How Group Affiliation, Corporate Governance, Block Holding, and Related Party Transactions affects Financial Performance in Pakistan

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ABSTRACT

Like other emerging and developing economies of the world, business groups dominate the Pakistani economic landscape. The political economy of the country makes it easier for business groups to take bold business decisions in uncertain and inconsistent policy regimes. By incorporating new subsidiaries and affiliates, business groups are better able to fetch new business opportunities as they arise. A firm's affiliation to a well-reputed group reduces the perceived risk of banks, customers, suppliers, and other stakeholders and enables it to avail of better and cheaper goods, services and facilities. It even gets better access to credit when individual companies struggle in distress and a sluggish economy. Even though group-affiliated companies are generally operationally efficient, these firms face unique conflicts within their boards i.e. directors from controlling business groups face a dilemma to uphold the parent group's interest at the expense of the firms' long-term interests. This includes making such firms to be a cash cow for their parents by paying unsustainably high dividends, investing in riskier group endeavors by increasing debt in their capital structures, passing better business opportunities to other group firms, etc. In many cases, they involve in unfair practices like transfer pricing to tunnel their resources to groups' other flagship companies. This study tries to determine how group affiliation benefits these firms in presence of such principal-principal conflicts. This research tracked the financial performance of Pakistani firms for the six years from 2014 to 2019 in the light of corporate governance measures, the presence of strategic block shareholding, capital structure, and related party transactions. The sample is composed of KSE-100 share index companies in the manufacturing and non-financial service sectors of the Pakistan Stock Exchange. Factor scores were generated to moderate the relationship between financial performance and group affiliation in MLA regression. The research concludes that group affiliation significantly adds to the ROE. Sound corporate governance structures, block holding and leverage greatly enhance the group affiliation's positive effect on ROE. In the light of its findings, the study proposes the definition and characteristics of good group governance. In the end, the study put forward its recommendations to regulators, investors, and future scholars to watch for best corporate and group governance practices.

Keywords: Business Groups, Group Governance, Corporate Governance, Block-holding, tunneling, RPT, Pakistan

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1. INTRODUCTION

Pakistan is an emerging economy which has many similarities with other developing economies (Lagarde 2016). Like many other developing economies, most of Pakistani businesses are commodity based like textiles, leather, fertilizer, energy, banks, food, education and health. Most big Pakistani businesses have concentrated ownership and most of these big businesses are controlled by a small number of institutions, individuals and families (LaPorta, Lopez-de-Silanes and Shleifer 1999) (Javid and Iqbal 2008). Like other emerging economies, these business groups control a large chunk of formal economy of Pakistan (Khwaja and Zaidi 2019).

A lot of research has been conducted on the roles of business groups which has resulted in two contrasting viewpoints (Khanna and Yafeh 2005). Firstly, due to asymmetry to information and opportunities, over regulations and other factors, the socio-economic factors in developing economies favor such connected families and groups to spot opportunities and create businesses around them. As a result of this, many of the groups emerge as major conglomerates controlling diverse businesses under their umbrellas. In absence of such groups, economic opportunities go wasted and no one takes benefits from them. On the other hand, the other viewpoint states that these groups use their size, mass and political connections to prevail in the economy. They capture the opportunities as they arise. They try to manipulate the government regulations to their benefits. Such rent seeking attitude distorts the competition and makes it difficult to do business. (Khanna and Yafeh, Business groups in emerging markets: paragons or parasites? 2005)

In the Pakistani capital market, many such conglomerates have listed their firms to raise funds and avail other incentives like tax benefits. According to a recent report by a local brokerage house at Pakistan Stock Exchange “17 family groups who are ‘sponsor’ shareholders in around 91 companies which collectively account for 42% of the total market capitalization of Pakistan Stock Exchange. The collective market capitalization of these companies is around PkR7.9 trillion.” (Khwaja and Zaidi 2019). Many of these firms are cross-holdings with one company have shareholding in another group company. This inter-web of cross-holding has created an opportunity for parent groups to exert their undue influence in their subsidiaries that is far more than what their capital permits to influence (Waseemullah, Ali and Mehmood 2017).

1.1 Background of the Study

Traditional corporate governance theories try to explain the misalignment of management and shareholder interests (Berle and Means 1932). According to the theory, shareholders hire the management as their agents to run the company in a way to maximize their long term value. This tend to create Principal-Agent conflict, where management as agents try to extort their benefit out of company (Fama and Jensen 1983). In order to minimize the agency cost, a corporate governance framework has evolved over last three decades and different countries have implemented corporate governance regulations in the light of their own requirements (Cadbury 1992). According to this generalized framework, the management should be overseen by a board which is independent of management and composed heavily of non-executive directors (NEDs).

Furthermore, the chairman of the board should also be an NED so that (s)he is not influenced by the CEO. Certain percentage of board should be elected by the shareholders to look after the company's performance and minimize the Principal-Agent PA agency cost. There should also be Independent Directors to check the overall performance of the company (Sheikh, Shah and Akbar 2018).

This framework works fine mainly with US and UK corporate sector where firms' shareholding were widely held and owner concentration was low. However, in economies of Europe and Asia, even the publically listed firms' ownership are majorly concentrated in hands of few individuals, families and institutions as sponsors (LaPorta, Lopez-de-Silanes and Shleifer 1999). These sponsors, being heavily on board, have a tight grip on managements' actions, minimize the agency cost that may arise in a firm. However, potential for another major conflict arises where the majority shareholders may take benefit of their position on the expense of minority shareholders. This is called Principal-Principal conflict (Ali 2014). In such economies research on principal-principal conflict is meant to understand how concentrated ownership abuses the minority shareholders of the firms.

However, in economies of South &South East Asia and Latin America, there exist another type of principal-principal conflict which has received very little importance of researchers so far. It is a fact that most of the big businesses in these economies are part of family or institutional groups (Banchit and Locke 2011). For firms listed in stock exchanges, it translates into a firm with concentrated ownership of a business family or institution that have concentrated ownership stake in other businesses also. Many times, these families hold ownership of one firm through others creating a pyramid structure. Many times, one firm having group's holding owns another frim with the group holdings creating cross-holdings. Many times, groups creates multiple chains of ownerships in companies through individual family members, associated companies and closely held private companies which are difficult to track. Offshore companies play a very vital role in holding control of group companies away from governments using cross border regulations. In such complex structures, business groups often control companies lot more than their fair stake in ownership. This group governance is hidden side of these emerging economies whose impact needs to be researched thoroughly.

The relationship between Group Affiliation and Financial Performance has been studied in various developing economies as well as in Pakistani context in numerous researches. The relationship is consistently found out to be significantly positive. The presence of business groups across the economies and regions has always positively contributed to the financial success of its affiliates. However, these business groups are also suspected to be abusive to minority shareholders of its affiliates. In various studies that have been conducted in many developing economies including Pakistan, researchers have tried to identify negative activities of business groups to control its affiliates and transfer its resources to other group companies. Business groups control boards and board committees by nominating their own chairmen, directors and seasoned group executives. They engage in activities like pyramiding, cross directorship, nepotism & family employment to have undue control in boards and management of its affiliates. They use techniques like tunneling, transfer pricing, related party transactions etc. to transfer resources of one of its affiliates to other affiliate. They offer extra compensation and benefits to group executives, directors and their families. They appoint their preselected

external auditors and use board audit committees to affect internal audit mechanisms to cover up these financial misappropriations. They use board HR and remuneration committees to hire their loyal higher management. Researches and studies have largely concluded that controlling business groups have potential to abuse minority shareholders and they certainly do so. Some studies have even tried to quantify the value loss of minority shareholders in terms of loss of market cap due to group discount.

1.2 Problem Statement

To the benefits that business group affiliation offers to shareholders of a company in emerging economies, weak governance structure of the firm pose a great risk.Principal-principal conflict is the core governance challenge these group affiliated firms face in the board rooms which drifts their focus away from overall shareholders' value towards the enhancement of the parent group's interests. In order to protect minority shareholders' interests, it is imperative to identify the factors that limit BG from expropriating its affiliates.

Capital markets play an integral role in advanced economies. Entrepreneurs spot new opportunities and setup new ventures to exploit them. Venture capitalists and stock markets take the risk of these ventures by investing in these new companies. Banking sector provide them necessary working capital and liquidity. In order to work efficiently, capital market needs many other factors also. For example, reliability of accounting information, adequate supply of quality managerial talent, freedom of choice, competitive market with supply and demand factors, availability of reliable information and economic rationality etc. In emerging economies, many of the prerequisites of capital markets are not available. Because of regulatory failures and practical complications, many of these critical elements are missing. This institutional inadequacy and void is often filled by business groups. These groups have their own ways to survive in tough business environments of developing economies.

In emerging economies, affiliation to a reputed diversified business groups is found out to be financially beneficial for any individual firm. Business groups use their reputation as a brand to reduce the perceived risks in the eyes of consumers, suppliers, suppliers, banks, employees and all other stakeholders. For them, doing business with new affiliates of group becomes natural extension of already established longstanding relationships with other group companies.Thus groups' new ventures get a quick head start in business world. Internal factor markets of the group provide them required managerial talent, accommodation, early office location & plant site etc. Experienced board members from other group ventures form governance structures which an individual company cannot afford to have. Seed capital from other group companies is quickly arranged and deployed. Distribution channel, support service etc. are easily arranged. Their connectedness speeds up many unnecessary delays caused by government officials and bureaucracy. In times of distressed and economic slowdown, these companies get better access to finance and capital due to their affiliation to business group. Thus trust in business groups fills the institutional gaps that emerging economies inherently have.

However, there is one additional dimension of group affiliation that is needed to be addressed carefully. In group affiliated companies, controlling groups often have grip over their boards through cross-directorships and nominations. At times, this gives them more decision making powers than they deserve. These group have a capacity to enhance groups' interest over the individual firms' own interests that may exploit minority shareholders. The principal-principal conflict arises when controlling group tries to enhance their group-wide interest at the cost of individual firm's minority shareholders. The controlling group use many unfair techniques and practices to transfer resources within the group companies. For example, they use transfer pricing mechanism in related party transactions to tunnel their affiliates' fortunes. Similarly, they may pass on a good business opportunity to some other group company where they have more shareholding. They may force their affiliates to be cash cows to pay inconsistently high dividends if they have more voting rights than ownership rights. They may also force such companies to take loans from banks to invest in riskier group ventures.

In Pakistani context, the problem is many fold. Handful business families and groups dominate the formal economy. Political economy of the country favors few big groups to take bold decisions to capture opportunities as they arise. The situation is worsened by inadequacy of capital market institutions to regulate the formal economy effectively. Inconsistent policy regimes along with uncertainty in political environment has resulted in narrowing down of active players in formal economic activities. That is evident by the fact that most of the large businesses have some sort of group affiliations. The importance of these families and groups is further increased when foreign investors have joint ventures with them or work with them as local partners. From Mehboob-ul-Haq's famous twenty-two families to present day era, significance of business groups has never been downplayed.

Pakistani corporate landscape has always been dominated by business groups. Studies have noted that despite superior operational performance of group affiliated firms, market value them at discount to their independent pairs. This is because market suspects that business groups use various means to undue control their affiliates. Market's suspect is built upon the fact that many groups have created pyramid like structures to have more controlling rights in their affiliates than then their shareholding allow them to. Many groups have a history of manipulating earnings of subsidiaries to accommodate their needs. This has caused a tremendous loss to minority shareholders.

The economic cost of potential principal-principal conflict in such firms must be viewed in context of overall macroeconomic scenario. Just like other emerging economies, Pakistani economy is characterized by low investment ratio. This is part because Pakistan has lowest saving ratio in the world and part because Pakistan has one of the lowest average per capita income in the world. In presence of this double down, it is imperative to use investment wisely to have capital accumulation in industrial development of country. However, the dominance of business groups in economic landscape with their value destroying practices has lost a lot of value for scarce investable capital in economy. Unless the value destroying behavior of business group is analyzed and properly regulated, Pakistan's true economic potential cannot be unleashed.

Pakistan implemented its initial Code of Corporate Governance in 2003 which reformed provided a foundation to strengthen the weak governance in Pakistani firms. It was updated in 2010 and then 2017. The upgraded codes have brought Pakistan in line with many best practices in world like eliminating CEO duality, introduction of independent and women directors, having independent director to be chairman of board committees etc. However, there is a need to regulate corporate governance practices in country in light of business groups. Limiting Interlocking and cross directorship, disclosure of ultimate owner and other such information that limits group's undue interference in companies affairs need to regulated.

This study aims to study group's effect on financial performance of group affiliated company in light of these principal-principal conflicts. Given the economic significance of the problem and dire current situationin market, this study will add to economic development of the country.

1.3 Gap Analysis

Presence of business groups is a very common feature of business ecosystem in emerging economies(LaPorta, Lopez-de-Silanes and Shleifer 1999). Creation of Pakistan was marked by mass migration, where several communities with established business background migrated to newly born country along with their capital and expertise (Papanek 1971). These business families were instrumental in early economic development of Pakistan by entering into diverse business lines and establishing business ventures that later evolved into business groups (White 1973). These early families got so influential that they earned name of famous "twenty-two families" (Haq 1973). Due to economic and political shakeup of nationalization and then privatization, some of these groups got even more powerful while others were perished and replaced by new ones (Rehman 1998).

Business groupshelps the companies in a number of ways. Affiliation to a reputed business group helps individual companies to survive in developing economies where many of the required institutions are either inadequate or simply missing (Khanna and Palepu 1997). They form market within, which help them lower their transaction costs (Khanna and Rivkin 2006). It helps them gather resources to thrive in difficult business environment (Guillén 2000). Due to the age-old reputation of the business groups, their affiliates get preferential access to the necessary key resources like talent, capital and credit which are scarce in these economies (Gao, et al. 2017). They form a social structure that facilitate free flow of business ideas, communications, transactions, resources etc. within due to mutual trust based on ties of community, family, religion, caste or creed (M. Granovetter 2005).

Affiliation to business group has a positive effective on financial performance (Khanna and Yafeh 2005). This finding is supported by many empirical researches in Pakistan(Ahmed, et al. 2018, Ghani, Haroon and Ashraf 2011). However, despite sparking superior financial performance, in Pakistan Stock Exchange group affiliated firms are traded at discount compared to their independent peers (Waseemullah and Hasan, Business Group Affiliation and Firm Performance—Evidence from Pakistani Listed Firms 2018). The most logical explanation to this

phenomenon is that it “indicate[s] that investors view the business-group as a mechanism to expropriate minority shareholders”(Ghani and Ashraf 2005).

Management in group affiliated firms is often controlled by the directors and executives from business groups due to their majority shareholding. Being principals themselves, they have undue influence over the firms’ affairs which gives them potential to enhance their groups’ interests instead of creating value for overall shareholders. This principal-principal conflict at the heart of group affiliated firms destroys value for minority shareholders (LaPorta, Lopez-de-Silanes and Shleifer 1999).

Business groups use various techniques to enhance their control when they have low shareholding in an affiliate. They use pyramid structures, multiple chains of control and cross-holding to control their affiliates beyond their simple shareholding permits them to (Shaikh, et al. 2019).

Studies show that there exists a non-linear (inverse U shape) relationship between groups’ ownership and performance (Hooy, Hooy and Chee 2019) (Afghan, Gugler and Kunst 2016). Beyond a certain threshold level shareholding in a firm, controlling group’s interests align with other shareholders and there is no principal-principal conflict. However, below that threshold, conflict of interests arises as controlling group tries to direct firm’s resources towards other group firms where their shareholding is more. This tunneling of resources have negative impact on performance destroying minority shareholders’ value (Waseemullah, Ali and Mehmood 2017).Group firms use transfer pricing in related party transactions RPTs to transfer resources within other firms of the group(Azim, Mustapha and Zaini 2018). These mechanisms also increase the probability of earning manipulation in financial results of these firms (Shaikh, et al. 2019). Various studies suspect tunneling to be wide spread prevalent in Pakistan business groups (Ikram 2005) (Hussain and Safdar 2018) (Waseemullah, Tahir, et al. 2021).

Even though extensive studies have be carried out to study how group affiliation has affected on performance and valuation of affiliated firms, no study has tried to study how business groups create value in their affiliates in presence of ill effects of principal-principal conflict in group affiliated firms. The study fills the gap in literature by factorizing group affiliation and proposing a model constructed upon them to study the interaction between group affiliation and firm’s financial performance. The research seeks to study moderating effect of different factors on the relationship.

1.4 Research Objectives

The aim of this research is to identify proxies for potential principal-principal conflictsin group affiliated firms and to study the relationship betweengroup affiliation and performance under the lens of these proxies.This study is to build upon past researches by determining individual dimensions of group affiliation that create or destroy value for group affiliated firms. By focusing on the potential for principal-principal conflict in corporate group

governance,individual factors are to be identified that enhance this value creation or destruction. The study seeks to find out the moderating roles of these factors on the relationship.

This study is unique in the sense that it seeks to study corporate governance in the light of group dynamics. Main objective of corporate governance is to have responsible, ethical and legally compliant corporate behavior that protects interest of all stakeholders. This study enlarges the scope of corporate behavior to group behavior. The aim of this research to study group behavior in relation to its affiliates and having responsible and ethical interactions with minority shareholders of their affiliates. By trying to limit principal-principal conflicts, this study aims to define responsible group behavior.

The aim of this research is to study group affiliated firms' performance with a variety of angles. The main objective of this study is to determine conditions under which group affiliation is beneficial for a Pakistani firm. This other objectivesof this study are:

- to seek whether better corporate governance limits principal-principal conflict and enhances group affiliated company's performance.

- to understand to phenomenon whether having multiple groups in a firm's shareholding limits principal-principal conflict and benefits it financially or not.

- to check whether having internal group transactions benefits the firm or hurt itsperformance.

- to study how leverage benefits a group affiliated company.

1.5 Research Questions.

The aims and objectives of this research signify that this study has highlighted new questions in the corporate governance literature. This study seeks to answer questions like:

- Does group affiliation affect performance of the firms?

- Does better corporate governance of the affiliated firm reduces the principal-principal conflict and complement the effect of group affiliation on its financial performance?

- Does presence of an institutional block holding reduces the principal-principal conflict and complement the effect of Group Affiliation on Financial Performance?

- Does group affiliation affect leverage structure?

- Does related party transactions add to principal-principal conflict and reduce the advantage of being part of business group?

1.6 Significance of the Study

This significance of this study lie in the uniqueness of its aims and objectives. It is first attempt to study corporate behavior in light of group dynamics. Corporate governance is the study of organizational behavior at the highest level that aims to create interactions which are beneficial to society as well as for all stakeholders. Its main objective is to have responsible and ethical corporate behavior. It does so by limiting organizational internal conflicts and creating structures that foster interests of all stakeholders. This study enlarges the scope of corporate governance to group governance. By trying to limit principal-principal conflict, this study shows responsible group behavior.

Corporate governance is an ever evolving field. Every year, academics from all over the world study corporate behavior critically to extend the regulatory fold of governance. Meanwhile, new problems surface globally due to the overlooked corners of the governance mechanisms in corporate world that destroy investors' confidence and scarce capital. In Pakistan, Corporate Governance Regulations 2017 are in place, which are updated version of 2010 regulations. This code is a regulatory response to many longstanding issues in the light of best corporate practices in the world. In this code, issues of CEO duality, independent directors and women director have been addressed. Several studies have been conducted since to determine the present day situation of corporate governance in the light of these regulations.

However, the evolution of corporate governance regulatory framework depends upon the critical evaluation of the code itself and reaching out for the missing elements continuously. In order to make our regulations more effective and appropriate, practical suggestions are needed to address the real issues of economy. One major missing element in Pakistani corporate regulations is addressing the controlling groups' influence over the individual firms. On many occasions, this undue influence lets the controlling groups act on the groups' interest rather than putting forward company's own interest destroying minority shareholders' value.

The significance of this study is that it attempts to address this missing element in regulatory framework of Pakistan. It provides a new direction to study the corporate governance measures in the light of group dynamics. It tries to identify the factors within corporate governance framework that enable an affiliate to be standalone for itself from undue group influence. It tries to define good group governance and differentiate good group governance practices from bad ones.

2 LITERATURE REVIEW

2.1 Business Groups

2.1.1 Definition

The presence of diversified business groups in third world economies started to get into the notice of academic researchers in 1970s and 1980s. The sudden economic growth of economies

like Japan, Singapore, Korea, Taiwan, Pakistan etc. forced researchers to study their growth models. As they noticed dominance of diversified groups in these economies, early researchers tried to define the group in simplest words to present the idea to the world. “A group of companies that does business in different markets under a common administrative or financial control” (Leff 1978). This broad definition included many forms of commercial undertakings. US and Japanese conglomerates, European and US multinationals, Korean chaebols all fall into this category.

As the US and western European economy moved from diversified conglomerates of 1960’s to specialized core competency and related diversification, the scope & size these diversified conglomerates was greatly diminished (Chandler 1990). This shifted the focus of research on business groups to the emerging economies of Asia, Latin America and continental Europe.

As the researchers study these developing economies, they marked the business group with their working in unrelated diversified markets and products. For many researchers, diversification is the hallmark of business groups (Cazurra 2006). For example, according to Ghemawat and Khanna business group is “an organizational form characterized by diversification across a wide range of businesses, partial financial interlocks among them, and, in many cases, familial control” <??). In another study Fisman and Khanna defined the business group as a “diverse set of businesses, often initiated by a single family, and bound together by equity crossownership and common board membership (Fisman& Khanna, 2004: 609)”. A contemporary researcher defines the business group as “a set of legally-separate firms operating in multiple strategically-unrelated activities that are under common ownership and control” (Cazurra 2006).

For a working definition of business groups, most of literature focuses on their three basic aspects. Firstly, it being active in unrelated diverse markets and products. Secondly, having a mechanism to follow somewhat loose unified guideline from a centralized planning and coordination. Thirdly, being composed of separate legal entities with separate organizational structures (Guillén 2000)

These simplest definitions of business groups are trying to simplify the real world complexities of the term so that an understanding of group phenomenon is developed. However, the business world is too complex for such simple notions. Researcher Granovetter has tried to define the term more comprehensively as “a collection of firms bound together in some formal and/or informal ways” (M. Granovetter 1994).

These researchers also noted that unlike US and Western Europe economies where ownership of conglomerates was widely held by general public through stock exchange, majority of these groups were either state-owned or owned by interrelated families. In late twentieth century, a researcher analyzed the Indian business houses as “[I]n each of these houses, strong social ties of family, caste, religion, language, ethnicity and region reinforced financial and organizational linkages among affiliated enterprises” (Encarnation, 1989: 45).

Another study focusing on Chinese group firms tried to define the business groups by encompassing the complex nature of business group as “a collection of legally independent firms

that are bound by economic (such as ownership, financial, and commercial) and social (such as family, kinship, and friendship) ties" (Yiu, Bruton and Lu 2005).

However, to understand the true nature of business groups, one must understand the complex interactions of these firms within and outside their group. These interactions are being incorporated in recent studies on the subject. A recent study tried to define the term business groups comprehensively as "Business group are interorganizational networks of semiautonomous firms bound through multiplex ownership, buyer-supplier, director interlock, and/or social ties" (Holmes, et al. 2016).

2.1.2 Importance of studying business groups

Presence of business groups is an important feature of global business landscape. Corporate groups dominate the US economy. Operating under single public name like Google, Apple, McDonalds and Chevron, these companies are composed of web of affiliate firms having its own legal entity separated from other affiliates. The authors goes forward to name such arrangement to be a corporate family (Chatman 2021).

Outside America, business groups are dominant organizational form for managing large businesses (Yiu, et al. Feb 2007). Diversified business groups are common in most emerging markets like Mexico, Chile, India, Pakistan, Thailand, Indonesia and South Korea (Khanna and Yafeh 2002). Most of the businesses outside American and UK are held by business groups controlled by few large old families (LaPorta, Lopez-de-Silanes and Shleifer 1999). For example, subsidiary firms of Noboa family provide livelihood to 25% population of Ecuador and account for more than 5% of its GDP. The Wallenberg family controlled over 40% of Swedish economy in 1998 (Agnblad, et al. 2001). In 2013, top five businesses groups of India account for nearly 16% of Indian GDP. Among these top five groups, three are state-owned while Tata and Reliance are private business groups. According to news article, these two private groups account for nearly 5% of Indian GDP (Sasi 2013). In 1996, 30 largest chaebols account for 40% of South Korea's total GDP. (Chang and Hong 2000). In 2013, out of fifty largest Korean companies, forty nine had business group affiliations. Top 10 of these firms accounted for more than 7% of Korean GDP (Jones 2018). A more recent estimation attributes fifty percent of South Korean market capitalization to its top five chaebols.

To study business groups across developing economies is important because "Diversified business (or corporate) groups are ubiquitous in emerging markets (e.g. India and Pakistan, Brazil and Chile, Indonesia and Thailand, Korea, and many more), and even in some developed economies (e.g. Italy, Sweden)" (Khanna and Yafeh 2005). Being economic drivers in developing economies of the world, they provide employment, promote human resource, develop institutions, facilitate development and introduce new technology and products in domestic market.

2.1.3 Evolution of Business Groups in Pakistan

Like other developing economies, business groups play an important role in early economic growth of Pakistan. The advent of business groups in Pakistan date back to independence movement. The Muslim League's struggle for a separate homeland for Muslims had attracted my prominent Muslim business families from across undivided India to migrate to Pakistan and start/relocate new businesses here. According to Professor Gustave Papanenk of the Boston University,

> "In the immediate circle around Jinnah, several big businessmen and industrialists played important roles, not only in helping to finance the Pakistan movement, but also in helping to organize businessmen, and in more specifically political roles. These men were also active in setting up private firms which were to fulfill important economic roles in the new state." (Papanek 1971, 9)

> "The most clear-cut evidence of Jinnah's relationship with businessmen before Partition is provided by the role which he personally played in the mobilization of Muslim businessmen through the organization of Muslim chambers of commerce and through the establishment of 'nation-building' companies which were to function in the new state. In both these efforts, leading roles were played by men most of whom later came to Pakistan, where they rose to positions of importance in the economy. This group included Sir Adamjee Haji Dawood (the father of the present head of the Adamjee firm), the two Ispahani brothers (M. A. and M. A. H.), Mahomedali Habib (of the Habib Bank), Habib Ibrahim Rahimtoola, as well as several others who included men active in provincial League activities, such as G. Allana in Karachi. The families of most of these men already owned considerable wealth, and it is certainly not surprising that their firms became large and important in Pakistan. What is perhaps more interesting is that these firms remain politically highly visible and their names remain powerful symbols, even though, by the late 1960s, some of them were far outdistanced in economic terms by other big enterprise groups. While association with the Pakistan movement was an important factor in the initial rise of these firms, it is probable that wealth, business experience, and aggressive entrepreneurship were far more crucial. In the initial establishment of Pakistan's industrial giants, politics of the visible sort were not the key factor." (Papanek 1971, 10-11)

> "Four [nation building] companies were organized in the period immediately before Partition; all were privately financed, owned, and managed by largely Muslim capitalists. Most of the investors in the four firms were either personally close to Jinnah or had gradually moved into positions of support for the establishment of a Muslim state, whether or not they themselves intended to migrate there. They came from families which were among the wealthiest Muslims in commerce and industry in undivided India: Adamjee, Ispahani, Rahimtoola, Dada (and other Bantva Memons), Habib (of the Habib Bank) and several others. Eventually, all these families did migrate to Pakistan, and most of

them are among the leading business-industrial families today." (Papanek 1971, 13)

The table 1 shows community and origin of business families on the initial phase of economic growth of Pakistan:

No	Name	Community	Family Origin	Head quartersPre-1947
1	Dawood	Memon	Kathiawar (Bantva)	Bombay
2	Habib	Khoja Isnasheri	Bombay	Bombay
3	Adamjee	Memon	Kathiawar (Jetpur)	Calcutta
4	Crescent	Punjabi Sheikh	Western Punjab (Chiniot)	Delhi
5	Saigol	Punjabi Sheikh	Western Punjab (Chakwal)	Calcutta
6	Valika	Dawoodi Bohra	Bombay	Bombay
7	Hyesons	(None)	Madras	Madras
8	Bawany	Memon	Kathiawar (Jetpur)	Rangoon
9	Amin	Punjabi Sheikh	Western Punjab	Calcutta
10	Wazirali	(None, Syed)	Western Punjab (Lahore)	Lahore
11	Fancy	Khoja Ismaili	Kathiawar	East Africa
12	Colony	Punjabi Sheikh	Western Punjab (Chiniot)	Lahore

Table 1: Summary of Social and business background of the early business groups (Papanek 1971)

According to the author, top seven Pakistani business families controlled about one-fourth of total private industrial assets, while top sixteen families controlled about 40 percent of private industrial assets in 1959-60 (Papanek 1971).

In 1968, Dr. Mehboob-ul-Haq gave his famous speech in which he named twenty-two industrial family groups of Pakistan that dominated economic landscape of Pakistan. These family groups controlled two-third of industrial assets, eighty percent of banking and seventy nine percent insurance sector of Pakistan. His list had Saigols, Habib, Dawood, Colony, Adamjee, Crescent and Valika as top business groups in country (Haq 1973).

White further expanded the Dr. Mehboob's list of 22 families and provided much needed empirical data to support it. According to him these 43 families and groups controlled over half of total assets of KSE listed non-financial firms. Four largest families (Saigols, Dawood, Adamjee and Amin) controlled nearly 28% of all private assets while top 10 groups controlled over 65% of total private assets (White 1973).

No	**Name**	**Listed**	**Total Assets**

		Assets	
1	Dawood	557.8	557.8
2	Saigol	529.8	556.5
3	Adamjee	437.6	473.2
4	Jalil	419.8	419.8
5	Colony	325.4	342.7
6	Fancy	280.4	330.5
7	Valika	320.0	320.0
8	Bawany	237.4	237.4
9	Crescent	199.7	199.7
10	Wazir Ali	132.7	199.7
11	Gandhara	153.2	153.2
12	Isphani	90.8	154.0
13	Habib	128.1	136.2
14	Khyber	127.5	127.5
15	Nisaht	64.6	128.9
16	Beco	113.8	113.8
17	Gul Ahmed	21.1	109.2
18	Arag	32.4	105.4
19	Hafiz	100.0	105.3
20	Karim	95.4	95.4
21	Milwala	96.0	96.0
22	Dada	48.0	90.6
23	Hyesons	68.4	90.4
24	Premier	77.3	89.3
25	Hussain Ibrahim	88.0	88.0
26	Monnoo	79.9	79.9
27	Maula Bakash	58.9	79.0
28	Adam	45.1	78.0
29	A K Khan	74.9	74.9
30	Ghani	41.2	71.2
31	Rangoonwala	44.5	68.2
32	Harijanss	61.0	61.0
33	Shafi	60.2	60.0
34	Fakir Chand	59.0	59.0
35	Hasham	53.9	58.9
36	Dadabhoy	53.9	53.9
37	Shahnawaz	52.7	52.7
38	Fateh	48.0	48.0
39	Noon	36.0	46.0
40	Hoti	40.6	45.8
41	Dost Mohammad	20.4	45.0
42	Farooq	36.7	36.7

Table 2: List of Top Business Groups in 1970 (White 1973)

The concentration of industry and newly created wealth in the hands of few business families was badly felt. Banking, insurance, manufacturing of steel, cement, fertilizer etc. were dominated by these groups. Furthermore, these families used banking credit to promote themselves even more. These banks were limited to few urban areas and their credit was flowing to a very few industrial clients (Rehman 1998). In that era, domestics politics was also very much affected by foreign affairs. The Korean War and the spread of Communism in Asia drew America to Pakistan, enhancing the military regime. President Ayub Khan used this as an opportunity to strengthen the position of the military elite, while foreign aid and investments helped expand the industrial sector controlled by these families (Shoukat 2020).

According to Dr. Mehboob, it was not that these families own all the wealth in Pakistan. The real issue that he drew attention towards was "the growing collusion between industrial and financial interests so that a few family groups had come to acquire control over basic economic decision making. . . . They preempted most investment permits, import licenses, foreign credits and government patronage because they controlled or influenced most of the decision-making forums handing out such permissions. They had virtually established a stranglehold on the system and were in a position to keep out any new entrepreneurs" (Haq 1973).

The concentration of wealth in the hands of 22 elite families highlighted the power games that had been played to enhance the personal interests of elites. In spite of high growth rates, people at large were unhappy with the military government. Due to rising disparity between the rich and the poor, difference in rural and urban growth and imbalance in development between East and West Pakistan, the middle class, specifically university youths, started voicing the need for equal rights and opportunities for everyone (Shoukat 2020).

> "One can best illustrate this imbalance by looking at the distribution of certain public and private services. From 1958 to 1968 Pakistan imported or domestically assembled private cars worth $300 million while spending only $20 million on buses. During the same period, about 80 per cent to 90 per cent of private construction can only be described as luxury housing" (Haq 1973).

Dr. Mehboob's observations came at the time when people could feel the severity of this income disparity. These revelations played a vital role in mobilizing millions of politically activated people in a massive grassroots protest movement that ended the Field Marshal Ayub Khan regime in March 1969.

> "The concentration of wealth and iniquitous regional development was to become the breeding ground for separatists of East Pakistan and Bhutto's nationalization.
>
> The separation of East Pakistan, followed by Zulfikar Ali Bhutto's nationalization, broke the back of many among the 22 families, wiping out some of them completely from the corporate map of Pakistan. Sixteen major houses lost heavily in East Pakistan, with Dawood, Adamjee, Isphani, AbassKhaleeli, Bawany and Amin being the major victims.
>
> Dawood lost Karnaphuli Paper Mills, Karnaphuli Rayon, a most modern jute mills, Dawood Shipping and host of trading and warehousing facilities. Adamjee lost six tea gardens in Sylhet and six industrial units including their biggest jute mills in Asia while Jalil, ranked fourth by Lawrence White lost five units and was left with only one unit in West Pakistan.

Bawany lost Latif Bawany Jute Mills, Habib Ahmad Haji (Aragwala) lost ARG Ltd Chittgong and a splinter Monnoo group lost Olympia Textile Mills at Tongi. It must be purely for nostalgic reasons that fifteen years after their return to Pakistan, Monnoos incorporated a company with the same name, now listed on Karachi Stock Exchange.

Atlas group lost Honda Motorcycle Plant in East Pakistan "reducing me to pauper overnight and forcing me to shift from a bunglow to a Flat", group chairman Yusuf Sherazi said in an interview. (Rehman 1998, 11-12)"

From 1971 to 1977, the then prime minister of Pakistan, Zulfiqar Ali Bhutto, launched a policy of nationalization of strategic industries to break the monopoly power of these families in line with international communism and socialism wave. The main aim of this policy was to facilitate masses with the economic benefits of growth and development. In nationalization of industry, one economic historian noted that 31 key industrial units, 13 banks, over a dozen insurance companies, 10 shipping companies and two petroleum companies were nationalized, out of which at least 22 industrial units, 9 banks, 9 insurance companies, 3 shipping companies and 2 petroleum companies belonged to the 22 families (Rehman 1998).

The following decades after fall of Dhaka and nationalization were stale with most of the business groups had lack of fate in the economic leadership. In 1990's a privatization / denationalization of these industries gave an opportunity for these business groups to rebuild new wealth. However, Rehman noted that this privatization was characterized by corruption and collusion of some business groups with bureaucracy and political leadership. He supported his claim by supplying a list of top business groups in 1990 released by Herald and then comparing that list with a new list of 22 families of late 1990s. In his list, many of the old Karachi based memon, bohra and gujrati families were replaced by new Lahore based families (mainly chiniotis).

No	Group	Assets Rs. In Million
1	Habib	5,781
2	Crescent	4,237
3	Dawood	3,265
4	Saigol	2,618
5	Wazir Ali	2,279
6	Nishat	2,279
7	Saphire	1,755
8	Lakson	1,559
9	Fazalsons	1,384
10	Gandhara	1,344
11	Dewan	1,344
12	Bawany	1,213
13	Adamjee	1,141
14	Al-Noor	1,124
15	Ghulam	1,091

No	Name	Manufacturing Assets	Financial Assets
1	Nishat	27,792	165,145
2	Saigol	15,202	9,004
3	Crescent	10,586	12,353
4	Dewan	10,113	--
5	Ittefaq	10,000	--
6	Chakwal	9,264	5,530
7	Habib	7,612	4,657
8	Saphire/Gulistan	7,583	4,657
9	Gul Ahmed / Al-Karam	5,220	915
10	Packages	5,168	12,822
11	Chakwal	4,592	5,530
12	Atlas	4,359	2,555
13	Hashwani	4,251	382
14	Bibojee-Saifullah	3,806	637
15	Dawood	3,780	1,605

	Farooq						
16	Gul Ahmed	1,066					
17	Ghani	1,034					
18	Pakland	1,006					
19	Atlas	956					
20	Hashwani	808					
21	Service	734					
22	Colony	728					
23	Fazal	719					
24	Fateh	458					
25	Ittefaq	398					
16	Monnoos	3,605	--				
17	Fecto	3,542	--				
18	Lakson	2,876	--				
19	Gatron	2,870	--				
20	Fateh	2,843	--				
21	Sargodha	2,743	--				
22	Al-Noor	2,573	--				
23	Ghulam Farooq	2,465	--				
24	Ibrahim	2,333	336				
25	United	2,237	3,644				
26	Bawany	2,189	53				
27	Zahoor	2,178	--				
28	Schon	2,038	2,259				
29	Dadabhoy	2,016	151				
30	Jehangir Elahi	2,038	--				
31	Fazalsons	2,000	--				
32	Rupali	1,910	12,833				
33	Servis	1,707	--				
34	Yunus Bros	1,689	997				
35	Tawkkal	1,678	644				
36	Sitara	1,619	--				
37	Colony	1,620	94				
38	Premier	1,501	--				
39	Shahnawaz	1,299	--				
40	Sunshine/Sunrays	1,265	--				
41	Fazal/Fatima	1,263	--				
42	Calico	1,235	--				
43	Tata	1,060	102				
44	Raja	1020					
45	Nagina	1013					

Table 3: List of top business groups in 1990 Vs 1997 (Rehman 1998)

Table 3 list the names of top business families of Pakistan along with their estimated known assets in 1990 and 1997. The leap rise in the assets of certain Chinioty and Lahore based politically connected families during the privatization era of 1990s rose the suspects of disposing government assets at throwaway prices using collusion between top political leadership and these business families.

In a 2011 study conducted by Institute of Cost and Management Accountants of Pakistan (ICMAP) concluded that around 64 percent of the largest companies listed in each of the

manufacturing and service sectors of Pakistan Stock Exchange (PSX) are controlled by the prominent business groups and families of Pakistan. These business groups include Nishat, Hasham, Ghulam Faruque group, Amin Bawany group, Gul Ahmed, Crescent, Sapphire, Din, Adam, Dawood, Younus Brothers, Dewan, Rupali, Dawood Habib, Ibrahim, Hashoo, Attock, Fatima, Engro, Byco, and EFU etc. (ICMAP 2011). The report also noticed dominant foreign ownership in pharma and auto sector (ICMAP 2011).

According to a recent report by a local brokerage house at Pakistan Stock Exchange "17 family groups who are 'sponsor' shareholders in around 91 companies which collectively account for 42% of the total market capitalization of Pakistan Stock Exchange. The collective market capitalization of these companies is around PkR7.9 trillion." (Khwaja and Zaidi 2019).

Haque and Husssain gave a very interesting observation in conclusion in their working paper in following words:

> "It goes further by looking at connections between firms through cross holdings to find that 31 families appear in the KSE-100. It appears that while MahbubulHaq talked of 22 families dominating Pakistan in 1967, in 2018, some 50 years later, the wealth in the stock market may be largely owned or controlled by 31 families." (Haque and Hussain 2021)

2.1.4 Types of Business Groups

Unlike many other aspects of business groups, very few researchers have tried to categorize the business groups yet. One potential reason for this lack of availability of literature on this aspect is because of the diverse nature of business groups. Business groups are present all over the world, operating in all types of economies, are of all scale, size and scope and it is very difficult to analyze these business groups in context they operate. For example, a Chinese state-owned business group is very different from British conglomerate or from an Indian family business. To bring these diverse groups into a single framework is a difficult task.

The preliminary work that we find, is of Cazurra (2006) who tried to categorize business groups in three different basic types according to their ownership; Family owned, widely-owned, state owned. His study suggest that each type of business group has different actors who own, control and manage it. According to his study, each of the business group type has its own kinds of agency costs, diversification behavior and performance. Their shareholding patterns along with goals and objectives have marked difference which lead them to operate differently (Cazurra 2006).

In 2007, we find a very comprehensive research which proposed a model to study the business groups. Hoskinsson and Yiu integrated internal control mechanism of horizontal and vertical connectedness with external contexts to categorize the business groups into four forms: network form, club form, holding form and multi-division form (Yiu, et al. Feb 2007). Network form of business group is an arrangement in which a leading firm plays a leading role in any sector of

economy with other affiliates grouped around to serve it. In Club form of business group, affiliates form a more complex structure by positioning around each other along with their subsidiaries to feed each other strategic resources like information, technology and financing. Holding form of business groups is traditional structure in a parent company invests and controls wholly or partially owned well-diversified independent firms as its subsidiaries. Lastly, a multi-division form of business groups in which a parent company controls its wholly or partially owned companies according to group's strategic objectives (Yiu, et al. Feb 2007).

2.1.5 Theories Pertaining to Business Groups

Different scholars have argued differently on why business groups emerge in developing economies. A no of theories have been proposed by different researchers in this regard which are summarized in this section.

2.1.5.1 Market Failure Theory

In his pioneering work in this field, Leff (1978) identified that market failure lead to emergence of business group in developing countries. According to him, these economies are characterized by weak and underdeveloped institutions that limit free market mechanisms to work properly. In such economies, crucial inputs are not available to everyone equally leading to asymmetry of information and capital. These market imperfections lead to distorted supply of information, opportunity, capital and managerial talent among other vital resources needed by the firms to compete fairly on economic grounds. In such situation, business groups emerge to fill this institutional gap. Affiliation to big business groups provide firms easy and timely access to these scarce resources. (Leff 1978).

Khanna and Palepu (1997) coined the term "institutional void" to explain that the vital institutions that make up market ecosystem are generally not effective in emerging markets. According to them, factor markets (like labor, product and capital) that play a significant role in developed economies, are simply missing or not functioning efficiently in developing economies. For example, in absence of access to quality and reliable information, investors refrain from risking their capital in unfamiliar ventures in emerging markets. In advanced economies like US and the UK, regulatory requirements for reliable financial reporting, fraud protection by presence of regulatory watchdogs, independent financial press, supply of quality financial analysts and presence of specialized venture capitalists enable newly established firms to raise capital easily. In these economies, business group fill such institutional voids in capital market as well as in other factor markets for their affiliates. Affiliation to reputed business groups decreases the perceived risk for investors, customers, suppliers, bankers and other service providers. Thus business groups get into diversified business lines through their affiliates using their affiliation as a brand in the eyes on consumers; their reputation as a collateral to raise debt and new capital; their history as a growing entity to attract and maintain managerial talent; their size, scope and economy of scale to procure extensive support services of lawyers, accountants,

legal advisors, management consultants, local and foreign agents etc.; their connectedness to deal with government and regulatory authorities etc. (Khanna and Palepu 1997).

2.1.5.2 Political Economy Theory

Political economy is about how politics affects the economy and the economy affects the politics (Frieden 2020). Political economic approach to economy claims that state plays a dominant role in shaping economic growth and development of any country. Whenever an underdeveloped country determines for a quick economic growth to take masses out of poverty, it often does so by incentivizing already established business families to grow as a means to national growth. The process also get augmented when business families have connections with the political class. As a result, business families grew into business groups in many emerging economies. For example, in South Korea, during era of General Park, chaebols flourished as they received extremely favorable policies. They were preferred recipient of loans and foreign exchange (E. M. Kim 1997). During British Raj, many business communities from Bombay and Sindh, Calcutta, Madras, Rajastan were promoted as old businesses were either declined or destroyed by the changing British policies. After partition, the socialist inspired "licence raj" of Nehru and his successors particularly favored a handful politically connected families for next several decades to grow in areas where not everyone could enter without government's consent. In last decade of twentieth century, when economy was de-regularized and delicensed, there were huge opportunities for established business families to tap into the opportunities as new economic regime was offering. Business groups entered into engineering, automobile, banking, telecom, pharma sectors. In order to push the economy, Indian government initiated many favorable policies that greatly benefitted the established family businesses (Bhattacharya 2019). In Bangladesh, "the entrepreneurial capacity and the creation of close ties with the State were the core factors that helped these business groups survive and grow in an economy led by a state that could do little to promote" (Nahid, Gomez and Yacob 2019).

Having ties with governing officials is also a route to quick business success. Just years before the fall of USSR, it offered my state owned enterprises to private investors as state could not run them. This gave rise to famous Russian Oligarchs who accumulated wealth rapidly through informal deals with officials (Weiss 2013).

In Pakistan, early business families who migrated from Undivided India to Pakistan benefitted a lot due government encouragement and opening of opportunities (Papanek 1971). Dr. Mehboob-ul-Haq's famous twenty two families was reflection of the collusion of state institutions with many business groups (Haq 1973). In 1990's, privatization of MCB and other state owned companies to many business groups by then governments was charged with "plundering" of state assets (Rehman 1998).

2.1.5.3 Transaction Cost theory

Transaction cost theory focuses on the costs that arise from contracts and activities of the firms. According to this theory, firms engage in any transaction only when it is economically viable to

do so (Coase 1937). In emerging economies, free market mechanisms don't work properly due weak or non-existent institutions, imperfect supply of crucial resources, chronic shortages of vital public goods, socio-political linkages etc. In such economies, crucial inputs are not available to everyone equally. This results in asymmetry of information and capital. Unpredictibity and instability of government policies and regulatory requirements inflict risk in decision making. The market imperfections result in distorted access to information and opportunities, availability of credit and capital, reach to managerial pool of talent among other vital resources needed by the firms to compete fairly on economic grounds. Independent firms are unable to acquire these crucial resources without incurring significant transaction costs. According to this theory, private firms only engage in commercial activities when it is economically viable to do so (Khanna and Palepu 1997). Business groups emerge in these economies and reduce these transactions using their internal markets. Intragroup Internal markets coordinate the allocation or exchange of various assets, goods, and services (Chang and Hong 2000, Guillén 2000).

The most important transaction costs are information asymmetry and contracting problems. Reliable and timely information about opportunities, products and services is often not available to everyone. Managers often have to acquire bad goods or services at higher price because they don't have information about cheaper and better alternatives (Ullah 2017). Another important cost that firms face is contracting cost. Since most of developing and emerging countries are defiant in rule of law, the cost of writing optimal contracts and enforcing them timely is usually high. In their famous study, La porta et al. used scale of five measures as a proxy to judge "law and order"; efficiency of judicial system, rule of law, corruption, risk of expropriation and lastly likelihood of contract repudiation (La Porta, et al. 1998).

A firm's affiliation to a reputable group lowers its transaction costs in a number of ways. These may be easy access to finance for the affiliated firms (Muttakin, Khan and Mihret 2017, Claessens, Fan and Lang 2006), knowledge and risk-sharing among the group affiliated firms (Khanna and Yafeh 2002), provision of critical services like legal, accounting and managerial services to each other, train HR to be used in other group affiliates, cross sell their products through related party transactions (Khanna and Palepu 1997).

So, a private independent bank is unable to open a branch in far flung area of a country where infrastructure is not present nor human resources readily available to run the operations due to high running cost and low customer base. However, in India "group-affiliates are more likely to (profitably) locate in less-developed states than unaffiliated firms" (Fisman and Khanna 1998). Thus, in developing countries where there are multiple market imperfections, business groups provide value (Khanna & Palepu, 2000a)

2.1.5.4 Other Theories

Lee proposed that BG thrive because they have inbuilt mechanism to economic catchup. He defined **economic catchup** as "narrowing the gap vis-à-vis a leading firm." Business groups

facilitate their affiliates to enter into new markets, products or business lines that have been monopolized by early entrants. Business groups support their "late entrant" affiliates to compete with already established players by providing capital, technology, support system, distribution & supplier network and brand names. They also accept lower or no return on their investment in the initial period so that their affiliate firm gets established in the industry. Thus, business group affiliation decreases the risk and uncertainty of the affiliates. (Lee and Malerba 2018)

Guillen proposed his **resourced based theory** which declares business groups in emerging markets result when entrepreneurs accumulate the capabilities for repeated industry entry. According to the theory, firms and entrepreneurs need three types of resources to enter into an industry 1. Inputs such as capital, labor and raw material 2. Process related knowledge 3. Markets along with distribution channel and sale contracts with domestic and international buyers. Entrepreneurs who learn to acquire these resources quickly will create a business group by repeatedly entering into new industries. In developing economies, due to asymmetry of information and other resources, not everyone has access to emerging opportunities. Entrepreneurs who have access to these resources end up creating business groups around the world (Guillén 2000). Essential resources like access to capital, regulatory compliances and high level government connections for necessary approvals etc. are necessary to grow and diversify. Already established and well connected business houses have better access to these opportunities and, thus, are more geared towards establishing new ventures as part of their groups (Khanna and Yafeh 2005)

Social Structure Theory by Granovetter propose that a business family and group act as a social cohesive group that is bound by community, region or religion. The mutual trust and understanding within the group let free flow of information, capital and other resources in a way that promote the overall group. (M. Granovetter 1994)

In a recent attempt to explain business groups, Gao et al. (2017) came up with **reputation based view**. According to them, favorable reputation is a meta-resource in emerging markets that "moderates whether a firm can activate its conventional resources." They call reputation as meta-resource "because of its high order ability to activate, leverage, and moderate other resources." Their conceptualized model of reputation had three components: prominence (standing out from other entities), perception about quality and resilience (trust of stakeholders that group is going to survive and thrive). They concluded that "reputation is crucial for survival in emerging markets, because it allows firms to overcome and capitalize on the transaction uncertainty created by institutional voids." (Gao, et al. 2017)

2.1.6 Business Groups and Performance

In a recent study, researcher have found out that Pakistani firms' financial performance is significantly positively affected by ownership concentration. Furthermore, this study confirms that financial performance is positively affected when this ownership concentration is of management and business groups (Usman and Hassan 2020). However, this study notes that

even though accounting based financial performance of a firm is positively related to business group affiliation, market based returns are not.

2.1.7 Business Groups and Firm's Market Value

In Swedish business family controlled firms are valued with twenty to thirty percent discount from standalone companies (Agnblad, et al. 2001). In a study that compared performance of group affiliated firms and independent firms, results suggested that group companies trade at discount to their unaffiliated peers. Thus, group affiliation destroys firm's market value. (Waseemullah and Hasan, Business Group Affiliation and Firm Performance—Evidence from Pakistani Listed Firms 2018)

2.2 Corporate Governance

2.2.1 Principal-Agent Conflict

The traditional literature of corporate governance focuses on the separation of ownership and management (Berle and Means 1932, Fama and Jensen 1983) and agency problems arising from such arrangement. This theory is based on the premises that there are times when the managers of the firm pursue their own interests rather than the shareholders' interests, creating a need to supervise them. Thus, the board of directors is charged with responsibility of monitoring the management on behalf of the shareholders.

Berle and Means argued that in modern corporations with dispersed shareholding pattern, a typical shareholder investor is uninterested in day-to-day operations of the firm. They just want to have shareholding in the firm without having botheration of running the company. This separation of ownership from operational control of company results in shareholders delegating decision-making authority and task of running the company to managers and directors which, in turn, gives them an opportunity to use the firm's resources to their own advantage rather than shareholders' best interests (Berle and Means 1932).

This concept of loss of enterprise value due to managerial conflict of interest motivated many economists to work in this direction. In 1976, Jenson and Meckling formalized a theory which suggested that any firm's governance is based upon conflicts of interests between shareholders (owners), its managers and its major debtors. The shareholders want to maximize their wealth, managers want to enhance their remuneration and perks while debtors want the managers to run the company with sound financial management so that they may timely get their principal back along with interest. Agency theory defined the relationship between shareholders and managers as principal-agent where owners as principals appoint managers to be their agents to manage the company in owners' best interest. They termed agency cost as sum total of cost of owners (principals) **monitoring** their managers (agents), the **residual loss** due to managers (agents) not

taking best decisions on behalf of owners (principals) and **bonding expenditure** incurred by owners (principals) to incentivize managers (agents) to minimize these leakages and losses (Fama and Jensen 1983).

This agency theory quickly gained popularity and soon hundreds of studies were conducted globally to test it in different economies and economic conditions. As a result, countries passed their codes of corporate governance to minimize Principal-Agent conflict.

2.3 Ownership concentration &Principal-Principal Conflict

The theoretical framework of corporate governance proposed by Fama& Jensen works well in companies which have dispersed shareholding. Bulk of principal-agent conflict studies were carried out in US and the UK, where ownership and management of the companies are separated to a great extent. However, there are companies in which ownership is not widely dispersed and shareholding is concentrated in the hands a very few big shareholders along with many small dispersed shareholders. In many European, Latin American and Asian economies, companies are characterized by presence of large concentrated shareholdings in firms. These majority shareholders have their undue influence on management. Often these shareholders are the controlling managers themselves which greatly reduce the principal-agent conflict. (LaPorta, Lopez-de-Silanes and Shleifer 1999). However, these major shareholders (principals) have their own interests in front of them which, at times, may conflict with the interest of other minority shareholders (principals). This, in-turn, gives rise to another type of agency conflict where controlling shareholders abuse minority shareholders. This is known as principal-principal agency theory (Dharwadkar, George and Brandes 2000).

Principal-Principal conflicts are of diverse types. For example, a study on Chinese public corporations found out that ownership had a U-shape relationship with board compensation, board size and presence of independent director (Su, Xu and Phan 2008). Another study used the percentage of cash dividend of total assets (CDTA) to measure the expropriation depicted in PP conflicts. The study concluded that principal-principal conflicts are major problem on ASEAN countries by finding that large shareholders do expropriate company wealth by paying higher cash dividends (Banchit and Locke 2011). In Continental Europe, researcher find that disclosures were negatively associated with ownership concentration, major shareholder voting rights, the existence of double voting rights and family control (Ali 2014).

In family firms, the PP conflicts have very interesting dimension. This conflict of interest often arises between working and non-working family shareholders in terms of dividend payout and executive remuneration. A study on Belgium's privately held companies concluded that the presence of passive family shareholders, increases the propensity to pay dividends (Michiels, et al. 2015).

In Malaysia, study found that individual (family) owned firms negatively influence firm value whereas foreign institutional owned firms positively affect firm value (Mokhtar, et al. 2017)

To protect minority shareholders' interests most of the countries have placed various legal and regulatory requirements on board compositions and other monitory aspects. Several studies have

shown that even these restrictions have not been able to stop bigger shareholders to exploit smaller ones (Volpin 2002).

2.4 Corporate governance of firms affiliated to business groups

The extension of the ownership concentration firms is business group affiliated firm. The presence of business groups in emerging economies is also very significant. When firms are part of a business group, additional governance issues emerge. These firms face another conflict of interests between interests of controlling business groups and interests of minority shareholders who are not part of their groups. This principal-principal conflict in such firms make minority shareholders (principals) vulnerable to the abuses of controlling major shareholder business group (principal). (Khanna and Yafeh 2005). Many business groups have created business structures in which one group firm has shareholding in another and one company's director is in board of another. This interlocking of directorship and pyramid style shareholding patterns create complex governance structures which makes decision making highly skewed towards benefit of the controlling group. Business groups may use different techniques such as tunneling and pyramid structures to influence the board composition and decision making process.

Resultantly, many business groups are known to transfer resources from firms in which they have less shareholding to firms where their shareholding is more. This behavior, called tunneling, divert profits to their handpicked companies. These groups also have power to have transactions to other group companies. These related party transactions divert one firm's resources to other.

According to a study, a firm under family-run business group has more risk of agency problems than freestanding firms (Morck, Wolfenzone and Yeung 2005). Even in family-run businesses, there is risk of some family member exploiting other family members (Morck and Yeung 2003).

Being part of a group also bring its benefits. Group firms get better access to capital, resources and market information (Khanna and Rivkin 2006). Directors from parent group bring crucial insight and resources that are not available internally (M. Granovetter 2005). Such boards connect the companies with external business environment. These cross-directorships interlock firms together (Mizruchi 1996). Board members from other companies are mostly CEOs, chairmen and executives who often serve on boards of more than one firm (Davis 1996). Such boards connect executives of different companies together, thus creating a broad, and complex, set of linkages to other firms. The group board members serve as a connection to other members of the same group, entirely different business group and third party organizations (Kim, Hokisson and Wan 2004)

2.5 Hypothesis Development

2.5.1 Group Affiliation Factors and Financial Performance

In developing world, affiliation to a reputed group serves as a brand in itself that links a firm with perceived superior quality and reputation in eyes of consumers, customers, suppliers,

employees, financial institutions etc. This enables the affiliated firm to charge a premium to customers for the same products and services (Khanna and Palepu 1997). Numerous studies have empirically linked group affiliation with superior financial performance (Ghani, Haroon and Ashraf 2011) (Ahmed, et al. 2018). This research is unique in the sense that it has proposed to factorize the group affiliation. Since the group affiliation has positive effect on financial performance, there must be some specific aspect of group affiliation that contributes to this superior performance. The study has identified two critical factors to be important dimensions of group affiliation. Firstly, how much ownership a group has. Secondly, how much board independence in decision making the firm enjoys from group. The study seeks to check their effect on financial performance ROE and ROA.

Hyp 1a: Group affiliation has a significant and positive impact on ROE

Hyp 1b: Group affiliation has a significant and positive impact on ROA

Whereas Group Affiliation is represented by 1. dummy variable for group affiliation; 2. percentage of group's shareholding; 3. dummy variable for group chairman; 4. percentage of group directors as a percentage of total directors, and 5. Dummy variable for foreign group

2.5.2 Corporate Governance Factors and Financial Performance

Corporate governance is process of removing agency and principal-principal conflicts from firm's operations. A well governed and structurally organized firm has better prospects for superior performance. Studies shows that corporate governance has positive effect on firm's financial performance (Cadbury 1992). The study seeks to check corporate governance quality and its effect on financial performance in the sample of study. For the purpose of this research two dimensions of corporate governance have been identified. Firstly, board size and secondly, board independence from management. Board independence from management will minimize the agency conflict while board size determines a healthy teamwork of experienced directors to look after the affairs of the firm. The hypothesis is:

Hyp 2a: Corporate Governance has a significant and positive impact on ROE

Hyp 2b: Corporate Governance has a significant and positive impact on ROA

Whereas Corporate Governance is represented by 1. BOD Size; 2. Dummy variable for CEO Duality; 3. Percentage of independent directors on board; 4. Percentage of NED directors on board, and 5. Dummy variable for professional CEO

2.5.3 Block Holding Factors and Financial Performance

Strategic block holding creates a long term institutional shareholder who has interest in long-term sustainable performance of the firm. Having a block holder in an affiliated firm is even more positive because this enables a long-term onboarding of an institution with the sponsor group. This shows that the parent group is trustworthy and interested in long-term growth of the firm. It also enables a counter-checking mechanism within board to look after the parent group's interaction with the firm. The block holder also brings its own expertise and potential to the board which enables a stewardship effect in the board.The study has proposed factors for block holding presence and identified two factors. Firstly, blockholder's ownership and secondly, blockholder's effective presence on board. The regression equation for hypothesis is:

Hyp 3a: Block Holding has a significant and positive impact on ROE

Hyp 3b: Block Holding has a significant and positive impact on ROA

Whereas Block Holding is represented by: 1. dummy variable for block holder presence; 2. percentage of block holder's share holding; 3. dummy variable for chairman from block holder; 4. percentage of block holder's directors on board; and 5. dummy variable for any director from non-share holder block holder

2.5.4 Capital Structure and Financial Performance

Capital structure and leverage affect financial performance of the companies negatively. Trade-off theory of capital structure states that capital structure increases the performance of a firm initially till a point of optimization. This is because increase in working capital create a momentum in firm's operations to generate more income than the financing cost. After that point, increasing leverage decreases the firm's financial performance. (Myers 1984). For the given sample, the study seeks to check the effect on financial performance.

Hyp 4a: Capital Structure has a significant and positive impact on ROE

Hyp 4b: Capital Structure has a significant and positive impact on ROA

Whereas Capital Structure is represented by: Long-term Debt over Equity Ratio of company.

2.5.5 Related party Transactions and Financial Performance

GAPP defines Related Party Transactions as "transactions between a company and its subsidiaries, affiliates, principal owners, officers or their families, directors or their families, or entities owned or controlled by its officers or their families." Since executives and sponsors have discretion to do business with parties in whatever manner deemed appropriate, a potential for

conflict of interest arises. Agency theory proposes that executives have an incentive to augment their own interest at the expense of shareholders(Fama and Jensen 1983). In literature regarding business groups, related party transactions are considered to be tools to tunnel resources from individual company to parent group. RPTs have negative impact on financial performance (Azim, Mustapha and Zaini 2018). The hypothesis is:

Hyp 5a: Related Party Transactions has a significant and positive impact on ROE

Hyp 5b: Related Party Transactions has a significant and positive impact on ROA

Whereas Related Party Transactions is represented by percentage of related party transaction out of total sales

2.5.6 Group Affiliation Factor Score and Financial Performance

In the study, a factor score has been constructed from the factors of group affiliation. The base research model propose that group affiliation factor score has impact on financial score. The uniqueness of this study is that it sets to study the effect of factor score of group affiliation on financial performance. Which means that it seeks to study the effect of quality of group affiliation to the financial performance. This is unlike other researches which study the group affiliation as a dummy variable and check its effect on financial performance (Ghani and Ashraf 2005) (Ghani, Haroon and Ashraf 2011) (Afghan, Gugler and Kunst 2016) (Ahmed, et al. 2018) (Javid and Iqbal 2008).

Hyp 6a: Group Affiliation Factor Score has a significant and positive impact on ROE

Hyp 6b: Group Affiliation Factor Score has a significant and positive impact on ROA

Whereas Group Affiliation Factor Score is represented by the factor score constructed from the underlying factors of Group Affiliation

2.5.7 Moderation of Corporate Governance on Group Affiliation Factors and Financial Performance

In the study, a factor score has been constructed out of variables of corporate governance. The contribution factor of the current study is that it tests the impact of corporate governance on relationship between group affiliation and performance. A well reputed group of companies has an ability to construct mechanisms for a well-managed, better governed firm to create superior value and performance. Thus, by augmenting the corporate governance quality, groups increase the performance of their affiliated firms. This observation will open new avenues for future researchers to study new dimensions of corporate and group dynamics. The study seeks to study

the moderating effect of CG factor score on the relationship between group affiliation and financial performance.

Hyp 7a: Corporate Governance Factor Score has a significant moderating impact on relationship between Group Affiliation Factor Score and ROE

Hyp 7b: Corporate Governance Factor Score has a significant moderating impact on relationship between Group Affiliation Factor Score and ROA

Whereas Group Affiliation Factor Score and Corporate Governance Factor Score are constructed from their underlying factors

2.5.8 Moderation of Block Holding on Group Affiliation Factors and Financial Performance

In the study, a factor score has been constructed out of variables of block holding. This factor score gauges the effectiveness of block holder in the board. The research will study the effect of block holding effectiveness on the relationship between group affiliation and financial performance. The contribution of the research to literature is adding this dimension to study the group affiliation. The study seeks to study the moderating effect of BH factor score on the relationship between group affiliation and financial performance.

Hyp 8a: Block Holding Factor Score has a significant moderating impact on relationship between Group Affiliation Factor Score and ROE

Hyp 8b: Block Holding Factor Score has a significant moderating impact on relationship between Group Affiliation Factor Score and ROA

Whereas Group Affiliation Factor Score and Block Holding Factor Score are constructed from their underlying factors

2.5.9 Moderation of Capital Structure on Group Affiliation Factors and Financial Performance

The most important benefit of group affiliation to a group company is easy and timely access to credit from banking sector (Khanna and Yafeh 2005). The availability of credit augments the financial performance of firm. According to tradeoff theory, increasing debt in capital structure increases the firm's value and performance upto an optimal point. Beyond that point, the value and performance begins to deteriorate (Myers 1984). The contribution of current study to research literature is that it studies the group dynamics in light of capital structure. The research seeks to study the moderating impact of capital structure on relationship between group affiliation and performance. The hypothesis is:

Hyp 8a: Capital Structure has a significant moderating impact on relationship between Group Affiliation Factor Score and ROE

Hyp 8b: Capital Structure has a significant moderating impact on relationship between Group Affiliation Factor Score and ROA

Whereas 1. Group Affiliation Factor Score is constructed from its underlying factors; and 2. Capital Structure is represented by Long-term Debt to Equity Ratio of the firm

2.5.10 Moderation of RPTs on Group Affiliation Factors and Financial Performance

Intra group transactions of the affiliated firm with other group member firms creates a potential for agency conflict. In literature regarding business groups, related party transactions are considered to be tools for parent groups to tunnel the resources from their affiliates. Sponsors tend to shift resources from group affiliated firm with lower cash holding right to higher cash holding rights affiliates (Azim, Mustapha and Zaini 2018). The research seeks to study the moderating effect of related party transactions on the relationship between group affiliation and financial performance.

Hyp 10a: Related Party Transactions has a significant moderating impact on relationship between Group Affiliation Factor Score and ROE

Hyp 10b: Related Party Transactions has a significant moderating impact on relationship between Group Affiliation Factor Score and ROA

Whereas 1. Group Affiliation Factor Score is constructed from its underlying factors; 2. Related Party Transactions is represented by percentage of related party transactions to total sales

2.5.11 Sales, Total assets, and Financial Performance

Total sale or total revenue of firm affects the company performance in a number of ways. Firstly, a higher sales enables a company to have economies of scales in its operations. Secondly, higher sales with satisfied customer base increases the perceived quality and reputation of firm's products and services. On the basis of this perception, company can attract new customers and charge premium from its existing clientele. Thirdly, higher turnover gives a firm more financial footprint to financial institution that may end up in better supply of credits to the firm. The hypothesis is as follows:

Hyp 11a: Total Revenue has a significant and positive impact on ROE

Hyp 11b: Total Revenue has a significant and positive impact on ROA

Total Assets affect a firm's performance in a very unique way. It affects the operations of the firm by have more dependency and reliability. By having more assets in firm's balance sheet, firms adds buffers in its operations. Having more spares, inventory, receivables, machinery, vehicles, office buildings etc., the firm has more reliable and consistent operations. While increasing the firm's assets increases the quality of firm's income, it doesn't necessarily result in increase in income of the firms. The hypothesis is as follows:

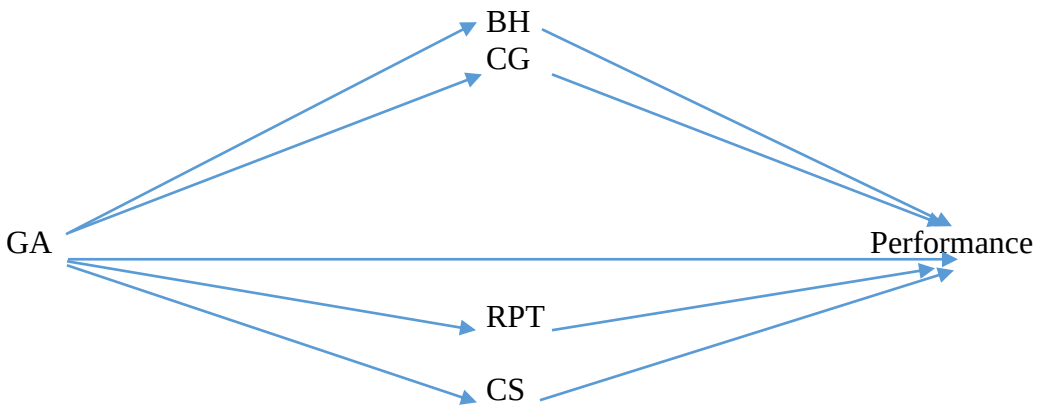
Hyp 12a: Asset Base has a significant and positive impact on ROE

Hyp 12b: Asset Base has a significant and positive impact on ROA

Whereas 1. Total Revenue is represented by turnover of the firm for any given year; 2. Asset base is represented by log of total assets of firm for that year

3 METHODOLOGY

3.1 Model Construction



For the purpose of this research, five factors are identified that may impact the relationship between group affiliation and financial performance. The factors identified are: Corporate Governance (CG) measures, presence of block holders (BH), related party transactions (RPTs) and capital structure (CS) have their impact on the relationship. In order to determine their impact on relationship, this study has used them as moderating variables in regression. In regression, moderator is a variable that affects the strength of any relationship. The use of these individual factors as moderating variables in regression analysis will single out their effect on the relationship. This will determine whether the moderating variable has strengthen the significant positive effect of group affiliation on financial performance or weaken it. Thus, impact of each variable will help the study to identify which factor augments the positive aspect of group affiliation.

For example, a high corporate governance factor score depicts that affiliate firm has strong corporate governance structures in place. This will enable the affiliate to focus its boards towards its own wellbeing rather than let the group appropriate its resources towards other group firms. All the energies of the board and board committees will directed towards growth of the firm and to increase the wealth of its shareholders including minority shareholders. On the other hand, a low corporate governance factor score depicts that firm has no means of governance to protect itself from group influence. Theoretically, high corporate governance measures should strengthen the significant positive effect of group affiliation on financial performance.

The findings of impact of each proposed factor on the positive effect of group affiliation on financial success will give a new insight to the relationship. This will help identify best group governance practices. A good group governance is one that let the individual firm thrive, finds opportunities to make firm standalone independent of group's influence, protects it from external shocks, guide it towards new opportunities and built the overall shareholders' wealth of the firm.

This premise will open a new avenue to the future researchers to study the relationship with new and better angles. This finding will also help investors, regulators and other stakeholders to differentiate good business group firms from bad business group firms. Thus, this research will provide a new direction to future researches in this regard.

3.2 Study Design

The scope of this study is limited to listed space in Pakistan Stock Exchange (PSX). In terms of market capitalization, largest companies of the economy as well as each sector is included in sample to make it representative to whole economy. The financial and governance data is gathered from secondary sources like websites and annual reports of companies, Pakistan Stock Exchange (PSX), National Clearing Company of Pakistan Limited (NCCPL), Central Depository Company (CDC) and other regulatory institutions etc. Financial data of ROE, ROA, leverage and related party transactions is extracted from financial statements. Factor scores for governance data of group affiliation, corporate governance, block holding is constructed. Multiple Linear Analysis (MLA) regression with panel data is used to estimate effect of Group Affiliation Factor on Financial Performance measures of ROE and ROA.

In order to make the study more market oriented, KSE-100 Share Index companies have been chosen for two reasons. Firstly, this is because the index is designed to reflect the overall market and gauge economy of Pakistan. The market cap of KSE-100 share index companies is approximately 85% of total overall market cap. So, these companies reflect biggest formal economy businesses in the country according to their market worth. Secondly, the index has already removed companies that are not being managed properly. Firms that don't hold their annual general meetings (AGM) regularly on time, or don't pay their dues or have defaulted due

to any other reasons have already being excluded from index. Companies outside this index are either too small or not managed properly or market doesn't value them high enough. In this way, this study focuses on significant corporate governance group practices in Pakistan.

Companies have been categorized as group or non-group on the basis that these groups have other group companies listed on the exchange. A company which has shareholding from any such group that has no other listed group company, it has been categorized as non-group company. Similarly, subsidiary of any non-group affiliated company has been categorized as a group of its parent.

Theoretically, business groups' affiliation has positive impact on financial performance of companies. However, if company has a good corporate governance structure in place to protect it from group's tunneling etc., the resulting loss of board control will increase the financial effect of group affiliation. This moderating effect of Corporate Governance factor measures the extent of potential for principal-principal conflict in company. Similarly, moderating effect of block holding (BH), capital structure (CS) and related party transactions (RPTs) is studied. The results of these effects are discussed in discussion section.

3.3 Data Collection

This is an exploratory research that aim to understand the corporate governance framework in the light of group dynamics of Pakistan. The study is based on quantitative descriptive methodology. It uses data from secondary sources, mostly from companies' annual reports. Study uses panel data for six years from 2014 to 2019. Six years data ensures the recent availability of related party transaction disclosures data which is a recent phenomenon due to regulatory pressures. Also, six years data is long enough to control for different stages of economy and industry. This is in line with international studies of similar nature.

In this research, factor scores for each of the moderating factors have been constructed. Different variables of the factors are used to construct these scores. Board size, independence, professional CEO, CEO duality, board composition are used to construct CG Score. Group Affiliation Score is composed of affiliation (Dummy variable), group director weightage on board, group chairman and shareholding, ultimate control of group and chains of shareholding. Block Holders' Score is composed of Block holder's presence (dummy variable), chairman from block holder, weightage of BH directors on board and BH shareholding. The data of these variables is obtained from company annual reports and other relevant sources. These variables are grouped together for relevant factor scores and factor scores are constructed using Eviews statistical software.

The focus of this research is to study non-financial companies listed in Pakistan Stock Exchange. Financial sector has been excluded because it has many regulatory requirements that are beyond the objectives of current study. This is in line with similar studies. State Owned Enterprises (SOEs) have also been excluded from the sample. This is because, the SOE as a group has other than commercial objectives that are not significant for the market oriented studies. This is also in-line with other similar studies.

Foreign companies are categorized as subsidiaries of foreign parent companies. However, if these foreign companies work with local partners and have local controlling groups, they have been categorized accordingly.

The complete list of companies that are to be studied in this research is following:

Table 1.1: List of Foreign Companies (Total No = 9)	
NAME	**Industry**
Abbott Laboratories (Pakistan) Limited	Pharma
Archroma Pakistan Limited	Chemical
Frieslandcampins Engro Foods Limited	Food & Personal Care
GlaxoSmithKline Pakistan Limited	Pharma
GlaxoSmithKline Consumer Healthcare	Pharma
Lotte Chemical Pakistan Limited	Chemical
Philip Morris (Pakistan) Limited	Tobacco
Pakistan Telecommunication Company Ltd	Technology
Shell Pakistan Limited	Oil Marketing Company

Table 4: List of foreign subsidary firms in sample

Table 1.2: List of Group Companies (Total No = 41)	
NAME	**Industry**
Agriauto Industries Limited	Automobile Parts
Attock Petroleum Limited	Oil Marketing Company
Atlas Honda Limited	Automobile Assemblers
Attock Refinery Limited	Refinary
BannuWoollen Mills Limited	Textile
Cherat Cement Company Limited	Cement
Colgate-Palmolive (Pakistan) Limited	Food & Personal Care
Dawood Hercules Corporation Limited	Fertilizer
Dolmen City REIT	Real Estate
D.G. Khan Cement Company Limited	Cement
Engro Fertilizers Limited	Fertilizer

Engro Corporation Limited	Fertilizer
Engro Polymer & Chemicals Limited	Chemical
Fatima Fertilizer Company Limited	Fertilizer
Fauji Cement Company Limited	Cement
Fauji Fertilizer BinQasim Limited	Fertilizer
Fauji Fertilizer Company Limited	Fertilizer
Gul Ahmed Textile Mills Limited	Textile
Ghani Glass Limited	Glass and Ceremics
Honda Atlas Cars (Pakistan) Limited	Automobile Assemblers
The Hub Power Company Limited	Power
ICI Pakistan Limited	Chemical
Indus Dyeing & Manufacturing Co. Limited	Textile
Indus Motor Company Limited	Automobile Assemblers
International Industries Limited	Engineering
International Steels Limited	Engineering
Kohat Cement Company Limited	Cement
Kohinoor Textile Mills Limited	Textile
Lucky Cement Limited	Cement
Mari Petroleum Company Limited	Oil Exploration
Maple Leaf Cement Factory Limited	Cement
Nishat Chunian Limited	Textile
Nestle Pakistan Limited	Food & Personal Care
Nishat Mills Limited	Textile
Pak Elektron Limited	Cable and Electronics
Packages Limited	Paper & Board
Pakistan Oilfields Limited	Oil Exploration
The Searle Company Limited	Pharma
Saif Power Limited	Power
Thal Limited	Automobile Parts
Yousaf Weaving Mills Limited	Textile

Table 5: List of group affiliated firms in sample

Table 1.3: List of Independent Companies (Total No = 23)	
NAME	**Industry**
AGP Limited	Pharma
Azgard Nine Limited	Textile
Byco Petroleum Pakistan Limited	Refinary
Feroze1888 Mills Limited	Textile
Hascol Petroleum Limited	Oil Marketing Company
Highnoon Laboratories Limited	Pharma

Ibrahim Fibres Limited	Textile
Interloop Limited	Textile
JDW Sugar Mills Limited	Sugar and Allied
K-Electric Limited	Power
Millat Tractors Limited	Automobile Assemblers
Murree Brewery Company Limited	Food & Personal Care
National Foods Limited	Food & Personal Care
Pakistan Tobacco Company Limited	Tobacco
Pakistan International Bulk Terminal	Transportation
Pioneer Cement Limited	Cement
Pakistan Services Limited	Misc
Pak Suzuki Motor Company Limited	Automobile Assemblers
Shifa International Hospitals Limited	Misc
Service Industries Limited	Leather
Systems Limited	Technology
TRG Pakistan Limited	Technology

Table 6: List of independent companies in sample

3.4 Period of Study

The study has used penal data of six years from 2014 to 2019. This is because a longer term period of six years smooths out effect of various economic conditions and business cyclic. This also smooths out various regulatory and other government fiscal measures across the economy. This is in uniformity to various international studies of such nature.

3.5 Statistical Methods Used

In order to determine the relationship between group affiliation, financial performance and factors of corporate governance, block holding, capital structure and related party transactions, regression analysis has been use. The main purpose of regression analysis is to isolate each relationship and check the effects of variables on the model.
In the study, Multiple Linear Analysis (MLA) regression with panel data has been used to analyze the data. This is because the model has many variables and the panel data set is consistent throughout the period of study.

3.6 Variables

Financial Performance a. ROE	Net Income/Total Equity

b. ROA	Net Income/Total Assets
Control Variables	
c. Ln Total Assets	Log of total assets
d. Net Revenue	Total sales
Group Affiliation	
e. Group Affiliation	Dummy variable
f. Chairman from group	Dummy variable
g. Group Shareholding	Group Shareholding as percentage of total shareholding
h. Group Directors	Directors from group as percentage of BOD Size
Block Holding (BH)	
i. Block holder presence	Dummy variable
j. BH Shareholding	BH Shareholding as percentage of total shareholding
k. BH Directors	Directors from BH as percentage of BOD Size
l. Chairman from BH	Dummy variable
Corporate Governance (CG)	
m. Board Size,	Total number of board seats
n. CEO Duality,	Is CEO is also chairman of the board (Dummy)
o. Professional CEO,	Is CEO Professionally hired or family member (Dummy)
p. NED	Non-Executive Directors as percentage of BOD Size
q. Independent directors	Independent Directors as percentage of BOD Size
r. Capital Structure (CS)	Long-term Debt to Equity Ratio
s. Related Party Transactions (RPT)	Related Party Transactions(Transactions of firm with its sponsors, shareholders, directors and associated companies) as a percentage of total revenue

Table 7: List of variables used in study

3.7 Factor Score Variables

In order to simplify MLA equation model, factor scores of variables are constructed. Each of the variables has factors which increase or decrease the effectiveness of the variable. Factor of Group Affiliation, Corporate Governance and Block Holding has been developed. The factor score of these variables depict the effectiveness and strength of particular variable.

3.8 Trend Analysis

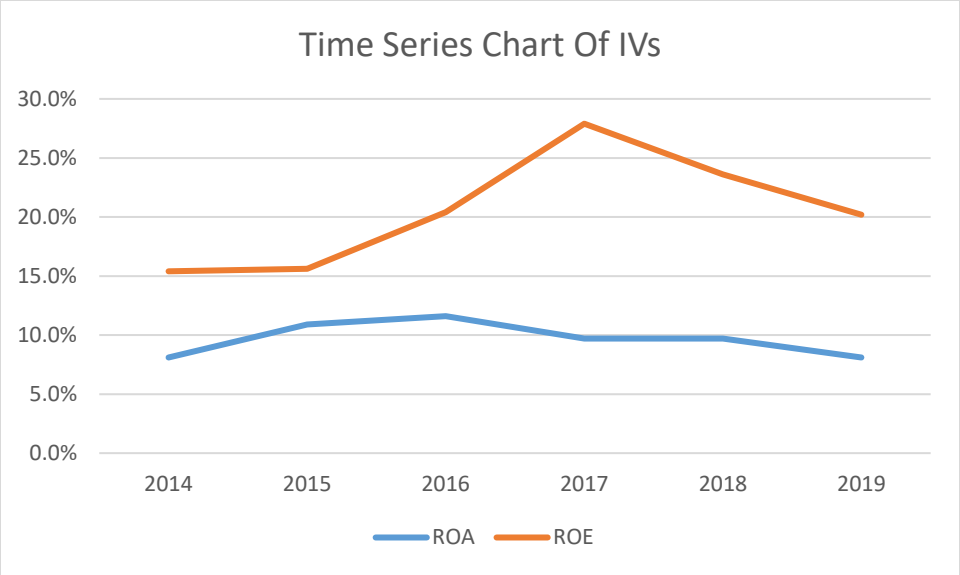


Chart 1: Time series chart of Independent Variables.

Chart 1 shows the time series chart of independent variables for the study. The mean value for ROE has rose initially from 15% in 2014 to 28% in 2017 and then fallen to 20% in 2019. This shows that overall economy performed well from 2014 to be peaked in 2017 and then showed some sign of exhausting. In the same chart, ROA is more stable and risen a little to 12% in 2017 to back to its initial reading of 8%.

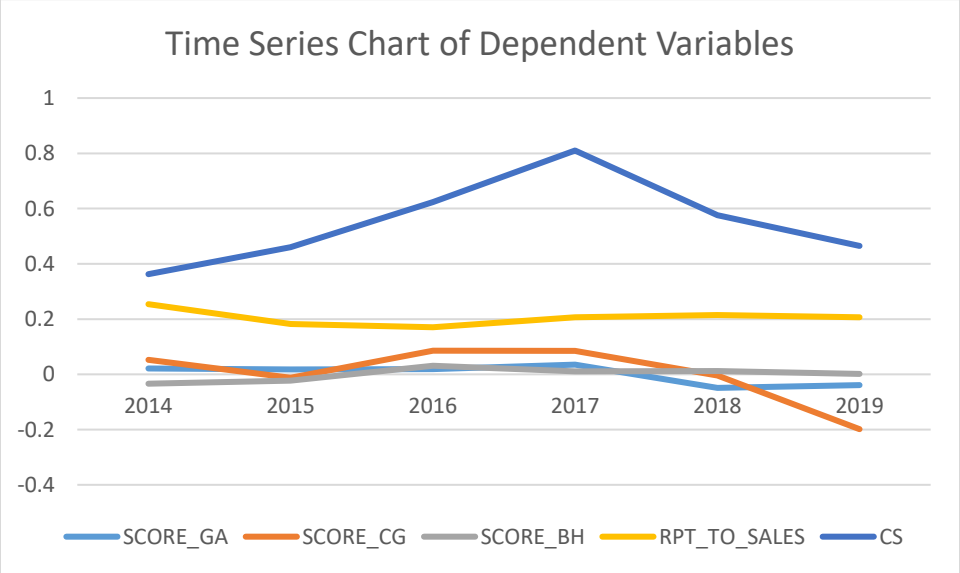


Chart 2: Time series chart of dependent variables.

Chart 2 shows time series chart of dependent variables for the study. Average value of Capital structure peaked at 80% in 2017 to get back to initial reading of around 40%. Mean RPT value remain stale to 20%; mean BH score and mean group affiliation score values to be stable in a

narrow band around 0. Mean value for corporate governance score is volatile and deteriorated towards the end of the period to negative territory.

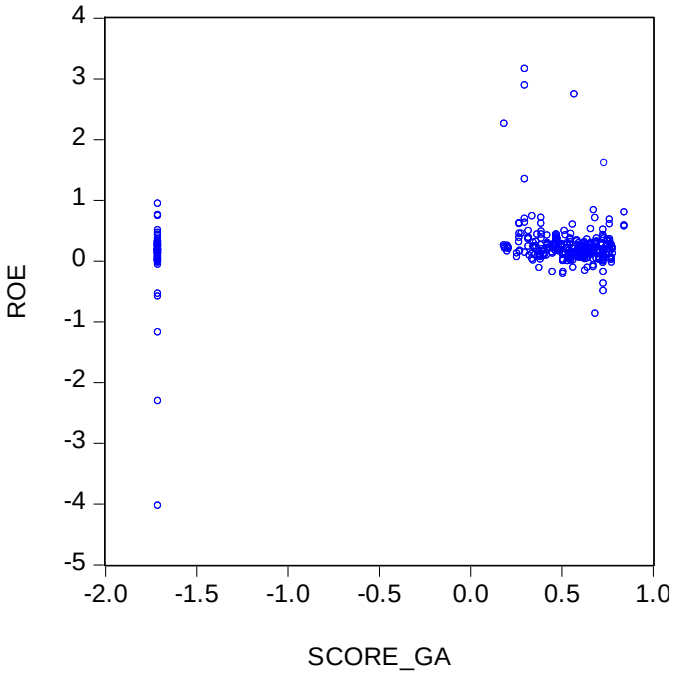


Chart 3:Scatter diagram between GA Score & ROE

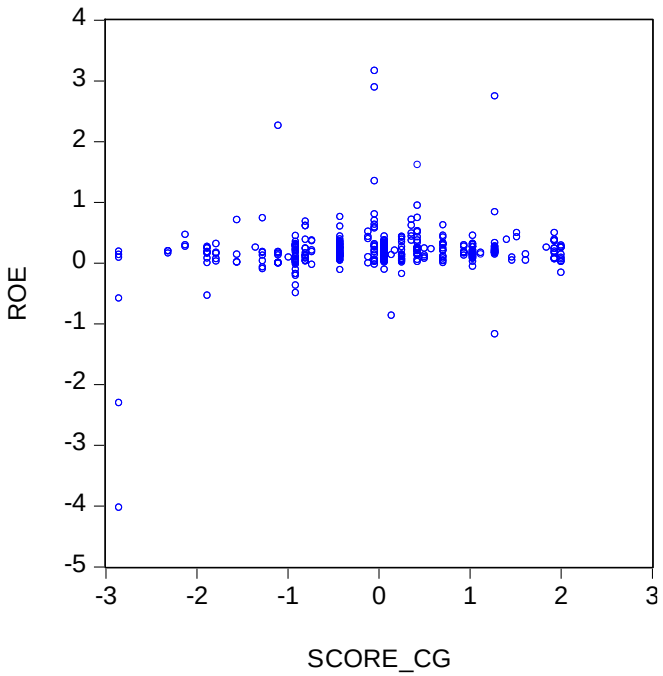


Chart 4: Scatter diagram between CG Score and ROE

Chart 3 shows scatter diagram between GA Score and ROE. Non group affiliated companies to be assigned GA score of -1.8 have a wide range of ROE from negative 400% to 100% with concentration between 0% to 80%; while group affiliated firms having GA scores between 0 and 1 have ROE ranging from -100% to 300% with heavy concentration between 0% to 100%. This chart illustrates that group affiliation certainly affects the floor of performance and let the firms operates not too below its potential.

Chart 4 shows scatter diagram between GA Score and ROE. CG score range between -3 to +2 with concentration betweem -1 to +2. This shows that average firm in Pakistan has positive CG Score. Higher ROEs are charecerized by firms having higher CG scores. Lower ROEs have lower CG scores as well.

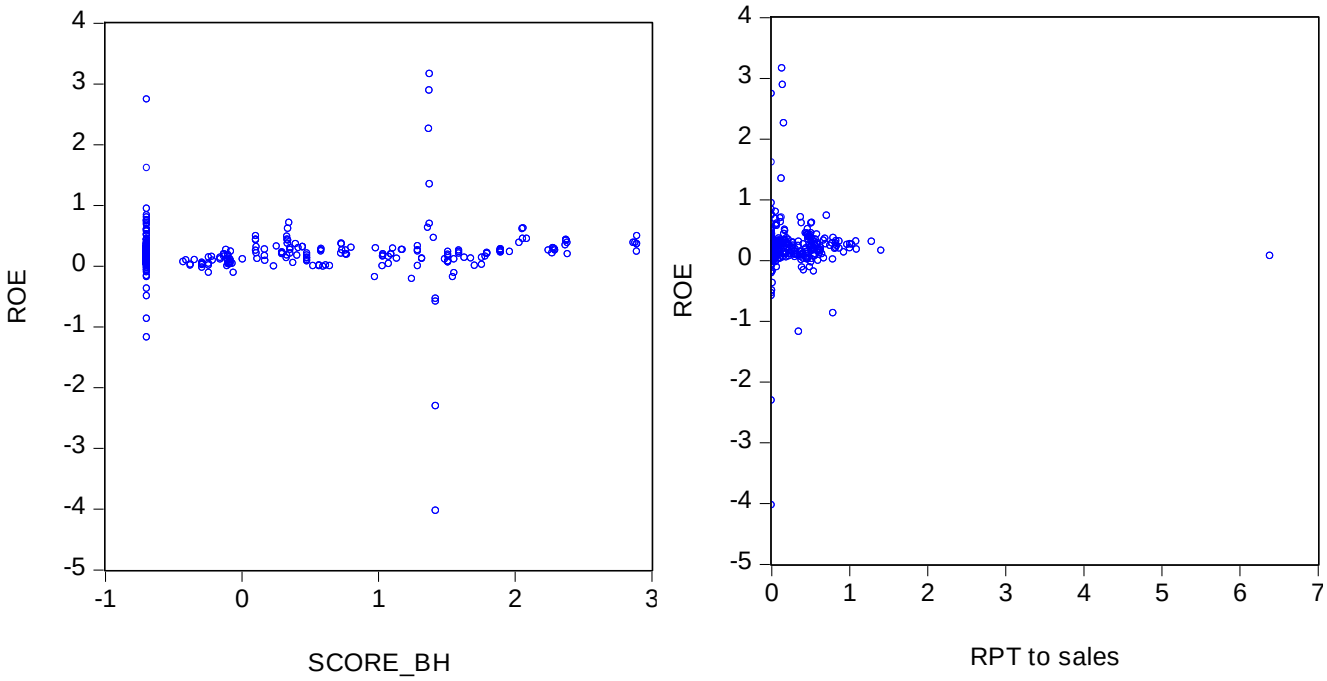


Chart 5: Scatter diagram between BH Score & ROEChart 6: Scatter Diagram between RPT to sales & ROE

Chart 5 shows scatter plot diagram between Score BH and ROE. Firms without blockholding have ROE ranging from -100% to +275% with concentration between -10% to 80%. Firms with blockholding have concentration of ROE from -10% to 60%. Firms with Blockholdings are less supposed to be in negative ROE.

Chart 6 depicts scatter plot diagram between RPT to sales and ROE. Concentration of RPT values is between 0 and 2 while ROE is between 0 and 50%.

Chart 7 portrays scatter plot between CS and ROE. CS value concentration is between 0 and 1 while ROE is concentrated between -10% to 60%.

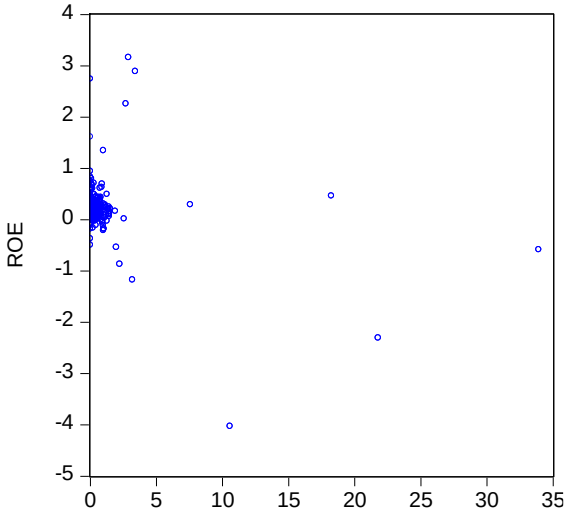


Chart 7: Scatter diagram between CS & ROE

4. RESULTS

4.1 Factor Analysis

4.1.1 Group Affiliation Score

Factor analysis is used to generate factor score of group affiliation. Group affiliation factor is composed of following variables:

	GA_GA	GA_SHRHLDNG	GA_CHRMN	GA_DR	GA_FRGN
GA_GA	1				
GA_SHRHLDNG	0.8598	1			
GA_CHRMN	0.8343	0.7451	1		
GA_DR	0.9280	0.8291	0.8202	1	
GA_FRGN	0.3311	0.4926	0.2521	0.2932	1

Table 8: Correlation between variables making Group Affiliation Score

GA_GA is dummy variable that depicts group affiliation (0 being independent and 1 being affiliated). So, it has correlation with other group affiliation variables. Shareholding is group holding shareholding as a percentage of total shareholding. Group Chairman Variable is also dummy variable (0 being chairman not from group and 1 being chairman from group). Director variable shows percentage of directors from parent group in the BOD of the affiliated firm. This includes all chains of control & shareholding as well individual and associate undertakings' shareholding. Foreign is dummy variable to depict group is local group or a foreign group.
Since BOD chairmanship and directorship is allocated on the basis of shareholding, there is correlation in the values.

	GA_GA	GA_SHRHLDNG	GA_CHRMN	GA_DR	GA_FRGN
Mean	0.753659	0.450322	0.680488	0.552009	0.251220
Median	1.000000	0.510000	1.000000	0.714286	0.000000
Maximum	1.000000	0.976500	1.000000	1.000000	1.000000
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000
Std. Dev.	0.431406	0.299778	0.466857	0.340488	0.434244
Skewness	-1.177398	-0.337300	-0.774148	-0.747740	1.147209
Kurtosis	2.386267	1.972194	1.599305	2.004842	2.316087
Jarque-Bera	101.1630	25.82097	74.46909	55.12451	97.92314
Probability	0.000000	0.000002	0.000000	0.000000	0.000000
Sum	309.0000	184.6322	279.0000	226.3237	103.0000
Sum Sq. Dev.	76.11951	36.75555	89.14390	47.41636	77.12439
Observations	410	410	410	410	410

Table 9: Descriptive Stats for Variables making Group Affiliation Score

The mean for group affiliation variable is 0.75 while median is 1. This means almost 75% of the sample is group affiliated firms. Since the sample composed of non-financial sectors of KSE-100 share index which makes up more than fifty percent of market capitalization, this means that PSX is dominated by group affiliated firms. This signifies the importance of the study and need to regulate the corporate governance in light of group dynamics in Pakistan.

The mean for group shareholding is 45% while median is 51% with standard deviation of 30%. Interestingly, the maximum value of group shareholding is 97.6%. This also signifies the hold of business groups in Pakistani economy.

The mean for Group chairman is 0.68 while median is 1. This signifies that most of the group affiliated firms have chairman from group. Since chairman of the board is most important element of governance structure, this observation shows the extent of Prinipal-Principal conflict in heart of Pakistani firms. Pakistani regulatory authorities must draw their attention to address these structural issues in group firms.

The mean for group director is 55% and median is 71%. Maximum value is 1 which shows all of the directors are from group. This observation again reinforces the extent of problem at the heart of corporate governance structures in group affiliated listed firms in Pakistan.

Foreign variable is dummy variable that shows whether a firm is affiliated with foreign group or multinational firm. Mean value is 0.25 which shows that there are many foreign controlled listed firms in Pakistan. These firms also have potential for principal-principal conflict that must be addressed by regulators in corporate governance code.

4.1.2 Corporate Governance Score

In order to determine the effectiveness of corporate governance structure in a firm, this study has generated a factor score based upon CG variables. This factor score depicts the CG effectiveness in a given firm. The score is composed of Bod Size, CEO Duality, Board Independence, Board Execution and presence of a professional CEO. Presence of a professional CEO is very effective in many family businesses and groups and for the purpose of this study, it is added in the factor.

	CG_BOD_SIZE	**CG_CEO_DUALITY**	**CG_INDE**	**CG_NED**	**CG_PROF_CEO**
CG_BOD_SIZE	1				
CG_CEO_DUALITY	-0.2030	1			
CG_INDE	-0.0438	0.0278	1		
CG_NED	0.2074	-0.2012	-0.6351	1	
CG_PROF_CEO	s0.0167	-0.1246	0.1070	0.12680	1

Table 10: Correlation between variables making Corporate Governance Score

The variables are not mutually correlated. The only significant correlation is relationship between board independence and presence of NEDs which is negative. One possible explanation is that CG code implementation is a recent phenomenon in Pakistan which has made it mandatory for listed firms to have independent directors and these independent directors are included in the boards of most firms at the expense of NEDs.

The descriptive stats of these variables are summarized in table 4.

	CG_BOD_SIZE	CG_CEO_DUALITY	CG_INDE	CG_NED	CG_PROF_CEO
Mean	8.616137	0.092910	0.200822	0.562114	0.484108
Median	8.000000	0.000000	0.142857	0.571429	0.000000
Maximum	21.00000	1.000000	0.600000	0.857143	1.000000
Minimum	6.000000	0.000000	0.000000	0.142857	0.000000
Std. Dev.	2.052458	0.290661	0.115078	0.147306	0.500359
Skewness	2.088776	2.804565	0.837944	-0.240718	0.063602
Kurtosis	9.901499	8.865584	3.525550	3.151945	1.004045
Jarque-Bera	1109.116	1122.490	52.57022	4.343374	68.16695
Probability	0.000000	0.000000	0.000000	0.113985	0.000000
Sum	3524.000	38.00000	82.13611	229.9048	198.0000
Sum Sq. Dev.	1718.733	34.46944	5.403111	8.853189	102.1467
Observations	409	409	409	409	409

Table 11: Descriptive Stats for the Variables that make Corporate Governance Score

The mean value for BOD size is 8.6 while median value is 8 with standard deviation of 2.05. Maximum value is 21 and minimum of 6. So, most of firms have BOD size in range of 6 to 9 with a few exceptions of larger boards due to block holding.

The mean value for CEO duality is 0.0929 which signifies that most of the companies in the sample have segregated the posts of chairman and CEO. This is a positive development since last few years.

Mean value for board independence is 20% which median is 14% with standard deviation of 14.7%. Minimum value is zero while maximum is 60%. The observation suggests that Pakistani firms are standing at a low level of board independence.

Mean value for professional CEO is 0.48 while median is 0. This shows that most of the firms are not professionally managed. This is due to the fact that most of family groups prefer to have CEO employment from within the family. This may have reduce some agency problems but it adds to the principal-principal potential. Non-professional CEOs are not just limited to family business groups. Fauji Group with many affiliates have serving armed forces personnels leading the firms. This creates a potential for a very different kind of conflict where CEO of a business

comes from a military background and may take decisions which are not most suitable for commercial and business purpose.

4.1.3 Block Holder Score

In order to determine the effectiveness of strategic block holding stakeholders, this research has factored in number of variables and applied factor analysis to generate a score that may be used to moderate the relationship between group affiliation and financial performance. The very first variable of this factor is number of block holders which shows how many block holders are in the firm. Second variable is block holder's shareholding as a percentage of total shareholding in the firm. Third variable is whether the chairman of the board is from block holding which is a dummy variable. Forth variable is percentage of directors in board from block holder's group. Lastly, representation of non-shareholder director in board of a firm. Factor score is constructed with these variables to determine how effective presence of block holders in a firm's board.

	BH_BH	BH_SHRHLDNG	BH_CHRMN	BH_DIR	BH_NONSHRHLDR_DIR_
BH_BH	1				
BH_SHRHLDNG	0.775	1			
BH_CHRMN	0.242	0.392	1		
BH_DIR	0.578	0.728	0.474	1	
BH_NONSHRHLDR_DIR_	0.153	0.0174	0.1035	0.0841	1

Table 12: Correlation between variables that make Block Holding Score

Table 5 shows correlation of variables that make block holder score factor. The only correlation that is significant enough is between block holding shareholding and director which is due to the fact that board seats are allocated on the basis of shareholding.

	BH	BH_SHRHLDNG	BH_CHRMN	BH_DIRECTORS	BH_DIR_NONSHRHLDR
Mean	0.500000	0.075662	0.080488	0.059801	0.007936
Median	0.000000	0.000000	0.000000	0.000000	0.000000
Maximum	2.000000	0.387800	1.000000	0.545796	0.384487
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000
Std. Dev.	0.610623	0.111768	0.272379	0.113716	0.042306
Skewness	0.806396	1.316438	3.084117	2.056538	6.330422
Kurtosis	2.655469	3.479152	10.51178	6.923204	46.60052
Jarque-Bera	46.46326	122.3443	1613.929	551.9441	35213.91
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	205.0000	31.02137	33.00000	24.51836	3.253887
Sum Sq. Dev.	152.5000	5.109230	30.34390	5.288898	0.732029
Observations	410	410	410	410	410

Table 13: Descriptive stats for variable that make Block Holding Score

Table 6 shows descriptive stats for underling variables of block holding factor score. Mean value of block holders is 0.5 and median is 0. Mean value of block holding shareholding is 7.5% with maximum value of 38%. Chairman from block holding has mean value of 0.08, mean value for directors from block holders is 5.91% while directors from non-shareholders' stakeholders is .7%. According to these stats 42% of total sample companies have blockholders with average blockholding of 17% controlling 20% of board seats. Out of these firms, a very small minority have chairman from block holders.

4.2 Descriptive Stats

The table below gives descriptive stats used in the study.

	Dependent Variables		Independent Variables				
	ROE	ROA	CS	RPT_TO_SALES	SCORE_BH	SCORE_CG	SCORE_GA
Mean	0.205376	0.096459	0.549775	0.205722	2.79E-16	4.39E-16	1.77E-16
Median	0.185639	0.096382	0.156760	0.056179	-0.692192	0.063308	0.502029
Maximum	3.159689	0.679582	33.92952	6.387494	2.896720	2.005284	0.844046
Minimum	-4.030220	-0.703513	0.000000	0.000000	-0.692192	-2.849655	-1.709677
Std. Dev.	0.413770	0.100061	2.287826	0.405607	0.977398	1.001225	0.987849
Skewness	-0.723837	-0.670195	10.98706	9.151485	1.235614	-0.240718	-1.114752
Kurtosis	46.99625	15.92241	139.1947	134.4372	3.326700	3.151945	2.332049
Jarque-Bera	33103.51	2883.414	325127.4	297915.1	106.1507	4.343374	92.53784
= Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.113985	0.000000
Sum	84.20418	39.54834	225.4078	83.52320	9.97E-14	1.92E-13	9.35E-14
Sum Sq. Dev.	70.02294	4.095009	2140.766	66.62950	390.7206	409.0000	399.1210
Observations	410	410	410	406	410	409	410

Table 14: Descriptive stats of main variables in model

The mean ROE for period 2014 to 2019 is 20.5% while the median ROE is 18.5%. The highest ROE achieved by any firm in the six year period is 315% while minimum is -403%. The standard deviation is 41.3% while skewness is -0.723. The values of ROE are normally distributed with a slight negative skewness.

The mean ROA for the period is 9.6% which is almost as the median with standard deviation is 10%. Maximum ROA attained by any firm is 67.9% while minimum is -70.3%. The distribution is slightly negatively skewed while kurtosis is lighter than ROE.

The mean value for capital structure for the period is 0.54 i.e. debt of a firm at mean is half the equity, which shows that average Pakistani listed firm is financially sound. However, median value is 0.15 which is considerably less than mean value. This reflects that typical firms use less leverage than arithmetic mean. The standard deviation of 2.28 shows some firms use too much leverage which is also reflected in skewness of 10.98 and kurtosis of 139.19.

The mean value of RPT to Sales is 20.5% while median value is 5.6% with standard deviation of 9.77%. Maximum value of RPT is 638% of sales while minimum value is 0%.
The mean value of Score_BH is 0 while median value is -0.69 with standard deviation of 0.97. The maximum value is of 2.86 and minimum value is of -0.69 which is also mean value.

The mean value of Score_CG is 0 while median value is 0.06 with standard deviation of 1. Maximaum value is 2 and minimum value of -0.69.

The mean value of Score_GA is 0 while median value is 0.5 with standard deviation of 0.98. Maximum value s 0.84 with minimum value is -1.7.

SCRIPT	ROE	ROA	Score_GA	Score_CG	Score_BH	RPT_TO_SALES	CS
ABOT	23%	18%	0.93	0.40	0.00	0.22	0.02
AGIL	13%	11%	0.88	0.77	0.00	0.34	0.01
AGP	19%	14%	0.00	0.60	0.41	0.85	0.15
ANL	-112%	-5%	0.00	0.08	0.57	0.00	15.69
APL	28%	12%	0.96	0.69	0.00	0.69	0.04
ARPL	30%	16%	0.94	0.57	0.00	0.15	0.04
ATLH	26%	20%	0.84	0.50	0.83	0.23	0.08
ATRL	3%	1%	0.94	1.00	0.00	0.41	0.30
BNWM	5%	4%	0.87	0.74	0.17	0.00	0.11
BYCO	-12%	0%	0.00	0.80	0.00	0.20	1.77
CHCC	19%	11%	0.84	0.76	0.18	0.10	0.69
COLG	25%	24%	0.87	0.60	0.72	0.07	0.03
DAWH	21%	17%	0.92	0.63	0.00	0.01	0.15
DGKC	10%	7%	0.87	0.60	0.00	0.01	0.25
EFERT	31%	11%	0.87	0.51	0.00	0.02	0.87
ENGRO	26%	25%	0.79	0.28	0.00	1.57	0.00
EPCL	9%	4%	0.85	0.67	0.46	0.25	1.07
FATIMA	21%	10%	0.75	0.68	0.66	0.04	0.38
FCCL	19%	12%	0.90	0.72	0.00	0.01	0.35
FCEPL	6%	4%	0.91	0.69	0.08	0.03	0.41
FFBL	0%	2%	0.92	0.71	0.00	0.61	1.33
FFC	50%	14%	0.82	0.67	0.29	0.30	0.53
SCRIPT	ROE	ROA	Score_GA	Score_CG	Score_BH	RPT_TO_SALES	CS
FML	25%	17%	0.00	0.83	0.51	0.10	0.06
GATM	15%	10%	0.00	0.10	0.00	0.03	0.53
GHGL	19%	13%	0.92	0.62	0.28	0.05	0.13
GLAXO	19%	13%	0.97	0.57	0.00	0.36	0.06
GSKCH	29%	15%	0.94	0.40	0.00	0.97	0.03
HASCOL	12%	2%	0.00	0.68	0.35	0.18	0.34
HCAR	46%	15%	0.77	0.59	0.76	0.50	0.03
HINOON	27%	19%	0.00	0.65	0.24	0.06	0.20
HUBC	35%	7%	0.82	0.70	0.22	0.00	0.58
IBFL	7%	5%	0.00	0.50	0.00	0.00	0.26
ICI	16%	8%	0.93	0.50	0.00	0.06	0.37
IDYM	8%	5%	0.00	0.69	0.00	0.00	0.17
ILP	36%	12%	0.00	0.49	0.00	0.02	0.40
INDU	36%	19%	0.87	0.66	0.86	0.51	0.00
INIL	15%	6%	0.84	0.45	0.19	0.56	0.17
ISL	21%	7%	0.83	0.42	0.45	0.71	0.73

JDWS	14%	3%	0.00	0.40	0.00	0.03	1.35
KEL	13%	5%	0.91	0.98	0.61	0.00	0.43
KOHC	25%	17%	0.94	0.58	0.00	0.00	0.19
KTML	14%	9%	0.96	0.41	0.00	0.00	0.09
LOTCHEM	10%	6%	0.95	0.43	0.00	0.00	0.01
LUCK	17%	14%	0.91	0.81	0.00	0.03	0.10
MARI	37%	9%	0.79	0.97	1.00	0.00	0.47
MLCF	16%	9%	0.92	0.68	0.05	0.07	0.47
MTL	62%	27%	0.00	0.65	0.00	0.06	0.01
MUREB	13%	11%	0.00	0.57	0.56	0.01	0.04
NATF	30%	13%	0.00	0.70	0.32	0.08	0.07
NCL	13%	5%	0.90	0.72	0.33	0.04	0.32
NESTLE	183%	18%	0.78	0.54	0.58	0.14	1.98
NML	6%	5%	0.91	0.60	0.00	0.03	0.08
PAEL	6%	3%	0.81	0.38	0.09	0.41	0.36
PAKT	66%	30%	0.98	0.47	0.00	0.08	0.11
PIBTL	-6%	-3%	0.87	0.37	0.51	0.00	0.56
PIOC	20%	13%	0.80	0.52	0.00	0.00	0.56
PKGS	7%	6%	0.91	0.64	0.17	0.23	0.07
PMPK	-16%	-3%	0.95	0.40	0.00	0.03	0.00
POL	33%	18%	0.87	0.50	0.00	0.42	0.48
PSEL	2%	2%	0.97	0.53	0.11	0.03	0.18
PSMC	8%	6%	0.94	0.53	0.03	0.44	0.00
SEARL	25%	16%	0.86	0.59	0.00	0.96	0.08
SCRIPT	ROE	ROA	Score_GA	Score_CG	Score_BH	RPT_TO_SALES	CS
SHEL	23%	5%	0.95	0.54	0.00	0.50	0.18
SHFA	15%	8%	0.00	0.49	0.05	0.01	0.37
SPWL	26%	12%	0.93	0.99	0.00	0.00	0.52
SRVI	22%	7%	0.00	0.34	0.50	0.00	0.47
SYS	21%	17%	0.00	0.19	0.03	0.59	0.01
THALL	19%	16%	0.90	0.80	0.00	0.53	0.00
TRG	0%	0%	0.00	0.34	0.34	0.00	0.12
UNITY	6%	3%	0.00	0.70	0.00	0.33	0.00
YOUW	103%	-25%	0.94	0.73	0.00	0.00	0.00
Grand	21%	10%	0.67	0.59	0.19	0.21	0.55

Table 15: Companywise Means of variables for the period (Factor scores normalized)

Table 15 shows company wisemean variable values, with factorscores normalized so that they be comparable. Normalization is a scaling technique in which scores are rescaled on range between 0 and 1. The scaling of factors core makes the score comparable to other variables. In this study, the scale of factor scores is 0 being least and 1 being maximum value of that factor. This is also called min-max scaling, For example, a high normalized factor score in group affiliation means that the firm has high level of group influence in its board with high group shareholding and more directors from group and/or chairman from the group. Resultantly, the company would be heavily influenced by parent group in decision making. Normalized group affiliation factor score 0 means company is not affiliated with any group. While, a low GA score means company has low control over firm. Similarly, a high normalized factor score in corporate governance means company has a good governance structure in place with independent and non-executive directors and professional CEO. On the other hand, a low corporate governance score means that governance structure of company is weak. A high normalized factor score of block holding

means there is an effective strategic block holder present in firm with high equity ownership along with directorship seats and chairman of the board that gives an effective check on parent group and management of the company. BH score of 0 means there is no strategic block holder in the firm while a low score means block holder is not effective in the board.
Normalization of factor scores is done by dividing difference of maximum score in data and individual company factor score by total difference between max and min score. The formula for calculating normalized score:

$$\mathbf{Y = (X — X\ min)/ (X\ max — X\ min)}$$

Here, Y is the normalized value; Xmax and Xmin are the maximum and minimum values of the factor score respectively. The Y will give us scale value between 0 and 1 with 0 being minimum and 1 being maximu,

The mean ROE for the period for the group affiliated firms is 24% and for unaffiliated firms is 11%. It ranges from -16% to 183% for affiliated firms and from -112% to 62% for unaffiliated firms.

The mean ROA for the period for the group affiliated firms is 10% and for unaffiliated firms is 9%. It ranges from -25% to 30% for affiliated firms and from -5% to 27% for unaffiliated firms.
The mean Score_CG for the period for the group affiliated firms is 0.61 and for unaffiliated firms is 0.52. It ranges from 0.28 to 1 for affiliated firms and from 0.08 to 0.83 for unaffiliated firms.

50% of affiliated firms have blockholding with mean value of 0.39 with range from 0.03 to 1.0 while almost 50% of unaffiliated firms have blockholding with mean BH value of 0.35 with range from 0.03 to 0.51.

The mean CS for the period for the group affiliated firms is 0.31 and for unaffiliated firms is 0.35 (excluding the outlier). It ranges from 0 to 1.98 for affiliated firms and from 0.0 to 15.69 for unaffiliated firms.

The mean RPT for the period for the group affiliated firms is 24% and for unaffiliated firms is 13. It ranges from 0 to 157% for affiliated firms and from 0% to 85% for unaffiliated firms.

Correlation among variables

	ROE	ROA	CS	RPT_TO_SALES	SCORE_BH	SCORE_CG	SCORE_GA
ROE	1						
ROA	0.26	1					
CS	-0.28	-0.16	1				
RPT_TO_SALES	0.01	0.09	-0.06	1			
SCORE_BH	0.05	0.07	0.15	-0.05	1		
SCORE_CG	0.17	-0.00	-0.25	-0.08	0.10	1	
SCORE_GA	0.13	0.05	-0.19	0.13	-0.12	0.25	1

Table 16: Correlation between main variables in the model

The table depicts correlation between variables used in the model. One of the key assumptions of multiple linear regression is that independent variables must not be highly correlated to each other. This is because one of the main goals of regression analysis is to find out relationship between independent variables and dependent variable by isolating each and every relationship. If two independent variables are highly correlated to each other, this will create multicollinearity in the model. Multicollinearity is a problem that arises when one independent variable cannot be held constant while changing the value of other independent variable. So, the results of regression get hard to interpret. Multicollinearity reduces the accuracy of the results and make the estimates of the model less reliable.

The correlation between variables of basic model i.e. group affiliation score (Score GA), corporate governance (Score CG), Block Holder score (Score BH), Capital Structure (CS) and Related Party Transactions (RPT) is equals to or less than 0.25 which depicts that there is no correlation between them.

4.3 Regression Results

4.3.1 Hypotheses 1: Underlying Variables of Group Affiliation Factor have significant effect on Financial Performance

The following table summarizes the econometric estimation results of MLA

Independent Variable		Dependent Variable: Financial Performance	
		ROE	ROA
C	Coefficient	0.8569	-0.0081
	t-Statistic	3.8115	-0.1447
	Prob.	0.0002	0.8850
REV	Coefficient	0.0000	0.0000
	t-Statistic	2.9192	-3.3969
	Prob.	0.0037	0.0007
LNASSETS	Coefficient	-0.0844	0.0114
	t-Statistic	-3.4970	1.9060
	Prob.	0.0005	0.0574
GA_GA	Coefficient	0.7777	0.0817
	t-Statistic	5.3259	2.2491
	Prob.	0.0000	0.0250
GA_CHRMN	Coefficient	-0.3470	-0.0356
	t-Statistic	-4.4815	-1.8489
	Prob.	0.0000	0.0652
GA_DR	Coefficient	-0.3555	-0.0419
	t-Statistic	-2.1909	-1.0382
	Prob.	0.0290	0.2998

GA_SHRHLDNG	Coefficient	-0.0504	0.0632
	t-Statistic	-0.3508	4.2947
	Prob.	0.7259	0.0000
GA_FRGN	Coefficient	0.0265	-0.0492
	t-Statistic	0.4485	-1.3762
	Prob.	0.6540	0.1695
R-squared		0.123988	0.073484
Adjusted R-squared		0.108734	0.05735
F-statistic		8.128272	4.554753
Prob(F-statistic)		0	0.000066
Durbin-Watson stat		0.831372	0.831372

Table 17: Effect of underlying variables of Group Affiliation Score on Financial Performance (Summary results of estimation equation of hypothesis number 1)

The results show that group affiliation has significant positive relationship with ROE. However, group chairman and group directors has negative significant relationship with ROE. This shows that even though the relationship between GA and ROE is significantly positive, companies with group chairman and group director dominating in BOD has negative relationship with ROE. This result is consistent with the theoretical principal-principal conflict as group chairman lead the BOD discussion towards group interest rather than company's own benefits and minority shareholders' interest. One thing to note in this result that business group's percentage shareholding has no relationship with ROE. This means that group's shareholding may be small or large, it doesn't matter. What matters is the company's affiliation with the group. Total revenue of firm is significantly positive on ROE while ln of assets has significant negative effect on it.

The results show that group affiliation and shareholding has significant positive relationship with ROA. Group chairman has significant negative relationship with ROA. Presence of Group directors on BOD has negative insignificant relationship with ROA. Being a foreign company has a significant positive impact on ROE. Revenue is negative significant effect on ROA while ln of assets has no significan effect on ROA.

4.3.2 Hypothesis no 2: Underlying Factors of Corporate Governance Score have effect on Financial Performance

Independent Variable		**Dependent Variable: Financial Performance**	
		ROE	**ROA**
C	Coefficient	0.3124	0.0673
	t-Statistic	1.2705	1.1372
	Prob.	0.2046	0.2561
REV	Coefficient	0.0000	0.0000
	t-Statistic	1.3674	-3.3030

	Prob.	0.1722	0.0010
LNASSETS	Coefficient	-0.0642	0.0090
	t-Statistic	-2.7707	1.6252
	Prob.	0.0059	0.1049
CG_BOD_SIZE	Coefficient	0.0207	-0.0002
	t-Statistic	1.9217	-0.1101
	Prob.	0.0553	0.9124
CG_CEO_DUALITY	Coefficient	0.0632	-0.0262
	t-Statistic	0.8808	-1.5184
	Prob.	0.3789	0.1297
CG_INDE	Coefficient	0.0697	-0.1292
	t-Statistic	0.2943	-2.2646
	Prob.	0.7686	0.0241
CG_NED	Coefficient	0.4584	-0.0733
	t-Statistic	2.4124	-1.6017
	Prob.	0.0163	0.1100
CG_PROF_CEO	Coefficient	0.1175	0.0557
	t-Statistic	2.6219	5.1672
	Prob.	0.0091	0.0000
R-squared		0.0726	0.0807
Adjusted R-squared		0.0564	0.0647
F-statistic		4.4864	5.0301
Prob(F-statistic)		0.0001	0.0000
Durbin-Watson stat		0.7844	0.7584

Table 18: Effect of underlying variables of Corporate Governance Score on Financial Performance (Summary results of estimation equation of hypothesis number 2)

The results demonstrate that the factors of corporate governance that have significant relationship with ROE are professional CEO and non-executive directors. CEO duality and Independent directors have no relationship with ROE. BOD size has an insignificant positive impact on ROE. This result has lot of implications for the researchers and policy makers as almost all of the corporate governance codes and discussions revolve around board independence. Ln of assets has significant negative effect on ROE while revenue has no significant effect on ROA.

The results depict that only CG factor that has significant positive relationship with ROA is professional CEO. Independent director has significant negative relationship with ROA. Non-executive directors has negative but insignificant relationship with ROA. This result has strong implications for investors, regulators and researchers. This may because NEDs and independent directors are often ignorant of business dynamics and may lead to less efficient economic utilization of assets. Also, an outside professional CEO has strong incentive to work for the company and put individual firm's interest over group interests. Revenue has negative significant effect on ROA and ln of assets has no significant effect on it.

4.3.3 Hypothesis no 3: Factors of Block Holding have significant effect on Financial Performance

Independent Variable		Dependent Variable: Financial Performance	
		ROE	**ROA**
C	**Coefficient**	0.5815	0.0101
	t-Stats	2.6608	0.1927
	Prob.	0.0081	0.8473
REV	**Coefficient**	0.0000	0.0000
	t-Stats	2.1854	-3.4415
	Prob.	0.0294	0.0006
LNASSETS	**Coefficient**	-0.0423	0.0109
	t-Stats	-1.8679	2.0110
	Prob.	0.0625	0.0450
BH_BH	**Coefficient**	-0.0250	-0.0659
	t-Stats	-0.4588	-5.0360
	Prob.	0.6467	0.0000
BH_CHRMN	**Coefficient**	0.3622	0.0341
	t-Stats	4.3232	1.6973
	Prob.	0.0000	0.0904
BH_DIR	**Coefficient**	0.4706	0.1333
	t-Stats	1.7602	2.0757
	Prob.	0.0791	0.0386
BH_NONSHRHLDR_DIR_	**Coefficient**	-0.3471	-0.1232
	t-Stats	-0.7079	-1.0465
	Prob.	0.4794	0.2959
BH_SHRHLDNG	**Coefficient**	-0.4780	0.2163
	t-Stats	-1.3753	2.5918
	Prob.	0.1698	0.0099
R-squared		0.090403	0.102989
Adjusted R-squared		0.074564	0.087369
F-statistic		5.707715	6.593575
Prob(F-statistic)		0.000003	0
Durbin-Watson stat		0.808588	0.775377

Table 19: Effect of underlying variables of Block Holding Score on Financial Performance (Summary results of estimation equation of hypothesis number 3)

The result shows that the only factor of block holder matrix that has positive significant relationship with block holders chairman. Having presence of block holder director on board has positive impact on ROE but not significant. One astonishing result is block holder's shareholding has negative significant relationship with ROE. This question has many interesting aspects for

future researchers. Revenue and ln of assets both have significant positive effect on ROE. Revenue and ln of assets both have positive significant effect on ROE.

The result shows that having block director on board has positive but not significant relationship with ROA. Block holder's chairman has positive significant relationship with ROA. Having block holder's shareholding has negative but insignificant relationship with ROA. Having block holder's directors on board has negative significant relationship with ROA. These findings open a new avenue for researchers to study role of block holders in corporate governance. Revenue has negative significant effect on ROA while ln of assets has no significant effect on ROA.

4.3.4 Hypothesis no 4: Capital Structure has significant effect on Financial Performance

Independent - +Variable		Dependent Variable: Financial Performance	
		ROE	ROA
C	Coefficient	0.6078	0.0179
	t-Stats	2.8497	0.3355
	Prob.	0.0046	0.7374
REV	Coefficient	0.0000	0.0000
	t-Stats	2.8111	-1.9000
	Prob.	0.0052	0.0581
LNASSETS	Coefficient	-0.0426	0.0091
	t-Stats	-1.9372	1.6539
	Prob.	0.0534	0.0989
CS	Coefficient	-0.0489	-0.0073
	t-Stats	-5.7166	-3.4260
	Prob.	0.0000	0.0007
R-squared		0.0955	0.0357
Adjusted R-squared		0.0888	0.0286
F-statistic		14.2846	5.0081
Prob (F-statistic)		0.0000	0.0020
Durbin-Watson stat		0.8355	0.7307

Table 20: Effect of Capital Structure on Financial Performance (Summary results of estimation equation of hypothesis number 4)

The result shows that Capital Structure (CS) has significant negative effect on ROE and ROA. This result is consistent with theory as leverage creates volatility in earnings and make the firm vulnerable to external shocks. Revenue and ln of assets both have no significant effect on both ROE and ROA.

4.3.5 Hypotheses no 5: Related Party Transactions have significant effect on Financial Performance

Independent Variable		Dependent Variable: Financial Performance	
		ROE	ROA
C	Coefficient	0.6676	0.0189
	t-Statistic	2.9815	0.3493
	Prob	0.0030	0.7270
REV	Coefficient	0.0000	0.0000
	t-Statistic	2.9371	-2.0054
	Prob	0.0035	0.0456
LNASSETS	Coefficient	-0.0514	0.0082
	t-Statistic	-2.2331	1.4881
	Prob	0.0261	0.1375
RPT_TO_SALES	Coefficient	-0.0086	0.0239
	t-Statistic	-0.1698	1.9558
	Prob	0.8653	0.0512
R-squared		0.0222	0.0180
Adjusted R-squared		0.0149	0.0106
F-statistic		3.0446	2.4531
Prob(F-statistic)		0.0287	0.0629
Durbin-Watson stat		0.7495	0.7316

Table 21: Effect of Related Party Transactions on Financial Performance (Summary results of estimation equation of hypothesis number 5)

According to the table, RPTs have no effect on ROE while it has positive effect on ROA but not significant. Revenue has positive significant and ln of assets have negative significant effect on ROE while they have no significant effect on ROA. This result is inconsistent with theory as many studies have linked RPTs with appropriations of parent group in firm's assets (Azim, Mustapha and Zaini 2018).

4.3.6 Hypotheses no 6: Group Affiliation has significant positive effect on Financial Performance

Independent Variable		**Dependent Variable: Financial Performance**	
		ROE	**ROA**
C	Coefficient	0.8244	0.0339
	t-Statistic	3.6411	0.6092

	Prob.	0.0003	0.5427
SCORE_GA	Coefficient	0.0626	0.0033
	t-Statistic	2.9667	0.6358
	Prob.	0.0032	0.5252
REV	Coefficient	0.0000	0.0000
	t-Statistic	3.1313	-1.6746
	Prob.	0.0019	0.0948
LNASSETS	Coefficient	-0.0675	0.0070
	t-Statistic	-2.8957	1.2222
	Prob.	0.0040	0.2223
R-squared		0.0434	0.0088
Adjusted R-squared		0.0363	0.0015
F-statistic		6.1403	1.2005
Prob(F-statistic)		0.0004	0.3093
Durbin-Watson stat		0.7657	0.6981

Table 22: Effect of Group Affiliation Score on Financial Performance (Summary results of estimation equation of hypothesis number 6)

In order to check the effect of group affiliation on ROE, control variables of revenue and log of assets has been used. This is because traditional studies of ROE suggest that ROE is effected by size of the firm. So, size of firm is used as control variable. The probability of the GA variable is less than 0.01 which shows that there is very small probability of null hypothesis being true. Thus, we accept alternate hypothesis and conclude that group affiliation has significant positive impact on financial performance. This is in line with various studies conducted globally and in Pakistan. Revenue has positive significant effect on ROE while ln of assets have negative significant effect on it.

However, when ROA is used a measure of financial performance, the result of this study in inconclusive. With the data of the period for the given sample, group affiliation has no significant relationship with ROA.

4.3.7 Hypothesis no 7: Corporate Governance has significant moderating effect on relationship between Group Affiliation and Financial Performance

Independent Variable		**Dependent Variable: Financial Performance**	
		ROE	**ROA**
		Coefficient	**Coefficient**
C	**Coefficient**	0.8513	0.0347
	t-Statistic	3.8177	0.6253
	Prob.	0.0002	0.5321

REV	**Coefficient**	0.0000	0.0000
	t-Statistic	2.6994	-1.7000
	Prob.	0.0072	0.0899
LNASSETS	**Coefficient**	-0.0681	0.0072
	t-Statistic	-2.9656	1.2666
	Prob.	0.0032	0.2060
SCORE_GA	**Coefficient**	0.0418	0.0008
	t-Statistic	1.9336	0.1524
	Prob.	0.0539	0.8789
SCORE_GA*SCORE_CG	**Coefficient**	-0.0535	-0.0123
	t-Statistic	-2.8845	-2.6724
	Prob.	0.0041	0.0078
SCORE_CG	**Coefficient**	0.0419	-0.0025
	t-Statistic	1.9549	-0.4866
	Prob.	0.0513	0.6267
R-squared		0.0807	0.0261
Adjusted R-squared		0.0693	0.0141
F-statistic		7.0753	2.1634
Prob(F-statistic)		0.0000	0.0574
Durbin-Watson stat		0.7843	0.7138

Table 23: Moderating effect of CG Score on relationship between GA and financial performance (Summary results of estimation equation of hypothesis number 7)

The results show that CG Score has negative significant moderating effect on the relationship between GA and ROE. This is in line with theoretical framework i.e. if a company has strong corporate governance structure that puts individual firm's interest over group interests, this will weaken group affiliation's effect on ROE. This result has strong implications for investors, regulators and researchers.

The results show that CG Score significantly weakens the relationship between Group affiliation and ROA. This result is similar to result of ROE and consistent with the theoretical model that if a company's governance structure is geared towards looking after individual firm's interest, the business group will not able to extract benefit from it and minority shareholders' interests will be better protected.

4.3.8 Hypothesis no 8: Block Holding has a significant moderating effect on relationship between Group Affiliation and Financial Performance

Independent Variable		**Dependent Variable: Financial Performance**	
		ROE	**ROA**
C	Coefficient	0.9294	0.0489
	t-Statistic	4.1274	0.8721

	Prob.	0.0000	0.3837
REV	Coefficient	0.0000	0.0000
	t-Statistic	2.9891	-1.8061
	Prob.	0.0030	0.0716
LNASSETS	Coefficient	-0.0767	0.0057
	t-Statistic	-3.3140	0.9881
	Prob.	0.0010	0.3237
SCORE_GA	Coefficient	0.0706	0.0047
	t-Statistic	3.3539	0.8981
	Prob.	0.0009	0.3697
SCORE_GA*SCORE_BH	Coefficient	0.0840	0.0090
	t-Statistic	3.5495	1.5195
	Prob.	0.0004	0.1294
SCORE_BH	Coefficient	0.0230	0.0064
	t-Statistic	1.1142	1.2504
	Prob.	0.2659	0.2119
R-squared		0.0755	0.0184
Adjusted R-squared		0.0640	0.0063
F-statistic		6.5957	1.5145
Prob(F-statistic)		0.0000	0.1841
Durbin-Watson stat		0.7940	0.7079

Table 24: Moderating effect of BH Score on relationship between GA and financial performance (Summary results of estimation equation of hypothesis number 8)

The result shows that block holders' presence and effectiveness increase the effect of group affiliation on ROE. This is a great insight for investors and regulators.

The result depicts that Block holder score has positive effect on relationship between Group Affiliation and ROA but not a significant one.

4.3.9 Hypothesis no 9: Capital Structure has moderating effect on relationship between Group Affiliation and Financial Performance

Independent Variable		**Dependent Variable: Financial Performance**	
		ROE	**ROA**
C	Coefficient	1.0699	-0.0055
	t-Statistic	5.0450	-0.0977
	Prob.	0.0000	0.9221
REV	Coefficient	0.0000	0.0000

	t-Statistic	3.5471	-2.0096
	Prob.	0.0004	0.0451
LNASSETS	Coefficient	-0.0978	0.0119
	t-Statistic	-4.4210	2.0331
	Prob.	0.0000	0.0427
SCORE_GA	Coefficient	0.0014	0.0020
	t-Statistic	0.0689	0.3774
	Prob.	0.9451	0.7060
SCORE_GA*CS	Coefficient	0.1742	-0.0110
	t-Statistic	7.4839	-1.7810
	Prob.	0.0000	0.0757
CS	Coefficient	0.2439	-0.0257
	t-Statistic	6.1723	-2.4402
	Prob.	0.0000	0.0151
R-squared		0.2126	0.0432
Adjusted R-squared		0.2029	0.0314
F-statistic		21.8204	3.6491
Prob(F-statistic)		0.0000	0.0031
Durbin-Watson stat		0.9622	0.7298

Table 25: Moderating effect of CS on relationship between GA and financial performance (Summary results of estimation equation of hypothesis number 9)

The result show that the Capital Structure has positive significant relationship between ROE and GA. This is well supported by the theoretical argument that group affiliation enhances the chances of a firm to get cheaper finances in the time of need and distress. One other way of interpreting this result is Group affiliation has positive significant effect on relationship between CS and ROE. This means that in firms without Group Affiliation, leverage deteriorates the ROE while in firms with group affiliation, leverage adds value. This finding has many new insights for researchers, academics and investors. This can open new avenues for research in new direction.
According to this result, capital structure has positive significant moderating effect on relationship between ROA and GA. This means leverage deteriorates the ROA of group affiliated firms just like non-group affiliated companies. However, in presence of group affiliation, ROA increases as CS increases.

4.3.10 Hypothesis no 10: Related Party Transactions has moderating effect on relationship between Group Affiliation and Financial Performance

Independent Variable		Dependent Variable: Financial Performance	
		ROE	ROA
C	Coefficient	0.8439	0.0213
	t-Statistic	3.6554	0.3784

	Prob.	0.0003	0.7054
REV	Coefficient	0.0000	0.0000
	t-Statistic	3.0951	-1.9830
	Prob.	0.0021	0.0480
LNASSETS	Coefficient	-0.0687	0.0080
	t-Statistic	-2.9041	1.3902
	Prob.	0.0039	0.1652
SCORE_GA	Coefficient	0.0726	0.0055
	t-Statistic	3.0442	0.9519
	Prob.	0.0025	0.3417
SCORE_GA*RPT	Coefficient	-0.0594	-0.0259
	t-Statistic	-0.6303	-1.1256
	Prob.	0.5289	0.2610
RPT	Coefficient	-0.0120	0.0309
	t-Statistic	-0.2073	2.1780
	Prob.	0.8359	0.0300
R-squared		0.0457	0.0217
Adjusted R-squared		0.0338	0.0095
F-statistic		3.8333	1.7765
Prob(F-statistic)		0.0021	0.1166
Durbin-Watson stat		0.7686	0.7305

Table 26: Moderating effect of RPT on relationship between GA and financial performance (Summary results of estimation equation of hypothesis number 10)

According to results, RPT has no moderating effect on relationship between ROE and GA.
The result shows that RPT has insignificant negative moderating effect on relationship between ROA and GA.

5. SUMMARY OF RESULTS

Factor	Independent Variable		Result with ROE	Result with ROA
	Name	Description		
Score_GA (Group Affiliation Score)	GA_GA	Group Affiliation (Dummy Variable)	**Significant Positive**	**Significant Positive**
	GA_Frign	Foreign Company (Dummy)	No effect	**Significant Positive**
	GA_Grp_Chrmn	Group Chairman	**Significant Negative**	**Significant Negative**
	GA_Grp_Dr	Group Directors	**Significant Negative**	**Significant Negative**
	GA_Grp_Shrhldg	Group Shareholding	No effect	No effect
Score_CG (Corporate Governance Score)	CG_BOD_Size	BOD Size	**Insignificant Positive**	No effect
	CG_CEO_Duality	CEO Duality	No effect	**Insignificant Negative**
	CG_Inde	Board Independence	No effect	**Significant Negative**
	CG_NED	NED Directors	**Significant Positive**	**Insignificant Negative**
	CG_Prof_CEO	Professional CEO	**Significant Positive**	**Significant Positive**
Score_BH	BH_Blk_Chrmn	Blk Holder Chairman	**Significant Positive**	**Significant Positive**
	BH_Blk_Dr	Block Holder Director	**Insignificant Positive**	**Insignificant Positive**

(Block Holder Score)	BH_Nonshhldr_dr	Non-Shareholder Director	No effect	**Significant Negative**
	BH_Shrhldng	Block Holder Shareholding	No effect	**Significant Positive**

Table 27: Discussion of results for relationship between variables that underlie factor scores and financial performance

The table summarizes the factors of different independent variables used in study. In this research, three factor scores are used. Firstly, Score_GA, which is factor score of Group Affiliation. The factor is composed of four variables. GA_GA is dummy variable that depicts a firm being part of business group or not. This variable has significant positive effect on both measures of financial performance i.e. ROE and ROA. This is a very important result that shows advantage of affiliation with business groups in a developing economy. A firm being foreign entity has no impact its ROE but has positive significant effect on ROA. Having a board chairman from group has negative consequence both on ROE and ROA. This is in line with theoretical assumption that a group chairman gives controlling group an opportunity to exploit minority shareholders' interest and have a serious principal-principal conflict. The same is true for having board members from business group. This creates a serious principal-principal conflict that have significant negative effect on both measures of financial performance. Business Group's shareholding in individual firm has no effect on financial performance.
Score_CG is factor score of variables of corporate governance. For the purpose of this study, five variables are used to construct factor for corporate gvernance. BOD Size has insignificant positive effect on ROE while no effect on ROA. CEO duality has no effect on ROE while insignificant negative impact on ROA. Independent directors have no effect on ROE while significant negative effect on ROA. NED has significant positive effect on ROE while significant negative effect on ROA. Professional CEO has significant positive effect on both ROE and ROA. The results have slight contradiction to the theoretical argument. Independent directors having no effect on REO and negative effect on ROA contrary to what is normally believed. This may be because of the fact that most of the outside directors have no idea about business and adding them to the board reduces the financial efficiency of the business.

Score_BH is factor score of block holding and composed of four variables. Blockholder Chairman being dummy variable shows either chairman of the board is from block holder or not. This has significant positive effect on both ROE and ROA. Block holder director has both insignificant positive effect on both ROE and ROA. Directors from non-shareholders have significant negative effect on ROA. Block holding Shareholding has significant positive effect on ROA.

Independent unitVariable	Description	Effect on ROE	Effect on ROA
Score_GA	Group Affiliation Score	significant positive	no effect
Score_CG	Corporate Governance Score	significant positive	no effect
Score_BH	Block-Holding Score	no effect	no effect
CS	Capital Structure	significant negative	significant negative
RPT	Related Party Transaction	have no effect	no effect

Table 28: Discussion of results of relationship between main independent variables and financial performance

The table summarizes relationship of financial performance with main variables used in the study with control variables of size of firms. Score_GA is factor score of variables of Group Affiliation and measures the effectiveness and extent of group affiliation. It has significant positive effect of ROE. This result is consistent with results of other studies with global and Pakistani context. This means group companies are either more effective in generating sales of its products with better sales terms and marketing mix or they are more efficient in converting their gross margins in net profit by effective supply chain and/or better use of leverage. However, no effect of Score_GA is found on Financial Performance when ROA is used. This means in terms of ROA, group affiliation has no advantage. Rather, the advantage that group companies accumulate in income statement is lost in balance sheet. This may be due to underutilization of assets, more credit terms to enhance sales, more loans & advances. This may also indicate investments in other non-performing group companies that don't yield cash outlay. This aspect of business groups needed to be studied by future researchers.

Score_CG is factor score of Corporate Governance variables and measures extent and effective corporate governance structures in company. It has significant positive impact of ROE which is in line with other studies. This may be due to better cost management and leverage of the company. However, no effect of corporate governance score is found on ROA. This means that better corporate governance measures don't translate into better utilization of assets. This may be because better managed companies have better buffer inventories, more investments in plants and machinery, more stocks and spares of machinery etc. This area of corporate governance must be studied in any future studies

Block holding Score is factor score of block-holding variables and measures block holder's presence and grip over a company. No measure of financial performance is effected by block holding score. This may be because block holders are passive shareholders usually financial institutions, mutual funds, insurance and government entities which don't have conviction, competency and skillset to run businesses. They may be in boards as chairman and directors but their presence don't positively affect performance.
Capital Structure is debt to equity ratio of the firm. It has significant negative effect on both measures of performance. This is in line with other studies.

RPT is related party transactions as percentage of total revenue of the firm. RPT has no effect on financial performance. This result has to be studied in any future study as related party transaction is considered to be negative for any firm. It is taken as a value destroyed for the firm. Researches and literature that focus on tunneling, exploitation of minority shareholders by majority shareholders etc. study this stats. This result is contrary to theoretical argument and needs to be researched on by any future researcher.

Relationship	Moderating Variable	Effect on ROE	Effect on ROA
Effect of GA on FP	No moderating variable	GA has Significant Positive Effect on ROE	GA has no significant relationship with ROA
	CG	Significant Negative	Significant Negative
	BH	Significant positive effect	Insignificant Positive
	CS	Significant Positive effect	Insignificant Negative

	RPT	No effect	No effect

Table 29: Discussion of moderating effects on Relationship between group affiliation & financial performance

The table summarizes the effect of moderating variables on relationship between GA and FP. In the basic relationship, GA has significant positive effect on ROE. When CG is used as a moderating variable, it had significant negative effect on the relationship. This shows that when a company has better corporate governance structure that looks after the interests of individual firm on priority, Group Affiliation reduces the ROE. This can be interpreted in a number of ways. The simplest explanation is better corporate governance measures lead to individual firm focused approach which often reduce the group control due to conflicting approaches and thus firm's ROE – GA relationship weakens. Alternatively, this can also be explained by corporate governance measures lead to more board independence & outside NEDs which reduces the group dominance in the board. Business group cannot direct and control an independent and empowered according to its own whims and wishes. This reduces the effect of GA on ROE. Although, there is no effect of GA on ROA, introduction of CG as moderating variable has negative effect on the relationship.

When BH is introduced as a moderating variable, it has significant positive effect on the relationship. This means in group firms which have effective block holder looking after its affairs and monitoring own interests, GA greatly enhances its ROE. This means that presence of an effective block-holder greatly enhances ROE of a good group company. This is because of the fact that an effective block-holding company is one that has chairman from block-holder. This block holder chairman looks into the affairs of the firm and engage into board discussions that enhances the value of the firm. However, the effect of block holder is insignificant positive on ROA.

When CS is introduced as a moderating variable, it has significant positive effect on the basic relationship. This means in group firms, leverage enhances the ROE. This is very different from non-group affiliated companies, where leverage largely reduce the ROE. This is very novel finding this research has added to literature and sheds a new light to business group dynamics. From this moderating relationship, it is empirically proved how effective business groups add value to their affiliated firms. This finding shows that good business groups have unique ability to use leverage in a way the rest of the firms cannot. This may be due to timely availability of banking advances and loans at the crucial times of economy, reduced markup rates due to being part of diversified business group considered to be less risky than standalone firms, or perhaps greater availability of group limits in financial institutions leading towards lenient terms etc. This opens a new avenue to the future studies. However, CS has an opposite moderating effect when it is used as ROA is used as financial measure i.e. insignificant negative. This may be due to the fact that leverage often increases the assets of the firm which reduces the total return on assets.

RPT has no moderating effect on relationship between GA and Financial Performance in terms of both ROE and ROA. This is very disturbing finding as most of the literature that is focused on negative features of business groups focus on RPTs.

Group affiliation and our constructed GA factor score both have significant positive relationship with ROE. Also, group shareholding has significant positive effect on ROA. Having professionally hired CEO has significant positive effect on financial performance. Having block holder shareholder has significant positive effect on ROA. Capital structure has significant negative effect on both ROE & ROA. All of these results confirm findings of past similar studies for our sample.

The study also notes that affiliation to foreign groups has no significant effect on financial performance. Similarly, board size has no effect on financial performance. While having independent directors have significant negative effect on ROA.

There are three unique findings of this research and add to literature:

1. CG score has significant negative moderating effect on relationship between GA and ROE/ROA. This means that having governance structure independent of group also weakens the group's effectiveness on financial performance. This can be interpreted by a generic statement about group behavior that "groups tend to behave as a group". Groups tend to use resources of each affiliate as a means to enhance overall group's interest as well as to benefit their other affiliates. When they have lack of control over an affiliate because of stronger CG, it also reduces the flow of good resources into the firm that groups come along with. However, CG has its own good effects that boost financial performance of the firm in their own way. A firm cannot enjoy twin benefits simultaneously. This explanation suggests that a group may tunnel some resources from one affiliate to other but also tunnels back some other resources into the firm from some other affiliates which compensates the earlier tunneling. This finding has strong implication for investors and regulators.
2. Having Block holder shareholder has significant positive moderating effect on relationship between GA score and ROE. Having chairman from group has significant negative effect on ROE while having chairman from BH has significant positive impact on it. Having board dominated with group directors has significant negative effect on ROE while having BH directors has significant positive effect on ROA. Furthermore, group directors and group chairman have significant negative moderating effect on the relationship and ROE while block holder chairman and directors have significant positive moderating effect on the relationship. This validates theoretical argument that presence and activism of strategic blockholder adds positively to firm's performance.
3. Capital structure have significant positive moderating effect on relationship. This confirms the theoretical argument presented by researchers that main benefit of group affiliation is better access to credit facilities at the time of need.

6. CONCLUSION

The study tried to study the principal-principal conflict in business group firms in the light of corporate governance structures. This study is an attempt to understand the business group dynamics and ways to enhance its positive elements and reduce the negatives. This research is

exploratory in nature and seeks to identify impact of various factors on the relationship between group affiliation of any firm with its financial performance. Different factors like corporate governance structure, capital structure, block holdings and related party transactions have their impact when firm is affiliated with any business group. The aim of this study is to explore these relationships and stipulate their impacts on financial performance. This study seeks to find ways to minimize principal-principal conflict in group affiliated firms in light of these relationships.

In order to explore the relationship, factor scores of each dimension is constructed. Corporate governance factor score and block holding factor scores were constructed from underlying variables and factors. These factor scores along with related party transactions and capital structure data were then used in multiple linear regression to study their moderating effect on the relationship between group affiliation score and ROA/ROE of the firms.

According to the results, group affiliation has a significant positive effect on ROE. However, having a group chairman and/or dominance of directors from parent business group have negative consequences on financial results.

The corporate governance score has a significant negative effect on relationship between group affiliation and financial performance. This can interpreted as a higher corporate governance score of a firm weakens the significant positive effect of group affiliation on financial performance. So, higher corporate governance features like BOD size, professional CEO and higher weightage of NEDs in boards reduces group affiliation's effectiveness on ROE. This is because of replacement of group directors with firm specific NEDs in boards lead towards lesser control of parent on subsidiary firms and in-turn reduces the positive effect of parent group's resources, connections etc. on individual firm.

The block holder score has significant positive moderating effect on relationship between group affiliation and financial performance in terms of ROE while, in terms of ROA, positive effect is insignificant. This can be interpreted as a firm with an effective block holder's presence enhances the effect of group affiliation on ROE. According to the results, effective block holder is one that has a chairperson to the board, less directors and not a major shareholding. In other words, an outsider block holder's chairman increases the effectiveness of the parent group by acknowledging the expertise and connections of the group directors.

The most astonishing result is of capital structure's moderating impact on the relationship of group affiliation with performance. Unlike independent firms, higher leverage increases the ROE of group affiliated firms. This abnormal behavior of relationship of capital structure with ROE suggests that bigger successful groups have better ways of handling financial institutions and business dynamics.

Lastly, related party transactions have no moderating effect on the relationship between group affiliation and performance. In simpler words, higher related party transactions don't reduce the significant positive impact of group affiliation on ROE. This result is contrary to the commonly held theory that RPT are used to tunnel subsidiary resources to parent company. However, the current study used just a single measure of RPT i.e. Total RPT-to-Sales ratio, which may lead to misleading result. In order to have reliable results, RPT must be studied with more than one

measures e.g. RPT sales-to-total sales, investment in related party to total assets ratio etc. Since current research is not focused on tunneling and other negative allegations that are targeting towards business groups, this result is deemed as inconclusive and draws attention of future researchers towards this important element of group dynamics.

6.1 Implications of Study

The implications of these results are very interesting. Group affiliation has many advantages to any individual firm. It adds numerous value to the firm. It adds to combine executive experience of the group companies. It gives exposure of company directors to variety of economic sectors. Group affiliation also reduces the perceived risk of banks which helps the companies in two ways. Firstly, it greatly reduces the risk premium demanded by the banks which reduces firm's cost of debt. Secondly, it ensures credit availability to the firm at critical instances of distress and economic hardship. This makes group companies very efficient in their use of leverage, making them grow at the times when other independent firms are experiencing economic slowdown. Group affiliation also gives access to superior consultants, lawyers, clearing agents and other service providers. However, the group control also makes these companies vulnerable to parent groups' mal-intentions. They may fix higher salaries and perks to their own group / family executives, pay higher dividends, invest in subsidiaries, direct sales at discount to associated firms, etc. These allegations make them suspected of tunneling, pyramiding and other mal-practices.

This study helps determining the relationships of different factors that may protect the subsidiary companies from such abuses. Having strong corporate governance structure with more firm related NEDs and a professional CEO help the group affiliated firms having better control and weaken the overall grip of the group. Furthermore, having better corporate governance has its own significant positive effect on ROE. Having strong group dominated board reduces the positive effect of corporate governance on ROE. Thus, a group affiliated firm has to decide between the two choices, to be a group dominated firm or protect its independent identity. Having chairman and directors from group promotes group specific policies in the board which significantly reduces the financial success of the firm. Having chairman from group has its toll as chairman has a potential to direct the board towards parent group's interest and issues. This will make firm more focused on what parent group expects of it rather than focusing on its own problems, issues and potential. Group chairman also tend to toe the agenda from received from parent group. If the board has additional directors from group, it will let board swayed away from firm's own wellbeing towards group interests. It will also give a free chit to the controlling group to take benefits from firm's resources and transfer such benefits to group's other endeavors. The regulators and investors must bear this in their minds that strong firm focused corporate governance measures should be served as mandatory to loosen the control of group over listed subsidiary companies and ensure protection of minority shareholders in group affiliated firms and to avoid principal-principal conflict.

In the light of this research, there is a very effective way to avoid this negative aspect of group affiliation i.e. having a chairman of the board of directors from block holding shareholder.

According to the results of this study, having a seat in board of directors by the block holding shareholder is not enough for a company to protect itself from controlling group abuses. Chairman from block holder is very effective for this purpose on two counts. Firstly, if a firm has chairman from block holder, it cannot have chairman from controlling group. Thus it removes the most crucial building block from controlling group's architecture of the firm. Secondly, it makes the board of the company focused on the firm itself rather than be focused on group affairs. The members of the board focus on the individual firms' issues and work for its growth. If the board is heavily dominated by the directors from parent controlling groups, it will be busier with group's issues and interest rather than individual firm's issues and interest. That will loosen the firm's own perspective on growth and shareholders' value. So, presence of block holders in a group affiliated firm must be viewed as an opportunity to preserve individual firm's identity and interest must be regulated accordingly. Investors and regulators must use block holders' presence as a mean to strengthen corporate governance structures and reduce controlling group's influence on group affiliated firm.

Another implication of the results of this study is the contrary view that the leverage must be seen in group dynamics. On an independent firm's standalone basis, leverage is risky and negative for the company. It reduces the consistency of returns and makes them volatile. It also makes a firm subject to external economic shocks. However, group affiliation reverses its impact and makes leverage impact significantly positive on the financial performance. Group affiliation makes available banking & other forms of credit at reduced rates at the crucial time of economic cycle and business need. This enhances firm's business operations while other firms in the economy are struggling. It also lowers the cost of borrowing of the firm, affecting its returns. This is a novel finding of this research and must be further studied in detail by researchers and scholars in their future studies.

6.2 Limitations

The study is very significant because it has explored corporate governance landscape of Pakistan from a very different aspect of group dynamics. Group dynamics is very integral part of developing economies like India, Pakistan, Malaysia, Bangladesh, Korea etc. Even in developed world like Japan, Korea, Continental Europe and US, conglomerates and groups dominate business world. The corporate governance of such diversified groups of companies is always been a difficult task.

The study is exploratory and it has limited itself to firms listed in Pakistan Stocks Exchange. However, there is ample avenue outside the listed space that must be explored to determine anything meaningful and conclusive for such integral aspect of developing economies.

One limiting factor of this study is its limitation to corporate governance structures with main focus on board of directors itself. Board committees have their role in corporate governance that must be analyzed empirically. Board audit committee having group influence also has material impact on the internal audit mechanisms. External auditors have a lot to financially discipline a

company. A group affiliated firm having a common external group auditor speaks a lot about its financial discipline.

Another limitation of the study is the data set. Many variables are used in their simplest form. For future study, these variables must be studied in depth. Variables like Related Party Transactions has multiple forms and each form has its own specific consequence. Investments in related parties, subsidized sales to associate parties, cross subsidies, engagement of executives from and to associated parties, share purchase of associated parties, loans and advances to associated parties must be viewed properly to have comprehensive result. Also, some transactions are of temporary nature and annual accounts may not reflect them fully e.g.loans and advances to associate party may vary month to month before they are returned before closing of accounts at year end. Also, many transactions are not reported and get disguised in normal business transactions as laws for disclosure are not very strong and enforced in Pakistan.

Another limitation of this study is using group shareholding as a dummy variable for group affiliation. However many studies differentiate cash flow rights and shareholding of group in the firm. Some researchers also count chains of control to further study effects of group affiliation. Future researchers must use these details to have better view of the phenomenon.

6.3 Recommendations to Investors

This study has lot of significance for investors in stock exchange. High worth individuals as well as small retail investors invest their hard earned savings into stock exchange for future growth. Institutional investors, retirement funds and other mutual funds also have huge sums of other people money (OPM) to be invested. Any firm which is affiliated to a reputed group is considered to be less risky to be invested by these investors. Such perceived safety drives the market demand for these group affiliated firms. At the heart of these businesses, the principal-principal conflict of interest by the controlling group destroys a lot of long term investable value that can be channeled into future growth of country. The finding of this research suggest that these investors redefine their “perception” of safety and risk in light group dynamics of corporate governance.

4.4 Recommendations to Regulator

Securities and Exchange Commission of Pakistan (SECP), State Bank of Pakistan (SBP), concerned ministries and departments have a lot to focus to develop and protect capital markets in country. Different corporate governance codes have been introduced from time to time in the light of international best practices. These codes have introduced many reforms in formal economy of the country. For example, as our study has noted, CEO duality has almost vanished from our sample. Similarly, independent directors are part of almost all of companies in the sample. These reforms are difficult to be conceived and slow to be implemented and have longer term effects. The long term effect of the spirit of these reforms is yet to be researched, at least these reforms have built the core corporate governance framework of the formal sector of the economy. However, group dynamics is a developing world phenomenon with its roots in Asian

and Continental European economies. Because of this background, it has not caught importance in the eyes of regulators yet. The principal-principal conflict in the heart of corporate governance structures of group affiliated firms is a very complicated issue to be regulated.

According to a recent study, 37% of total market cap of Pakistan Stock Exchange (PSX) is controlled by 12 groups (Khwaja and Zaidi 2019). Besides having employment from family and key contacts of controlling groups, these groups control the affairs of the affiliated firms through their nominated directors and chairman. As the results of this study suggest, despite having "sound" corporate governance structure prescribed by the regulatory code, board dominated by the controlling group have many negative consequences on the financial performance of the firm. This get worst when the board is chaired by chairman from the group. The whole affairs of the company get into the clutches of group by such arrangement and the firm gets group focused instead of being focused on its long term wellbeing. This destroys long-term value for minority shareholders and left them into mercy of controlling group. So, it is imperative for the regulators to design a corporate governance framework for group affiliated firms that ensures a degree of independence from controlling group.

Another important aspect of group affiliated firms to be watched by regulator is financial supervisory structure of corporate governance. A common external auditor in group setting speaks a lot about financial affairs of the subsidiaries and affiliates. Regulators must address this issue by making sure that all group affiliated firms have different reputed external auditors. Similarly, board audit committee composition must be carefully regulated to watch for group influence over internal audit mechanism. Although Corporate Governance Code 2017 calls for audit committee to be chaired by independent director, more stringent measures must be devised to limit financial control of the group.

Related party transactions must be carefully watched by regulators. Although regulatory emphasis have been growing to disclose financial transactions with related parties, there is a gap between what should be reported and how should it be. In this regard, corporate governance best practices must be studied in Korea, Japan and similar economies where business groups are very common.

This study calls for one additional resource available to regulators i.e. block holders' presence. Blockholder's presence in the board must be celebrated. The study notices that having a chairman from blockholder significantly increases the alignment of board objectives towards company's interests which is in effect minority shareholders' interest. Regulators must device a framework where a substantial blockholder has a right to appoint its chairman to the board.

4.5 Recommendations to Scholars for future Studies

The study prepares a base for future researchers to study the group dominating behavior in its affiliates. For future aspiring scholars, this study gives a new direction to study the corporate governance in the light of group dynamics in Pakistani economic setting. Any future study must analyze the related party transactions in detail specially the balance sheet transactions to finance the group endeavors. Aspirant researchers must look into the role of board committees critically for new directions in the research. Some studies must go beyond corporate governance structures

to research senior managerial employment from families of owners and key managers' of group to graph potential points of conflicts.

Numerous studies have been conducted in Pakistan and other developing and developed world to determine relationship between group affiliation and financial performance. But there is so much more to be investigated than just financial performance. Impact of group affiliation on capital structure, dividend & reinvestment policy, growth, innovation & entrepreneurship, market share & dominance, ESG framework and so many other business dimensions are to be researched empirically.

The growth aspect of business groups can be interesting topic. Business groups use the resources of their affiliates to enter into new business opportunities. The political economy of developing world makes it easier for the established & reputed business groups to seize the opportunity as it arises. Their size, contacts, linkages, local & international collaborations, good will, exposure makes it easier and less risky to enter into unknown territory. Their presence in new ventures decreases the perceived risk of bankers, government officials, regulators and other stakeholders. Academic study of Pakistani business groups and their growth is imperative. How different groups have employed different strategies to growth is also an avenue of future research.

One aspect of growth to be further investigation is growth of individual company. Does group affiliation has significant effect on growth of a firm can be an interesting question for any future research. The findings of this research can also add to answer this question. The highly leveraged capital structure has significant negative impact on its financial performance while for group affiliated company, this impact is significant positive. This can be an interesting avenue to research.

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