackman, 1990, p. 267) which means that the estimate is shifted at least one standard error due to the observations. Thus we calculate dfbetas of independent variables, in this study, we look for a dfbeta>0.043 or else >1. The statistics show that no dfbetas is larger than 0.043, which show that there are no outliers in the independent variables.

We began with the collection of data from 422 non-financial firms listed on the Pakistan Stock Exchange across 28 different sectors during the 6-year period from 2006-2011. Later we dropped 42 firms which were delisted during the period of 2006-2011 from the study and 47 firms were also dropped because their annual reports were only available for partial years. Our final sample consists of 333 firms for 1998 firm-year observations during the period of 2006-2011.

We needed information on stock market indicators and other firm characteristics for our analysis. Therefore, for each firm, we obtained data on corporate governance variables (board-level) from the annual financial reports of 333 firms for the period 2006-2011, collected from the mentioned sources above. We utilized these reports to hand compile details of: board size, different measures of multiple directorships, the proportion of non-executive directors, CEO duality, board ownership, board meetings, board committees, ownership style and

firm age. In addition to the data on corporate governance variables, we need information on market measures for our analysis including Tobin's Q and other firm characteristics like firm size. We source these data from the Financial Statements Analysis of Companies (Non-Financial) Listed at Pakistan Stock Exchange and stock price details of the companies available in the Business Recorder to measure Tobin's Q.

4.3.2 Measures

4.3.2.1 Measures of director's busyness

In order to capture the concept of director busyness we used several measures and all of these measures of multiple directorships only include appointments to the boards of our sample firms. Each measure is calculated at the firm's board level, thereby permitting us to match the data from the firm-level with these measures of directorships. Furthermore, all the data on these measures of multiple directorships had to be hand compiled.

There are numerous ways to gauge the director's busyness and based on the empirical studies by Harris and Shimizu (2004), Ferris et al. (2003), Fich and Shivdasani (2006) Jiraporn et al. (2008), Lee and Lee (2014), Cashman et al. (2012), Ahn et al. (2010), we employ three alternative measures of director's busyness. Following the argument of Fich and Shivdasani (2006) and Lee and Lee (2014) that only outside directors are central to the effective board monitoring and executive directors on board for the reasons other than monitoring of top management, our basic premise is also that if outside directors are primarily responsible for the monitoring then busyness should be computed only for the outside directors to provide a more particularized assessment of the effect of director business on the performance of the firm. Our first measure of busyness

is the *Average Number of Directorships per outside director*, for a given firm, the average number of sample firm directorships held by the non-executive directors of that firm and calculated as the total number of directorships of non-executive directors divided by the total number of non-executives on board (where non-executive are directors who are not classified as executive or inside directors). Second, *Percentage of Busy Outside Directors* is the total number of busy outside directors on the board divided by the total number of non-executive directors on the board. As in Ferris et al. (2003), Fich and Shivdasani (2006), (Lee & Lee, 2014), Jiraporn et al. (2008) and as per the guidelines of the US National Association of Corporate Directors (NACD)[9] and recommendation by the Council for Institutional Investors (CII)[10], we consider a director busy if he/she holds three or more directorships. Third, *Busy Board* for which we construct a dichotomous variable, dummy for busy board, which is equal to one if 50 percent or more of non-executive directors are busy (i.e. holding three or more board seats), and zero otherwise.

4.3.2.2 Firm performance

We employ Tobin's Q, a market-based measure to analyse firm performance. It is calculated as the market value of the firm's equity at the end of the year plus the difference between the book value of the firm's assets and the book value of the firm's equity at the end of the year, divided by the book value of the firm's assets at the end of the year and multiplied by 100. This

[9] The NACD is a not-for-profit trade group that offers guidance to boards and directors. NACD suggested a limit of three outside directorships for those directors who serves as a full time employee

[10] The CII is a nonprofit, nonpartisan association of corporate, public and union employee benefit funds. CII suggest that individuals with full-time jobs should not serve on more than two other boards and current CEOs should only serve on one other board

calculation of Tobin's Q is also consistent with prior studies (Renée B Adams et al., 2005; Cashman et al., 2012; Güner et al., 2008; Lee & Lee, 2014)

4.3.2.3 Firm size

In the interaction model of our study, we consider firm size as a moderating variable. Firm size is calculated as the natural log of total assets which includes both current assets and non-current assets of a firm in a given year. Values of total assets were too large and data were skewed toward one side. In order to avoid the problem of heteroscedasticity in the regression analysis due to the large variability in the observations and to make a normal distribution, we used the natural log of total asset.

4.3.2.4 Control variables

We added seven control variables in our model. Board size is measured by the total number of directors on the board in a given year. CEO Duality is a dummy variable which is equal to 1 if the CEO is also the chairman of the board, and otherwise 0. Proportion of non-executive directors is the percentage of outside directors on board and calculated by the number of non-executive directors divide by the board size. CEO/Director shareholding is the total number of shares held by the board of directors, CEO and their spouses and minor children. It is measured by the number of shares held by them divided by the total number of outstanding shares. Board meetings are the frequency of total board meetings in a year. Board committees are measured as the total number of board standing committees where directors sit as a member. Family ownership is also a dummy variable which accounts whether a firm is family owned or non-family owned. If a firm is owned by a family, then it is equal to 1 otherwise it is equal to 0. Firm age is the number of years since the firm is incorporated.

4.3.3 Estimation Method

We used firm fixed effects and sector per year fixed effects regression model[11] to estimate the effects of director's busyness on firm performance. Fich and Shivdasani (2006, p. 694) advocates that the fixed effects framework is more reliable than Ordinary Least Square regression by stating that "the fixed effects approach is robust to the presence of omitted firm-specific variables that would lead to biased estimates in an ordinary least squares (OLS) framework". Jiraporn et al. (2008) explained that the fixed effect specification provides help to capture the effect of unobserved heterogeneity.

In this study, we also estimate interaction models in which firm size is interacted with all the measures of busyness. By following the argument of Gormley and Matsa (2013) to capture the industry effect we added the *industry×year* effects in the model.[12] Statistics are adjusted for heteroscedasticity and robust standard errors are calculated.

First Model:

$$\begin{aligned}\text{TobinQ}_{i,t} = {} & \beta_o + \beta_1\,\text{Busyness}_{i,t} + \beta_2\,\text{Board Size}_{i,t} + \beta_3\,\text{CEO Duality}_{i,t} \\ & + \beta_4\,\text{Board Composition}_{i,t} + \beta_5\,\text{Director Shareholding}_{i,t} \\ & + \beta_6\,\text{Board Meetings}_{i,t} + \beta_7\,\text{Board Committes}_{i,t} \\ & + \beta_8\,\text{Ownership}_{i,t} + \beta_9\,\text{Firm Age}_{i,t} + \beta_8\,\text{Firm Size}_{i,t} \\ & + {}_i.Sector \times {}_i.Year + \varepsilon_{i,t}\end{aligned}$$

[11] We carried out Hausman test to determine whether Fixed Effect Model (FE) or Random Effect Model (RE) is appropriate. The results of the Hausman test depict that p-value was significant, so, FE is more applicable for this study.

[12] "If the desired industry-adjusting is on a yearly basis, then instead of using the mean or median of observations in the same industry-year to adjust the dependent variable, estimate a model with *industry×year* fixed effect"

Interaction Model:

$$\text{TobinQ}_{i,t} = \beta_o + \beta_1 \text{Busyness}_{i,t} + \beta_2 \text{Firm Size}_{i,t} + \beta_3 \text{Busyness}_{i,t} * \text{Firm Size}_{i,t} + \beta_4 \text{BoardSize}_{i,t} + \beta_5 \text{CEO Duality}_{i,t} + \beta_6 \text{Board Composition}_{i,t} + \beta_7 \text{Director Shareholding}_{i,t} + \beta_8 \text{Board Meetings}_{i,t} + \beta_9 \text{Board Committes}_{i,t} + \beta_{10} \text{Ownership}_{i,t} + \beta_{11} \text{Firm Age}_{i,t} + {}_i.Sector \times {}_i.Year + \varepsilon_{i,t}$$

4.4 Results & discussion

In this section, the results from the descriptive statistics and regression analysis are discussed.

Table 4.1 Descriptive statistics

Descriptive statistics for key variables for the 333 companies are presented in Table 4.1.

Variable	Mean	Median	SD	Min	Max
Avg. Number of directorships per outside director	2.14	1.75	1.34	0	8.25
% of Busy outside Directors	27.73	16.67	32.96	0	100
Busy Board	0.26	n.a	0.44	0	1
Board Size	7.75	7	1.37	7	15
CEO Duality	0.43	n.a	0.50	0	1
Board Composition	65.47	71.42	18.52	0	93.33
Directors Shareholding	29.55	24.37	27.30	0	95.9
Number of Board Meetings	5.39	5	2.56	1	35
Number of Board Committees	1.27	1	0.84	1	11
Family Ownership	0.69	1	0.46	0	1
Firm Age	32.20	27	16.71	1	145
Tobin Q	112.84	93.53	65.25	7.64	497.8
Firm Size	8.14	1.70	22.31	0	262.67

Table 4.1 presents descriptive statistics of all key variables included in this study for 333 firms listed in Pakistan Stock Exchange. Looking at the firm-level average number of directorships per outside director, the mean value of this variable is 2.14 and the median is 1.75 with the maximum of 8.25 directorships

per outside director. Whereas Ferris et al. (2003) found that the mean value of the average number of directorships per outside director is 1.89, using the definition of busy directors ("we consider directors busy if they serve on three or more boards") on average about 28% (the median is 16.66) of directors in the sample are considered as busy directors, Ferris et al. (2003) reported only 14.97% directors are busy directors in their study. Similarly, to measure the prevalence of busy outside directors on the board, we create a dummy that is equal to one if 50% or more outside directors of the board are busy. We found that about 26% of the firms included in the study have busy boards. Whereas Fich and Shivdasani (2006) found that 21% boards are busy in their sample. Descriptive results of different measures of director's busyness show that multiple directorships are more prevalent in Pakistan as compare to the United States

In our sample, a typical board has about 8 members on average (median is 7), no firm has less than seven members and a maximum board size is fifteen members, of whom 65% (median is 71.42) are non-executive directors. About 43% boards have CEO duality and a board meets 5.39 (median is 5) times on average in a year and no firm had less than one board meeting and the maximum of 35 board meetings held in a year. Typically, a board has 1.26 (median is 1) board committees and no firm has less than one committee (which is the audit committee) and no more than 11 committees in the sample. About 30% equity shares are held by the board of directors and their families and 69% firms in the sample are family owned firms. The average firm in our sample has total assets of Rs 8.14 billion[13] (median is Rs 1.70 billion) and is 32 years old.

[13] 1 Euro (€) = 151 Pakistani Rupee (Rs) and 1 US Dollar ($) = 134 Pakistani Rupee (Rs), exchange rates are calculated on November 12, 2018.

Table 4.2 Spearman correlation matrix

Table 4.2 presents Spearman Correlation between all key variables included in the study. Statistically significant at the 10% level. **Statistically significant at the 5% level. ***Statistically significant at the 1%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Avg. Number of directorships per outside directors (1)	1												
% of Busy outside Directors (2)	0.85***	1											
Busy Board (3)	0.73***	0.88***	1										
Board Size (4)	0.03	0.03	-0.0170	1									
CEO Duality (5)	-0.15***	-0.19***	-0.16***	-0.21***	1								
Board Composition (6)	0.17***	0.15***	0.12***	0.26***	-0.18***	1							
Director's Shareholding (7)	-0.16***	-0.08***	-0.02	-0.26***	0.18***	-0.28***	1						
No.of Board Meetings (8)	-0.09***	-0.09***	-0.06**	0.06*	-0.01	-0.11***	-0.01	1					
No.of Board Committees(9)	0.06**	0.08***	0.08***	0.36***	-0.21***	0.09***	-0.27***	0.04*	1				
Family Ownership(10)	0.07**	0.14***	0.16***	-0.29***	0.09***	-0.20***	0.57***	0.03	-0.30***	1			
Firm Age (11)	0.06*	0.03	-0.03	0.15***	-0.10***	-0.03	-0.08***	-0.07**	0.10***	-0.06**	1		
Firm Size (12)	0.20***	0.18***	0.15***	0.39***	-0.23***	0.06**	-0.25***	0.16***	0.34***	-0.18***	0.03	1	
Tobin Q (13)	-0.05*	-0.07**	-0.04*	0.15***	-0.03	0.11***	-0.18***	-0.04	0.16***	-0.24***	0.07**	-0.06**	1

In the Table 4.2, we report the Spearman correlation of all variables included in the study. The results of the correlation matrix lend credence to the predictions of agency theory about the relationship between multiple directorships and firm performance. Agency theory predicts that multiple directorships are negatively associated with the firm performance. Furthermore, the results are in line with the findings of Jiraporn et al. (2008) and Lee and Lee (2014) Kiel and Nicholson (2006). Numerous striking observations emerge.

First, our measures of director's busyness are highly correlated at the 0.01 level, implying that our all measures are consistent and this finding is in line with Jiraporn et al. (2008). Second, Tobin's Q, which is an indicator of firm performance is negatively correlated with all the measures of multiple directorships and significant at the .05 (significance) level to 0.10 (significance) level. The aforementioned results of correlation between our variables of interest, i.e. director's busyness and firm performance indicate that multiple directorships are associated with lower firm performance and the results of the correlation matrix are consistent with Lee and Lee (2014). Third, board size, board composition, board committees and firm age are positively correlated with Tobin's Q and statistically significant at .01 level. These results are in line with Lee and Lee (2014). On the contrary, firm performance is negatively correlated with CEO duality, directors shareholding, ownership and firm size.

Furthermore, we were concerned about multicollinearity, thus we analyze the variance inflation factor (VIF) of each variable. All VIFs were lower than the conventional cutoff of 10 (highest VIF is 1.75), hence indicate that multicollinearity is unlikely in our study (Gujarati, 1995; Neter, Kutner, Nachtsheim, & Wasserman, 1996).

Table 4.3 Fixed effects regression analysis

Table 4.3 presents fixed effects regressions of firm performance and busy outside directors. All regressions use Tobin's Q as dependent variable. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

VARIABLES	(1)	(2)	(3)
Avg. Number of directorships per outside director	-0.775		
	(2.439)		
% of Busy outside Directors		-0.181**	
		(0.0864)	
Busy Board			-12.16**
			(4.891)
Board Size	-0.852	-1.271	-1.415
	(2.669)	(2.670)	(2.648)
CEO Duality	5.270	5.112	5.181
	(3.816)	(3.779)	(3.746)
Board Composition	0.440**	0.424*	0.442**
	(0.220)	(0.218)	(0.216)
Directors Shareholding	-0.0534	-0.0500	-0.0501
	(0.171)	(0.170)	(0.171)
Number of Board Meetings	0.0103	0.0125	0.0683
	(0.391)	(0.385)	(0.387)
Number of Board Committees	-2.006	-2.014	-2.398
	(2.609)	(2.528)	(2.562)
Family Ownership	16.54	17.56	17.55
	(11.25)	(11.32)	(11.77)
Firm Age	1.116	1.150	1.286
	(3.913)	(3.895)	(3.736)
Firm Size	-16.80***	-16.62***	-16.76***
	(4.255)	(4.267)	(4.262)
Constant	53.86	54.31	47.65
	(124.5)	(124.6)	(121.1)
R-squared	0.375	0.377	0.377

In Table 4.3 we estimate firm-fixed effects regressions for the main effects by using Tobin's Q as dependent variable and all the regressions control for the several board characteristics. We control for board composition by scaling the total number of non-executive directors by board size. With a higher proportion of non-executive directors, boards may be able to exercise better monitoring and demand

accountability from management and thus reduce the agency costs (Jiraporn et al., 2008). Therefore, we control for this effect. Small boards have been considered as a better monitor of management as compared to the larger boards and board size has been found negatively associated with firm valuation (Yermack, 1996). That's why we control for board size by adding the total number of board members in the regression analysis. Prior studies have linked equity ownership of directors with firm value and it has been found to closely align the interest with shareholders (Bhagat et al., 1999). Hence, we include directors' ownership as a control variable. We use firm size as a control variable measured by the natural log of total assets. As firm size is negatively associated with firm performance (Fich & Shivdasani, 2005; Jiraporn et al., 2008). A long firm history would also affect the firm performance (Lam & Lee, 2012). For that reason, we also included firm age in our model. Effective board standing committees would reduce agency cost and may affect the performance (Jiraporn, Singh, et al., 2009). Thus we control for the number of board committees. As per Georgiou (2010), there is a significant positive association between the frequency of board meetings and firm value. This is because the market evaluates the higher frequency of meetings as a sign of better corporate governance in the firm. So, in order to control this potential effect on firm performance, we add board meetings as a control variable. Coles et al. (2001) also reported that when the CEO and chair of the board are separately occupied by different persons, firms have better performance. That's why we include CEO Duality in the model and control for this effect.

We estimate three models separately, one for each measure of directors' busyness. Two out of three models exhibit directors' busyness is negatively associated with firm performance by depicting negative and significant coefficients. Model (2) shows that the coefficient for the percentage of busy non-

executive directors is negative and statistically significant at the level of 5 percent. Similarly, in model (3) we used busy board indicator to measure the busyness and find a coefficient which shows a negative and significant results at the 5 percent level. However, model (1), where we used average number of directorships per outside director as an indicator of directors' busyness, fail to exhibit a significant result. The results of both models specify a negative and statistically significant effect of the presence of busy outside directors to firm performance. The results suggest that busy outside directors are associated with lower Tobin's Q. The evidence from these models is consistent with the busyness hypothesis and suggest that busy directors are likely overcommitted and, consequently, poorly perform as monitors and advisors of management. As a result, managers become able to extract personal benefits on the cost of shareholders' interest. These results are also in line with the findings of Fich and Shivdasani (2006) who stated that multiple directorships compromised the quality of monitoring and advising which board members offered and subsequently agency costs are exacerbated.

Overall, these results are in line with the prior work of Ferris et al. (2003), Fich and Shivdasani (2006), Jiraporn et al. (2008), Ahn et al. (2010) and Cashman et al. (2012). Moreover, the results of our model (1) replicate the result of Ferris et al. (2003) and findings of the model (2) and model (3) replicate the results of Fich and Shivdasani (2006). The contrast between the results of these models suggest that inferences about the effects of multiple directorships are sensitive to how we measure the presence of busy directors. In line with the results of our model (1), Ferris et al. (2003) failed to find a significant effect of average number of directorships per outside director on firm performance. On the other hand, Fich and Shivdasani (2006) used the same measures of directors' busyness that we have used in model (2) and model (3) and found negative and statistically

significant results. In sum, the results of the main effects support our first hypothesis that directors' busyness is negatively related with firm performance.

Furthermore, we expect that the effect of director's busyness on firm performance will be moderated by firm size. The negative effect of multiple directorships will be more pronounced in large firms. This necessitates the estimation of fixed effects regression model with interaction effects. We discussed the interaction effects in table 4.4

Table 4.4 Fixed effects regression analysis with moderating effect

Table 4.4 presents fixed effects and industry per year fixed effects regressions of firm performance and busy outside directors taking into account moderating effect of firm size. All regressions use Tobin's Q as dependent variable. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

VARIABLES	**(1)**	**(2)**	**(3)**
Avg. Number of directorships per outside director	0.225		
	(2.786)		
Avg. Number of directorships per outside director*Firm Size	-1.640		
	(1.377)		
% of Busy outside Directors		-0.158*	
		(0.0867)	
% of Busy outside Directors*Firm Size		-0.0783*	
		(0.0471)	
Busy Board			-8.654*
			(4.842)
Busy Board*Firm Size			-6.662**
			(3.034)
Board Size	-0.772	-1.387	-1.663
	(2.665)	(2.704)	(2.663)
CEO Duality	5.137	5.043	5.058
	(3.793)	(3.742)	(3.713)
Board Composition	0.437**	0.412*	0.425**
	(0.220)	(0.216)	(0.211)
Directors Shareholding	-0.0629	-0.0673	-0.0713
	(0.168)	(0.171)	(0.173)
Number of Board Meetings	0.0318	0.0363	0.120
	(0.394)	(0.387)	(0.390)
Number of Board Committees	-1.916	-1.922	-2.436
	(2.572)	(2.460)	(2.540)
Family Ownership	16.90	16.57	15.01
	(11.12)	(10.75)	(10.75)
Firm Age	0.941	1.065	1.083
	(3.914)	(3.885)	(3.729)
Firm Size	-16.93***	-17.13***	-15.59***
	(4.202)	(4.203)	(4.246)
Constant	59.23	64.80	58.36
	(124.6)	(122.3)	(122.5)
R-squared	0.376	0.379	0.380

Table 4.4 exhibits the results that test the interaction effects between directors' busyness and firm size. We create an interaction variable by multiplying the measure of directors' busyness with firm size computed as natural log of total assets. The hypothesized coefficient of the interaction variable is negative and significant. Therefore, multiple directors appear to reduce firm value more in large firms. The findings of model (2) and model (3) lend credence to our second hypothesis that firm size negatively moderates to the relationship between measures of directors' busyness and firm performance. The negative and statistically significant coefficient of the interaction term suggests that as firm size increase, the complexity is also increased, which in result, require more time, full commitment and attention from directors and demand them to take active part in all important decision making and address the issues. Results suggest that multiple directorships are not desired for firms larger in size and the negative effect of multiple directorships is more pronounced in larger firms. One likely explanation may be that busy directors are overcommitted and a danger exists that busy board will not be able to monitor and advise the management which in turn will enhance agency costs and affect firm performance negatively. Qualitatively, our results are consistent with the findings of Fich and Shivdasani (2006) and Cashman et al. (2012), they studied the effects of different measures of director's busyness on firm performance in large firms (S&P 500 Firms) and found negative and statistically significant results.

The coefficients of the interaction term in the model (1) is also negative but not statistically significant. Overall, the results of model (2) and model (3) support our second hypothesis that firm size negatively moderates the effects of director's busyness on firm performance.

4.4.1 Robustness checks

In corporate governance literature, it is common for studies to be plagued by endogeneity issues (Bhagat & Jefferis, 2002; Duru, Iyengar, & Zampelli, 2016; Wintoki, Linck, & Netter, 2012). Moreover, boards are said to be endogenously determined (Hermalin & Weisbach, 1998, 2003). In this study, the presence of endogeneity implies that a higher number of directorships may not necessarily lead to lower firm performance. The direction of causality may be reverse; firms having lower performance will choose to appoint busy directors with multiple board seats. Since busy directors are good contributors (Harris & Shimizu, 2004), it may be possible that firms facing lower performance may appoint such busy directors and they would be beneficial for such firms.

In order to confirm the robustness of results presented in the Table 4.3 and Table 4.4, we conduct additional analysis. *First*, we examine whether our models are subject to endogeneity problems. Therefore, we follow the procedures suggested by Wintoki et al. (2012) and Duru et al. (2016) and conduct a test of strict exogeneity prescribed by Wooldridge (2002)[14] in the panels where T>2. If $\mathbf{X}_{i,t}$, comprises multiple directorships, governance and other control variables, by estimating the following fixed-effects model, we can test for strict exogeneity.

$$\boldsymbol{y}_{i,t} = \alpha + \beta \boldsymbol{X}_{i,t} + \Omega \mathbf{W}_{i,t+1} + \eta_i + \varepsilon_{it}$$

Where, $\mathbf{W}_{i,t+1}$ is a subset containing the future values of the multiple directorships and control variables including measures of corporate governance, firm characteristics and ownership. Under the null hypothesis, strict exogeneity of any value of W_i requires $\Omega = 0$, i.e., future realizations of multiple directorships and control variables are not related to the current performance. Results in the

[14] According to Wintoki et al. (2012, p. 594) "this is the only explicit test of strict exogeneity that is prescribed in the literature"

Table 4.5, Table 4.6 and Table 4.7 present different subsets of the different measures of multiple directorships, governance and control variables, $\mathbf{W}_{i,t+1}$. Results are estimated by using fixed-effects with robust and clustered standard errors. Year dummies are also included.

In every specification, the coefficient estimate for the future values of measure of multiple directorships, interaction term, governance proxies and other control variables are not significantly different from zero except firm size and the family ownership dummy. In Table 4.5, we use average number of directorships per director and its interaction with firm size. In Table 4.6 we use percentage of busy directors and its interaction with firm size and in Table 4.7 we used busy board dummy and its interaction with firm size along with all other governance and control variables. Overall, the results from all tables of strict exogeneity suggest that all measures of multiple directorships and control variables are strictly exogenous and do not adjust in response to the firm performance. The hypothesis of strict exogeneity can be rejected only for firm size and family ownership but not for the other variables.

However, there are strong theoretical arguments in the prior literature that the relationship between corporate governance and firm performance are often having the problems of endogeneity (Renée B Adams & Ferreira, 2009; Duru et al., 2016; Hermalin & Weisbach, 2003; Wintoki et al., 2012). Mostly prior studies have used instrumental variables to solve this issue (Renée B Adams & Mehran, 2012; Bennedsen, Nielsen, Pérez-González, & Wolfenzon, 2007; Cornett, McNutt, & Tehranian, 2009). However, the challenge of this method is to find a variable as an instrument that correlate with endogenous variable but do not correlate with the dependent variable nor with the unobservable variables in the error term. Therefore, we followed the approach of Duru et al. (2016) and Wintoki

et al. (2012), which also used strict exogeneity tests followed by the system generalized method of moments (System GMM) proposed by Arellano and Bover (1995) and Blundell and Bond (1998) to estimate a dynamic model of firm performance. This method addresses the challenge of instrumental variables by using the lags of endogenous variables, which correlated with the endogenous variables, but exogenous with the dependent variable and error term. Further, this method enables us to measure governance and performance relationship while solving the estimation problems such as simultaneity, dynamic endogeneity by including past performance, unobserved heterogeneity by including fixed-effects in panel models. In the context of this study System GMM can be written as:

$$\boldsymbol{y}_{i,t} = \alpha_1 + k_1\boldsymbol{y}_{it-1} + \beta\boldsymbol{X}_{it} + \gamma\mathbf{Z}_{it} + \theta\mathbf{D}_{it} + \eta_i + \varepsilon_{i,t}$$

Where y_{it} is Tobin's Q and $\mathbf{X}_{it}$ includes measures of multiple directorships and $\mathbf{Z}_{it}$ contains all governance variables such as, board size, CEO duality, board composition, directors' shareholdings, number of board meetings, number of board committees, family ownership and firm size. $\mathbf{D}_{it}$ includes year dummies and firm age. We use a two-step system estimator with the STATA command "xtabond2" proposed by Roodman (2006) to perform this test. In order to effectively apply this method, the number of instruments generated should be less than the number of groups in the data set. Moreover, it is important to know how many lags of firm performance are appropriate. Therefore, we need to capture the information from the past for this variable (Wintoki et al., 2012). According to Glen, Lee, and Singh (2001) and Gschwandtner (2005), to capture the persistency of profitability two lags are sufficient. However, in this study, we used one lag of performance in dynamic models. In order to determine the lag order and dynamic completeness of the Tobin's q, we started model estimations with one-year lag

and increased by one until the additional lag become statistically insignificant. Meanwhile, we also ensure that the lag order has no serial correlation in the first–differenced residuals and find that one lag is sufficient because the second lag become insignificant. Following Wintoki et al. (2012), we included lags of three periods or more (*t*-3 and *t*-4 of all the regressors including measures of multiple directorships, governance and control variables) as instruments for all endogenous variables in the GMM estimation and considered that all the regressors except year dummies and firm age are endogenous. Furthermore, we also included diagnostic tests to ensure the validity of System GMM estimation. For instance, the *AR(2)* second order serial correlation test with the null hypothesis of no second-ordered serial correlation in the first differenced residuals, the Hansen over-identification *J* test with null hypothesis that instruments are robust and the Difference-in-Hansen test of exogeneity of instruments with the null hypothesis that instruments are exogenous.

As shown in the Table 4.8, we run the test six times for all the measures of multiple directorships. Columns 1, 3 and 5 contain the results of the three different measures of multiple directorships and columns 2, 4 and 6 contain the interaction of firm size with the measures of multiple directorships. According to the results of different models in Table 4.8, we find that in general, multiple directorships have a negative effect on firm performance as we find in the Table 4.3. Thus, we can say there is no issue of endogeneity in our models, since we also found the same results from the Table 4.6, Table 4.7, and Table 4.8 that all variables are strictly exogenous expect firm size and family ownership. Further, the results of *AR(2)* test in all six models yield *p*-values ranging from 0.353 to 0.545 which means we cannot reject the null hypothesis and there is no second-ordered serial correlation. Similarly, we can also conclude that all instruments

were robust and exogenous because the Hansen *J* test yields the *p*-values ranging from 0.522 to 0.862 and Difference-in-Hansen of exogeneity shows the *p*-values ranging from 0.439-0.590 which means we cannot reject the null hypothesis.

Finally, we can conclude that, in general, the negative effect of multiple directorship on firm performance has not changed, which confirms our results of the fixed-effects models in the Table 4.3 *and* results are not plagued with potential endogeneity issues. However, our results of the interaction models in Table 4.8 have changed to insignificance in dynamic panel settings, which may be probably due to the endogenous variable firm size which is used as moderator.

Table 4.5 Test for strict exogeneity with average number of directorships per director

Table 4.5 presents strict exogeneity test with average number of directorships per director as a measure of multiple directorships. All models use *Tobin's Q* as dependent variables. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**
Avg.Ndshp *(t+1)*	0.147	-1.063										-0.182
	(2.009)	(2.163)										(1.974)
Avg.Ndshp*Fsize *(t+1)*		1.251										
		(1.592)										
Board Size *(t+1)*			-0.484									-0.628
			(2.735)									(2.760)
CEO Duality *(t+1)*				-7.172								-7.738
				(6.368)								(6.324)
Board Composition *(t+1)*					0.162							0.174
					(0.162)							(0.166)
Dir Shareholding *(t+1)*						-0.046						-0.087
						(0.180)						(0.166)
Num B.Meetings *(t+1)*							0.241					0.277
							(0.574)					(0.569)
Num B.Comm *(t+1)*								-3.459				-3.626
								(3.315)				(3.084)
Family Ownership *(t+1)*									15.244			22.756*
									(12.453)			(12.528)
Firm Age *(t+1)*										-2.384		-3.567
										(6.329)		(6.912)
Firm Size *(t+1)*											-8.715***	-8.441**
											(3.362)	(3.349)
Avg.Ndshp *(t)*	1.738	2.630	1.819	1.666	1.810	1.542	1.830	1.802	1.691	1.817	1.541	1.107
	(2.964)	(2.992)	(3.053)	(3.024)	(3.046)	(3.084)	(3.060)	(3.058)	(3.073)	(3.062)	(2.997)	(2.863)
Avg.Ndshp*Fsize*(t)*		-0.992										

		(1.828)										
Board Size *(t)*	3.409	3.468	3.624	3.383	3.392	3.466	3.354	3.449	3.452	3.390	3.192	3.487
	(2.797)	(2.807)	(2.764)	(2.799)	(2.773)	(2.804)	(2.788)	(2.806)	(2.804)	(2.799)	(2.755)	(2.686)
CEO Duality *(t)*	3.043	2.843	3.081	6.692	3.313	3.115	3.165	2.870	2.899	3.169	2.815	7.026
	(4.914)	(4.798)	(4.930)	(4.931)	(4.941)	(4.902)	(4.909)	(4.957)	(4.915)	(4.935)	(4.811)	(4.869)
Board Composition *(t)*	0.243	0.242	0.244	0.247	0.162	0.228	0.257	0.248	0.241	0.242	0.243	0.157
	(0.242)	(0.242)	(0.242)	(0.243)	(0.247)	(0.243)	(0.244)	(0.243)	(0.242)	(0.243)	(0.243)	(0.252)
Dir Shareholding *(t)*	0.009	0.011	0.011	0.008	0.009	0.032	0.013	0.012	0.006	0.009	0.013	0.055
	(0.189)	(0.189)	(0.190)	(0.189)	(0.190)	(0.228)	(0.190)	(0.189)	(0.190)	(0.189)	(0.186)	(0.220)
Num B.Meetings *(t)*	-0.480	-0.481	-0.482	-0.447	-0.489	-0.475	-0.476	-0.471	-0.492	-0.473	-0.502	-0.455
	(0.486)	(0.484)	(0.486)	(0.490)	(0.487)	(0.486)	(0.485)	(0.485)	(0.487)	(0.487)	(0.470)	(0.474)
Num B.Comm *(t)*	-1.801	-1.949	-1.796	-1.785	-1.720	-1.555	-1.751	0.147	-1.822	-1.786	-1.801	0.588
	(3.795)	(3.767)	(3.776)	(3.787)	(3.797)	(3.843)	(3.788)	(4.106)	(3.788)	(3.793)	(3.727)	(4.001)
Family Ownership *(t)*	16.387	16.452	16.430	16.324	16.780	16.548	16.631	15.783	7.846	16.283	16.823	4.292
	(10.690)	(10.760)	(10.695)	(10.967)	(10.832)	(10.489)	(10.704)	(10.703)	(9.854)	(10.711)	(10.924)	(9.564)
Firm Age *(t)*	1.015	0.959	1.018	1.030	1.194	0.973	-0.985	1.066	1.039	1.916	0.937	0.328
	(4.880)	(4.849)	(4.880)	(4.883)	(4.920)	(4.854)	(5.189)	(4.889)	(4.881)	(4.287)	(4.755)	(4.449)
Firm Size *(t)*	-19.745***	-19.682***	-19.721***	-19.896***	-19.737***	-19.675***	-20.024***	-19.543***	-19.791***	-19.706***	-18.355***	-18.456***
	(4.790)	(4.737)	(4.802)	(4.789)	(4.785)	(4.795)	(4.902)	(4.780)	(4.794)	(4.768)	(4.186)	(4.284)
Constant	41.031	42.262	42.946	41.909	30.142	42.913	98.304	41.154	35.680	87.718	45.258	165.208
	(149.635)	(148.802)	(150.536)	(149.687)	(151.563)	(148.895)	(156.905)	(149.856)	(149.620)	(237.094)	(145.839)	(264.895)
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,589	1,586	1,589	1,589	1,589	1,588	1,585	1,589	1,589	1,589	1,586	1,581
R-squared	0.185	0.185	0.185	0.186	0.186	0.184	0.186	0.186	0.186	0.185	0.190	0.193
Number of firm	329	329	329	329	329	329	329	329	329	329	329	329

Table 4.6 Test for strict exogeneity with Percentage of busy directors

Table 4.6 presents strict exogeneity test with Percentage of busy directors as a measure of multiple directorships. All models use *Tobin's Q* as dependent variables. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**
PercnBdirNx *(t+1)*	0.128	0.114										0.123
	(0.085)	(0.096)										(0.089)
PercnBdirNx*Fsize *(t+1)*		-0.010										
		(0.057)										
Board Size *(t+1)*			-0.227									0.056
			(2.735)									(2.703)
CEO Duality *(t+1)*				-8.011								-8.519
				(6.494)								(6.435)
Board Composition *(t+1)*					0.144							0.169
					(0.161)							(0.166)
Dir Shareholding *(t+1)*						-0.029						-0.083
						(0.188)						(0.165)
Num B.Meetings *(t+1)*							0.182					0.201
							(0.578)					(0.578)
Num B.Comm *(t+1)*								-3.610				-3.935
								(3.218)				(3.009)
Family Ownership*(t+1)*									19.590			27.278**
									(13.127)			(12.859)
Firm Age *(t+1)*										-2.009		-2.932
										(6.321)		(6.898)
Firm Size *(t+1)*											-8.640**	-8.124**
											(3.382)	(3.401)
PercnBdirNx *(t)*	-0.266**	-0.239**	-0.207*	-0.213*	-0.204*	-0.213*	-0.207*	-0.210*	-0.219*	-0.207*	-0.205*	-0.282***
	(0.108)	(0.098)	(0.115)	(0.116)	(0.116)	(0.116)	(0.116)	(0.117)	(0.115)	(0.116)	(0.116)	(0.105)

PercnBdirNx*Fsize *(t)*		-0.079										
		(0.073)										
Board Size *(t)*	2.920	2.658	3.072	2.931	2.961	3.015	2.919	3.006	3.001	2.955	2.762	2.699
	(2.864)	(2.964)	(2.748)	(2.856)	(2.831)	(2.861)	(2.848)	(2.864)	(2.863)	(2.857)	(2.818)	(2.679)
CEO Duality *(t)*	3.097	3.029	3.206	7.252	3.423	3.240	3.291	3.002	2.992	3.290	2.946	7.283
	(4.595)	(4.358)	(4.648)	(4.579)	(4.657)	(4.616)	(4.632)	(4.670)	(4.624)	(4.654)	(4.556)	(4.489)
Board Composition *(t)*	0.206	0.198	0.215	0.220	0.143	0.201	0.229	0.220	0.212	0.214	0.216	0.122
	(0.239)	(0.239)	(0.239)	(0.240)	(0.242)	(0.240)	(0.241)	(0.240)	(0.239)	(0.240)	(0.240)	(0.248)
Dir Shareholding *(t)*	0.023	0.009	0.027	0.025	0.026	0.042	0.029	0.030	0.023	0.026	0.029	0.061
	(0.193)	(0.195)	(0.193)	(0.193)	(0.193)	(0.232)	(0.194)	(0.192)	(0.193)	(0.193)	(0.188)	(0.221)
Num B.Meetings *(t)*	-0.424	-0.383	-0.430	-0.393	-0.437	-0.430	-0.423	-0.418	-0.444	-0.423	-0.454	-0.402
	(0.478)	(0.476)	(0.479)	(0.483)	(0.480)	(0.478)	(0.478)	(0.477)	(0.479)	(0.479)	(0.464)	(0.468)
Num B.Comm *(t)*	-1.943	-2.018	-1.933	-1.919	-1.864	-1.658	-1.893	0.093	-1.968	-1.925	-1.928	0.630
	(3.539)	(3.338)	(3.509)	(3.509)	(3.530)	(3.567)	(3.513)	(3.883)	(3.503)	(3.518)	(3.459)	(3.769)
Family Ownership *(t)*	17.361	16.473	17.644	17.535	17.957	17.612*	17.859	16.996	6.656	17.530	17.976	2.453
	(10.855)	(10.618)	(10.973)	(11.272)	(11.085)	(10.666)	(10.983)	(10.968)	(9.656)	(10.989)	(11.230)	(9.244)
Firm Age *(t)*	0.692	0.729	0.793	0.806	0.955	0.760	-1.243	0.843	0.814	1.552	0.713	-0.213
	(4.850)	(4.827)	(4.820)	(4.822)	(4.858)	(4.798)	(5.108)	(4.828)	(4.819)	(4.228)	(4.694)	(4.408)
Firm Size *(t)*	-19.835***	-20.169***	-19.880***	-20.042***	-19.881***	-19.812***	-20.175***	-19.675***	-19.931***	-19.856***	-18.472***	-18.557***
	(4.852)	(4.785)	(4.881)	(4.862)	(4.859)	(4.868)	(4.976)	(4.854)	(4.868)	(4.844)	(4.249)	(4.356)
Constant	55.857	59.093	52.455	52.706	41.703	53.069	110.245	51.803	45.156	90.878	55.756	163.798
	(148.872)	(148.387)	(149.226)	(148.114)	(150.132)	(147.475)	(154.693)	(148.280)	(148.007)	(235.241)	(144.283)	(264.151)
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,589	1,586	1,589	1,589	1,589	1,588	1,585	1,589	1,589	1,589	1,586	1,581
R-squared	0.189	0.191	0.188	0.189	0.189	0.187	0.189	0.189	0.189	0.188	0.193	0.197
Number of firm	329	329	329	329	329	329	329	329	329	329	329	329

Table 4.7 Test for strict exogeneity with busy board

Table 4.7 presents strict exogeneity test with busy board as a measure of multiple directorships. All models use *Tobin's Q* as dependent variables. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**
BBoardNx *(t+1)*	3.445	3.224										2.229
	(5.249)	(5.832)										(5.336)
BBoardNx*Fsize *(t+1)*		-2.415										
		(3.799)										
Board Size *(t+1)*			-0.575									-0.549
			(2.714)									(2.726)
CEO Duality *(t+1)*				-6.730								-7.237
				(6.587)								(6.549)
Board Composition *(t+1)*					0.153							0.170
					(0.162)							(0.167)
Dir Shareholding *(t+1)*						-0.002						-0.049
						(0.194)						(0.172)
Num B.Meetings *(t+1)*							0.188					0.222
							(0.581)					(0.577)
Num B.Comm *(t+1)*								-3.739				-3.862
								(3.241)				(3.021)
Family Ownership *(t+1)*									20.065			25.720*
									(14.832)			(14.024)
Firm Age *(t+1)*										-2.286		-3.310
										(6.256)		(6.749)
Firm Size *(t+1)*											-8.694***	-8.387**
											(3.298)	(3.301)
BBoardNx *(t)*	-18.006***	-13.821***	-16.944***	-16.745***	-16.852***	-16.931***	-16.954***	-17.077***	-17.386***	-16.880***	-16.966***	-18.009***
	(6.185)	(4.899)	(6.251)	(6.256)	(6.257)	(6.187)	(6.219)	(6.247)	(6.113)	(6.234)	(6.380)	(6.251)

BBoardNx*Fsize *(t)*		-8.323**										
		(3.839)										
Board Size *(t)*	2.724	1.899	2.946	2.678	2.680	2.736	2.639	2.730	2.730	2.676	2.475	2.745
	(2.791)	(2.875)	(2.648)	(2.775)	(2.752)	(2.775)	(2.765)	(2.781)	(2.780)	(2.773)	(2.740)	(2.576)
CEO Duality *(t)*	2.902	1.885	2.940	6.320	3.153	2.937	3.009	2.707	2.692	3.019	2.664	6.484
	(4.485)	(3.873)	(4.535)	(4.548)	(4.542)	(4.500)	(4.514)	(4.562)	(4.513)	(4.537)	(4.422)	(4.492)
Board Composition *(t)*	0.225	0.214	0.223	0.228	0.147	0.211	0.237	0.228	0.221	0.222	0.224	0.143
	(0.231)	(0.226)	(0.231)	(0.232)	(0.236)	(0.232)	(0.233)	(0.232)	(0.231)	(0.232)	(0.232)	(0.240)
Dir Shareholding *(t)*	0.027	-0.004	0.027	0.024	0.025	0.028	0.028	0.028	0.021	0.025	0.028	0.050
	(0.194)	(0.197)	(0.194)	(0.194)	(0.194)	(0.232)	(0.195)	(0.193)	(0.194)	(0.194)	(0.189)	(0.221)
Num B.Meetings *(t)*	-0.397	-0.307	-0.401	-0.370	-0.407	-0.404	-0.393	-0.388	-0.415	-0.392	-0.423	-0.388
	(0.471)	(0.456)	(0.471)	(0.476)	(0.472)	(0.471)	(0.471)	(0.469)	(0.471)	(0.472)	(0.457)	(0.461)
Num B.Comm *(t)*	-2.197	-2.478	-2.232	-2.214	-2.159	-1.964	-2.192	-0.135	-2.272	-2.221	-2.224	0.324
	(3.663)	(3.549)	(3.633)	(3.651)	(3.661)	(3.708)	(3.647)	(4.026)	(3.647)	(3.652)	(3.595)	(3.936)
Family Ownership *(t)*	17.582	14.922	17.761	17.612	18.075	17.519	17.963	17.061	6.458	17.609	18.096	3.421
	(11.261)	(10.443)	(11.354)	(11.584)	(11.471)	(10.952)	(11.359)	(11.380)	(9.684)	(11.370)	(11.667)	(9.330)
Firm Age *(t)*	0.379	0.089	0.370	0.389	0.538	0.359	-1.760	0.416	0.382	1.230	0.264	-0.500
	(4.812)	(4.833)	(4.816)	(4.821)	(4.856)	(4.804)	(5.074)	(4.825)	(4.820)	(4.209)	(4.691)	(4.352)
Firm Size *(t)*	-19.848***	-18.062***	-19.821***	-19.983***	-19.843***	-19.812***	-20.151***	-19.628***	-19.889***	-19.809***	-18.387***	-18.476***
	(4.819)	(4.799)	(4.840)	(4.824)	(4.820)	(4.831)	(4.934)	(4.811)	(4.827)	(4.804)	(4.202)	(4.296)
Constant	68.675	87.376	72.325	70.475	59.678	70.422	131.158	70.434	63.715	114.623	74.942	189.664
	(146.442)	(147.184)	(147.756)	(146.617)	(148.593)	(146.121)	(152.451)	(146.719)	(146.567)	(233.458)	(142.664)	(259.563)
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,600	1,597	1,600	1,600	1,599	1,599	1,596	1,600	1,600	1,600	1,597	1,591
R-squared	0.192	0.198	0.192	0.192	0.192	0.190	0.192	0.193	0.193	0.192	0.197	0.200
Number of firm	332	332	332	332	331	332	332	332	332	332	332	331

Table 4.8 Two-step GMM regression

Table 4.8 presents System GMM regression results when considering the measure of multiple directorships and control variables as endogenous variables. All models use *Tobin's Q* as dependent variables. For the variables definitions see Table 4.7. *AR*(1) and *AR*(2) are tests for first-order and second-order serial correlation in the first-differenced residuals, under the null of no serial correlation. The Hansen test of over-identifications under the null that all instruments are valid. The Diff-in-Hansen test of exogeneity is under the null that instruments are exogenous. We report robust standard errors in parentheses below each coefficient estimate *** p<0.01, ** p<0.05, * p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**	**Tobin's Q**
Avg.Ndshp	-21.708**	-20.209*				
	(10.442)	(10.749)				
Avg.Ndshp*Fsize		-2.821				
		(4.588)				
PercnBdirNx			-0.630	-0.692*		
			(0.385)	(0.406)		
PercnBdirNx*Fsize				-0.042		
				(0.145)		
BBoardNx					-15.744	-15.101
					(17.783)	(18.705)
BBoardNx*Fsize						-6.529
						(15.582)
Board Size	-15.563	-15.308	-14.052	-15.424	-13.153	-12.791
	(13.446)	(13.094)	(16.112)	(16.939)	(14.632)	(14.756)
CEO Duality	-7.054	-6.060	-3.319	-4.303	-7.977	-6.973
	(18.934)	(18.220)	(18.430)	(18.504)	(17.176)	(16.819)
Board Composition	0.451	0.020	0.726	0.423	0.530	0.464
	(0.900)	(0.753)	(0.903)	(0.809)	(0.786)	(0.774)
Dir Shareholding	-0.742	-0.349	-0.527	-0.316	-0.378	-0.235
	(0.640)	(0.530)	(0.586)	(0.466)	(0.545)	(0.625)
Num B.Meetings	-4.562	-4.674	-4.897	-5.300	-3.823	-4.228
	(3.627)	(3.750)	(3.381)	(3.595)	(3.433)	(3.519)
Num B.Comm	22.287*	20.185*	23.641*	22.134	18.700	18.219
	(12.921)	(12.000)	(13.753)	(14.126)	(12.744)	(12.514)
Fam/N.Fam Own	22.937	-9.453	41.489	17.781	35.424	25.673
	(57.572)	(44.997)	(54.028)	(49.314)	(45.957)	(53.003)
Firm Age	0.205	0.123	0.221	0.196	0.152	0.128
	(0.364)	(0.311)	(0.407)	(0.409)	(0.340)	(0.327)
Firm Size	-26.718**	-21.33**	-22.32**	-19.63**	-20.73*	-17.35

	(10.567)	(9.690)	(10.789)	(8.947)	(10.817)	(13.441)
TobinQ$_{(t-1)}$	0.394***	0.445***	0.409***	0.418***	0.405***	0.423***
	(0.151)	(0.140)	(0.152)	(0.154)	(0.136)	(0.146)
Observations	1,582	1,582	1,582	1,582	1,593	1,593
Number of groups (firm)	330	330	330	330	333	333
Number of instruments	36	39	36	39	36	36
AR (1)	-3.40***	-3.71***	-3.37***	-3.37***	-3.55***	-3.47***
AR (2)	0.353	0.411	0.413	0.431	0.394	0.545
Hansen test of over-ident (*p*-value)	0.862	0.882	0.806	0.874	0.563	0.522
Diff-in-Hansen tests of exogeneity (*p*-value)	0.590	0.589	0.439	0.446	0.448	0.492
Year effects	Yes	Yes	Yes	Yes	Yes	Yes

4.5 Conclusion

Recently, in the academic world as well as in practice, the issue of multiple directorships has gained considerable attention. To deal with this issue some corporate governance activists propose to place specific limits on the number of directorships. The idea behind this proposal is that when directors wear too many caps they are overstretched and not able to monitor and advise management effectively. A similar recommendation has made by The National Association of Corporate Directors. In academia the phenomenon of multiple directorships is also under a careful scrutiny as discussed by recent studies (Ferris et al., 2003; Fich & Shivdasani, 2006; Perry & Peyer, 2005).

We have contributed to this fledging, but gradually growing body of literature by explaining that overcommitted directors materially affect firm value. Results reported by this study are very timely and contribute to the ongoing debate on the costs and benefits of having multiple directorships. We studied the effect of multiple directorships on firm performance and we found empirical evidence that supports the busyness hypothesis. We found that multiple

appointments of directors affect the quality of managerial oversight and advice, thus negatively affect firm performance due to increased agency costs. By using different measures of director's busyness we found some support for the notion that overcommitted directors appear to decrease firm value. Further, we also depict that the negative effect of busy directors on board is pronounced in large firms. From the results of our interaction models, we found slight indications— results are not robust— for the view stating that, in larger firms, having a busy board seems to be risky, because multiple directorships overstretch director's time and it is becoming difficult for a director to pay attention and give full time commitment. Furthermore, Wintoki et al. (2012) state that the causal relationship between corporate governance and firm performance is disappeared when thee GMM estimator is used, however, we also followed the same approach and found that the results of the main effect are robust with the dynamic panel settings, stating that the baseline hypothesis is not affected by endogeneity issue. However, results related to the notion that multiple directorships are more detrimental in larger firms are not robust when we account for the dynamic effects in the model. One possible reason would be that firm size is found to be affected by an endogeneity issue. Since our data do not allow us to find an appropriate instrumental variable to cope with this issue, we recommend that future research may consider this limitation and find some better instrumental variable which can explain this relationship by considering the endogeneity problem.

4.6 Transitioning to the following chapter

In this chapter we have discussed the effects of multiple directorships on firm performance at the board level and based on the results of this study, we conclude that multiple directorships are detrimental for firms. In larger firms this problem is more pronounced because it is difficult for busy directors to pay full

attention at one firm due to over-commitment. However, some other studies have also reported that multiple directorships have a positive effect on firm performance and we have found negative results supporting the busyness hypothesis grounded in agency theory. Further, we have not found any direct effect of multiple directorships on ROA but in the chapter six we show that there is an indirect effect of busyness son the ROA. This relationship can be further investigated by considering the different types of directors. Effects of multiple directorships are expected to vary within the different types of directors. Moreover, we raise the question how multiple directorships will affect the activities of the directors on the board by focusing on the individual director level. Therefore, in the next chapter, we move on to the individual director level and dig more into the data and studied the effects of multiple directorships on the directors' board meeting attendance.

5 Chapter - Overcommitted to Show up in the Board? The Moderating Effect of Ownership

Abstract[15]

This study empirically investigates the impact of multiple directorships on board meeting attendance at the individual director level. The results suggest that attendance at board meetings decrease with multiple directorships. By using the individual director attendance rate in Pakistani listed firms, we find that non-executive directors with multiple board appointments show a higher tendency to remain absent from board meetings while executive directors regularly attend board meetings. Furthermore, we propose that a higher percentage of ownership leads to greater convergence of interests of directors and those of the firm. Our results also support this notion that higher directors' shareholdings will motivate non-executive directors to attend more board meetings.

Keywords:

Multiple Directorships; Board Attendance; Ownership; Outside Directors

[15] This study has been presented at the European Academy of Management conference 2018.

5.1 Introduction

Generally, the board of directors is considered as an important firm resource as they provide the critical expertise to effectively address the monitoring, service and strategic challenges of the firm (Carpenter & Westphal, 2001). Accordingly, it may come as no surprise that highly qualified and experienced directors are in high demand, which substantially raised the number of directorships per director for a significant part of the director population, leading to the phenomenon of "over-boarded" directors (directors serving on several boards). The number of board seats that directors can hold has been a contentious corporate governance issue in different countries around the world. As per the "busyness hypothesis" (Ferris et al., 2003) when directors have a large number of board appointments, they become overcommitted, which compromises their ability to advise and monitor the top management on the behalf of shareholders. This in turn could have an adverse effect on firm value. Therefore, following this criticism on multiple directorships and by recognizing that time of an executive is not unlimited, corporate reformers have echoed the notion to place a strict limit on the number of board positions that individuals may hold. For instance, The Council for Institutional Investors argues that directors with full time jobs should not serve on two other boards. Likewise, The National Association of Corporate Directors (NACD) is more lenient and suggested that CEOs and senior executives should not serve on more than outside three boards.

On the other hand, multiple directorships may be a proxy for higher director quality in the presence of a well-functioning market of outside directors (Fama, 1980; Fama & Jensen, 1983). Moreover, directors with multiple directorships, by the virtue of being more embedded within the network, can be beneficial by bringing in needed resources, suppliers and customers to the

company (Booth & Deli, 1996; Mizruchi & Stearns, 1994; Pfeffer, 1972). Therefore, having directors with multiple directorships on board can be advantageous and firm value can be increased.

Existing empirical literature mirrors these different theoretical opinions about the issue of multiple directorships. Some studies have reported that multiple directorships adversely affect the performance of the firm, lower the sensitivity of CEO turnover and manifest a positive reaction of the market following the departure of a busy director from the board (Fich & Shivdasani, 2006). It also leads to excess remuneration to the CEOs (Core et al., 1999; Shivdasani & Yermack, 1999) and enhances the chances of committing accounting frauds (Beasley, 1996). However, other studies proffer that, directors with multiple appointments can serve the interest of shareholders by positively affecting the performance of the firm (Miwa & Ramseyer, 2000; Sarkar & Sarkar, 2009). It can also enhance the experience of executives, provide the opportunity to build a business network and also certify the ability of directors (Booth & Deli, 1996; Carpenter & Westphal, 2001; Loderer & Peyer, 2002; Mace, 1986; Rosenstein & Wyatt, 1994). In sum, empirical evidence on the cost and benefits of multiple directorships is ambiguous and mixed.

One of the explanations of this inconclusive evidence is that the majority of prior studies did not focus on the key variables embedded in the busyness hypothesis namely an increasing workload and a lack of board meeting attendance. Therefore, this study contributes to the ongoing debate about multiple directorships by examining the effects of directors' busyness on the board meeting attendance at the individual director level. A focus on board meeting attendance is warranted as directors having multiple board appointments face a

significant increase in their workload. Therefore, the risk increases that they can no longer adequately perform their director roles, especially regarding their monitoring and advising duties (Ferris et al., 2003; Kiel & Nicholson, 2006). It is rational to say that individual directors can only exercise their duties by asking questions, seeking explanations about problems, reviewing meeting materials and giving their independent advice and judgment on several crucial issues *during board meetings*. Therefore, directors have to attend the board meetings in order to stipulate and supervise the firm to perform their service and monitoring roles, collect information and to take strategic decisions for the firm (Renée B Adams & Ferreira, 2008; Chou et al., 2013; Lin et al., 2014). An integrated view on board roles—control role and service role— was presented by Forbes and Milliken (1999, p. 492) where they define the board task performance as "the board's ability to perform its control and service tasks effectively". Similarly, instead of focusing separately on the directors' monitoring and service roles (Payne, Benson, & Finegold, 2009) take a broad view of board effectiveness. Directors' activities related to control role, such as succession planning of top management, monitoring the implementation of strategy *and* activities related to service role such as networking with strategic partners, bolstering the image of company in community and building relations with the government leads to the board effectiveness. To contribute to the general board effectiveness and indirectly improve the performance of the firm, it is a perquisite that directors carry out their board roles (Roberts, McNulty, & Stiles, 2005). This requires significant time commitment from directors to learn about the intricacies of firms' operations and lack of time is a main constraint for the directors to do so (Carter & Lorsch, 2004; J. Lorsch & Young, 1990).

When directors hold too many board seats and become overcommitted then they could find it difficult to "show up" at all the meetings. Similarly, when directors are not able to participate personally in the discussions and reach a consensus during the meeting, a reduction in board effectiveness becomes apparent and it also gives a signal that the director is unable or not willing to fulfill his duties. Failure to attend the board meetings may hinder the ability of the director to do his job effectively as the frequency of board meetings has been linked to firm performance[16] (Jiraporn, Davidson, et al., 2009).

Studies on the issue of multiple directorships and board meeting attendance is scant and the existing literature of the board members' activities is concentrated on the meeting attendance by outside directors and most of the studies are restricted to US firms. However, directors' board meeting attendance data of US firms are not precise because firms in the US only have to report whether or not a given director has attended 75% of total board meetings (Renée B Adams & Ferreira, 2008; Jiraporn, Davidson, et al., 2009; Lawler & Finegold, 2006). This study intends to overcome this shortcoming of the current literature on the board meeting attendance by investigating the effects of directorships on meeting attendance for both outside and inside director and by using a more comprehensive data set of the directors' board meeting attendance in Pakistani firms. As compared to the firms in US, firms listed on a Pakistan Stock Exchange must have to provide the detailed information in annual reports about the board meeting attendance of all directors. With the help of this more accurate and precise information we can take a closer look on the board members' activities.

[16] Vafeas (1999) finds that performance improves after years in which boards meet more frequently than usual.

Particularly, we can empirically examine the effect of multiple directorships on board meeting attendance.

Moreover, the choice of the Pakistani context is dictated by several additional considerations. First, an emerging economy would be an appropriate laboratory to analyze the issue of multiple directorships as compared to a developed economy like the US, where a long history of strong imposed limitations on the number of directorships can be found. Further, the directors themselves might also share this view that serving on too many boards may not be feasible for them as well and voluntarily seek to limit the number of board memberships. Under such circumstances, the incidence of multiple directorships in listed firms may be endogenously determined, making it hard to find much variation in directorship data. This in turn makes it difficult to find an empirical relationship between directorships and meeting attendance by using data from developed countries (Dahya & McConnell, 2003; Sarkar & Sarkar, 2009). In contrast, the incidence of multiple directorships in the Pakistani context is higher as compared to developed countries like the US[17]. While the limit in the US is defined as maximum three directorships (Ferris et al., 2003; Fich & Shivdasani, 2006), the directorships limits in emerging countries like India, Malaysia and Pakistan is much higher (Kamardin, Latif, Mohd, & Adam, 2014; Sarkar & Sarkar, 2009). As per the Code of Corporate Governance 2002, the recommended limit of the maximum number of directorships in Pakistan is ten directorships which are significantly

[17] While mean busyness of directors for the US companies is between 1.6 (Ferris et al., 2003) with corresponding estimates of the percentage of busy directors is 14.97% (Ferris et al., 2003). The estimates of mean busyness and percentage of busy outside directors for Pakistani listed companies are 2.01 and 24.37% respectively.

higher than the best practices that are in vogue in the US and other developed countries. Second, this is the first study - to the best of our knowledge – that quantitatively examines this relationship by particularly focusing on the issue of multiple directorships with a comprehensive data set of directors board meeting attendance and their individual shareholdings[18]. In contrast to the US context, Pakistani firms have to report the total number of board meetings and the number of meetings attended by each director which makes the Pakistani context much more suitable to examine the effects of multiple directorship on the board meeting attendance with a detailed data set.

Another important contribution of our study is that we investigate the moderating effect of directors' shareholding on the relationship between multiple directorships and meeting attendance which has not been tested before in literature. We will argue that directors' stock ownership will motivate them to perform their director duties with more diligence because they would have a stronger alignment of interest with the interest of shareholders as their own wealth is tied the value of the firm (Jensen & Meckling, 1976; Weisbach, 1988). Therefore, this study examines the moderating effect of directors' shareholding on the relationship between multiple directorships and board meeting attendance. Our argument is that when directors have a higher level of shares in the firm they will be more motivated to attend board meetings. Hence, we contribute to the

[18] The only exception is the work of Jiraporn, Davidson, et al. (2009) which discussed this relationship in the US context and faced the problem of data limitations. These authors reported that "Data are not available on what percentage of meetings directors attend. Firms are only required to report whether or not a given director attends more than 75% of the total meetings. Future research, perhaps, should look into this issue as more detailed data become available" (Jiraporn, Davidson, et al., 2009, p. 1163). Further, the work of Chou et al. (2013) which also discussed this issue in Taiwanese context, focused on the effects of meeting attendance on firm performance (ROA).

debate whether directors' shareholding have an impact on the board meeting absence of busy directors (Jiraporn, Davidson, et al. (2009).

The remainder of this paper is organized as follows. In section 2 we present a literature review and the hypothesis development. In section 3 we discuss the methodology of this study and data. We discuss empirical results in section 4 and offer a conclusion in section 5.

5.2 Literature review and hypotheses

5.2.1 Prior studies on multiple directorships

Prior academic literature on the issue of multiple directorships documents two opposing views. Some researchers contend that multiple directorships could be valuable. Mace (1986) proffered that multiple directorships are beneficial as it enlarges directors' visibility, commercial contacts and give them prestige. It may open new markets for the firm and provide access to vital resources. Furthermore, outside directorships provide new insights to the executives and they can learn different strategies and management styles which are being implemented in other firms (Booth & Deli, 1996; Carpenter & Westphal, 2001). As a result, they become more able to perform their board roles effectively, resulting in more rigorous oversight of top management and hence, fewer wealth-diminishing decisions (Ahn et al., 2010). Similarly, Fama (1980) and Fama and Jensen (1983) stated that multiple directorships signal a director's quality. Thus, the market for directorships provides incentives for directors to develop their reputation as monitoring specialists by accepting more directorships. Harris and Shimizu (2004, p. 793) posit that "busy directors are busy for good reason – they are good contributors". Therefore, researchers have taken the number of board positions held by directors to represent the reputation of director in the external labor

market and provided empirical support in favor of multiple directorships (Boyd, 1990; J. Coles & Hoi, 2003; Di Pietra et al., 2008; Yermack, 2004).

However, there is also abundant evidence to the contrary, which questions the value of holding multiple directorships. Multiple directorships may reduce the effectiveness of outside directors as corporate advisors and monitors which thus negatively affect firm performance (Core et al., 1999; Shivdasani & Yermack, 1999). As a result, managers start taking advantages of less effective oversight and extract their own benefits at the expense of shareholders (Ahn et al., 2010). One of the main reasons of less effective monitoring and advice is the time constraint, as the time of an executive is finite and thus holding too many board positions may make a director so "busy" to the point where the director's ability to provide useful advice and monitor the management is compromised (Ahn et al., 2010). Core et al. (1999) proffer that busy directors having multiple board seats offer excessive compensation packages to the CEOs which in turn leads to poor firm performance. In line with this view, the National Association of Corporate Directors (1996) and the Council for Institutional Investors (2003) have suggested to place a limit on the number of board memberships held by the individual directors in public companies.

Ferris et al. (2003) did not find any significant relationship between the market to book ration and the average number of directorships. They concluded that calling for limits on the number of directorships is an ill-advice. Fich and Shivdasani (2006) re-examined the relationship between multiple directorships and firm performance and found that directors with multiple directorships can be detrimental for firm performance. Particularly, they conclude that, when boards are busy (i.e., majority of outside directors holding three or more directorships),

firms are associated with weak corporate governance, lower sensitivity of CEO removal to firm performance, weaker profitability and lower performance ratios.

Perry and Peyer (2005) postulate that, when top executives of the firm join the board in other firms as outside director, the announcement return is positive for the sending firm when the sending firm has an independent board and the sent executive has high equity. They conclude that when directors have strong incentives to enhance the shareholders' value, then seat accumulation has a positive effect on firm performance. Jiraporn et al. (2008) studied the effect of multiple directorship on corporate diversification and stated that firms having busy boards are more likely to suffer from a deeper diversification discount and are more diversified.

Based on this review of the representative literature, it is very difficult to draw clear inferences as studies have yielded equivocal results.

5.2.2 Multiple directorships and directors' attendance

According to Fama and Jensen (1983), directors should advice and monitor the top management on behalf of the shareholders in order to mitigate agency problems. One way through which directors can perform their board roles and also contribute in developing and implementing strategies and board effectiveness is to attend board meetings (Davies, 1991; Vafeas, 1999). Usually, directors hold top executive jobs and other board memberships in different firms (Lin et al., 2014). Under the premises of the busyness hypothesis, Ferris et al. (2003) stated that directors holding too many board seats in other companies become overly busy, thereby, their multiple appointments undermine their ability to perform their board roles effectively and properly advise and monitor the top management of the firm. Therefore, they propose that multiple directorships raise agency costs, which ultimately lead to lower firm value. Jiraporn, Davidson, et al.

(2009) highlight the difficulty while measuring a link between multiple directorships and firm performance, because it would require the identification of all possible exogenous variables that will affect the relationship between multiple directorships and firm performance. A potential method to deal with these measurement problems is to study a director's advising and monitoring activities, which thus have an effect on board effectiveness. It is in fact a variable hard to observe directly in reality and one possible way to examine this important variable is to observe the director's absence at board meetings as directors exercise their advising and monitoring roles in the board meetings. Attending board meetings make them more effective to exercise their role as advisors and monitors[19]. We argue that, building up knowledge about a firm is time intensive and requires a good understanding of the affairs of a company by attending board meetings where information is shared and discussed. If directors have too many board appointments, it will become difficult for them to pay attention and remain involved in the affairs of a company (Jiraporn, Davidson, et al., 2009). Therefore, we posit that directors who attend less board meetings may be those who are busier and by being on multiple boards, their time and efforts are spread in such a way that they do not perform in an effective way anymore.

Thus, our baseline hypothesis is:

***Hypothesis 1*:** Directors with more directorships will have a lower board meeting attendance.

However, prior studies (e.g. Jiraporn, Davidson, et al., 2009; Lin et al., 2014) have suggested that there is a significant difference between outside or

19 It would be a signal of low quality of advising and monitoring, if, a director is not attending board meetings. But whether failure to attend board meetings will adversely affect firm performance is a question which is beyond the scope of this study.

non-executive directors and executive directors in terms of attendance behavior. Inherently, executive directors are different from outside or non-executive directors in several ways. These fundamental differences would affect the rate of meetings attendance. For example, non-executive directors are not employees of the firm and they are invited to join the board as outside member. Mostly, they have other careers and professional responsibilities which will demand their full commitment and attention. In addition, they are under less pressure to attend board meetings. Therefore, we expect that time constraints coupled with other more compulsory professional commitments will lead to a weaker attendance rate by directors serving on multiple boards.

Therefore, we presume that:

***Hypothesis 2$_a$*:** A higher number of multiple directorships will have a negative effect on board meeting attendance of non-executive directors.

Executive directors, however, are the employees of the firm and it is an obligation for them to remain present at board meetings (Jiraporn, Davidson, et al., 2009). Therefore, they are under more pressure to attend board meetings because absence will adversely affect their careers. Furthermore, when executive directors accept additional board positions, they are expected to bring needed resources, knowledge and skills to the sender firm and they can introduce a new value adding policy in their home firm (Kiel & Nicholson, 2006; Perry & Peyer, 2005; Pfeffer, 1972). A key role of directors on the board having multiple directorships is their linking role of the firm with its external environment (Huse, 2005a). The experience and knowledge of individual directors gained by external board appointments is very important and a valuable resource leading to a competitive advantage for the firm (Gabrielsson & Huse, 2005; Huse, 1998). Therefore, multiple directorships are beneficial and it would be a reason for

executives to remain present at the board meetings while performing their service roles by participating in the discussions to reach constructive conclusions.

Thus, we expect that:

***Hypothesis 2$_b$*:** A higher number of multiple directorships will have a positive effect on the board meeting attendance of executive directors.

5.2.3 Multiple directorships, director shareholdings and board meeting attendance

The board should guide and supervise the managers in the company's operations (Lin et al., 2014). Jensen and Meckling (1976) proffer the concept of convergence of interest, stating that, equity ownership concentrated in the board provides direct incentives for the directors to act in the best interest of shareholders as his own wealth is tied to the performance of firm (Brickley, Lease, & Smith, 1988; Weisbach, 1988). Beasley (1996) stated that the more shareholdings belong to outside directors, the lower the likelihood of fraud or malpractice in the company. Numerous studies (e.g. Ang et al., 2000; Filatotchev et al., 2005; Han & Suk, 1998; Krivogorsky, 2006) found that a higher director's equity ownership is associated with lower agency costs. Jiraporn, Davidson, et al. (2009) propose that directors holding a higher percentage of shares have a lower probability to be absent from board meetings. The notion of this study is that a higher level of equity ownership of directors will motivate them to perform their role on boards with more diligence and more tightly integrate their interest with those of the firm, thus creates more willingness to attend board meetings[20]. For executive directors, attending board meetings is a part of their job, they are under more pressure due to their obligations being an executive. Therefore, if executive

[20] It is not necessarily that directors attending board meetings are fulfilling their monitoring role, but not attending board meetings is a clearly indication that a director is evading his/her responsibilities.

directors have shareholdings, it might motivate them also to attend board meetings, but because it is their duty to remain present regardless of whether they have shareholdings in the firm or not, it is expected that equity shareholdings will motivate non-executive directors more to attend board meetings regularly. Therefore, we postulate that

> ***Hypothesis 3*:** A higher percentage of equity shares held by directors will moderate the negative relationship between multiple directorships and board meeting attendance in such a way that directors with multiple directorships will attend more board meetings of the firm from which they have a higher ownership stake and this moderating effect will be more pronounced for the non-executive directors.

5.3 Methodology

5.3.1 Data

Our database comprises the directors of all firms in non-financial sectors listed on the Pakistan Stock Exchange[21]. We obtain the required data from the annual reports of all the firms and those annual reports were hand collected from the websites of the respective firm and other sources, including, DSpaceRepository, Opendoors.pk, Securities and Exchange Commission of Pakistan, Islamabad and Pakistan Stock Exchange, Karachi. We did not include financial companies in the study because of their regulatory requirements and their unique financial structure. We started data collection from 422 non-financial firms listed on the Pakistan Stock Exchange across 28 different sectors during the 6-year period from 2006-2011.

[21] Formerly Karachi Stock Exchange

We then dropped our sample and in step one, we eliminated 28 firms for which annual reports were only available for partial years. In step two, we removed 42 firms which were delisted during the period of 2006-2011. Thus, our final sample consist of 16,668 director level observations from 352 firms during the period of 2006-2011[22]. Since our analysis requires data on individual directors of each of these firms, we used the annual reports to collect detailed information on the individual director level. All data of multiple directorships had to be hand compiled and are based on directorships found in the final total sample of the Pakistan Stock Exchange, i.e. the directorships held by any individual director in the study include appointments to the boards of our sample firms. In addition to the data on multiple directorships we need information about the total number of board meetings in a year, director's attendance at the board meetings, directors' equity shareholdings, the status of a director (either a director is an executive or non-executive), the gender of a director, director's membership of the audit committee and membership of other committees.

5.3.2 Variables

5.3.2.1 Directors' board meetings attendance

In the United States, according to the requirements of the Securities and Exchange Commission (SEC), firms only have to disclose the directors' name who were absent more than 25% of the board meetings during a fiscal year. Therefore, more detailed data of a directors' meeting attendance are not available (Chou et

[22] We have chosen the period of 2006-2011 due to two reasons. First, Statement of Compliance with the Code of Corporate Governance was not found for most of the firms before 2006. Secondly, the Code of Corporate Governance was revised in 2012 in Pakistan. Therefore, to avoid the inconsistence in data due to changes in the governance code and non-availability of compliance report, selected sample period spans 6 years from 2006-2011.

al., 2013). Thus, in this study, we have taken the advantage that Pakistani companies must have to disclose the details of each director's board meeting attendance during a fiscal year. Therefore, the dependent variable is the percentage of board meeting attendance, which is calculated by dividing the number of board meetings attended by each director by the total number of board meetings in a year.

5.3.2.2 Directors' busyness

In this study, we employ *Directorships per Director* as a measure of directors' busyness which is the total number of board seats held by each director on the board. Since we have complete and detailed information about the directorships of each director, we chose this measure to capture the concept of busyness in this study.

5.3.2.3 Directors' shareholdings

In the interaction model of this study, we propose that higher directors' shareholdings will motivate and create more willingness to attend more board meetings, thus, we have taken the *Percentage of Directors' Shareholdings* as a moderator and it is calculated as the total number of shares owned by a director divided by the total number of shares. This measure is identical to the one adopted by Jiraporn, Davidson, et al. (2009) and Lin et al. (2014) to measure the directors' ownership.

5.3.2.4 Control variables

In addition, we control for the factors other than multiple directorships that may affect directors' board meeting attendance. It includes some demographic factors such as gender, status of a director (either executive or non-executive director). We create a binary variable which is equal to one for female

directors and zero for male directors. Similarly, the status of a director is also a dichotomous variable, which is equal to one for non-executive directors and zero for executive directors. Attendance behavior may be different for executive and non-executive directors (Lin et al., 2014). Furthermore, we also control for the frequency of board meetings in a year because a high number of board meetings my lead to lower board attendance. Companies with an overly high frequency of board meetings are likely to use the boards as decision making mechanisms in daily routine matters (Jiraporn, Davidson, et al., 2009). It is obvious that, in such firms, the importance of monthly board meetings will be less for a director as compared to quarterly meetings. A high frequency of board meetings requires more time from directors, but the time and efforts for each person is limited, therefore, the attendance rate in such frequent board meetings could be lower. In most cases, corporate boards delegate their tasks to board committees as an audit committee or a nominating committee (Vafeas, 1999). Directors are appointed as members of these committees and boards that form more monitoring committees meet significantly more often (Vafeas, 1999). Therefore, it is possible that membership of board committees may affect the directors' board meeting attendance in such a way that directors attend board meetings more frequently. A probable reason for this positive relation between committee memberships and meeting attendance would be that directors have to defend their decisions taken in the board committees. Therefore, we control for the directors' membership of an audit committee or other committees and created a dummy which is equal to one if a director is a member of a committee and zero otherwise.

5.3.3 Estimation model

In this study we first estimated a fixed effects model with three fixed effects[23] (individual, year and firm level) to determine the effect of multiple directorships on board meeting attendance of individual directors. Fich and Shivdasani (2006, p. 694) suggest that the fixed effects framework is more reliable than an Ordinary Least Square regression by suggesting that "the fixed effects approach is robust to the presence of omitted firm-specific variables that would lead to biased estimates in an ordinary least squares (OLS) framework". Hence, our fixed effects specification captures the effect of any unobserved heterogeneity on the year, individual director and firm level (Brookman and Thistle (2013), J. L. Coles and Li (2013) and Graham, Li, and Qiu (2011). We used this approach because the unobservable firm, year and individual directors' attributes are expected to be important determinants of board meeting attendance. For example, the individual director fixed effects captures unobservable director characteristics, such as, personality traits, director's ability or it may be possible that the directors have the responsibility of five children or he/she is also chairman of any sports club, which creates by consequence unobserved time constraints that could affect his/her board meeting attendance. Year fixed effects control any systematic effects, such as regulatory changes (J. L. Coles & Li, 2013). The firm fixed effects is included to capture the firm characteristics that can affect the board meeting attendance, like, unobserved board demographic characteristics, firm-specific director compensation practices and corporate culture (Brookman & Thistle, 2013) or it may be possible that a headquarter of a specific firm is located near to the residence of a director which

[23] We conduct Hausman test to find out whether Fixed Effect Model (FE) or Random Effect Model (RE) is appropriate in this study. The results of the Hausman test show that the p-value was significant, so, FE is applicable for this study.

can urge him to attend board meetings frequently as compare to the meetings of a firm which head office is located at a far distance.

Additionally, in this study, we examine differences in attendance behavior between executive directors and non-executive directors by replacing the directors' busyness variables with two new additional variables. We estimate the effect for non-executive directors by adding *Outside Directorship per Director*Status of Director* and for executive directors *Outside Directorship per Director*(1-Status of Director)* (Yip and Tsang (2007)). Furthermore, we also estimate an interaction model in which the percentage of a director's shareholdings is interacted with outside directorships of director. We regress each model at the individual director level, therefore subscript *i* indexes individual director and in each regression statistics robust standard errors are calculated.

Model 1:

$$\text{Board Meeting Attendance}_{i,t} = \beta o + \beta 1 \text{Directorships Per Director}_{i,t} + \beta 2 \text{ Percentage of Director's Shareholdings}_{i,t} + \beta 3 \text{ Status of Director}_{i,t} + \beta 4 \text{ Log of Board Meetings}_{i,t} + \beta 5 \text{ Gender}_{i,t} + \beta 6 \text{ Membership of Audit Committee}_{i,t} + \beta 7 \text{ Membership of Other Committees}_{i,t} + \text{Firm Fixed Effects} + \text{Individual Director Effects} + \text{Year Effects} + \varepsilon_{i,t}$$

Model 2:

$$\text{Board Meeting Attendance}_{i,t} = \beta o + \beta 1 \text{Directorships Per Director}_{i,t} * \text{Status of Director}_{i,t} + \beta 2 \text{ Directorships Per Director}_{i,t} * (1 - \text{Status of Director}_{i,t}) + \beta 3 \text{ Percentage of Director's Shareholdings}_{i,t} + \beta 4 \text{ Status of Director}_{i,t} + \beta 5 \text{ Log of Board Meetings}_{i,t} + \beta 6 \text{ Gender}_{i,t} + \beta 7 \text{ Membership of Audit Committee}_{i,t} + \beta 8 \text{ Membership of Other Committees}_{i,t} + \text{Firm Fixed Effects} + \text{Individul Director Effects} + \text{Year Effects} + \varepsilon_{i,t}$$

Interaction Model:

$$\text{Board Meeting Attendance}_{i,t} = \beta o + \beta 1 \text{Directorships Per Director}_{i,t} * \text{Status of Director}_{i,t} + \beta 2 \text{Directorships Per Director}_{i,t} * (1 - \text{Status of Director}_{i,t}) + \beta 3 \text{ Percentage of Director's Shareholdings}_{i,t} + \beta 4 (\text{Directorships Per Director}_{i,t} * \text{Status of Director}_{i,t}) * \text{ Percentage of Director's Shareholdings}_{i,t} + \beta 5 (\text{Directorships Per Director}_{i,t} * (1 - \text{Status of Director}_{i,t}) * \text{Percentage of Director's Shareholdings}_{i,t} + \beta 6 \text{ Status of Director}_{i,t} + \beta 7 \text{ Log of Board Meetings}_{i,t} + \beta 8 \text{ Gender}_{i,t} + \beta 9 \text{ Membership of Audit Committee}_{i,t} + \beta 10 \text{ Membership of Other Committees}_{i,t} + \text{ Firm Fixed Effects} + \text{Individul Director Effects} + \text{Year Effects} + \varepsilon_{i,t}$$

5.4 Results and discussion

Table 5.1 Patterns in the number of directorships held by directors

This table describes the distribution of directors for our sample, in terms of the number of directorships held. The sample comprises 352 companies listed on the Pakistan Stock Exchange for the year 2006 to 2011 across 28 sectors. Distribution of directorships held by individual director is computed only based on the directorships observed within the sample firms.

Directorships Held	Number of Directors	Fraction of Directors	Total Number of directorships	Fraction of Total Directorships	Number of directors (cumulative)	Percent of directors (cumulative)
1	2,129	71.35	2,129	45.98	2,129	71.35
2	474	15.88	948	20.48	2,603	87.23
3	212	7.10	636	13.74	2,815	94.33
4	70	2.35	280	6.05	2,885	96.68
5	37	1.24	185	3.99	2,922	97.92
6	23	0.77	138	2.98	2,945	98.69
7	14	0.47	98	2.11	2,959	99.16
8	14	0.47	112	2.42	2,973	99.63
9	6	0.20	54	1.17	2,979	99.83
10	5	0.17	50	1.07	2,984	100
Total directors			2,984			
Total directorships			4,630			
Number of Female Directors			388			
Number of Male Directors			2,596			
Number of firms			352			

In the Table 5.1, we report the distribution of the number of directorships held by directors in our sample. The largest frequency, 71.35%, is for the directors that hold only one directorship and have no outside directorship whereas 15.88% hold two directorships in total and have one outside directorship. The highest frequency in our sample is 0.17% holding a total of ten directorships or nine outside directorships. Consistent with Ferris et al. (2003) we observe that, as the number of board seats held by directors increases, the percentage of directors holding multiple directorships falls. For example, we find that 15.88% of directors have two board positions, while only 0.17% hold ten board seats. Ferris et al. (2003) found that 84.39% of directors hold one board seat while the corresponding statistics for our sample is 71.35%. Furthermore, if we follow the

limit of three directorships proposed by the Council of Institutional Investors, about 12.77% directors hold three or more directorships, whereas, Ferris et al. (2003) report that only 6% of the directors hold three or more board seats, which indicates that in our sample the incidence of multiple directorships is higher compared to studies conducted in the US context. The total number of directors is 2,984 of which 388 are female directors and 2,596 male directors.

Table 5.2 Descriptive statistics

Descriptive statistics for key variables for the 352 companies are presented in Table 5.2.

Variable	Obs	Mean	Median	SD	Min	Max
Directorships Per Director	16,668	2.01	1	1.74	1	10
Percentage of Director's Shareholdings	16,314	3.23	.05	7.24	0	77.78
Status of director	16,127	0.66	1	0.47	0	1
Percentage of meeting attendance	16,007	80.98	100	26.48	0	100
Number of Board Meetings	16,321	5.41	5	2.49	1	35
Membership of audit committee	16,539	0.40	0	0.49	0	1
Membership of other committees	16,668	0.08	0	0.27	0	1
Gender	16,668	0.11	0	0.31	0	1

Table 5.2 lists the descriptive statistics for the 16,668 observations. The average board meeting attendance rate of directors is almost 81% and the average directorships per director is 2.01. Compared to the studies of Ahn et al. (2010) and Ferris et al. (2003) conducted on US data, the statistics of directors' busyness suggest that the rate of multiple directorship in Pakistani firms is higher as compared to firms in the USS. For example, Ahn et al. (2010) report that the mean value of directorships per director is 1.93 and Ferris et al. (2003) stated that the mean value of directorship per director is 1.60. In our sample, we found that about 66% of directors are non-executives and 11% of directors are female

directors. According to the Code of Corporate Governance[24] in Pakistan, every public firm is required to have one board meeting in every quarter. The average frequency of board meetings is 5.4 per year (median is 5) with the lowest at 1 and maximum 35 meetings in a year. The overly high number of board meetings implies that some firms may use their boards as a decision making body for daily routine matters. The mean value of director's shareholding is 3.24 and 40% of directors are members of an audit committee, while about 8% of directors are members of other board committees.

Table 5.3 Test of mean difference between non-executive and executive directors

It compares the means of all variables between two subgroups.
** p<0.01, * p<0.05, † p<0.1

	Executive Directors (*n*=5,477)	**Non-Executive Directors (*n*=10,650)**	**Mean difference in test**	
Variable	**Mean**	**Mean**	**Mean Deviation**	***t*-Value**
Directorships Per Director	1.723	2.198	-0.474	-16.32**
Percentage of Director's Shareholdings	5.382	2.168	3.213	26.74**
Percentage of meeting attendance	87.121	77.770	9.351	21.24**
Number of Board Meetings	5.548	5.405	0.143	3.39**
Membership of audit committee	0.238	0.488	-0.249	-31.43**
Membership of other committees	0.087	0.081	0.005	1.178
Gender	0.087	0.117	-0.030	-5.82**

This study compares the Non-executive and executive directors' subgroups. In line with the existing literature, we have considered a director as executive director if he or she is a full time employee of the firm vested with the responsibilities of managing the business while a non-executive director (or

[24] As per Code of Corporate Governance 2002 and revised Code of Corporate Governance 2012

outside director) is one who is a not an employee of the company and brought in as an advisor and a monitor (Sarkar & Sarkar, 2009). In the Table 5.3 which presents the univariate analysis, we find a significant difference in the mean value of almost every variable under observation. On average, the board meeting attendance rate of non-executive directors is significantly less than the attendance rate of executive directors (t = 21.24, p <0.001) and non-executive directors hold more board seats (2.198) than do executive directors (1.723, t = -16.32, p <0.001). Not surprisingly, non-executive directors are more in demand because they can provide more objective advice to the board (Jiraporn, Singh, et al., 2009).

In terms of shareholdings of directors, non-executive directors hold 2.168%, whereas the average ownership of executive directors is 5.405%. The ratio of non-executive director's ownership is significantly lower (t = 26.74, p <0.001). The average frequency of board meetings of outside directors is 5.40 times, which is significantly lower than 5.54 times for the executive directors (t = 3.39, p <0.001). Female directors constitute 11.7% of non-executive directors, while 8.7% of executive directors. The ratio of female executive directors is lower than the non-executive female directors (t = -5.82, p <0.001). Regarding the membership of audit committees, non-executive directors sit more on the audit committee with the mean value of 48.8%, which is significantly higher than membership of executive directors (23.8%, t = -31.43, p <0.001). While there is no significant difference between the executive and non-executive directors on the membership of other board committees.

In sum, univariate analyses suggest that non-executive directors are (1) relatively more busy by holding a higher number of board seats, (2) have a lower ownership stake, and (3) attend less board meetings as compare to executive

directors. In the agency framework, non-executive directors can afford to be busy as their own private benefits may be higher of being on multiple board seats than to the value loss from not attending board meetings. This evidence supports the notion of the agency framework where directors having lower equity shares render their services to outside boards for their own private benefits (Jiraporn, Singh, et al., 2009). Furthermore, evidence from univariate analysis also lends credence to our *Hypothesis 2a* and *Hypothesis 2b* and statistics also support the notion of a higher prevalence of multiple directorships in Pakistani firms as compared to the US context. For example, Perry and Peyer (2005) reported that the mean value of directorships of executive directors is 0.85 whereas the corresponding value in our sample is 1.72. Likewise, Ahn et al. (2010) found that the mean value of directorships of outside directors is 1.82 and Ferris et al. (2003) show 1.89. While in our sample, we found 2.198 directorships of per outside director which is higher than reported in US studies.

Table 5.4 Correlation

This table presents Spearman Correlation between all key variables included in the study.

** p<0.01, * p<0.05, † p<0.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Directorships Per Director (1)	1							
Percentage of Director's Shareholdings (2)	-0.032**	1						
Status of director (3)	0.127**	-0.208**	1					
Number of Board Meetings (4)	-0.043**	-0.007	-0.027**	1				
Percentage of meeting attendance (5)	-0.002	0.113**	-0.168**	-0.061**	1			
Gender (6)	-0.150**	-0.004	0.046**	0.016*	-0.090**	1		
Membership of audit committee (7)	0.009	-0.011	0.241**	0.006	0.094**	-0.044**	1	
Membership of other committees (8)	-0.007	-0.098**	-0.009	0.085**	0.031**	-0.078**	-0.018†	1

The Table 5.4 displays the Spearman Correlation between all variables. Several points are noteworthy. First, directorships per director is negatively associated with board meeting attendance. Second, the percentage of attendance is negatively associated with the status of a director, which suggests that non-executive directors attend less board meetings. Third, non-executive directors are more busy as the status of directors is positively correlated with *directorships per director*. Fourth, non-executive directors hold less equity shares as director's shareholding is negatively related with the status of a director. Fifth, the percentage of a director's shareholding is positively associated with board meeting attendance, which shows that ownership in the firm can motivate a director to attend more board meetings. Sixth, as the number of board meetings increases, the attendance rate decreases as it is shown by the negative association of number of board meetings and board meeting attendance. Seventh, memberships of audit and other committees is positively associated with board meeting attendance. Overall, findings of a correlation matrix support our baseline *Hypothesis 1* and *Hypothesis2a.*

Table 5.5 Fixed effects regressions

This table presents three way fixed effects regression of multiple directorships and board meeting attendance. All regressions use percentage of board meeting attendance as the dependent variable. We report robust standard errors in parentheses below each coefficient estimate. ** p<0.01, * p<0.05, † p<0.1**.**

VARIABLES	**Model (1)**	**Model (2)**
Directorships Per Director	0.622	
	(0.524)	
Directorships Per Director*Status of Director (i.e. Non-executive Directors)		-0.915*
		(0.424)
Directorships Per Director*(1-Status of Director) (i.e. Executive Directors)		1.361*
		(0.607)
Percentage of Director's Shareholding	0.137**	0.135**
	(0.050)	(0.050)
Status of director	-9.900**	-5.675**
	(1.146)	(2.009)
Natural log of Board Meetings	-9.167**	-9.109**
	(1.288)	(1.291)
Gender of director	10.47	10.10
	(10.640)	(10.860)
Membership of audit committee	4.184**	4.217**
	(0.895)	(0.908)
Membership of other committees	6.559**	6.538**
	(1.995)	(1.990)
Constant	Yes	Yes
Individual Director Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Year Effects	Yes	Yes
Observations	15,266	15,266
R-squared	0.124	0.124

The results of the univariate comparison lend credence to the hypothesis of this study. Nevertheless, it does not permit us to draw any conclusive inferences. To test whether directors' busyness influence board meeting

attendance (dependent variable), we estimate fixed effects regressions. Our measure of directors' busyness and the two models are reported in the Table 5.5. In model (1) the estimated coefficient of directorships per director is positive, but not statistically significant (β = 0.622, p = 0.235), implying that directors' busyness has no significant influence on board meeting attendance. The result is not consistent with our baseline *Hypothesis 1* that proposes that higher multiple directorships negatively affect the board meeting attendance.

The theoretical arguments and results of *t*-test in previous sections confirms that a significant difference exists between non-executive and executive directors. We further investigate whether the effect of director's busyness on board meeting attendance differ between the two groups by estimating different effects of an executive versus non-executive director. In Model (2), we re-estimate Model (1), by interacting the measure of director's busyness (directorships per director) with two dummy variables ('status of director' and '1-status of director') taking the value one if the director is a non-executive and zero for executive. The results of the first interaction (Directorships Per Director*Status of Director) represent the non-executive directors' group and the estimated coefficient is negative and significant (β = -0.914, p = 0.031). The results of the second interaction (Directorships Per Director*(1-Status of Director)) represent the executive directors' group and the estimated coefficient is positive and significant (β = 1.357, p = 0.025). The results in Model (3) support the expectations that differences exist among both groups of directors, supporting *Hypothesis* 2_a and *Hypothesis* 2_b. In sum, serving on multiple boards will have a negative effect on the attendance of only non-executive directors who seem to suffer from time constraints to perform their director duties in that case.

In the case of executive directors, the situation is different: directors' busyness has a positive effect on the board meeting attendance of the executive directors, thus they are likely to attend more board meetings. Similarly, Perry and Peyer (2005) also found positive effects of outside directorships for executives directors on the firm performance of the sender firm. The executive directors are inherently different from the non-executive directors in several ways. These basic distinctions may affect the propensity of board meeting attendance. For example, executive directors are employees of the firm and they are under more pressure to attend board meetings. It is their duty to regularly attend board meetings and absence from meetings can adversely affect their executive careers. Moreover, they are allowed to take additional board seats by the sender firm with the intention to bring this new expertise to the own board. Consequently, this can only happen when these directors are present at the board meetings of the sending firm. In contrast, non-executives are not employees of the firm and they are under less pressure to attend board meetings when experiencing time constraints due to multiple directorships, resulting in poorer board meeting attendance (Jiraporn, Davidson, et al., 2009). The attendance rate for non-executive directors is 77 % and 87% for executive directors. This simple comparison demonstrate that non-executive directors show poorer attendance.

In addition, we have also control for those variables that can affect board meeting attendance in all three models in order to prevent errors or interference in the results. The coefficients of the control variables are mostly along expected lines. Higher meeting frequency demand more time from directors, but time and efforts are limited for each individual. Apart from the required time to acquaint with the agenda of board meeting, a director, also requires time for commuting to and attend board meetings. Therefore, a higher number of board meetings lead

to a lower attendance rate. We control for this effect and found that the number of board meetings have a significant negative effect on board meeting attendance. A higher percentage of equity shares held by directors might align their interest with the company (Bhagat et al., 1999; Lin et al., 2014) and resulting in higher meeting attendance rate. We have found a significant positive influence of director's shareholding on board meeting attendance in all three models. The status of director can also affect the attendance behavior of a director. Non-executive directors are more likely to miss board meetings (Jiraporn, Davidson, et al., 2009) therefore, we include the status of director as a control variable and this status dummy shows a negative and significant effect. The gender dummy is also included in the model to control for the gender effect, but we did not find any significant effect of gender in any of the three models. It is possible that membership of board committees may affect the directors' board meeting attendance. Members of an audit committee and other committees may have to attend board meetings to defend their decisions. Therefore, we have to control for the directors' membership of the audit committee and membership of other committees. The membership dummy show positive and significant effect in all three models.

Table 5.6 Fixed effect regression with moderating effect

This table presents three way fixed effects regression of multiple directorships and board meeting attendance. All regressions use percentage of board meeting attendance as the dependent variable. We report robust standard errors in parentheses below each coefficient estimate. ** p<0.01, * p<0.05, † p<0.1

VARIABLES	**Interaction Model**
Directorships Per Director*Status of Director (i.e. Non-executive Directors)	-1.340*
	(0.553)
Directorships Per Director*Status of Director* Percentage of Director's Shareholding	0.098*
	(0.042)
Directorships Per Director*(1-Status of Director) (i.e. Executive Directors)	1.610**
	(0.632)
Directorships Per Director*(1-Status of Director)* Percentage of Director's Shareholding	-0.0176
	(0.024)
Percentage of Director's Shareholding	0.104
	(0.114)
Status of director	-5.620**
	(2.114)
Natural log of Board Meetings	-9.108**
	(1.274)
Gender of director	10.24
	(10.78)
Membership of audit committee	4.141**
	(0.879)
Membership of other committees	6.434**
	(1.986)
Constant	Yes
Individual Director Effects	Yes
Firm Fixed Effects	Yes
Year Effects	Yes
Observations	15,266
R-squared	0.126

The notion of this study is that a higher level of equity ownership of directors will motivate them to perform their role on boards with more diligence and more tightly integrate their interest with those of the firm, thus creating more willingness to attend board meetings and predicting that a negative effect of directors' busyness is moderated with the higher percentage of equity shares (i.e. directors will attend more board meetings). To test the moderating effect, we create two interaction variable by interacting directorship per non-executive director (*Directorships Per Director*Status of Director*) and directorships per executive director (*Directorships Per Director*(1-Status of Director)*) with the Percentage of Director's Shareholdings. The results of the Interaction Model are presented in the Table 5.6 which show that, the estimated coefficient of the interaction term *Directorships Per Director*Status of Director* Percentage of Director's Shareholding* is positive and significant (β = 0.098, p = 0.025). Thus supporting our *Hypothesis 3* by implying that, a higher percentage of shareholdings of a non-executive director, having multiple board appointments, will motivate him/her to attend more board meetings.

While the estimated coefficient of *Directorships Per Director*(1-Status of Director)* Percentage of Director's Shareholding* is not statistically significant. The results depict that a higher percentage of equity shares held by executive directors, having multiple board seats, will not motivate them to attend more board meetings. The probable reason would be that executive directors are under more pressure to be present at board meetings because they are employees of the firm and absence will adversely affect their executive careers (Jiraporn, Davidson, et al., 2009). We infer from these results that motives to attend board meetings related to their human capital seem to be more important than motives related to their financial capital. When executive directors join other boards, it is

expected that their knowledge, skills and abilities will be enhanced. They will bring needed resources and will be beneficial for the sender firm (Perry & Peyer, 2005). By virtue of multiple directorships, they can learn new management styles and gain new expertise from external environments (Conyon & Read, 2006). In addition, they can introduce a new value adding policy in their home firm which they have already seen in other company where they take a seat as outside director (Booth & Deli, 1996; Kiel & Nicholson, 2006; Mizruchi & Stearns, 1994; Pfeffer, 1972). To do so, they have to be present at board meetings and participate in discussions personally (Lin et al., 2014). Therefore, the result suggests that it is not directors' shareholdings that will motivate them to attend board meetings, but rather the duty of being an executive director and the potential negative consequences on their own human capital as a consequence of board meeting absence. Thus, the results support the *Hypothesis 3* that moderating effects of shareholdings are more pronounce for non-executive directors.

5.5 Conclusion

5.5.1 Theoretical and practical implications

The primary purpose of this study is to examine the effect of multiple directorships on board meeting attendance. Using individual director attendance rates of listed firms in Pakistan, we found that non-executive directors who hold more board seats (thus busier directors) exhibit a clear tendency to remain absent from board meetings. These findings are consistent with the notion of this study that non-executive directors who sit on multiple boards are overcommitted and experience more difficulty to show up for board meetings. This finding is very important as Vafeas (1999) argued that board meetings are critical to firm performance. Indeed, board meeting attendance is important for board effectiveness which thus influence the firm performance. While results reveal that

executive directors more frequently attend board meetings because they are employees of the firm and they are under more pressure to attend board meetings as absence can adversely affect their executive careers (Jiraporn, Davidson, et al., 2009). Furthermore, the higher rate of director's equity ownership implies greater convergence of the interests of directors with the company. As their own wealth is tied to firm value, directors meeting attendance rate will be higher and results confirm this notion that busy non-executive directors with a higher equity ownership show higher board meeting attendance.

5.6 Transitioning to the following chapter

In conclusion, this study establishes the effect of over-commitment on the showing up at board meetings. We conduct this study on the individual director level data and found that over-commitment leads to a lower probability of showing up. Prior studies (Vafeas, 1999) have linked the board meetings with firm performance. In the next chapter, we explore whether a greater number of missed meetings affect the firm performance or not? Therefore, we test the relationship between multiple directorship, board meeting attendance and firm performance at the firm level by considering firm growth as a context variable.

6 CHAPTER - Busy Boards, Meeting Attendance and Firm Performance: The Moderating Role of Firm Growth

ABSTRACT

This study contributes to the ongoing debate on the benefits and costs of multiple directorships by investigating how and when multiple directorships affect firm performance. More concretely, we study the effect of multiple directorships on firm performance, while taking into consideration board meeting attendance as a channel and firm growth as a context. Based on the unique data of 352 firms listed on the Pakistan Stock Exchange, we find that board meeting attendance mediates the negative effect of multiple directorships on firm performance. In addition, we find that the negative effect of multiple directorships on board meeting attendance is mitigated by the higher firm growth and accordingly, the indirect effect on firm performance become less negative as firm growth increases.

Keywords: Multiple Directorships, Board meeting Attendance, Firm Growth, Firm Performance

6.1 Introduction

The board of directors commands a central role in strategy formulation, evaluation and performance (Forbes & Milliken, 1999; Fried, Bruton, & Hisrich, 1998; Hendry & Kiel, 2004; Judge Jr & Zeithaml, 1992). Therefore, it is important for firms to have strong *board capital* which comprises of directors' expertise, experience, reputation and networking ties with external contingencies (Hillman & Dalziel, 2003). Such board capital can be increased by bringing valuable directors on the board. Directors with multiple directorships—i.e., busy directors—are experienced and skilled, thus making them better monitors and advisors (Field et al., 2013). Moreover, by the virtue of being more networked, busy directors—i.e. holding three or more directorships— can bring in needed resources, suppliers and customers to the company (Booth & Deli, 1996; Mizruchi & Stearns, 1994; Pfeffer, 1972). Hence, busy directors contribute to the formation of additional board capital of the firm with a likely positive influence on firm performance.

However, there is theoretical and empirical controversy about this effect because multiple directorships can have drawbacks. Directors having multiple appointments would be overcommitted due to increased time commitments, and as a consequence, they tend to shirk their responsibilities (Fich & Shivdasani, 2006). Therefore, the presence of busy directors could deteriorate firm value because a large number of board appointments can compromise their ability to effectively monitor and advise the management, which will lead to higher agency costs through poor monitoring. Consistent with such view and alleged disadvantages of multiple directorships and by recognizing that time of an executive is limited, corporate governance activists have advocated placing a limit on the number of directorships an individual may hold in a publicly traded firm. For instance, the guidelines of the National Association of Corporate Directors

(NACD) have recommended that directors with a full time job (senior corporate executives and CEOs) should not hold more than three outside directorships. Similarly, as per suggestions of corporate governance policies of The Council for Institutional Investors (CII), directors with full time jobs should serve no more than two other boards.

In academia, the debate on the costs and benefits of multiple directorships continues and existing empirical literature document different viewpoints on this contentious issue. Some studies proffer that firms with busy directors show lower firm valuation, weaker profitability, lower sensitivity of CEO turnover to performance (Fich & Shivdasani, 2006), lower returns in the corporate acquisitions (Ahn et al., 2010) and more probability of committing accounting frauds (Beasley, 1996). When boards consist of busy directors, CEOs are often paid an excessively high remuneration (Core et al., 1999; Shivdasani & Yermack, 1999) and such busy directors show a higher propensity to remain absent from board meetings (Jiraporn, Davidson, et al., 2009). On the other hand, other studies postulate that firm performance is positively associated with external board seats held by directors and professed that multiple directorships can add value to the firm by enhancing the experience of executives (Carpenter & Westphal, 2001), certifying directors' abilities and permitting them to build a network by which they can monitor business relations (Loderer & Peyer, 2002; Mace, 1986). Such directors would have more experience and knowledge about the industry and are expected to be more capable of making a contribution in the strategic decision making process, i.e. they are better monitors and advisors of management (Ruigrok, Peck, & Keller, 2006). In a nutshell, the prior empirical literature has provided mixed and equivocal evidence on the link between multiple directorships and firm performance (Ferris et al., 2003; Fich & Shivdasani, 2006; Field et al., 2013;

Harris & Shimizu, 2004; Jiraporn et al., 2008; Lee & Lee, 2014; Perry & Peyer, 2005).

While existing empirical studies suggest that there is a link between multiple directorships and firm performance (though without any conclusive evidence), we still do not know in what way or more specifically *"how"* multiple directorships affect firm performance because this link has been elusive (Himmelberg, Hubbard, & Palia, 1999; Palia, 2001). We address this gap in this ongoing debate by providing evidence that one possible channel of influence of directors' multiple directorships on firm performance may be through their ability to attend board meetings. Indeed, the busyness argument from the literature points to attendance problems and there are some studies that have established a relationship between busyness and board meeting attendance (Chou et al., 2013; Jiraporn, Davidson, et al., 2009; Lin et al., 2014). Directors holding too many board positions may find it difficult to show up at all meetings due to a significant increase in their workload. These busy directors have important time constraints and their over-commitment on several board seats preclude them from attending board meetings.

There are also some studies which found that the number of board meetings are critical to firm performance (Brick & Chidambaran, 2010; Vafeas, 1999). When board attendance is linked to firm performance, failure to attend meetings may hinder directors from performing their monitoring and advising roles effectively (Jiraporn, Davidson, et al., 2009), thus creating agency problem which will lead to lower market to book ratios and profitability (Fich & Shivdasani, 2006). The issue of board meeting attendance is crucial in understanding the multiple directorships-firm performance relationship because board meetings are the main vehicle for directors to collect information, exercise their duties by asking

questions, seeking explanations about problems, reviewing meeting materials and giving their independent judgment on several crucial issues (Renée B Adams & Ferreira, 2008; Chou et al., 2013; Lin et al., 2014). Therefore, absence at board meetings can be seen as that a director is not willing or not able to perform his/her duties. Consequently, such busy directors are not able to detect managerial self-interest motives and also they have less time to support management in crucial business issues. The argument of time constraints is embedded in the negative effect, since directors' busyness makes them absent from board meetings which ultimately have a negative effect on firm performance. Based on these arguments, we argue that attendance is a mediator explaining how multiple directorships negatively affect firm performance and rather than just focusing on the direct effect, we estimate a mediation model.

In addition, we contribute also from another perspective by taking into account the fact that the value of corporate governance is context specific (Chi and Lee (2010). Therefore, we propose a model that not only shows "*how"* multiple directorships negatively affect firm performance, but also demonstrates *"when"* this effect is mitigated. Therefore, we build on the attendance argument because merely looking at the effect of multiple directorships on board meeting attendance is just one part of the story. This study aims to contribute by proposing the other side of the story, namely that directors who have multiple directorships and cannot attend all board meetings, have to prioritize and make choices concerning the attendance. Directors will distribute their time and efforts *unequally* across the boards (Masulis & Mobbs, 2014) based on board role needs and will not skip each board meeting but will have to make choices about which board meeting to attend. We propose that they will first choose the board meetings from the firms that need them most. For example, a busy director who

has seven directorships on different boards would probably not able to attend board meetings in seven firms. An implicit assumption embedded in the busy directors literature (e.g., Chou et al., 2013; Jiraporn, Davidson, et al., 2009; Lin et al., 2014) states that the busy director will have *equally less time* for all seven firms and distribute their time and efforts uniformly across all the directorships. However, we argue that this assumption is not necessarily true because directors will choose where to attend and where to skip based on the needs of the firms. Since firms have different governance needs based on their governance context, directors will choose to attend board meetings of those firms where board role needs are highest. One such important context variable is *firm growth* and the firms where the growth rate is higher would have higher board role needs. Thus, firms with high board role needs will benefit from busy directors (because they will attend the meetings) while firms that do not have these needs will experience negative effects from such busy directors. Attending board meetings at high growth firms is also beneficial for the reputation of directors because it is more challenging to serve on the board of a rapidly growing firm. It would also certify the abilities of directors and signal director quality (Fama, 1980; Fama & Jensen, 1983).

Therefore, we introduce firm growth as moderator on the busyness – board attendance relationship because the costs and benefits of multiple directorships are sensitive to firm growth and it also reflects the board role needs of a firm. Primarily, directors play dual roles of advisors and monitors for the firm (Baysinger & Hoskisson, 1990; Boyd, 1990; Fama & Jensen, 1983). A key role of directors on the board having multiple directorships is their linking role of the firm with its external environment (Huse, 2005b). Accordingly, firm growth has interesting implications because it affects the relative importance of the board

roles. Thus, high firm growth creates a context in which directors having multiple directorships can contribute significantly to the enhanced board role needs and therefore, it is expected that it is less likely that they skip board meetings (C.-W. Chen, 2009).

Based on these board role needs, our argument is that firms with higher firm growth (likely to have greater advising and monitoring needs) will expect that their most valuable directors – i.e. busy directors - are present at board meetings. As a consequence, if these directors have to make choices, they will choose the meetings where they are needed most. In addition, directors will choose to attend the meetings of the board where the attendance is also beneficial for their reputation. Therefore, we test a moderated mediation model in which board meeting attendance acts as the channel or mechanism (mediator), and firm growth as the context (moderator). We state that busyness is negatively related to firm performance because it makes directors to shirk their responsibilities and they find it hard to show up at board meetings. However, higher firm growth mitigates this negative effect as directors will make choices where to attend based on the board role needs.

An additional contribution of this study is that we choose an unexplored context to study. The existing evidence on the costs and benefits of multiple directorships are restricted predominantly to developed economies. Renée B Adams, Hermalin, and Weisbach (2010, p. 101) stated that "the vast majority of the literature focuses on United States firms and comparisons of boards across countries outside the United States is, in contrast, under-explored". Therefore, to enhance our understanding of the effects of multiple directorships we use an international sample and provide additional evidence with respect to an emerging economy, Pakistan.

The choice of the Pakistani context is triggered by several reasons. First, we believe that an emerging economy forms an appropriate laboratory to analyze the issue of multiple directorships. In developed economies like the United States, institutional investors have a long history of actively seeking for a limit on the number of board seats and firms may be compelled to appoint directors who conform the recommended standards of multiple directorships. Further, a survey by Kon/Ferry International (1998) states that directors themselves believe that holding too many board seats places an excessive burden. Under the given conditions, the incidence of multiple directorships in listed firms may be endogenously determined making it hard to find much variation in directorship data by using data from developed countries (Dahya & McConnell, 2007; Demsetz & Lehn, 1985; Sarkar & Sarkar, 2009). Second, systematic evidence on the relationship between multiple board seats and firm performance is missing for emerging economies, the prevalence of multiple directorships is significantly higher as compared to developed countries like the US[25]. In the United States, less than three directorships are considered as best practice (Ferris et al., 2003; Fich & Shivdasani, 2006) while in developing economies like Pakistan, India and Malaysia the recommended limit of directorships is much higher (Sarkar & Sarkar, 2009). The Code of Corporate Governance 2002 of Pakistan has defined a limit of maximum ten[26] directorships per director which is significantly higher to the one that is being practiced in the US and other developed countries. Third, we have a

[25] In the US, the percentage of busy boards is about 21 percent (Fich & Shivdasani, 2006) whereas according to our study of Pakistan, percentage of busy boards is about 23 percent and directorships per director is 1.60 (ferries, 2003) and as per our results vale is 2.04.

[26] Code of Corporate Governance was revised in 2012 and limit has been reduced from ten to seven directorships but we have taken the data from the period of 2006-2011 therefore we follow the limit defined in that time period

unique data set as compared to the studies conducted in the US because data of board meeting attendance of US firms are not precise, as available data sources records only whether a given director have attended more than 75% of total board meetings or not. The Securities and Exchange Commission (SEC) requires firms to report the name of directors who are absent in more than 25% of the board meetings during a year and more detailed information is not available (Renée B Adams & Ferreira, 2008; Renée Birgit Adams & Ferreira, 2012; Jiraporn, Davidson, et al., 2009). Therefore, this study intends to overcome this shortcoming of the current literature by using a more comprehensive data set of the directors' board meeting attendance in Pakistani firms. In contrast to US companies, listed firms in Pakistan have to provide detailed information of board meeting attendance of each director in their annual reports. With such precise and more accurate information on meeting attendance, we can have a closer look at the directors' activities. Therefore, we consider the Pakistani context as very suitable to examine the effects of multiple directorship on firm performance.

We organize the remainder of this paper is as follows. Section 2 presents a review of the literature and the hypotheses development. In section 3, the data and methodology is discussed and section 4 describes the empirical results. Finally, section 5 concludes the paper.

6.2 Literature review and hypothesis

6.2.1 Multiple directorships and firm performance

There are two opposing views on the association between multiple directorships and firm value. Some argue that multiple directorships can be valuable. For example, directors with multiple appointments on different outside boards may learn different management styles and strategies being used in other companies (Booth & Deli, 1996; Carpenter & Westphal, 2001). In addition, sitting

on the boards of other firms may permit directors to establish a network which could be beneficial in monitoring business relationships (Loderer & Peyer, 2002; Mace, 1986; Rosenstein & Wyatt, 1994). Support for this positive view of multiple directorships can be found in different theoretical perspectives. First, *agency theory* proposes that boards having independent outside directors can be an effective instrument to monitor the behavior of agents and reduces agency cost (Fama & Jensen, 1983). In line with this view, traditional agency theory stated that busy directors signal their reputation as monitoring specialists (Fama, 1980; Fama & Jensen, 1983) and provide adequate monitoring, thus avoiding value destructing decisions (Ferris et al., 2003). It is not only the control role through which boards add value (Zahra & Pearce, 1989). Along with the monitoring role, boards also perform several service, resource dependency and strategy related tasks which also often labelled as the "service role" of the board.

The theoretical underpinning of the service role of the board is embedded in *resource dependency theory* and the *resource based view* (Van den Heuvel et al., 2006). According to the *resource dependency theory*, the most important role of directors having multiple board appointments is to link a firm with its external environment (Huse, 1998, 2005a). Therefore, multiple directorships enhance the directors' experience and enlarge their network, through commercial contacts which may provide help to firm in approaching new markets and give access to key resources e.g. bank finance. Similarly, the *resource based view* states that, due to the personal and professional qualifications of directors, boards can be an important source of sustainable competitive advantage (Gabrielsson & Huse, 2005). In order to perform effectively, a board needs to have directors with experience, commercial contacts and diverse skills in terms of their educational, industrial and functional background (Kiel & Nicholson, 2006; Pugliese & Wenstøp,

2007). Harris and Shimizu (2004, p. 793) stated that *"busy directors are busy for good reason – they are good contributors"* and such directors would have diverse knowledge and they can provide profound advice on key strategic issues. They can also provide counsel to the management and CEO in the important areas where in-firm knowledge is lacking or limited (Gabrielsson & Huse, 2005). Hence, it is considered that busy boards have more board capital - consisting of directors' expertise, experience, reputation and network ties— which would have a positive effect on both the monitoring function and provision of resources (Hillman & Dalziel, 2003). In sum, multiple directorships can be value enhancing for both key roles. Several studies (e.g. Boyd, 1990; J. Coles & Hoi, 2003; Di Pietra et al., 2008; Ferris et al., 2003; Gilson, 1990; Harris & Shimizu, 2004; Kaplan & Reishus, 1990; Lee & Lee, 2014; Mace, 1986) have provided empirical support in favor of multiple directorships and its positive impact on firm performance.

However, on the contrary, other studies argue that multiple directorships are detrimental because individuals have time constraints and limited abilities. They cannot serve properly when they are 'stretched' by several directorships and such directors are too plentiful and exhibit a tendency of not adequately fulfilling their board roles. Therefore, multiple board appointments can reduce directors' efficacy as monitor and advisor (Core et al., 1999; Shivdasani & Yermack, 1999). Recently, the wisdom of holding multiple directorships has been questioned, especially from an agency point of view. Given the high fees and prerogatives associated with multiple board seats, an agency cost view of multiple directorships considers it as a form of perquisite consumption. Directors enjoy the prestige and high remunerations linked with numerous boards, thus, they over-commit themselves at the expense of shareholders. Hence, low monitoring by such busy directors allows managers to impose high agency costs for the shareholders

(Ferris et al., 2003). The time constraints of busy directors may exacerbate agency conflicts because they would not be able to perform their monitoring duties adequately. The arguments of time constraints may also be valid when discussing the service role of the board. For instance, Huse (1998) postulate that a director's time availability is often as important as his experience and knowledge. Thus, less effective boards of directors may not be able to sufficiently monitor, control and evaluate the behavior of managers which would lead to a negative effect on firm performance, since managers may persuade to take their own private benefits at the stake of shareholder value (Di Pietra et al., 2008; Harris & Shimizu, 2004). Related to this, Shivdasani and Yermack (1999) analyze CEO involvement in the directors' selection process and find that CEOs tend to select directors who have multiple board seats and predisposed to monitor managers less. This evidence suggests that such directors will cater to CEOs and does little to reduce agency cost. Core et al. (1999) report that CEOs are paid excessively higher in firms where outside directors are busy which in turn leads to poor performance. Ahn et al. (2010) proffer that acquiring firms will experience more negative returns upon the announcement of an acquisition if directors hold multiple board position, while, Jiraporn et al. (2008) examine the effect of multiple directorships on corporate diversification and report that firms where the majority of directors are busy are more probable to suffer a deeper diversification discount. Fich and Shivdasani (2006) contend that busy directors are associated with weak corporate governance and consequently, have a negative effect on firm performance. They find that a firm experiences positive announcement returns when a busy director leaves the board, they also find evidence of negative announcement returns for an incumbent firm in response to the news of a director accepting a third board seat.

In sum, multiple directorships would be value enhancing but the time constraints of directors are critical issues. It will deteriorate the directors' ability to perform their board roles adequate and thus will lead to higher agency conflicts. Therefore, this study proposes that the detriments of multiple directorship will outweigh the benefits. We postulate that:

Hypothesis 1: Multiple directorships have a negative effect on firm performance.

6.2.2 The mediating role of board meeting attendance

Next, we argue that multiple directorships negatively affect firm performance through lower board meeting attendance. Directors perform their advice and oversight role mainly in board meetings. It is considered as one way by which boards can contribute to formulate and implement the strategy and exercise their board roles (Davies, 1991; Vafeas, 1999). Board meetings are one important tool by which directors can exert their influence on firms by asking questions and calling explanations of problems, by understating the audit and supervisory communications, and giving their independent expert opinion on critical issues (Lin et al., 2014). In other words, directors have to attend board meetings to advise, monitor, stipulate and supervise firms and to make important strategic decisions (Chou et al., 2013). Failure to attend regularly board meetings can signal that either directors are not able or unwilling to fulfil their roles and it could also be a sign of low monitoring and advising. Therefore, when directors are not available to participate in the discussions of board meetings and could not reach a consensus, a reduction in the board's supervisory effectiveness becomes apparent. Thus, directors must be present at meetings to provide advice, monitor the managers and be accountable for the shareholders and the company (Lin et al., 2014).

However, the busyness hypothesis postulated by Ferris et al. (2003) states that directors who have multiple directorships become too busy to monitor management, thus increasing agency costs and leading to lower firm performance. Jiraporn, Davidson, et al. (2009) report that directors serving on multiple board seats are less likely to attend meetings and the failure to attend board meetings may inhibit the director's abilities to do their job effectively. To the extent that remaining absent from meetings is an agency cost, multiple directorships raise this kind of agency problem. Under the notion of the busyness hypothesis, directors holding multiple board seats are overstretched, thereby finding it hard to show-up at all board meetings because they have less time (Core et al., 1999; Fich & Shivdasani, 2006). On average, boards meet seven times in a year (Monks & Minow, 1996). Therefore, when directors take on multiple directorships, the likelihood of schedule conflicts increase very quickly (Harris & Shimizu, 2004).

Further, Lin et al. (2014) found that a higher number of board meeting attendance enhances firm accounting performance. Similarly, Chou et al. (2013) professed that high meeting attendance by the directors themselves enhance the performance of the firm. Since board meetings are critical to firm performance (Brick & Chidambaran, 2010; Vafeas, 1999), board meeting attendance is considered as an accomplishment of director’s responsibility and associated with subsequent higher firm performance (Lin et al., 2014). Therefore, based on these arguments we propose that:

Hypothesis 2: The relationship between multiple directorships and firm performance is mediated by board meeting attendance.

6.2.3 The moderating role of firm growth

We have already argued that multiple directorships negatively influence firm performance through lowering the board meeting attendance of directors. We argue that firm growth provides a context where higher board meeting attendance can be achieved, despite having directors with multiple directorships. Since the value of corporate governance is contextual in nature (Chi & Lee, 2010), the presence of high firm growth has interesting implications for a board, because it affects the board role needs. Based on these board role needs, this study argues that as the firm growth increases, the advising and monitoring role of directors is likely to be more pronounced (Booth & Deli, 1996; C.-w. Chen, 2008; Liu & Paul, 2015). Busy directors are good contributors (Harris & Shimizu, 2004) and firms with high growth will expect that their high-quality directors —busy directors— are present at board meetings. Therefore, we argue that busy directors will not skip all board meetings, but they have to make choices. Directors will distribute their time unequally (Masulis & Mobbs, 2014) and they will choose the meetings where board role needs are highest. Hence, firm growth will provide a context in which directors will choose to attend board meetings which in turn positively effect to the firm performance.

Therefore, based on all these arguments we hypothesize that:

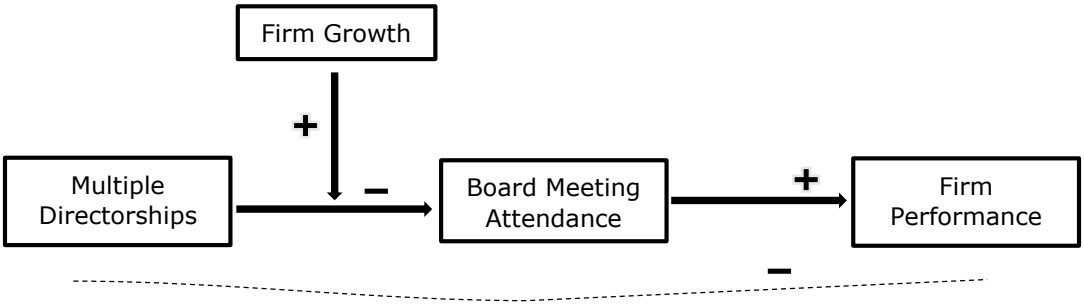
Hypothesis 3: Firm growth moderated the negative and indirect effect of multiple directorships on firm performance (through board meeting attendance) such that the relationship is less negative when growth rate is higher.

In order to test the formulated hypotheses, this study will examine the effect of multiple directorships on firm performance. Board meeting attendance as a channel of influence is expected to mediate this relationship, whereas firm

growth rate as a context is expected to moderate the relationship between multiple directorships and firm performance.

The research model is illustrated in Figure 6.1 below.

Figure 6.1 Research Model



6.3 Methodology

6.3.1 Data

The data set for this study consists of non-financial firms listed at the Pakistan stock Exchange[27] during the 5-year period from 2007 to 2011[28]. We obtained board and director level data from the annual financial reports of the firms. We source these annual reports from the websites of firms and other online sources including DSpaceRepository, Opendoors.pk. In addition, we had to hand collect some annual reports from the offices of the Securities and Exchange Commission of Pakistan, Islamabad and Pakistan Stock Exchange, Karachi

[27] Formerly Karachi Stock Exchange.

[28] We chose the period of 2007-2011 for three reasons. First, we have to calculate the one-year firm's asset growth rate. Therefore, we have to skip year 2006 and started from year 2007. Secondly, before 2006 the "Statement of Compliance with the Code of Corporate Governance" was not available for most of the firms. Third, the Code of Corporate Governance was revised in Pakistan in the year 2012. In order to avoid the inconsistency in data due to non-availability of compliance reports and changes in the code of corporate governance, we selected the period of 2007-2011.

because these reports were not available from online sources. Financial companies were excluded from the study since these firms have unique financial structures and their regulatory effect may lead to a limited role of their board of directors (Fich & Shivdasani, 2006; Lee & Lee, 2014). We begin the collection of data from 422 non-financial firms listed in the Pakistan stock Exchange across 15 different sectors.

In the first step, we eliminate 42 firms from the data set which were delisted during the span of five years from 2007-2011. Secondly, we drop 28 firms from the study for which annual financial reports are not fully available. Thirdly, we exclude observations with extreme values of some variables by trimming of data, such as growth rate and return on assets. We adopted a criteria of 1% trimming of growth rate and return on assets in order to remove extreme values. It yields a final data set of 352 firms for 1,599 firm-year observations for the period of 2007-2011. Since our analysis requires both director and firm level information, we use annual reports to hand compile details of the individual director's level information for the variables such as board meeting attendance, director's shareholdings and firm level variable such as multiple directorships, board size, CEO duality, the proportion of non-executive directors, number of board meetings, total sales and firm age. All data of multiple directorships had to be hand compiled and are based on directorships found in the final total sample of the Pakistan Stock Exchange, i.e. the directorships held by any individual director in the study include appointments to the boards of our sample firms. While data for the performance measure and growth rate is gathered from the Financial Statements Analysis of Companies (Non-Financial) issued by State Bank of Pakistan.

6.3.2 Variables

6.3.2.1 Firm performance

This study employs industry adjusted Return on Assets (ROA) as the dependent variable to measure firm performance. The value of ROA is calculated by dividing a company's annual earnings by its total assets[29]. In order to have industry-adjusting on a yearly basis, we adjust ROA with the industry ROA for each year. In this chapter, we use ROA as a measure of firm performance instead of Tobin's Q, because firms publish annual reports normally in the following year. For example, the annual report of 2007 will be published and available for the public somewhere in the beginning of 2008 and information regarding the board meetings attendance of each director will also be available in the market at the time when the annual report is published. Therefore, Tobin's Q at the end of 2007 will not capture the effect of board meeting attendance since meeting attendance is not public information before the annual report of 2007 is published. Thus, a book measure would be more suitable than a market measure. Therefore, we chose ROA as a performance measure for this study.

6.3.2.2 Measures of multiple directorships

We calculate three different measures of multiple directorships. All measures are calculated at the board level, thereby allowing us to match data from the firm level with these measures of directorships. The first, *Average Number of Directorships per Director,* measures the mean number of sample firm directorships held by directors of a firm. It is calculated as the total number of directorships of directors divided by the total number of directors on a board. The

[29] The calculations of ROA is also consistence with Cashman et al. (2012) and Chou et al. (2013).

second variable we use is the *Percentage of Busy Directors,* which measures the percentage of busy directors in a board and calculated as the number of busy directors divided by the total number of directors on the board. As in Fich and Shivdasani (2006), Field et al. (2013), Lee and Lee (2014) and inspired by the guidelines of the US National Association of Corporate Directors (NACD) and following the recommendation by the Council for Institutional Investors (CII), we consider a director as busy if he/she holds three or more directorships. Our third measure is *Busy Board,* it is a dummy variable that equals to one if fifty percent directors of the board are busy and zero otherwise. All our three measures of multiple directorships are consistent with prior literature (Ahn et al., 2010; Cashman et al., 2012; Core et al., 1999; Ferris et al., 2003; Fich & Shivdasani, 2006; Lee & Lee, 2014; Lin et al., 2014; Perry & Peyer, 2005).

6.3.2.3 Board meeting attendance

Our database has the advantage of containing detailed data on what percentage of meetings directors attended because in the United States, the Securities and Exchange Commission (SEC) requires firms only to report the name of directors who are absent more than 25% of board meetings in a year and a more detailed data are not available (Chou et al., 2013; Jiraporn, Davidson, et al., 2009). However, Pakistani firms have to disclose the full details of each director's board meeting attendance in a year. Thus, the mediator variable is the *Average Meeting Attendance* of directors at the board level. We first measured it at the director level by dividing the individual director's attendance rate by the total number of meetings in a year and then we take the average of this figure on the board level. Further, we take the mean of all the directors' percentages of

attendance to derive an average percentage of board meeting attendance at the board level. This measure is in line with Lin et al. (2014).

6.3.2.4 Firm growth

We suspect that the relationship between multiple directorships and firm performance is sensitive to the board role needs. In the moderated mediation model, we therefore employ *Firm Growth* rate as a moderating variable and use it as a proxy for the board role needs. Firm growth is estimated by the asset growth (Liu & Paul, 2015; Tariq & Abbas, 2013) over one year preceding the performance in current year. In other words, it is the change in total assets from the prior year to the present year. Firm growth rate is adjusted with the industry growth rate for each year. We used asset growth as a measure of firm growth, because the board has to decide where to invest and where not and which assets a firm should acquire. Thus, asset growth would be more suitable measure since it is a better match with our theoretical argumentation.

6.3.2.5 Control variables

In addition to the aforementioned variables, we include several firm level control variables that may affect firm performance. We use *Board Size,* measured by the total number of directors on a board in a year since board size affects firm performance (Gilson, 1990; Yermack, 1996). Similarly, Coles et al. (2001) stated that CEO duality has an important impact on firm performance. Therefore, we also control for *CEO Duality* by using a dummy variable that is equal to 1 if the CEO is also chairman of the board and zero otherwise. Further, the prior study of Shivdasani (1993) reported that the appointment of non-executive directors can lead to higher firm performance. Thus, we use *Proportion of Non-Executive Directors* as a control variable, measured by the number of non-executive

directors on the board divided by board size. We also control for the *Number of Board Meetings* measured by the frequency of board meetings in a year as per findings of Vafeas (1999) and Brick and Chidambaran (2010), board meetings have a positive impact on firm performance.

Anderson and Reeb (2003) and Abor and Biekpe (2007) found a significant and positive impact of firm age on firm performance, therefore, we also control for *Firm Age* measured by the number of years since the firm is incorporated. Furthermore, shareholdings by directors has been found to align their interests more closely with those of shareholders (Bhagat et al., 1999) thus, we included *Average Percentage of Directors' Shareholdings* as control variable. It is calculated by the total percentage of each director's shareholdings divided by board size. We control for *Firm Size* measured by the total sale in a year. In this chapter, we use sales as a measure of firm size instead of total assets (used as a measure of firm size in chapter four) to avoid the issue of multicollinearity. As firm size is not normally distributed we use the natural logarithm of total sales to account for its skewed distribution (Gujarati, 1995). We have also included *Year* effects in the model because it can capture systematic effects, such as regulatory changes which may have effects on firm performance (J. L. Coles & Li, 2013).

6.3.3 Estimation model

The main focus of this study to find how and when multiple directorships have an effect on firm performance. Therefore, we estimate a simple mediation model to answer the question of *how* multiple directorships have an effect on firm performance and test hypothesis 2. Further, we estimate a moderated mediation model to test hypothesis 3. For both models we use models 4 and 7 respectively from the PROCESS codes of Hayes (2017). In these codes, bias corrected bootstrapping methods are used to test for the statistically significant effects.

Bootstrapping methods are used to avoid the power problems that arise from the non-normal and asymmetric distributions of indirect effect. It is also used to find the significance of conditional indirect effects at the different levels of the moderator (Vandekerkhof, Steijvers, Hendriks, & Voordeckers, 2018).

The interaction variables (measures of multiple directorships and firm growth) are mean centered. Such mean centering is necessary to facilitate a substantive interpretation of interaction effects (Franzese & Kam, 2009). Furthermore, we find conditional indirect effects by using the Johnson and Neyman technique (Hayes, 2017) in order to detect the range of values of firm growth for which conditional indirect effects are significant at a .05 level (Vandekerkhof et al., 2018).

6.4 Results

Table 6.1 Descriptive statistics

Descriptive statistics for key variables for the 352 companies are presented in Table 6.1 N =1599 firm year observations

Variable	Mean	Median	SD	Min	Max
ROA	4.41	2.54	12.64	-49.38	49.26
AvgDshp	2.04	1.63	1.25	1	7.71
PerBusDir	25.31	14.29	31.12	0	100
BusBoard	0.23	n.a	0.42	0	1
AvgAttnd	81.83	82.93	12.63	0	100
FGrow	10.24	5.66	26.53	-100	191.28
BSize	7.76	7	1.37	7	15
Duality	0.41	n.a	0.49	0	1
PerNonExDir	65.31	71.42	18.49	0	93.33
BMeet	5.40	5	2.53	3	35
AvgShare	3.45	2.27	3.56	0	22.04
Fage	32.83	28	16.73	2	145
FSize	10.25	1.91	40.85	0	820.53

Before testing hypotheses, descriptive statistics and a correlation matrix are discussed. Table 6.1 shows the descriptive statistics of all the variables for the 1,599 firm-year observations. A number of results are noteworthy, the mean (median) value of the average number of directorships per director is 2.04 (1.63) ranging from 1 to 7.71 directorships and the percentage of directors having three or more directorships have a mean (median) of 25.31 percent (14.29 percent) 23% of the boards in our sample are termed as busy boards. Ferris et al. (2003) reported that the mean (median) value of directorships per director is 1.60 (1.40) and mean (median) value of percentage of busy directors is 14.97 (9.09). Similarly, Ahn et al. (2010) reported that 11.76% boards are busy and mean (median) of directorships per director is 1.93 (1.86). The aforementioned estimates of mean (median) values of different measures of multiple directorships imply that the prevalence of multiple directorships in Pakistan is higher as compared to the United States.

Furthermore, on average a board consists of eight members (median is 7 members) with the smallest board consisting of 7 directors and the largest of 15 directors. 41% of the boards have CEO duality. As per Code of Corporate Governance[30] in Pakistan, publicly traded firms should have at least one board meeting in each quarter. The average frequency of board meetings is 5.4 per year (the median is 5) with the lowest 3 and the maximum 35 meetings in a year. The mean (median) of average board meeting attendance is 81.83% (82.93). In our sample a board constitute of 65.31% non-executive directors and average directors' shareholdings is 3.45% (median is 2.27%). On average a firm is 33 years old with total sales of Rs 10.25 billion[31] in a year and mean (median) value of ROA is 4.41 (2.54) and the average growth rate is 10.2.

[30] As per Code of Corporate Governance 2002 and revised Code of Corporate Governance 2012

[31] 1 Euro (€) = 151 Pakistani Rupee (Rs) and 1 US Dollar ($) = 134 Pakistani Rupee (Rs), exchange rates are calculated on November 12, 2018.

Table 6.2 Correlation

This table presents Correlation between all key variables included in the study. N =1599 firm year observations. ** p<0.01, * p<0.05, † p<0.1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) ROA	1												
(2) AvgDshp	-0.037	1											
(3) PerBusDir	0.023	.861**	1										
(4) BusBoard	-0.003	.772**	.905**	1									
(5) AvgAttnd	.088**	-.105**	-0.027	-0.015	1								
(6) FGrow	.251**	-0.042†	-0.013	-0.016	.055*	1							
(7) BSize	.127**	-0.001	-0.003	-0.038	-.188**	0.049†	1						
(8) Duality	-.211**	-.145**	-.185**	-.153**	0.036	-.094**	-.225**	1					
(9)PerNonExDir	0.047†	.208**	.189**	.152**	-0.012	0.004	.259**	-.188**	1				
(10) BMeet	-0.021	-.073**	-.087**	-.080**	-.125**	0.012	.052*	-0.005	-.106**	1			
(11) AvgShare	-.152**	-.127**	-.059*	0.015	.151**	-0.014	-.286**	.199**	-.267**	-0.010	1		
(12) Fage	.071**	0.034	0.017	-0.023	-.091**	.058*	.155**	-.098**	-0.042†	-.078**	-.108**	1	
(13) FSize	.099**	0.030	0.018	-0.021	-0.005	.061*	.273**	-.105**	.135**	.090**	-.174**	.053*	1

The correlation matrix is presented in Table 6.2. It reveals several significant (univariate) correlations between predictors and control variables. All three measures of multiple directorships are highly correlated which state that these measures are consistent (Jiraporn et al., 2008). Firm growth is positively associated with average meeting attendance and firm performance. There is also a significant and positive correlation between board meeting attendance and return on assets. A negative relationship between measures of multiple directorships and both average board meeting attendance and firm growth was found. However, this negative correlation is statistically significant only with the average number of directorships per director.

Moreover, the average number of directorships per director and busy board are negatively associated with return on assets but this relationship is not statistically significant. Further, a positive correlation is found between firm performance and both board size and the proportion of non-executive directors. Furthermore, the number of board meetings are negatively correlated, while, average shareholding per director is positively associated with average board meeting attendance.

Further, to finalize the univariate analysis, we were concerned about multicollinearity, thus we analyze the variance inflation factor (VIF) of each variable. All VIFs were lower than the conventional cutoff of 10 (the highest VIF is 1.238) indicating that a multicollinearity problem is unlikely in our study (Gujarati, 1995; Neter et al., 1996, p. 409)

Table 6.3 OLS regression

This table presents OLS regression results for the effect of different measures of multiple directorships on firm performance. All regressions use Adjusted Return on Assets (AdjROA) as the dependent variable. Unstandardized regression coefficients are reported. N =1599 firm year observations. ** p<0.01, * p<0.05, † p<0.1

	Model (1)			***Model (2)***			***Model (3)***		
Variable	***B***	***SE***	***t***	***B***	***SE***	***t***	***B***	***SE***	***t***
Constant	-6.914	2.811	-2.460**	-7.948	2.785	-2.854**	-7.885	2.784	-2.833**
AvgDshp	-0.444	0.257	-1.730†						
PerBusDir				0.016	0.010	1.575			
BusBoard							1.098	0.752	1.459
BSize	-0.105	0.250	-0.420	-0.019	0.250	-0.076	-0.022	0.250	-0.087
Duality	-3.026	0.659	-4.594**	-2.744	0.664	-4.135**	-2.767	0.663	-4.175**
PerNonExDir	-0.046	0.018	-2.521**	-0.057	0.018	-3.121**	-0.056	0.018	-3.081**
BMeet	-0.084	0.124	-0.677	-0.059	0.124	-0.475	-0.061	0.124	-0.492
AvgShare	-0.110	0.094	-1.174	-0.098	0.093	-1.054	-0.106	0.093	-1.135
Fage	-0.036	0.019	-1.906†	-0.038	0.019	-2.007*	-0.037	0.019	-1.956†
FSize	0.516	0.070	7.412**	0.493	0.069	7.097**	0.496	0.069	7.166**
Years Effects	Yes			Yes			Yes		
R-squared	0.064			0.064			0.064		
F	9.071**			9.025**			8.994**		

Prior to test the full moderated mediation model, we test *Hypothesis 1* and Table 6.3 presents the results of the OLS regression analysis where three alternative measures of multiple directorships are reported in three different models by using adjusted return on assets as dependent variable. The results exhibit that one out of three models show significant results. In model (1) the estimated coefficient of average number of directorships per director is negative and statistically significant (β = -0.444, p = 0.084), depicting that a higher coefficient of the average number of directorships leads toward lower return on assets, thus supporting H1. In other words, holding a higher number of board seats of other companies implies lower firm performance. However, the model (2)

and model (3) shows insignificant results of the percentage of busy directors and a busy board respectively. The estimated coefficient of the percentage of busy directors in model (2) exhibits an insignificant effect ($\beta = 0.016$, $p = 0.115$) on adjusted return on assets. Similarly, in model (3), the estimated coefficient of busy boards also indicates an insignificant effect ($\beta = 1.098$, $p = 0.145$) on adjusted return on assets. Thus, the results of two measures are not consistent with our first Hypothesis. In sum, Table 6.3 provides some weak support that multiple directorships measured by the average number of directorships per director have a negative effect on firm performance

Table 6.4 Simple mediation

This table presents regression results for Simple mediation model for different measures of multiple directorships and firm performance through board meeting attendance. N =1599 firm year observations. Unstandardized regression coefficients and heteroscedasticity consistent standard error are reported. Bootstrap sample size =10000. LL= Lower Limit, UL= Upper limit, CI= Confidence interval. ** p<0.01, * p<0.05, † p<0.1.

	Model (1)			**Model (2)**			**Model (3)**		
Variable	***B***	***SE***	***t***	***B***	***SE***	***t***	***B***	***SE***	***t***
Mediator Variable model (Dependent Variable = Average Board Meeting Attendance)									
Constant	94.043	2.691	34.952**	92.339	2.660	34.709**	92.287	2.648	34.848**
AvgDshp	-1.259	0.220	-5.725**						
PerBusDir				-0.020	0.010	-2.089*			
BusBoard							-1.465	0.695	-2.108*
BSize	-1.665	0.324	-5.145**	-1.574	0.323	-4.869**	-1.573	0.322	-4.890**
Duality	-0.715	0.662	-1.081	-0.595	0.675	-0.881	-0.578	0.674	-0.858
PerNonExDir	0.047	0.019	2.546**	0.037	0.019	1.970*	0.036	0.019	1.930†
BMeet	-0.632	0.152	-4.151**	-0.617	0.152	-4.051**	-0.615	0.151	-4.060**
AvgShare	0.377	0.086	4.370**	0.411	0.086	4.754**	0.421	0.086	4.872**
Fage	-0.043	0.018	-2.436**	-0.046	0.018	-2.612**	-0.047	0.018	-2.684**
FSize	0.195	0.099	1.975*	0.169	0.099	1.712†	0.165	0.099	1.674†
Years Effects	Yes			Yes			Yes		
	R2 = 0.083, F = 15.149**			R2 = 0.071, F = 11.801**			R2 = 0.071, F = 11.916**		
Dependent Variable model (Dependent Variable = Adjusted Return on Assets)									
Constant	-12.489	3.536	-3.532**	-14.013	3.431	-4.085**	-13.933	3.416	-4.078**
AvgAttnd	0.077	0.023	3.309**	0.084	0.023	3.631**	0.084	0.023	3.630**
AvgDshp	-0.356	0.289	-1.232						
PerBusDir				0.018	0.010	1.839†			
BusBoard							1.231	0.734	1.677†
BSize	0.002	0.255	0.006	0.092	0.251	0.368	0.089	0.252	0.354
Duality	-3.000	0.667	-4.497**	-2.720	0.672	-4.048**	-2.745	0.670	-4.095**

Table 6.4 — *Continued*

	Model (1)			***Model (2)***			***Model (3)***		
Variable	***B***	***SE***	***t***	***B***	***SE***	***t***	***B***	***SE***	***t***
PerNonExDir	-0.050	0.017	-2.868**	-0.060	0.018	-3.446**	-0.059	0.018	-3.398**
BMeet	-0.031	0.110	-0.286	-0.003	0.109	-0.030	-0.006	0.109	-0.051
AvgShare	-0.132	0.087	-1.510	-0.125	0.087	-1.445	-0.134	0.087	-1.547
Fage	-0.027	0.021	-1.305	-0.029	0.021	-1.377	-0.028	0.021	-1.329
FSize	0.498	0.069	7.210**	0.476	0.069	6.930**	0.480	0.069	6.988**
Years fixed Effects	**Yes**			**Yes**			**Yes**		
	R2 = 0.062, F = 9.994**			**R2 = 0.063, F = 10.516****			**R2 = 0.063, F 10.464****		

Model (1)					***Model (2)***					***Model (3)***				
Total Effect of AvgDshp on AdjROA					**Total Effect of PerBusDir on AdjROA**					**Total Effect of BusBoard on AdjROA**				
Effect	*SE*	*t*	*LLCI*	*ULCI*	*Effect*	*SE*	*t*	*LLCI*	*ULCI*	*Effect*	*SE*	*t*	*LLCI*	*ULCI*
-0.453	0.289	-1.566	-0.929	0.023	0.016	0.010	1.641†	0.000	0.0328	1.09	0.74	1.49	-0.116	2.333
Direct Effect of AvgDshp on AdjROA					**Direct Effect of PerBusDir on AdjROA**					**Direct Effect of BusBoard on AdjROA**				
Effect	*SE*	*t*	*LLCI*	*ULCI*	*Effect*	*SE*	*t*	*LLCI*	*ULCI*	*Effect*	*SE*	*t*	*LLCI*	*ULCI*
-0.356	0.289	-1.232	-0.831	0.120	0.018	0.010	1.839†	0.002	0.034	1.231	0.734	1.68†	0.023	2.439
Indirect Effect of AvgDshp on AdjROA					**Indirect Effect of PerBusDir on AdjROA**					**Indirect Effect of BusBoard on AdjROA**				
Effect	*Boot SE*	*BootLLCI*	*BootULCI*		*Effect*	*Boot SE*	*BootLLCI*	*BootULCI*		*Effect*	*Boot SE*	*BootLLCI*	*BootULCI*	
-0.097	0.033	-0.153	-0.045		-0.002	0.01	-0.003	-0.0003		-0.122	0.069	-0.245	-0.021	

How and when multiple directorships have an effect on firm performance is the main focus of this study. Therefore, to test Hypothesis 2 we estimate a simple mediation model followed by a moderated mediation model to test Hypothesis 3. For both models we use the PROCESS codes of Hayes (2017). Table 6.4 shows the results of the simple mediation with three separate models, one for each measure of multiple directorships. Hypothesis 2 states that board meeting attendance mediates the relationship between multiple directorships and firm performance. The aforementioned results of Table 6.4 give support to Hypothesis 2. The indirect effect of all measures of multiple directorships on firm performance is confirmed by the bias corrected bootstrap results. In Model (1) the indirect effect of the average number of directorships per director on return on assets is significant because bootstrapped 90 percent confidence interval around indirect effect does not contain zero (-0.153, -0.05). Similarly, the percentage of busy directors in the Model (2) and busy board in the Model (3) have a significant negative indirect effect on adjusted return on assets. It is confirmed as bootstrapped 90 percent confidence interval does not contain zero (-0.003, -0.0003) and (-0.245, -0.021) respectively.

Table 6.5 Moderated mediation

This table presents regression results for moderated mediation model for different measures of multiple directorships and firm performance through board meeting attendance with firm growth as moderator. N =1599 firm year observations. Mean centered regression coefficients and heteroscedasticity consistent standard error are reported. Bootstrap sample size =10000. LL= lower Limit, UL= Upper limit, CI= Confidence interval. ** p<0.01, * p<0.05, † p<0.1.

	Model (1)			***Model (2)***			***Model (3)***		
Variable	***B***	***SE***	***t***	***B***	***SE***	***t***	***B***	***SE***	***t***
Mediator Variable model (Dependent Variable = Average Board Meeting Attendance)									
Constant	89.436	2.720	32.878**	89.787	2.717	33.042**	89.861	2.716	33.087***
AvgDshp	-1.163	0.215	-5.416**						
AdjAGrow	0.021	0.011	1.849†						
AvgDshp * AdjAGrow	0.016	0.009	1.705†						
PerBusDir				-0.020	0.009	-2.092*			
AdjAGrow				0.021	0.011	1.889†			
PerBusDir * AdjAGrow				0.0004	0.0004	1.111			
BusBoard							-1.487	0.689	-2.158*
AdjAGrow							0.021	0.011	1.864†
BusBoard * AdjAGrow							0.017	0.028	0.624
BSize	-1.635	0.322	-5.069**	-1.546	0.322	-4.800**	-1.547	0.320	-4.830**
Duality	-0.577	0.659	-0.875	-0.482	0.671	-0.719	-0.470	0.671	-0.699
PerNonExDir	0.0472	0.019	2.538*	0.038	0.019	2.012*	0.037	0.019	2.011*
BMeet	-0.630	0.148	-4.249**	-0.68	0.148	-4.169**	-0.617	0.148	-4.185**
AvgShare	0.368	0.852	4.315**	0.395	0.085	4.631**	0.404	0.086	4.728**
Fage	-0.050	0.017	-2.891**	-0.052	0.0174	-3.037**	-0.054	0.017	-3.127**
FSize	0.181	0.098	1.859†	0.156	0.098	1.585	0.153	0.098	1.553
Years Effects	**Yes**			**Yes**			**Yes**		
	R2 = 0.095, F =10.744**			**R2 = 0.0832, F = 8.648****			**R2 =0.0827, F =8.7027 ****		

Table 6.5 — Continued

Variable	***Model (1)***			***Model (2)***			***Model (3)***		
	B	***SE***	***t***	***B***	***SE***	***t***	***B***	***SE***	***t***
Dependent Variable model (Dependent Variable = Adjusted Return on Assets)									
Constant	-13.999	3.416	-4.0982**	-14.327	3.393	-4.222**	-14.41	3.390	-4.252**
AvgAttnd	0.069	0.023	2.964**	0.076	0.023	3.278**	0.076	0.023	3.279**
AvgDshp	-0.357	0.291	-1.228						
PerBusDir				0.018	0.009	1.815†			
BusBoard							1.211	0.728	1.663†
BSize	0.009	0.254	0.035	0.099	0.251	0.394	0.096	0.251	0.381
Duality	-2.978	0.666	-4.473**	-2.701	0.670	-4.030**	-2.725	0.668	-4.079**
PerNonExDir	-0.049	0.017	-2.848**	-0.060	0.018	-3.421**	-0.059	0.018	-3.372**
BMeet	-0.040	0.109	-0.366	-0.012	0.108	-0.111	-0.014	0.108	-0.133
AvgShare	-0.135	0.086	-1.559	-0.19	0.086	-1.494	-0.137	0.861	-1.595
Fage	-0.033	0.021	-1.561	-0.034	0.021	-1.631	-0.0331	0.021	-1.585
FSize	0.502	0.069	7.298**	0.480	0.068	7.011**	0.484	0.68	7.070**
Years Effects	**Yes**			**Yes**			**Yes**		
	R2 = 0.069, F = 7.991**			**R2 = 0.069, F = 8.326****			**R2 =0.069, F=8.261****		

Model (1)					***Model (2)***					***Model (3)***				
Conditional Indirect Effects of AvgDshp on AdjROA					**Conditional Indirect Effect of PerBusDir on AdjROA**					**Conditional Indirect Effect of BusBoard on AdjROA**				
Firm Growth	Bootstrap indirect Effect	Bootstrap SE	Boot LLCI	Boot ULCI	Firm Growth	Bootstrap indirect Effect	Bootstrap SE	Boot LLCI	Boot ULCI	Firm Growth	Bootstrap indirect Effect	BootstrapSE	Boot LLCI	Boot ULCI
-33.793	-0.113	0.044	-0.190	-0.045	-33.793	-0.003	0.001	-0.005	-0.001	-33.793	-0.151	0.103	-0.340	-0.008
-4.991	-0.806	0.0305	-0.133	-0.034	-4.991	-0.002	0.001	-0.003	-0.0002	-4.991	-0.113	0.063	-0.226	-0.021
23.811	-0.049	0.031	-0.104	-0.005	23.811	-0.001	0.001	-0.224	0.0014	23.811	-0.075	0.081	-0.209	0.057

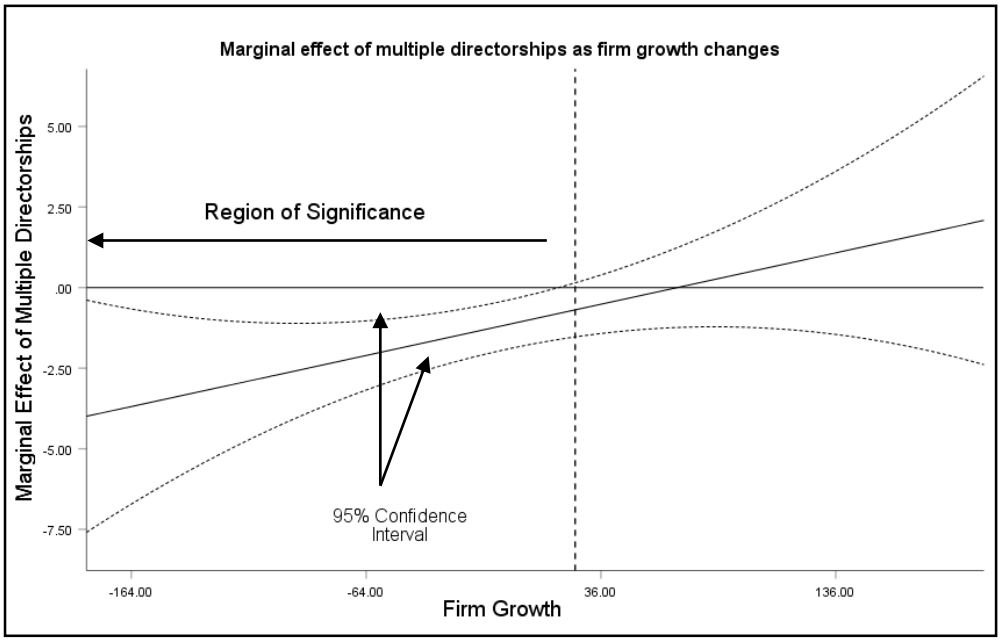
The moderated mediation model is used to test Hypothesis 3 and results of three measures of multiple directorships are reported in Table 6.5. We have mean centered the interaction variables (average number of directorships per director, percentage of busy directors, busy board and firm growth) which would be helpful in the substantive interpretation of interaction effects (Franzese & Kam, 2009; Vandekerkhof et al., 2018). Model (1) of Table 6.5 reveals that the interaction term obtained by multiplying the average number of directorships per director and firm growth is significant and positive (β = 0.016, p =0.088) implying that the negative effect of multiple directorships on board meeting attendance is mitigated by firm growth. The interaction term of the percentage of busy directors and busy boards with firm growth are presented in Model (2) and Model (3) respectively. Model (2) shows a positive, but insignificant interaction coefficient (β = 0.0004, p =0.2669). Likewise, Model (3) also reveals a positive and insignificant interaction effect (β = 0.017, p =0.533).

Further, we examined the conditional indirect effect of multiple directorships on firm performance through board meeting attendance at different levels of firm growth. Results of conditional indirect effects of average number of directorships per director, percentage of busy directors and busy board on adjusted return on assets are reported in Model (1), Model (2) and Model (3) respectively. To examine conditional indirect effects, we use three values of firm growth; the mean (-4.991) as well as one stander deviation above (-33.793) and below (23.811) the mean. In model (1) at the value of -4.991 (the mean) of firm growth, the indirect effect of the average number of directorships per director is -0.806 and the bootstrap results at a 90 percent confidence interval does not contain zero (-0.133, -0.034). At the other two values of firm growth of -33.793

(one above the mean) and 23.811 (below the mean), both confidence intervals (-0.190, -0.045) and (-0.104, -0.005) do not contain zero while the indirect effect of average number of directorships per director is -0.113 and -0.049 respectively. Furthermore, the Model (2) also shows similar results at different values of firm growth. Bootstrap confidence interval around the indirect effect -0.003 and -0.002 of percentage of busy directors do not contain zero (-0.005, -0.001) and (-0.003, -0.0002) at the value of firm growth of -33.793 (1SD above the mean) and -4.991 (the mean). While at the value of 23.811 (1SD below the mean) of firm growth the indirect effect is -0.001 however, this result is not significant because the confidence interval contains zero (-0.224, 0.0014). Moreover, Model (3) also depicts a significant conditional indirect effect of busy board on adjusted return on assets at two values of firm growth. At both (1SD above the mean *and* the mean) values the bootstrap 90 percent confidence interval do not contain zero which indicates a significant conditional indirect effect. However, the indirect effect on the 1SD below the mean is not significant because the confidence interval contains zero.

The results from all three models at different values of firm growth imply a significant conditional indirect effect at the 95% significance level. As the level of firm growth increases from -33.793 to 23.811 the indirect effect of multiple directorships becomes less negative; in other words, the negative effect of multiple directorships is lessened when the level of firm growth increases. Thus, the results of Table 6.5 support Hypothesis 3.

Figure 6.2 Conditional indirect effect of multiple directorships on firm performance through board meeting attendance.



Further, to draw a final conclusion and to complete the moderated mediation analysis, we use the Johnson and Neyman technique (Hayes, 2017) to explore the conditional indirect effect and to identify the range of values of firm growth for which conditional indirect effects are significant at the level of 0.05. In the Figure 6.2, conditional indirect effect is plotted as well as the 95 percent confidence interval and a region of significance. The horizontal line indicates an indirect effect of zero while the vertical line denotes the boundary of the region of significance. The y-axis shows the conditional indirect effect: the indirect (mediated by board meeting attendance) relationship between multiple directorship measured by the average number of directorships per director and firm performance at varying levels of firm growth. This indirect effect is significant when upper and lower boundaries of the confidence interval are below (or above)

the zero line. The graph shows that multiple directorships have a significant negative effect on firm performance through board meeting attendance when the level of firm growth is situated between -163.99 and 25.01. Within the range of -163.99 to 25.01, the negative effect is lessened as the level of firm growth increases. Further, the graph also shows that the indirect effect of multiple directorships becomes insignificant at very high levels of the growth, however, the insignificant part at high growth just contains 8% of the total number of observations. Since 92% of the observations of directorships per director are situated in the significance region whilst the 95% confidence interval is also below the zero line, our Hypothesis 3 is fully supported because the indirect effect is becoming less negative when firm growth increases.

6.4.1 Robustness check

Endogeneity is a common problem in corporate governance studies (Bhagat & Jefferis, 2002; Duru et al., 2016; Wintoki et al., 2012) because board variables can be endogenously determined (Hermalin & Weisbach, 1998, 2003). In this study, the existence of endogeneity would imply that busyness may not necessarily lead towards lower board meeting attendance and thus lowering the firm performance. Indeed, the relationship between performance and multiple directorships may be reversed: firms having lower firm performance will attract busy directors to cope with this lower performance (Jiraporn, Davidson, et al., 2009).

Therefore, to ensure the robustness of the results presented in Tables 6.4 and 6.5 and to explore the causal direction and the issue of endogeneity, we conduct additional analyses. By following Hicks and Tingley (2011), we perform a sensitivity analysis by using the *medsens* macro in STATA. The 'medsens' command is used to conduct the sensitivity analysis on the Average Causal

Mediation Effects (ACME). This test assesses the robustness of the results from the mediation analysis and tests the sensitivity of results for the measures of multiple directorships when there is an omitted confounder. This test provides information about the change in the R^2s of both the mediator and outcome models for which the ACME=0.

This sensitivity analysis suggests that our results are moderate robust for that the causal direction is from multiple directorships to firm performance through board meeting attendance. For example, the results (untabulated) indicate that an omitted confounder must change the R^2 by at least 0.0748 (i.e. √ 0.0056) of the residual variance in the mediator ***and*** 0.0748 of the residual variance in the outcome model for the results to be changed turning the average causal mediation effect (ACME) to be zero.

Furthermore, as we propose that the firms with high growth rate have more board role needs, similarly, firms in times of crises or having very low or negative growth would also have a higher board role needs. Therefore, to test the effects of board busyness on firm performance within the firms having a very low firm growth, we split the sample based on the median and focused on a subsample *below the median*. Table 6.6 depicts the conditional indirect effect of average directorships per director on firm performance through board meeting attendance. At the three levels of firm growth; the mean (-20.579) as well as one standard deviation above (-41.073) and below (-0.086) the mean, the indirect effect is insignificant because the 90% confidence interval does contain zero. Results indicate that multiple directorships have no effect on firm performance through board meeting attendance in low growth firms.

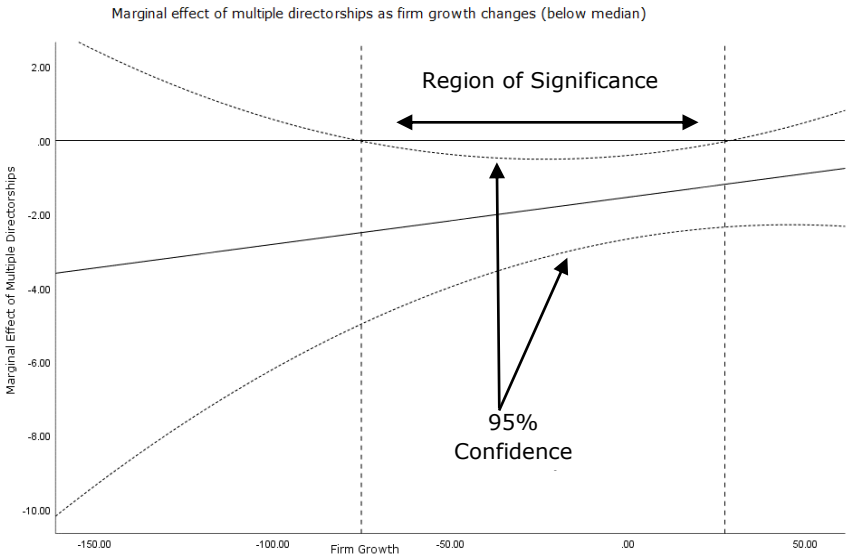
Furthermore, we also draw Figure 6.3 by using the output of the Johnson-Neyman technique from Model 1[32] of the PROCESS code of Hayes (2017). Figure 6.3 shows that in firms having very low growth, multiple directorships have no significant effect on board meeting attendance. It might be indeed true that such firms would also have higher board role needs as the results show an insignificant effect at very low growth and that busy directors do not skip board meetings of these firms whereas busy directors in firms with moderate growth in this subsample are likely to have a negative effect on board meeting attendance. Note that this effect is only visible when we take the subsample of low growth firms but was not visible in our prior tests on the full sample. Therefore, future research should investigate in more depth the relationship between board busyness and firm performance when firm growth is extremely low which might reflect a crisis situation.

Table 6.6 Conditional indirect effects of AvgDshp on AdjROA (below the median)

Firm Growth	***Bootstrap indirect Effect***	***BootstrapSE***	***Boot LLCI***	***Boot ULCI***
-41.073	-0.084	0.055	-0.179	0.0006
-20.579	-0.073	0.045	-0.148	0.0000
-0.0856	-0.062	0.043	-0.139	0.0002

[32] Since the output of the Table 6.6 shows that the indirect effect is insignificant, therefore, we were not able to get the output of Johnson-Neyman technique from Model 7, thus, we used Model 1 and focus on just moderation of firm growth on the average number of directorships per director and board meeting attendance relationship.

Figure 6.3 Conditional effect of multiple directorships (below the median)



6.5 Discussion

This study investigates the effect of multiple directorships on firm performance. Multiple directorships are expected to negatively influence the financial performance of a firm. In our study, we examine both how and when multiple directorships affect firm performance. We argued that multiple directorships negatively affect board meeting attendance and consequently firm performance. This negative effect can be mitigated by firm growth, where firms with high board role needs will benefit from busy directors because they are less likely to skip board meetings. By using a moderated mediation model on a unique sample of 352 companies across 15 different sectors, we indeed found that board meeting attendance mediates the negative relation between multiple directorships and firm performance, which shows that over-commitment of directors makes it hard to attend board meetings which ultimately affects firm performance. In addition, our results reveal that the negative effect of multiple directorships on

board meeting attendance, and ultimately on firm performance, is mitigated by firm growth and the indirect effect becomes less negative as the values of firm growth increases.

Traditionally, research on the issue of multiple directorships has concentrated on the direct effect of multiple directorships on overall firm performance and produce inconclusive and ambiguous results (Ferris et al., 2003; Fich & Shivdasani, 2006; Perry & Peyer, 2005). Limited attention is given in the literature to the *channels* through which multiple directorships can affect performance and the *context* when multiple directorships are beneficial or detrimental for the firm which is an important research gap in the field. Overall, our study contributes to the multiple directorships – firm performance debate from different ways. First, we test a moderated mediation model which is to our knowledge the first study that systematically analyses how and when multiple directorship affects firm performance. Second, we used a comprehensive and unique data set of individual directors' board meeting attendance while prior studies were not having precise information about board meeting attendance. Third, we shed empirical light on the consequences of multiple directorships from the perspective of the emerging economy because the prevalence of multiple directorships is higher in the Pakistani context as compared to the US.

We adopted different measures of multiple directorships and the average number of directorships per directors displays a significant and negative estimated coefficient while the other two measures are also negative but insignificant. In general, the results provide a weak support and suggest that multiple directorships are inversely related to firm performance: busier directors are associated with lower firm value. This evidence is in line with the contention of the *Busyness Hypothesis* (Ferris et al., 2003). The results imply that busy

directors are likely overcommitted and, as a result, they cannot perform their board roles properly due to time constraints (Core et al., 1999; Shivdasani & Yermack, 1999). Consequently, managers are able to persuade their own benefits and impose higher agency costs on the shareholders, which leads to lower firm performance (Di Pietra et al., 2008; Ferris et al., 2003).

Further, directors with multiple directorships find it difficult to show up at all board meetings due to time constraints (Jiraporn, Davidson, et al., 2009; Lin et al., 2014). Therefore, we investigate the issue of board meeting attendance and argue that multiple directorships will lower board meeting attendance and in turn firm performance. This argument is further confirmed by the results of our mediation analysis. The results imply that directors holding multiple board seats are overstretched and find it difficult to attend board meetings (Chou et al., 2013; Jiraporn, Davidson, et al., 2009; Lin et al., 2014) and thus cannot actively take part in the affairs of the board. Hence, these busy directors cannot exercise their monitoring and advising board role, which ultimately negatively affect firm performance. The results of the mediation analysis support our Hypothesis 2.

In addition, we argue that firm growth can reduce the negative effects of multiple directorships and also provide a context where higher board meeting attendance can be achieved despite having multiple directorships. The results of the moderated mediation analysis support this notion and give credence to our Hypothesis 3. Results show that, firm growth positively moderates the negative effect of multiple directorships on board meeting attendance and the indirect negative effect of multiple directorships on firm performance through board meeting attendance become less negative. One plausible reason of not finding a negative effect on board meeting attendance and a decrease in the negative indirect effect on firm performance would be higher board role needs. As firm

growth increases, the monitoring and advising roles of the board become more pronounced (Booth & Deli, 1996; Liu & Paul, 2015). Thus higher board role needs demand that their valuable directors -*busy directors*- must attend board meetings. At the same time, directors will not skip all board meetings but they will choose where to attend and where to skip based on the board role needs of firms. Therefore, they will choose the firms where growth opportunities are higher and they are needed most, because it is also beneficial for the reputation of directors as well since it is more challenging to serve on the boards of rapidly growing firms (Fama, 1980; Fama & Jensen, 1983). Consequently, a higher board meeting attendance has a positive and significant effect on the firm performance (Chou et al., 2013; Lin et al., 2014).

Further, the Figure 6.2 gives us an indication of the effect of firm growth to address the issue of multiple directorships. The figure depicts that as the levels of firm growth increases, the effect of multiple directorships on firm performance becomes less negative, which designate that with the high growth rate, having directors with multiple directorships may be less detrimental for the firm. Further, Figure 6.2 also gives an indication of even a positive effect of multiple directorships on firm performance through board meeting attendance at the very high growth, but this effect is insignificant. It may be possible that there are some side effects which influence our results and thus, we didn't find any positive significant effect at very high growth. There would be some other moderators which we have not considered in this study, like, busy directors having professional qualifications *or* with industry related experience would be beneficial for the firms with high growth. In such case, multiple directorships would have a positive effect on firm performance. Therefore, future research may consider other moderators to find the effect of multiple directorships at very high growth.

Moreover, our results are moderate robust to endogeneity issues. The direction of causality is likely to go from busyness to firm performance through board meeting attendance. Further, Figure 6.3 depicts that multiple directorships have no significant effect on the board meeting attendance in the firms having very low growth.

6.6 Conclusion

6.6.1 Theoretical and practical implications

The primary objective of this study is to enhance our understanding of the multiple directorships and performance link and to find out how and when multiple directorships are beneficial or detrimental for a firm. With a sample of 1,599 firm-year observations of 352 firms listed on the Pakistan Stock Exchange from 2007 to 2011, our empirical evidence supports the notion that multiple directorships have both costs and benefits to the firm.

Initially, the results of our study show that multiple directorships have a negative impact on firm performance while board meeting attendance mediates this negative link. Since the value of corporate governance is contextual in nature (Chi & Lee, 2010), our moderated mediation model shows that the negative effect of multiple directorships can be tackled (because it becomes less negative) when a firm has high growth. The dark side of multiple directorships might become less dark as firm growth increases. This implies that multiple directors can be an asset of a firm if growth is very high. More specifically, we observe that in firms with increasing growth (likely having greater monitoring and advising needs), multiple directorships have less negative effect because busy directors are less likely to skip board meetings of such firms as it is also advantageous for their own reputation, which thus can improve board functions. In contrast, in firms with low growth, multiple directorships can be detrimental because busy directors will skip

board meetings of firms having low growth and therefore low board meeting attendance can negatively affect performance.

Further, the findings of our study provide an additional explanation for the conflicting evidence in previous studies regarding the link between multiple directorships and firm performance. Finally, in line with Ferris et al. (2003), our study casts doubt for limiting the individual number of directorships held by directors under each circumstance. Regulators should take this into account because in growing firms, the negative effect of multiple directorships is becoming less negative and even becomes insignificant. Nevertheless, despite the fact that we find a positive effect at very high growth levels, the insignificance of this positive effect cast again some doubt about the real benefits from directors with multiple directorships, such as if they can really help the firm in acquiring diverse and critical resources and also give valuable strategic advice to maintain and promote growth.

6.7 Transitioning to the following chapter

In conclusion, this chapter analyzes *how* and *when* multiple directorships affect firm performance. We conduct this study at the board level and found that board meeting attendance mediates the negative effect of multiple directorships on firm performance and higher firm growth mitigate the negative effect of multiple directorships on firm performance through board meeting attendance in such a way that the relationship become less negative. In the next and last chapter of this dissertation we provide a summary of the empirical findings of our research and discuss the theoretical and practical implications. Further, we conclude the last chapter by providing some interesting avenues for future research.

7 Chapter – Conclusion

7.1 Outline

The main purpose of this dissertation is to expand our knowledge concerning the multiple directorships debate, i.e. is it a curse or blessing? Three empirical studies revolving around this dissertation shed light on the effects of multiple directorships on the board as well as the individual director level. These insights add to the current literature by identifying and filling several gaps related to the issue of multiple directorships. This final chapter highlights the empirical results of each study and presents the theoretical and practical contributions. Finally, some future research directions are suggested.

7.2 Empirical findings

In **Chapter 4** we examined the association between multiple directorships and firm performance at the board level. The objective of this paper was to explore the multiple directorships-performance relationship and to find out whether this relation is being affected by other factors or not. Prior studies have mainly focused on the direct effect of busyness on performance or strategic decisions. However, we followed the argument of Chi and Lee (2010) that the value of corporate governance is conditional in nature and that there is not a one best way to design the board and governance system (Huse, 2005a, 2005b). We state that the relationship between multiple directorships and firm performance is not simple and direct but rather conditional in nature and depends on the context of the firm. Thus, we study the relationship between multiple directorships and firm performance conditional on the context variable such as firm size. We predict a negative effect of busyness on firm performance and argue that multiple

directorships may increase the likelihood that directors will not be able to perform their board roles and fulfil their duties to govern the firm in an appropriate manner because it requires time and efforts to monitor and advice the management the management. Indeed, overcommitment of directors may raise agency cost by reducing the advising and monitoring of management. Furthermore, we predict that, as the size of the firm increases, it becomes more complex and difficult for a busy director to pay attention and monitor and advise the management. Therefore, the negative effect of multiple directorships is more pronounced when firm size is larger. In line with our arguments, findings confirm that multiple directorships have a significant negative effect on firm performance. The empirical results for the baseline hypothesis are robust to endogeneity problems when the GMM estimator is used. Further, findings of our fixed effects interaction models give slight indications that firm size moderates this relationship in such a way that the negative effects of multiple directorships become more pronounced in larger firms, because an increase in firm size would lead to higher organizational and environmental complexity and consequently create a higher demand for intense monitoring and advising. Therefore, it becomes difficult for busy directors to really understand the issues and pay attention to the affairs of the board as they are shortening with time. However, the results of this moderation effect are not robust in dynamic panel settings when we use the approach suggested by Wintoki et al. (2012) which may be probably due to the endogenous variable firm size which is used as a moderator. In general, we find that multiple directorships have a significant negative effect on firm performance and results are robust. Further, in these larger firms, this negative effect is pronounced although the moderating effect is not robust. Overall, the findings lend credence to the busyness hypothesis.

In **Chapter 5,** instead of looking at the direct effect of multiple directorships at board level, we focused particularly at the individual director level to examine how multiple directorships affect the activities of directors. The majority of prior studies did not focus on the key variables embedded in the busyness hypothesis namely an increasing workload and a lack of board meeting attendance. Therefore, chapter five dwells into the relationship between multiple directorship and board meeting attendance. We argue that when directors hold too many board seats and become overcommitted then they could find it difficult to "show up" at all the meetings. Failure to attend the board meetings may hinder the ability of directors to perform their board roles effectively. Therefore, we predict that multiple directorships will have a negative effect on board meeting attendance. Further, we distinguish between the board meeting attendance behavior of executive directors and non-executive directors. Since non-executive directors are not employees of the firm and they are invited to attend board meetings as external member, they are under less pressure to attend board meetings. In contrast, executive directors are employees of the firm which are expected to bring knowledge, skills and needed resources to the sender firm. Based on the experience and knowledge gained by external board appointments, they are also expected to introduce a new value adding policy in their home firm which would be a reason for executives to be present at the board meetings. Therefore, they are under more pressure to attend board meetings. Consequently, we predict that multiple directorships will have a positive effect on the board meeting attendance of executive directors, while busyness will negatively affect the attendance of non-executive directors. Furthermore, we argue that stock ownership of directors will converge the interest of directors with the firm and motivate them to attend more board meetings. Therefore, we also examine the

moderating effect of directors' shareholding on the relationship between multiple directorship and board meeting attendance and predict a positive moderating effect of stock ownership. We argue that shareholdings might motivate directors to attend board meetings. But the positive effect of shareholdings will be more pronounced for non-executive directors as executive directors have already the duty to be present regardless of whether they have shareholdings or not.

In line with our arguments, results indicate that non-executive directors who sit on multiple boards are overcommitted and experience more difficulty to show up for board meetings while executive directors attend board meetings more frequently because they are expected to bring in needed resources to the home firm and absence can adversely affect their executive careers. Moreover, results show that when directors' own wealth is tied to firm performance their meeting attendance rate become higher and the moderating effects of shareholdings are more pronounce for non-executive directors. Overall, the findings in this chapter reveal that directors— more specifically, non-executive directors— show a stronger tendency to remain absent from board meetings because they are overstretched. However, a higher percentage of shareholdings will moderate this negative relationship in such a way that non-executive directors will attend more board meetings. This finding is important because prior evidence stated that board meetings are critical for firm performance (Vafeas, 1999) and board meeting attendance is essential for board effectiveness which thus influences firm performance.

In **Chapter 6** we extend the scope of chapter 5 by including a new question in the multiple directorships debate, namely does board meeting attendance affect firm performance or not? The objective of this paper was to

explore *how* and *when* multiple directorships affect firm performance. Prior studies suggest that there is a link between board busyness and firm performance, but still we don't know *how* it affects firm performance because this link has been elusive (Himmelberg et al., 1999; Palia, 2001). We provide one possible channel of influence of directors' multiple directorships on firm performance and argue that multiple directorships negatively affect firm performance through board meeting attendance, because buy directors will find it difficult to show up at all board meetings which thus have a negative effect on the firm performance. In this chapter, we proposed a model which not only shows *how* busyness effect to the performance, but also depicts *when* this effect is mitigated. Therefore, we integrate a contextual factor —firm growth— that can mitigate negative effects of multiple directorships. More concrete, we state that the negative effect of multiple directorships can be mitigated when firm growth is higher and argue that busy directors will not skip all the board meetings but they will distribute their time and efforts *unequally* across the boards (Masulis & Mobbs, 2014) and will make choices concerning the attendance. They will choose where to attend and where to skip based on the needs of the firms and they will attend board meetings of the firms where firm growth is higher because such firms would have higher board role needs. In addition, attending board meetings of growing firms is also beneficial for their own reputation in the market because it is more challenging to serve on the board of a rapidly growing firm.

Empirical findings of this chapter depict a negative effect of busyness on firm performance and the results of the mediation model show that board meeting attendance mediates this negative link. The results imply that directors holding multiple board seats are overstretched and find it difficult to attend board

meetings and that lower board meeting attendance negatively affect firm performance.

In addition, the results of this chapter also reveal that firm growth positively moderates the negative effect of multiple directorships on board meeting attendance and the indirect negative effect of multiple directorships on firm performance through board meeting attendance becomes less negative as firm growth increases. This implies that the negative effect of multiple directorships can be tackled when a firm has higher growth and the dark side of multiple directorship might become less dark. Furthermore, the results indicate that, in a growing firm (likely having greater monitoring and service needs) busy directors may be less harmful, since busy director will be less likely to skip board meetings of such firm, which improves board functioning and thus firm performance. In contrast, busy directors may be detrimental in firms with lower growth because these directors will skip board meetings and thus have a negative effect on firm performance.

The findings of this chapter are reasonable robust to endogeneity issues and the direction of the casualty is likely to go from busyness to firm performance through board meeting attendance. Further robustness testing suggests that multiple directorships have no significant effect on board meeting attendance at very low growth. Based on the results of this study and in line with prior studies such as Ferris et al. (2003), we casts doubt for placing a strict limit on the number of directorships under each circumstance because, in growing firms, the negative effect of multiple directorships is becoming less negative and even becomes insignificant.

7.3 Theoretical implications

The main contribution of this dissertation is that we get a better understanding about the mediating and moderating variables in the debate (when and how) and we also investigate the effects on the individual level as well as the board level. In addition, we question and challenge an important implicit assumption in this field, namely that if a director has multiple directorships, it is detrimental for all firms for which he/she is director. We show that this assumption can be challenged. A busy director can have detrimental effects for some of his firms, while at the same time he/she may not be harmful for other firms in which he is directors. We have included board meeting attendance in the debate, since prior studies could not measure this important mediating variable while we have insight into the detail patterns of board meeting attendance of each individual director. Therefore, we included board meeting attendance in the debate and argue and show that directors indeed have time constraints. But they will distribute their time and efforts unequally and will make choices concerning meeting attendance. The relation between busyness and board meeting attendance will depend on board role needs (more specific board role needs related to a growth situation). This is an important theoretical contribution: we have to be cautious about the assumptions behind some phenomena like board busyness.

Further, we took a multi-theoretical—agency theory and resource theories—view of multiple directorships and in this way suggested that directors having multiple directorships fulfil a much larger role – service provider and monitor - in the firm. Most prior directorship studies kept relying on agency theory to explain the different types of agency conflicts as a condition to discuss the issue

of multiple directorships (Perry & Peyer, 2005). However, by relying on different theories and perspectives, this dissertation provides a more complete view about multiple directorships by the inclusion of new conditional variables in the multiple directorships - performance debate which are grounded in resource theories.

From the perspective of resource dependency theory, multiple directorships are considered as an important source of creating linkages between the firm and its external contingencies (Kiel & Nicholson, 2006; Zahra & Pearce, 1989). Furthermore, multiple directorships are likely to provide firms with access to crucial information and could raise the visibility of a board within the business community. Directors with multiple board appointments, therefore, might be able to reduce uncertainties of their firms in accessing critical resources and thus attain potentially better financial outcomes. Therefore, it is suggested that some firms may have a higher need for directors with multiple directorships than others because of their needs to get access to a wide range of resources including additional expertise and networks. Similarly, from an agency perspective, multiple board experience is an important source of developing the monitoring abilities of a director (Keys & Li, 2005; Kor & Sundaramurthy, 2009; J. Li & Ang, 2000). In this vein, it is argued that multiple directorships may help directors in developing their monitoring ability by providing in depth- knowledge, relevant experience and reliable information. Therefore, busy directors are expected to play a better role of monitor to reduce agency cost (Fama & Jensen, 1983), hence may help in raising financial outcomes. Furthermore, firms having higher needs for monitoring the management may have more busy directors on board as a mechanism to reduce agency cost.

On the other hand, the theoretical underpinning of the detrimental view of multiple directorships also stems from agency theory. Since the time and cognitive abilities of a director are limited, therefore, multiple directorships may increase the likelihood that directors will not be able to fulfil their roles in governing the firm in an appropriate manner. An agency cost view considers multiple directorships as a form of perquisite consumptions due to high prerogatives and fees associated with board membership. Thus, director overcommit themselves at the expense of shareholders and such overcommitment raises agency costs due to poor monitoring (Ahn et al., 2010; Ferris et al., 2003).

The main theoretical contribution of **Chapter four** of this dissertation relates to exploring the moderating role of firm size on the multiple directorships – performance debate. We explain that overcommitted directors materially affect firm value and also contribute to the debate of the conditional nature of corporate governance by adding firm size as a context which can moderate the effect of multiple directorships on firm performance. This chapter adds to a strand of literature by particularly focusing on firm size as a moderator because it is an important determinant of different corporate governance activities. Prior studies mostly neglect the moderating role of firm size while determining the effect of multiple directorships on firm performance.

Another contribution of this chapter is to extend the prior literature which mainly examined the phenomenon in developed countries (e.g. Ferris et al., 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004; Jiraporn, Davidson, et al., 2009; Jiraporn, Singh, et al., 2009) by focusing on a developing country, namely Pakistan. This context is important to study because the prevalence of multiple directorships is higher in Pakistan. Similarly, the imposed limit on the number of

directorships is also higher as compared to the developed countries like the US, which thus give a suitable scenario to study the relationship between multiple directorships and firm performance because we can find much more variation in directorship data.

Further, his chapter also adds to the overall corporate governance literature by providing significant and robust results by following the methodology of Wintoki et al. (2012). Since Wintoki et al. (2012) found that corporate governance and board variables have no causal effect on firm performance when the GMM estimator is used we also used this proposed methodology. From this perspective, part of the results of this chapter add to the literature by providing significant and robust effects of multiple directorships on firm performance.

Chapter five contributes to the literature by examining the effect of multiple directorships on the board meeting attendance at *the individual director level* and more specifically how the attendance behavior differs in different types of directors. In that way, we contribute by extending the corporate governance literature by providing evidence on one critical reason concerning why prior studies (Fich & Shivdasani, 2006; Perry & Peyer, 2005) found multiple directorships to be problematic namely that director busyness will lead to lower board meeting attendance. That is, multiple directorships will lead to a higher number of missed meetings which subsequently will negatively affect firm performance. This underlying theoretical argument has been largely untested in the literature.

Further, this chapter extends the prior literature by focusing on the board members' activities of both *executive* and *non-executive directors* in the Pakistani context. Prior studies (e.g. Renée B Adams & Ferreira, 2008; Jiraporn, Davidson,

et al., 2009; Lawler & Finegold, 2006) mostly concentrated on the meeting attendance of non-executive directors and restricted to the US context. However, the data of board meeting attendance of US firms are not precise because firms in the US have to report either a director have attended 75% of board meetings or not. As listed firms in Pakistan report the exact number of board meetings attended by each director, focusing on the Pakistani context is an important contribution to the existing literature because more comprehensive and accurate data are available which thus provide a clear picture of the multiple directorships-meeting attendance relationship.

In this chapter we also elaborate the effect of shareholdings on the activities of directors by examining how stock ownership aligns the interest of directors with the firm's interests and reduce agency cost. Though, according to our best knowledge, this is the first empirical study that examines the moderating effect of shareholdings on the multiple directorships and board meeting attendance relationship within executive and non-executive directors with a detailed data set. In this context, the results of this chapter contribute by providing important insights on the attendance behavior of different types of directors.

A theoretical explanation of the results can be found in agency theory. Overall, the findings of this study contribute by stating that the non-executive directors with multiple directorships are likely to miss more board meetings due to overcommitment. However, when their own stake is involved in the firm they attend more board meetings to perform their board roles with more diligence. Such non-executive directors are likely to perform their service and monitoring responsibilities with due care to protect their professional reputation, and

therefore they are motivated to serve in the best interest of the firm. This can only happen when they will attend board meetings more frequently. This means they are less likely to approve any proposal that may affect their reputation in the market (Ferris, Javakhadze, & Liu, 2016). On the contrary, executive directors have to attend board meetings regardless of their shareholding in the firm because it is a part of their job.

Chapter six also has significant theoretical contributions to the literature by answering two important questions that, *how* and *when* multiple directorship affects firm performance at the board level. Existing empirical studies suggest that there is a link between multiple directorships and firm performance, but we do not know how this relationship is built because this link has been elusive. Thus, this chapter adds to a strand of literature by discussing a possible *channel* —board meeting attendance— by which multiple directorships affect firm performance. Further this chapter also examines *when* this effect can be mitigated and adds to the debate of the contextual nature of corporate governance by introducing firm growth as a *context.* This study argues that the firm growth provides a context where directors can make choices related to board meeting attendance and distribute their time and efforts *unequally* and will choose to attend meetings where board role needs are higher. To our best knowledge, this is the first study that systematically analyses how and when multiple directorship affects firm performance because limited attention is given in the prior literature to the channels through which multiple directorships can affect performance and the context when multiple directorships are beneficial or detrimental for the firm. Thus, this chapter extends the corporate governance literature by introducing board meeting attendance as a mediator and firm growth as moderator in the debate. Since prior studies do not take into consideration this important mediating

variable due to measurement issues, we chose the Pakistani context to study this relationship because firms in Pakistan have to report the exact number of board meetings attended by each director. Consequently, we have detailed information about the board meeting patterns of each individual director. Therefore, we bring it into the debate and challenge an implicit assumption behind the busyness hypothesis that a busy director is *equally* detrimental for all the firms.

The findings of this chapter theoretically contribute by suggesting that busy directors are not detrimental for all the firms where they serve. A director with multiple directorships may be detrimental for some of his firms, while at the same time he/she may be less harmful for other firms because busy director will choose the firms where he/she will attend board meetings based on the board role needs. A director with time constraints will attend those meetings where the growth rate is higher because such firms would have higher board role needs. Further, our results show that in firms with increasing growth (likely having greater monitoring and advising needs), multiple directorships have a less negative effect because busy directors are less likely to skip board meetings which thus can improve board functions. Overall, the findings of this chapter imply that the dark side of multiple directorships might become less dark as firm growth increases and thus cast doubts on limiting number of board seats an individual director can hold under each circumstances. Thus, regulators must take this into account that the negative effect of multiple directorships becomes less negative as firm growth increases.

7.4 Practical implications

The findings of this dissertation also have several practical implications. In the first place, the evidence in this dissertation has also some implications for the firms' director selection strategy. In general, the overall findings of this dissertation suggest that multiple directorships have a negative effect on the directors' board activity and firm performance. However, results also indicate that in some circumstances the negative effect of multiple directorships becomes less negative and directors are likely to skip less board meetings. Therefore, firms should be cautious while appointing a busy director on board. Since, busy directors are expected to bring resources and contribute to those firms that are experiencing a higher need for critical resources or having higher board role needs. However, appointing more knowledgeable and highly connected directors on board may impose unnecessary costs on a firm having routine board role needs. The findings of this study suggest that a firm's choice for the director selection has to be made according to the board role needs of the firm. Directors with multiple directorships may be selected only when firm growth is higher — which means higher board role needs— because in firms with high growth, busy directors have no detrimental performance effects. Otherwise, busy directors will be sub-optimal for the firm. Further, empirical results also show that when the interest of non-executive directors are converged with those of the shareholder, then they would participate in the affairs of the company more diligently. Thus firms, while appointing the non-executive directors on the board, may give them a stake in the firm in the form of stock ownership. As ownership increases, directors are less likely to skip board meetings and it would be beneficial for the firm.

Since, we find a negative impact of multiple directorships on the board meeting attendance, therefore, directors at the individual level must be mindful that boards vary in the level of expected involvement — e.g., higher board role needs— (Forbes & Milliken, 1999) and in the terms of time demands —e.g., distribution of readings in advance of the meetings and number of meetings— (Harris & Shimizu, 2004). Therefore, before accepting any additional board seat they must consider the schedule of board meetings. Otherwise the probability of schedule conflict may increase quickly, and they would not be able to perform their expected board roles which may affect their own reputation as well.

Further, the findings of this dissertation also have implications for policy makers and regulators. We have argued that corporate governance is conditional in nature (Chi & Lee, 2010) and any connection between governance and the firm performance varies by the context. It is not always true that what is good governance measure for one firm is also good for another firm as well. According to Bhagat, Bolton, and Romano (2008, p. 1803) "there is no one "best" measure of corporate governance: The most effective governance system depends on context and on firms' specific circumstances". Similarly, the results of this dissertation show that multiple directorships are not equally detrimental for all firms. It is conditional in nature and depends on the context when it is a curse (or a blessing). Therefore, regulators must be cautious about placing a strict limit on directorships uniformity, because, one size does not fit all the firms. Therefore, we suggest that regulators must be flexible to permit the variations that suit the situation.

Similarly, based on the findings of this dissertation that corporate governance is conditional, we suggest that regulators rethink the approach of the

corporate governance system in Pakistan. SECP's choice of code of the corporate governance is heavily influenced by the Anglo-American approach, while de-facto the realities of the Pakistani market are quite in contrast. Therefore, the spirit of complying with the code is missing (Tariq & Abbas, 2013). Currently, in Pakistan a mandatory compliance governance system is being implemented. According to Tariq and Abbas (2013), compliant firms in Pakistan are less profitable as compared to the average of low compliance firms. Therefore, it is an alarming situation for the policy makers and the regulators of Pakistan that firms with high compliance appear to be less profitable. It may be possible that the requirements of the code of corporate governance are conflicting with the optimal governance structure of each unique firm which thus increase the cost of compliance and have a negative effect on the profitability. Similarly, the results of this study also confirm that the effect of multiple directorships on the firm performance are not the same for each firm, it is contextual in nature.

Therefore, following the prior studies and in light of the results of this dissertation, it is recommended to the national policy makers to review the corporate governance system and raise questions about the effectiveness of this one size fit all *and* mandatory compliance approach. Alternatively, we suggest that a Comply-or-Explain governance approach, which is usually considered as the alternative to the US mandatory approach may be applied. This approach is adopted by different regulators in the United Kingdom, Canada and many countries in the European Union (Bhagat et al., 2008). In this approach, firms either have to comply with the best practices or explain the reason for the non-compliance. For example, in the context of this study, instead of placing a strict limit on the number of directorships which one individual director can hold and all the firms have to follow uniformly, a maximum limit as a best practice may be

specified and firms either comply with that limit or explain in the case of non-compliance. Under some circumstances, busy directors are considered as quality directors because they are good contributors (Harris & Shimizu, 2004). However, descriptive statistics in chapter two show that only 11% of total directors hold three or more directorships and considered as busy directors. Given this shortage of quality directors, and to meet the complex needs of Pakistani firms, it is worthwhile to follow the comply-or-explain approach.

Furthermore, the results of this study may also be useful for the other countries because such kind of study is hard to conduct in another context. Since in Pakistan the imposed limit on the number of directorships an individual director can hold was ten[33] which is significantly higher to the one that is being practiced in the US and other developed countries. For example, in the US this limit is defined as maximum three directorships and in the Belgian context this limit is set at five directorships. Under such circumstances, the incidence of multiple directorships in listed firms may be endogenously determined, making it hard to find much variation in directorship data of the developed countries (Dahya & McConnell, 2007; Demsetz & Lehn, 1985; Sarkar & Sarkar, 2009). This study provides a context where variations in the directorship data is higher which makes it empirically possible to determine the relationship between busyness and firm performance. Further, we also have comprehensive and detailed information about the board meeting attendance of each individual director while in the US context such detailed information is not available. Thus the regulators in other

[33] The Code of Corporate Governance was revised in 2012 and limit has been reduced from ten to seven directorships but we have taken the data from the period of 2006-2011 therefore we follow the limit defined in that time period

countries also recommend to review such a strict limit because in some circumstance multiple directorships are not detrimental.

Finally, we recommend to the regulators and policy makers that decisions related to the regulations should be done based on the academic research rather just following other countries because what is a good governance system for one country need not be good for another country.

7.5 Limitations and suggestions for future research

To finalize this dissertation, we want to point out some limitations and provide promising avenues for future research. The three interconnected studies within this dissertation provide insights that pave the way for future research. For example, in the chapter six, we observe that at a very high growth rate of multiple directorships have a positive effect on firm performance, but, this effect is insignificant. It may be possible that there are some side effects of other variables which influenced our results and we were not able to find a significant positive effect of multiple directorships at very high growth. It may be possible that there are some other moderators we have not considered in our study such as professional qualification of busy directors *or* experience in related industry, which may also have an effect on this relationship. Hence, future research could include more complex (three way) moderators to explore the effect of busyness at very high growth. Similarly, we find that at very low growth or at times of crisis, board busyness has no effect on board meeting attendance and firm performance. Future research may study this effect by particularly focusing on different ranges of the growth, such as firms with very low, medium and very high growth.

Further, this research is based on secondary data which does not allow us to observe in detail the black box of the board. A relevant question is "How busy

directors contribute to the decision making process of the firm"? We used board meeting attendance to measure a director's commitment and his/her contribution to the firm decision making process. However, we have not measured whether they have done their homework or whether they are prepared for the meetings. Similarly, the educational qualifications of busy directors, the age pattern and the experience of such busy directors may also have an effect on the board. Therefore, incorporating other data collection techniques such as interviewing directors can enrich our knowledge regarding the commitment and contributions of directors to the board level decision making process.

Future research may also take into account whether the directorships are within the same group of companies or not? Because a director having all the directorships in the same group of companies would not be as busy as a director having all directorships in different companies. For example, it would be possible that a director who has five board seats and all of his directorships are in the same group of companies and in a related industry. Whereas, a director having three board seats, but all are in different firms and in different industries may be more busy as compare to the one having five directorships. In a Pakistani context where, mostly listed firms are family owned and it is common that families owned a group of companies. Thus, directors in such group of companies belong to the same family as well and owned directorships within the same group. Therefore, we recommend that future studies should consider this distinction as well.

We observed the phenomena of alternate directorships during data collection. It is allowed in The Companies Ordinance 1984 to appoint an alternate director during the absence of a director from Pakistan. Further, Chou et al. (2013) find that board meeting attendance by the alternate director would have an adverse effect on firm performance. Thus, future studies may also consider the

difference between the board meeting attendance by directors themselves and attendance by their representatives and its effect on the firm performance.

The empirical results of this dissertation are based on the data from a specific context, Pakistan. A comparative study in two or more contexts would be more informative and may reveal a detailed patters of multiple directorships. Future research may extend this study to other contexts to compare the incidence of multiple directorships and its effects of different firm outcomes.

It would also be interesting to study the effect of different types of multiple directorships. If a director has directorships in the firms listed in 100 index or sitting on the board of multinational firms, such director might be more valuable as compare to a director sitting on the board of small firms. It may be possible that the directorships in prestigious firms may be beneficial for the appointing firm as compare to directorships in non-prestigious firms. Directors of prestigious firms may be beneficial for the firm as compared to others. If this is a case, then it would help the firms in the director selection process and they could preferably select directors having directorships in prestigious firms.

Further, this study has not measured the behavioral dynamics of the busy directors, their board role performance and board effectiveness. Either busy directors are performing their board roles efficiently for which they have appointed or not? Either busy board as a *team* performing efficiently or not? How do multiple directorships affect board task performance or board effectiveness? We have not measured the effect of multiple directorships on board dynamics such as board cohesiveness or in relation to board evaluation. Therefore, these possible questions may be considered in future research.

Similarly, we also have not made any distinction between advising and networking needs of a firm, it may be possible that a firm may have higher needs of networking rather than monitoring or advising. In such case busy directors having political or other contacts may be beneficial for the firm. Thus future research may be done by considering the different types of board role needs separately.

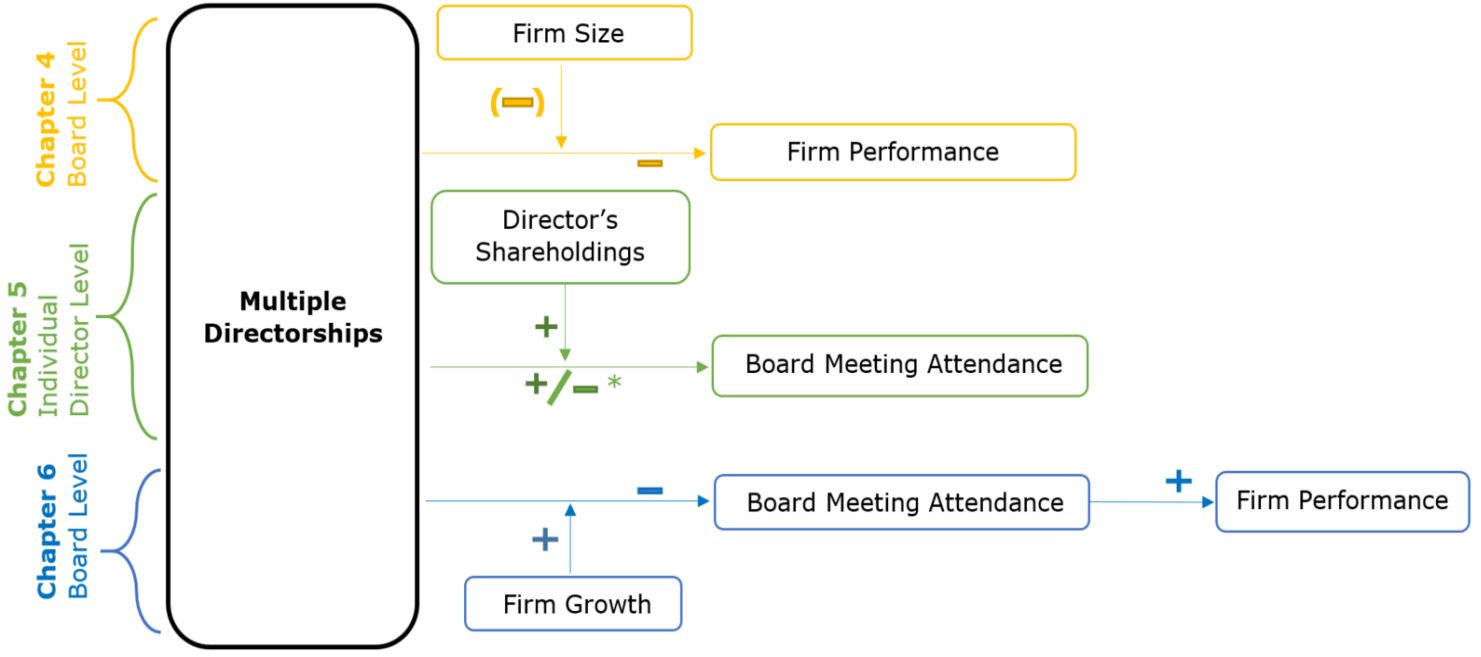
Further, in this study, we do not have data about foreign directorships of directors and we also have no measure of the personal busyness of a director such as personal life and social life commitments. Although, we control for theses unobserved effects by adding individual fixed effects to our model, future studies should try to control for these individual effects by more direct measures. Likewise, data are not available about foreign directorships of a director, Therefore, it would be an interesting avenue for future research as more detailed information become available about the busyness of directors.

This research has examined the implications of multiple directorships with respect to firm performance and board meeting attendance. Future research could be undertaken to examine the effects of multiple directorships by employing alternative measures of firm outcomes such as the strategic decisions of a firm or earnings management.

Concluding note

We believe that there is much more to be learned on the issue of multiple directorships. We hope that this dissertation provides another stepping stone towards a more comprehensive understating of the different dynamics of multiple directorships within different types of directors as well in different context how their effect varies. We started to uncover the channels and the context when multiple directorships are a curse and blessing. To enrich our understanding, we also shed light on the dark side of the multiple directorship and discuss when it becomes less dark. Further, we discuss how the behavior of different types of directors differs when there is convergence with the interests of shareholders. This dissertation also sheds light on the context when the effect of multiple directorships is pronounced. As such, we have paved part of the way on this issue, yet there are still many directions which remain underresearched. Therefore, we hope this dissertation will prompt further research on the effects of multiple directorships on board effectiveness and board task performance and will provide more insights concerning a board of directors

Figure 7.1 Main empirical findings of this dissertation



*** + for executive directors and – for non-executive directors**
() Results are not robust in dynamic panel settings

Appendix Yearly industry distribution

This table provides industry distribution of 381 firms by year.

No.	Industry	Year	No. of Companies
1	CEMENT	2006	17
		2007	18
		2008	19
		2009	19
		2010	19
		2011	19
2	GLASS & CERAMICS/MINERAL PRODUCTS	2006	6
		2007	6
		2008	7
		2009	7
		2010	8
		2011	8
3	FERTILIZER	2006	4
		2007	4
		2008	4
		2009	5
		2010	5
		2011	5
4	CHEMICAL SECTOR	2006	25
		2007	26
		2008	28
		2009	28
		2010	30
		2011	30
5	PHARMA SECTOR	2006	8
		2007	8
		2008	8
		2009	8
		2010	8
		2011	8
6	SUGAR SECTOR	2006	33
		2007	33
		2008	33
		2009	34
		2010	34
		2011	34
7	TEXTILE SPINNING	2006	81

		2007	82
		2008	82
		2009	85
		2010	85
		2011	85
8	TEXTILE WEAVING	2006	9
		2007	9
		2008	9
		2009	10
		2010	9
		2011	9
9	TEXTILE COMPOSITE	2006	37
		2007	37
		2008	38
		2009	39
		2010	38
		2011	39
10	TEXTILE WOOLEN	2006	2
		2007	2
		2008	2
		2009	2
		2010	2
		2011	2
11	TEXTILE SYNTHETIC & RAYON	2006	9
		2007	9
		2008	9
		2009	9
		2010	9
		2011	9
12	JUTE	2006	3
		2007	3
		2008	3
		2009	3
		2010	3
		2011	3
13	TOBACCO	2006	3
		2007	3
		2008	3
		2009	3
		2010	3
		2011	3
14	REFINERY	2006	4
		2007	4
		2008	4

		2009	4
		2010	4
		2011	4
15	POWER GENERATION AND DISTRIBUTION	2006	12
		2007	12
		2008	12
		2009	12
		2010	12
		2011	12
16	OIL AND GAS MARKETING COMPANIES	2006	5
		2007	5
		2008	5
		2009	6
		2010	6
		2011	6
17	OIL & GAS EXPLORATION COMPANIES	2006	4
		2007	4
		2008	4
		2009	4
		2010	4
		2011	4
18	ENGINEERING	2006	10
		2007	10
		2008	10
		2009	10
		2010	10
		2011	10
19	AUTOMOBILE ASSEMBLER	2006	11
		2007	11
		2008	11
		2009	11
		2010	11
		2011	11
20	AUTOMOBILE PARTS & ACCESSORIES	2006	7
		2007	7
		2008	7
		2009	8
		2010	8
		2011	8
21	CABLE & ELECTRICAL GOODS	2006	5
		2007	5
		2008	6
		2009	6

		2010	5
		2011	6
22	TRANSPORT	2006	3
		2007	3
		2008	3
		2009	3
		2010	3
		2011	3
23	TECHNOLOGY AND COMMUNICATION	2006	7
		2007	7
		2008	7
		2009	8
		2010	7
		2011	7
24	PAPER & BOARD	2006	8
		2007	8
		2008	8
		2009	9
		2010	8
		2011	8
25	LEATHER & TANNERIES	2006	5
		2007	5
		2008	5
		2009	5
		2010	5
		2011	5
26	VANASPATI & ALLIED INDUSTRIES	2006	5
		2007	4
		2008	4
		2009	4
		2010	4
		2011	4
27	FOOD & PERSONAL CARE PRODUCTS	2006	14
		2007	14
		2008	14
		2009	15
		2010	16
		2011	16
28	MISCELLANEOUS	2006	16
		2007	16
		2008	16
		2009	17
		2010	16
		2011	16

Appendix 1 is depicting the sector wise distribution of firms in each year. This tables provides more in depth information about the sector wise available annual reports in each year. Like, in the cement sector for the year 2006, there were 17 firms and in 2007 we had data of 18 firms, later for the year 2008-2011 we collected data of 19 firms. On the contrary, the leather & tanneries sector contains 5 firms in total and we have annual reports for all the 5 firms across the years 2006 to 2011.

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