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#### Corporate Governance, Business Group Affiliation, and Firm Performance: Descriptive Evidence from Pakistan

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# **Corporate Governance, Business Group Affiliation and Firm Performance: Descriptive Evidence from Pakistan**

WAQAR I. GHANI and JUNAID ASHRAF

## **Abstract:**

This study examines business groups and their impact on corporate governance in Pakistan. We use non-financial firms listed on the Karachi Stock Exchange of Pakistan for 1998-2002 periods in order to select group and non-group samples. Our analysis find that group firms have higher liquidity/short-term debt paying ability, and lower financial leverage than those of the non-group firms in each of the five years and when averaged over five-years. More importantly, we find that for the group firms, the five-year mean values of revenues and the five-year mean values of total assets grew faster than those of the non-group firms. Based on mean values of ROA, we find that group firms are more profitable than non-group firms in each year and over all five-years combined. In contrast, Tobin's Q results (a market valuation measure) show that the mean values for each year and for all five-years combined are lower than those of the non-group firms. Our industry-level results are roughly consistent with those of the full samples. The divergence between ROA and Tobin's Q suggests that external shareholders perceive firms affiliated with business groups to have relatively lower transparency and weaker corporate governance mechanisms than firms not affiliated with business groups. As a consequence, the market participants appear to discount the value of group firms even though these firms are more profitable than non-group firms. We interpret this evidence to indicate that investors view the business-group as a mechanism to expropriate minority shareholders. On the other hand, the comparative financial performance results suggest that business groups in Pakistan are efficient economic arrangements that substitute for missing or inefficient outside institutions and markets. We feel that our preliminary work substantially contributes to our understanding of business groups and their relationship to corporate governance and economic development in Pakistan.

**Key words:** Business Group, Corporate Governance, Minority Shareholders, Expropriation, Agency Theory, Market Failures.

# **Corporate Governance, Business Group Affiliation and Firm Performance: Descriptive Evidence from Pakistan**

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## **1. Introduction**

Increasingly policy makers around the globe have come to believe that there is a strong relationship between corporate governance and economic growth, and that this relationship is of fundamental importance in the developing economies (Berglof and Thadden, 1999). In an emerging economy such as Pakistan, corporate governance since the late 1990s has been the central policy issue in the debate on the link between expropriation and economic development. According to LaPorta et al., (2000), “Corporate governance is, to a certain extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders.” They define “the insiders” as both managers and controlling shareholders.

Lately, a number of empirical studies suggest that business groups, as an organizational form, are more prone to expropriation of minority shareholders. For example, Claessens et al., (1999) study the relationship between the expropriation of minority shareholders and ownership structure for a sample of East Asian corporations and find a negative association between control rights of family businesses and market valuation (Tobin’s Q). They interpret this as evidence of expropriation of minority shareholders by business groups. Khanna and Palepu (1999) find that foreign institutional investors have higher investment in unaffiliated firms and in the group firms that have higher transparency as compared to the group firms with lower transparency. Khanna (2000), in a review of research on business groups in emerging markets, conclude that while groups perform the welfare-enhancing function by duplicating the missing or inefficient outside institutions, they also indulge in welfare-reducing activity of minority shareholder exploitation.

## **2. Research Questions:**

Base on the above evidence, we examine three broad research questions related to business groups and minority shareholders expropriation in Pakistan. First, what are the key characteristics of business group firms that are different from those of non-business group

firms? Second, are firms affiliated with business groups more profitable than unaffiliated firms? Third, how does the stock market value group firms as compared to non-group firms? Specifically, we use the accounting performance measure, Return on Assets (ROA), to address the second question and the market valuation measure, Tobin's Q, to examine the third question. A divergence between the ROA and Tobin's Q (that is, ROA of group firms being higher than ROA of non-group firms but Tobin's Q of group firms being lower than Tobin's Q of non-group firms) would suggest that even though group firms are profitable during the test period, the external shareholders discount the value of the firm because they fear that these gains will not transfer over to the minority shareholders (see more on this in Khanna, 2000).

We use samples of group and non-group firms listed on the Karachi Stock Exchange of Pakistan for 1998-2002 periods. Our analysis of key financial characteristics show that group firms have higher liquidity and short-term debt paying ability, and lower financial leverage in each year and over all five-years combined than those of the non-group firms. More importantly, we find that group firms revenues and total assets averaged over five-years grew faster than those of the non-group firms.

Our results on mean values of ROA (an accounting performance measure) show that group firms are more profitable than non-group firms in each year and over all five-years. In contrast, Tobin's Q results (a market valuation measure) show that the mean values for each year and for all five-years combined are lower than those of the non-group firms. Our industry-level results generally are not different from those of the full samples.

This divergence between ROA and Tobin's Q suggests that external shareholders perceive firms affiliated with business groups to have lower transparency and weaker corporate governance mechanisms than firms not affiliated with business groups. Our results suggest that external shareholders perceive firms affiliated with business groups to have lower transparency and weaker corporate governance mechanisms than firms unaffiliated with business groups. We interpret this evidence to indicate that market participants view the business-group as a mechanism to expropriate minority shareholders. On the other hand, our comparative financial performance results support the market failures/institutional void theory and suggest that the business groups in Pakistan are efficient economic arrangements that substitute for missing or inefficient outside institutions and markets. We feel that our

preliminary work substantially contributes to our understanding of business groups and their relationship to corporate governance and economic development in Pakistan.

### **3. Business Group Defined:**

Khanna and Rivkin (2001) define a business group as, "...a set of firms which, though legally independent, are bound together by a constellation of formal and informal ties and are accustomed to taking coordinated action." Encarnation (1989) describes the relationship among firms in 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."

### **4. Business Groups in Pakistan:**

The business groups in Pakistan (previously known as 'twenty-two families,' hereafter, named '*The families*') are informal combinations of legally independent business entities run by families. The family patriarch is the dominant shareholder and manager whereas the immediate and distant family-members help operate various firms within the business group. It is common for these family members to belong to the same religious sects or communities.<sup>1</sup> Though a firm belonging to one group is not a member of another group, it is quite common for family members of a group to hold director seats in firms affiliated with other groups (known as interlocking directorates). Most business families operate in multiple industries, and similar to groups in some other countries, have no informal or official designation and are not state regulated.

### **5. Business Groups - The Theoretical Frame-work:**

The existing approaches to understanding the factors that provide meaningful insight into the activities of business groups in the emerging economies are: market failure/institutional

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<sup>1</sup> Some examples of major communities are the Chiniotis, Memons, Ismaeelis/Aga Khanis – families, with business origins (primarily trading, some in manufacturing) in parts of India, later migrated to Pakistan. A view of the typical family tree: grandfather-sons –grandsons; usually, all are involved in family business. See more on this in White, 1974, *Industrial Concentration and Economic Power in Pakistan*, Chapter 4; and Papanek, 1972, *Pakistan's Big Businessmen: Muslim Separation, Entrepreneurship and Partial Modernization*, "Economic Development and Cultural Change."

void, social structure, and resource-based/political structure view (Guillen, 2000; Hoskisson, et al., 2000).

### ***Market Failure/Institutional Void argument***

Coase (1937) posed the question as to why do firms exist. That led to the examination of the problem of resource allocation in the context of two institutions: the market mechanism and firm's internal organization (Alchian and Demsetz, 1972; Williamson, 1975, 1985; Spence, 1975; Chandler, 1977). According to Williamson (1975, 1985) markets and firms exist to execute a set of transactions. These transactions will take place depending upon which mechanism (that is, market or within firm) can execute it more efficiently. The efficiency or lack thereof (lower or higher transaction costs) is determined by the institutional factors that surround the transactions. In advanced economies these institutional factors are highly developed whereas, in developing economies, they are primitive and malfunctioning.

Khanna & Palepu (1997) describes the institutional factors and their characteristics in a developed economy like United States: a) Capital markets are highly efficient and are kept that way with active stockholder involvement, a well defined monitoring and disclosure regime, and a well functioning market for corporate control, b) Labor markets have an abundance of highly skilled, trained, and mobile managerial talent due to the existence of excellent business schools and high quality consulting firms, c) Product markets are driven by reliable enforcement of liability laws, efficient flow of information and proactive consumers, c) Government regulation assures the rule of law; a relatively free environment of corruption, and d) Contract enforcement that is reasonably predictable.

Leff (1978) focuses on the institutional factors in the developing countries and proposes that the existence of a business group, as an institutional mechanism, is a response to market failure. Leff identifies mainly three market imperfections to explain group pattern of industrial organization in developing countries: 1) group is an organizational form that appropriates quasi-rents that accrue from access to scarce and imperfectly marketed inputs such as information and capital, 2) groups adopt a portfolio approach and expand into diversified product lines because of the absence of markets for risk and uncertainty, and 3) a group's pattern of vertical integration helps it to overcome problems associated with various forms of oligopoly and monopoly.

Transaction cost theory is an integral part of the market failure argument. Economists identify two primary sources of transaction costs: information asymmetry and contracting problems. Buyers and sellers will have deficient information about the true underlying value of the good or service. Very high prices could be offered for very low quality goods or services and vice versa. If the market does not possess institutional mechanisms to reduce the information asymmetry then the transaction costs will stay very high (George Akerloff). Such problems are rampant in the emerging economies and result in high transaction costs.

The contracting problems arise because the transacting parties not only fail to write optimal contracts but also are unable to enforce the contracts due to deficient legal systems. This in turn encourages opportunistic behavior and increases transaction costs also known as agency costs (Jensen and Meckling, 1976). Firms in emerging economies have deficient corporate governance mechanisms that lead to very high agency costs.

### ***Social Structure Approach***

The social structure approach focuses on the economic organization as a function of the social order and argues that the emergence and the continued existence of the business groups can be linked to axes of social solidarity such as ethnicity, kinship, region political party and religion (Granovetter, 1994). Building on the concept of moral economy' originally developed by Thompson (1971), Granovetter argues further that groups can be conceived as a 'moral community' in which members are expected to exhibit trustworthy behavior, adhere to normative standards, and forego opportunism. On similar lines, Leff (1978, p.663) suggests that business groups are mostly 'linked by relations of interpersonal trust, on the basis of a similar personal, ethnic or communal background.'

### ***Political Economy Approach***

A political economy approach attaches dominant role to the state in shaping the economy. In the case of emerging economies, researchers focus on the relationship between political power structures and emergence (and continued existence) of business groups (Encarnation, 1989). Groups are viewed as counterproductive rent seekers that destroy rather than add value (Ghemawat & Khanna, 1998). This view highlights the disproportionate diversion of scarce resources toward business groups in lieu of their cozy relationship with the political



establishment, mostly at the cost of the larger population. In the context of Pakistan, White (1974) argues that the acquisition and maintenance of economic power requires existence of significant scale economies barriers and scarce resources barriers. White suggests a connection between scarce resource barriers created by the government of Pakistan in the form of foreign exchange licenses, investment licenses, and licenses to import capital goods, raw material, spare parts, and consumer goods from abroad and the emergence of business families and groups in the 1950s and their subsequent business dominance in the 1960s. This resulted in the concentration of economic and political power in a few privileged hands during the 1960s

## **6. Comparative Performance: Group versus Non-Group Firms**

Empirical evidence on the impact of group affiliation on firm performance is generally positive for emerging and transition economies and inconclusive for advanced economies (Caves and Uekusa, 1976; Kakatani, 1984; Weinstein and Yafeh, 1995, 1998; Chang and Choi, 1998; Keister 1998; Perotti and Gelfer, 1999; Khanna and Rivkin, 1999b). For example, Perotti and Gelfer (1999) use Tobin's q as a measure of performance to compare group firms with non-group firms in Russia and find higher Tobin's q values for the group firms. Similarly, Keister (1998) examines the performance of business groups that were formed in China, in the 1980s, with the support and encouragement of the government. He finds that the productivity and financial performance of these groups improved significantly. He also finds that among groups, the ones with more centralized organizational structure did better than the others. Mixed evidence emerges in a study by Khanna and Rivkin (1999). They examine the impact of group affiliation on financial performance (measured as operating returns/assets) of firms in 14 emerging economies in Asia, South Africa, and Latin America (sample does not include Pakistan). After controlling for firm and industry fixed effects, they find that the mean of the estimated group effects is positive (and statistically significant) in four countries and negative (and statistically significant) in one country only. More importantly, Khanna and Rivkin find that group membership explains a higher variation in profitability than the one explained by industry effects in 13 out of 14 countries sample. Chang and Choi (1998) focused on the group size effect and performance and find that the firms affiliated with the

largest four Korean chaebols perform significantly better than the nonaffiliated firms and firms affiliated with the small chaebols.

In contrast, some other studies, based on the evidence from advanced economies, found that performance measures of group-affiliated firms are either significantly lower than or are not significantly different from those of the unaffiliated firms (Caves and Uekusa, 1976; Gunduz and Ekrem Tatoglu, 2003; Kakatani, 1984; Cable and Yasuki, 1985; Weinstein and Yafeh, 1995, 1998).

## **7. Background of Business Families in Pakistan**

During the mid-1950s, the military government of Pakistan, headed by Ayub Khan, actively encouraged domestic production of manufactured goods (primarily textiles) instead of agriculture (cotton, wheat, rice and jute) as the future economic growth strategy for an agrarian economy. Toward this end, Pakistani government provided extensive incentives for the business families in the form of tariffs, foreign exchange licenses and voucher system, quotas, and a highly advantageous tax regime. This in turn, led to the development of a class of industrialists, later known notoriously as the *twenty-two families*. Pakistan, during that period (late 1960s) was declared as one of the success stories among the less developed countries (White, 1974). According to Omar,

“The Ayub Khan era was the 22 families’ heyday. They flourished mightily in that era, setting up one industry after another and expanding into sector after sector [;] until it seemed that they virtually controlled the economy. Banking, insurance, textiles, consumer goods - everything was grist for their mill.”

Soon afterward, the story of these business families turned tragic. After the 1971 war between Pakistan and India, the East wing of Pakistan declared itself an independent nation, Bangladesh. In late December 1971, in the West wing of Pakistan (now called Pakistan), the popularly elected government of Z.A. Bhutto replaced the military regime of Yaha Khan. The first order of business of the Bhutto government was to nationalize most of the so-called *twenty-two families* holdings (that included highly efficient and well-managed banks and insurance companies) leaving just the textiles in the families hands. The devastating impact

on the fortunes and the futures of these families in Pakistan was immediate. It was only until the very early 1990s that the political government of Nawaz Shariff (himself a member of a large business family) started returning some of the nationalized units back to these families.

During the 1990s, the business environment turned friendly. Some new business families emerged and the existing families resuscitated themselves and started expanding and moving in to new areas like automobiles and cement (Kaleem Omer, *Business and Finance Review*). The current military regime of Pervaiz Mushraf is continuing the process of liberalization by privatizing state-owned enterprises such as banks and heavy-tool industries.

There is only one known study that examines the financial performance of 43 business families (65 affiliated firms) and 33 nonmember firms involved in manufacturing in Pakistan during 1964-1968 period (White, 1974). White's empirical analysis found no significant relationship between the average profit rates (over 1964-1968 period) of family-affiliated firms and non-family controlled firms and the firm-specific variables such as size of the firm, industry membership, or family control. The results of his study also show no statistically significant difference between the financial performance (measured as the 'after-tax net profits' regressed on 'growth of total assets') of family and non-family controlled firms during the 1965-1968 periods. Though, White's additional tests did show a strong positive link between the state sanctioning of the licenses (licenses to enter an industry, capital goods import licenses, and foreign exchange licenses) and business families leading him to conclude that the emergence and existence of business families in Pakistan can be unambiguously explained by political economy hypothesis.

## **8. Corporate Governance, Group Affiliation and Firm Performance:**

We have observed a recent surge in theoretical and empirical literature on examining the role of business groups in different institutional settings and across various countries (Leff, 1978; Goto, 1982; Granovetter, 1994; Ghemawat and Khanna, 1998; Khanna and Palepu 2000; Khanna, 1999; Guillen 2000; Peng, Lee and Tan, 2001; Khanna and Rivkin, 1999b, 2001)<sup>2</sup>. Khanna (1999) argues that the with-in country as against the cross-country

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<sup>2</sup>Research has shown that business groups operate in many countries. For instance, for Belgium see van Hulle (1996), for Italy see Barca (1995), for Germany see Baums (1993), for Indonesia see Robison (1986) and Schwartz (1992), for Japan see Aoki (1990), for France see Encaoua and Jacquemin (1982), for China see

examination of business group phenomenon is more reliable since the definition of a group; the consensus about the definition and the degree of tightness of control varies significantly across countries. Similarly, Khanna and Rivkin (1999b) found that group affiliation explains a substantial portion of the firm performance across a host of countries.

Recent theoretical and empirical research also suggests that business group related organizational devices such as pyramids, cross-ownership, block trading, managerial networking, and interlocking directorates, enable controlling shareholders to expropriate minority shareholders (Bergloff and Thadden, 1999; Wolfenzon, 1999; Claessens, et al., 1999; Ghemawat and Khanna, 1998; Khanna and Palepu, 1999; LaPorta et al., 2000).

La Porta et al. (2000) state that there is significant expropriation of minority investors and creditors by the controlling shareholders in many countries. They define various ways in which this expropriation takes place. That include outright stealing of the profits by insiders, selling their firm's products or assets at lower than market prices to firms they control or own, appointing incompetent family members, unfairly rewarding executives with company stocks, free loans, and huge raises.

Recent research, primarily based on emerging economies data, has shown that the agency problem is most severe if the organization form is a business group. In the case of Pakistan, one major reason of this severity is that the corporate governance mechanism such as protection of outside investors and creditors is very poor. More importantly, laws are there but their timely and full enforcement is highly problematic. In addition, external financial disclosures (in terms of relevance and reliability) of listed firms are of poor quality. In addition, based on anecdotal evidence and general perception of outside stakeholders, firms' level of transparency is very low. In the light of the above, an examination of business group phenomenon in the context of corporate governance problems in Pakistan is warranted.

## **9. Research Design and Methodology:**

### ***Sample Selection, Data Collection, and Screening***

The initial sample was based on all firms listed on the Karachi Stock Exchange (KSE) during 1998 through 2002 period (the test period) and whose data were available on VISTA.

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Keister (1997), for South Korea see Feenstra et al., (1997) and Chang and Choi (1988), for Mexico, see Camp (1989).

We then excluded from our initial sample, firms that were in banking, finance, real estate and insurance. The numbers of total firms remaining were 582, 570, 568, 566, and 533 for the years 1998, 1999, 2000, 2001, and 2002, respectively.

**[Insert Table 1 about Here]**

Next, as shown in Table 1, we separated these firms into group and non-group sample firms. We used various sources and methods to both identify known business groups and to confirm a firm's affiliation with a group. These methods were: accessing group web sites; calling the firms themselves; referring to the book 'Who Owns Pakistan?' by Shahid-ur-Rehman (a journalist); relying on the common knowledge in the market place and among business circles. We were able to identify 49 groups for our study. Table 1 shows the additional screening criteria applied to both samples. After deleting firms that were non-operating or had missing data for a particular year, we were left with the final samples of group firms (and years) as: 253 (1998), 252 (1999), 251 (2000), 248 (2001), and 237 (2002). The final of non-group firms (and years) were: 249 (1998), 233 (1999), 228 (2000), 207 (2001), and 211 (2002).

### ***Description of Industry Characteristics***

In the next phase of the research design, we used the Karachi Stock Exchange industry classification in assigning industry codes to both sample firms. We classified firms in their respective industry codes, and where possible, we made an effort to retain the same firms across all five years.

Table 2 provides an example of the industry distribution, based on year 2002, of group and non-group firms. Due to the very small sample size of some industries, we combined the ones most related to one another, such as industrial Codes 6 and 7, Codes 9,10, and 11, and Codes 16, 17, and 18, and eliminated sectors such as Miscellaneous, etc., without sacrificing the primary intent of our study. This reduced the total sample sizes of both groups for use in the industry analysis.

**[Insert Table 2 about here]**

Table 2 shows 60% of the total group firms belong to the Textile and related sectors as against 47% for the non-group firms. This is consistent with the fact that Bhutto's regime, in 1972, did not nationalize textile holdings of the 22 families, which in turn, subsequently

helped families consolidate and expand, in these sectors. Family businesses dominate Sugar & Allied (14% vs. 6% of non-group). Alternatively, non-group firms dominate the Chemical & Pharmaceuticals (14% vs. 4% group) and the Fuel & Energy (10% vs. 3% group firms).

### ***Measures of Financial Characteristics***

We examine research question one in Table 3. It shows a list of different financial measures that will be used to examine and compare the financial characteristics of business and non-business group firms. Table 3 also provides the definition of the accounting measure of firm's financial performance (ROA) and the market measure of firm's performance (Tobin's Q), which would be used to examine the second and third questions stated earlier. The choice of these variables is consistent with measures employed in prior studies (Gunduz and Tatoglu, 2003).

**[Insert Table 3 about Here]**

## **10. Results**

### ***Descriptive Analysis of Financial Characteristics***

Table 4, Panel A and Panel B show means of different selective financial measures of sample firms affiliated with business groups and with non-business groups over a five-year test period (1998-2002). Table 4 also provides all five-years mean of financial measures for both the samples. We feel that a five-year average is a better measure than yearly averages because of the significant uncertainties that an emerging economy such as Pakistan faces over time.

**[Insert Table 4 about Here]**

### ***Liquidity Ratio***

As shown in Table 4, for the group firms, a five-year combined mean value 1.41 of current ratio is higher than the five-year combined mean value of current ratio of 1.31 for the non-business group firms - a difference of 8%. This suggests that group firms, on average, have higher liquidity and short-term solvency than the firms belonging to non-business group sample.

### ***Financial Leverage Ratio***

Table 4 also reports the financial leverage of both samples. There appears to be a significant variation in leverage ratios across years. For example, for the business group sample, the leverage ratio is as low as 2.63 in year 2002 to a high of 9.37 in year 2000 (more than three times higher). For the non-business group sample, the leverage ratio ranges from a low of 4.83 to a high of 14.07. The very high values of financial leverage for both groups could be driven by very large five-year average values 16.23 (business group sample) reported for the Textile Composite industry and five-year average values of 8.65 and 7.96 (non-business group sample) reported for the Textile Composite and Woolen, Synthetic & Rayon industry (see Table 5).

As shown in Table 4, the five-year mean debt/equity ratio (0.38) of group sample firms is lower than the five-year mean debt/equity ratio (0.52) of the non-group sample firms. In other words, the non-group firms are 37% more leveraged than the business group sample firms. A higher debt/equity ratio is a proxy for a higher financial risk suggesting that non-group firms are exposed to higher financial risk.

### ***Performance Measures - Gross Profit Margin and Operating Profit Margin***

As shown in Table 4, the business group firms have a higher five-year mean value of the gross profit margin (12.27) as compared to gross profit margin mean value (5.23) for the non-business group firms. Similarly, the operating profit margin averaged over all five years for the business group firms report a value of 0.04, whereas, the mean value reported for the non-business group firms averaged over these same five years is negative (-0.25). Therefore, based on these two averages of the test period, the business group firms are more profitable than non-business group firms.

### ***Divergence between ROA and Tobin's Q – Test of Research Question 2 and 3***

Table 4 reports two key ratios that specifically address research questions 2 and 3 that form the primary focus of our study. These ratios are ROA (an accounting-based performance measure) and Tobin's Q (a market-based performance measure) averaged over five years and reported for both the business group sample and non-business group samples. As shown in Table 4, the mean value of five-year ROA of the business group firms (8.86) is higher than

the mean five-year ROA value of the non-business group firms (5.00) – a difference of 78%. The difference in ROA clearly shows that the business group firms have a higher level of financial performance than the non-business group firms when compared over a five-year time span.

In contrast, as shown in Table 4, the five-year mean value of Tobin's Q of the business group firms (0.62) is much lower than the five-year mean value of Tobin's Q of the non-business group firms (0.82) – a difference of 33%. The divergence in ROA and Tobin's Q results suggest that even though business group firms are more profitable than non-business group firms, equity market discounts the value of these firms because it perceives these firms to have weaker corporate governance than the non-business group firms. We interpret these results as evidence that the business group, as an organizational form in Pakistan, is a successful substitute for outside market and institutional failures. At the same time, the results on Tobin's Q suggest that business groups, as compared to non-business groups, are viewed by the outside investors as mechanisms to expropriate minority shareholders.

### ***Dividend Payout Ratio***

Table 4 provides comparative five-year average values of dividend as a percentage of net profits for both, the business group and non-business group firms. The dividend payout ratio is much higher for the business group sample than for the non-business group sample - a difference of about 91%. There are two ways of interpreting this ratio. On the one hand, a higher dividend payout ratio challenges the notion that family businesses indulge in welfare-reducing activity of minority shareholder exploitation. On the other hand, it is argued in finance literature that companies pay higher dividends if they expect slim growth opportunities in future for their businesses. Family business owners/managers would rather return wealth to the owners than invest in risky but high return projects. This in turn, impacts the future growth prospects of family businesses and hurt the minority shareholders in the long run.

### ***Five-Year Revenue Growth and Asset Growth***

Finally, Table 4 shows comparative mean values of revenue growth and asset growth over the five-year test period for both business group and non-group firms. The average five-



year revenue growth value for the business group firms is 0.44, whereas the average five-year revenue growth value for the non-business group firms is 0.32 – a difference of 20%. The mean values of asset growth over five-year period for business group and non-business group firms are 0.32 and 0.29, respectively – a difference of 9%. The results suggest business groups play a prominent role in the economic growth of the Pakistani economy.

## **11. Industry Level Analysis:**

As mentioned earlier, we classified both final samples in to nine industries using KSE classification codes. The purpose of industry analysis is to determine if financial differences between the two samples found earlier can be attributed to industry effects.

### ***Financial Characteristics – Industry Analysis***

Table 5 provides five-years of various financial measures for both samples across different industries. The financial measures are the same as used in previous tables. As shown in Table 5, current ratio, debt/equity ratio, dividend payout ratio, and ROA values averaged over five-years for all nine business group industries are mostly higher than those of the non-business group industries. As shown in Table 5, a mean Debt Leverage (DL) value of 16.23 for the Textile Composite appears significantly much higher than the DL values for all other industries in the business group sample firms. The next highest DL mean value is 5.80 for the Textile Spinning & Weaving industry. Overall, we find the Textile sector to be highly leveraged both in case of the group and non-group samples. Since the Textile sector is a major source of foreign exchange, one would expect lenient lending arrangements offered to this sector both by the government and by the private sector – more so by the government.

**[Insert Table 5 about Here]**

As shown in Table 5, only the Food & Allied, Vanaspati industry of the non-business group sample has a higher liquidity than that of the business group sample industry. In contrast, the five-year mean values of Tobin's Q of all nine industries of the non-business group sample are higher than those of the business group sample industries.

### ***Five-Year Revenue Growth and Asset Growth – Industry Analysis***

Table 6 shows mean five-year revenue and five-year asset growth values for the nine industries of both samples. A comparative analysis of industries show that the average five-year revenue growth values of business group industries, namely, Textile Composite, Sugar & Allied, Cement, Fuel & Energy, Engineering, Auto, Allied, and Cables & Electric, and Food & Allied, Vanaspati are higher than those of the same industries in the non-business group sample. On the other hand, the mean values are higher for the non-business group industries, namely in Textile Spinning & Weaving, Woolen Synthetic & Ryon, and Chemical & Pharmaceuticals.

**[Insert Table 6 about Here]**

In terms of the mean values of total asset growth over five-year test period, the results on industries are similar to the ones shown for the revenue growth variable, with the exception of the Sugar & Allied industry. In that case, the mean total asset growth value over the five-year period for the Sugar & Allied industry for the non-business group is much higher than that of the same industry in the business group sample.

### **12. Discussions and Conclusion:**

This study examines business groups and their impact on corporate governance in Pakistan. Toward that end, we raise three broad research questions. First, what are the key characteristics of business group firms that are different from non-business group firms? Second, are firms affiliated with business groups more profitable than unaffiliated firms? Third, how does the stock market value group firms as compared to non-group firms? Specifically, we use the accounting performance measure, Return on Assets (ROA), to address the second question and the market valuation measure, Tobin's Q, to examine the third question. A divergence between the ROA and Tobin's Q (that is, ROA of group firms is higher than ROA of non-group firms but Tobin's Q of group firms is lower than Tobin's Q of non-group firms) would suggest that even though group firms are profitable during the test period, the external shareholders discount the value of the firm because they fear that these gains will not transfer over to the minority shareholders.

We address the three research questions using samples of group firms and non-group firms listed on the Karachi Stock Exchange (KSE) of Pakistan during 1998 through 2002

period (the test period) and whose data were available on VISTA. Next, we classify both samples into nine industries using KSE industrial classification codes.

The results of our descriptive analysis of key financial characteristics show that group firms have higher liquidity and short-term debt paying ability, and lower financial leverage in each year and if averaged over all five-years of the test period than the non-group firms. We also find that group firms revenues and total assets averaged over five-years grew faster than those of the non-group firms. These results suggest that business groups play a prominent role in the economic growth of the Pakistani economy.

We also find that group firms have higher profitability than non-group firms on all key performance measures used. In particular, our results on ROA (a test of research question 2), show that group firms are more profitable than non-group firms in each year and if averaged over all five-years. In contrast, our Tobin's Q results (a market valuation measure) show that its value each year of the test period and five-year mean values combined are lower than those of the non-group firms.

The results of our descriptive analysis show a divergence between ROA and Tobin's Q. The ROA of group firms is higher than the ROA of non-group firm. In contrast, the Tobin's Q of group firms is much lower than the Tobin's Q of non-group firms. Our results suggest that external shareholders perceive firms affiliated with business groups to have lower transparency and weaker corporate governance mechanisms than firms unaffiliated with business groups. Consequently, the market participants discount the value of group firms even though they are more profitable than non-group firms. We interpret this evidence to indicate that, in general, the business-group mechanism in Pakistan makes it easier to expropriate minority shareholders. It is equally important to note that the results of our comparative financial performance suggests that, like in most other emerging economies, the business groups in Pakistan substitute for missing or deficient outside institutions and markets and appear to play a prominent role in the economic growth of the country. We feel that our preliminary work substantially contributes to our understanding of business groups and their relationship to corporate governance and economic development in Pakistan.<sup>3</sup>

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<sup>3</sup> We also conducted additional analysis using industry-level data. The industry results are roughly similar to the ones for the full sample, and they do not change the conclusions of our study reached earlier for the full sample.

**Table 1**  
**Sample Screening Criteria**  
**Group versus Non-Group Firms: Five-Year Time Horizon (1998-2002)**

	<u>Group Firms*</u> <u>Years</u>					<u>Non-Group Firm</u> <u>Years</u>				
Sample Selection Screening	98	99	00	01	02	98	99	00	01	02
Initial Sample-Listed Firms	253	252	251	248	237	330	319	318	319	297
Non-Operating	(6)	(10)	(9)	(10)	(9)	(14)	(22)	(20)	(19)	(19)
Missing Financial Data	(14)	(19)	(25)	(39)	(25)	(67)	(64)	(70)	(93)	(67)
Final Sample	233	223	217	199	203	249	233	228	207	211

\*We managed to identify a total of 49 groups for our study.

**Table 2**

**The Distribution of Group and Non-group Firms across Key Industries (Year 2002)**

<b>Industry</b>	<b>Code</b>	<b>Group firms</b>	<b>Non-Group firms</b>
Textile Spinning & Weaving	6, 7	72 (40%)	48 (27%)
Textile Composite	8	25 (14%)	20 (11%)
Woolen, Synthetic & Rayon	9, 10, 11	10 (6%)	16 (9%)
Sugar & Allied	12	25 (14%)	11 (6%)
Cement	13	9 (5%)	10 (5%)
Fuel & Energy	15	5 (3%)	18 (10%)
Engineering, Auto & Allied, & Cables & Electric	16, 17, 18	22 (12%)	16 (9%)
Chemical & Pharmaceuticals	20	8 (4%)	25 (14%)
Food & Allied, Vanaspati	22, 25	6 (3%)	15 (8%)
<b>Total</b>		<b>182 (100%)</b>	<b>179 (100%)</b>

**Table 3**

## Financial Characteristics

Variables	Definition
<b>Short-term Liquidity Ratio</b>	
a. Current Ratio =	Current Assets/Current Liabilities
<b>Financial leverage</b>	
b. Debt to Assets =	(ST Debt + LT Debt)/Assets
c. Debt Leverage=	Total Debt to Equity
<b>Stock Market Performance Measures</b>	
d. Dividend to Net Profit =	Dividend/Net Profit
e. Dividend per Share =	<i>No change; value as entered by VISTA</i>
<b>Accounting Performance Measures</b>	
f. Gross Profit Margin =	Gross Profit/Revenues
g. Operating Profit/Sales =	Operating Profits/Sales
h. ROA =	Operating Profits/Total Assets
i. Revenue Growth =	Year-Over-Year Growth in Revenues (five-years)
j. Total Asset Growth =	Year-Over-Year Growth in Total Assets (five-years)
<b>Stock Market Measure of Performance – Corporate Governance Variable</b>	
k. Tobin's Q =	(Shares Outstanding * Share Price + BV of Total Debt)/Assets

**Table 4**

**Selective Summary Statistics**

The summary statistics present the cross-sectional/time-series statistics for group and non-group firms during 1998-2002. All firms were listed on the Karachi stock exchange during the test period.

**Panel A: Business Group Firms – Experimental Firms**

	<u>All years</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Variables	Mean	Mean	Mean	Mean	Mean	Mean
Current Ratio	1.41	1.25	1.33	1.74	1.33	1.39
Debt-to-Assets	0.38	0.39	0.40	0.33	0.37	0.41
Debt Leverage	5.02	4.45	6.21	9.37	2.46	2.63
Dividend/Net Profits	37.84	25.53	45.57	26.47	57.53	34.07
Dividend Per share	2.09	0.84	1.81	2.54	2.15	3.14
Gross Profit Margin	12.27	10.79	10.89	16.07	12.63	10.99
Operating Profit/Sales	0.04	0.00	0.07	0.09	0.06	(.00)
<b>ROA (%)</b>	<b>8.86</b>	<b>5.79</b>	<b>7.70</b>	<b>15.21</b>	<b>8.27</b>	<b>7.34</b>
<b>Tobin's Q</b>	<b>0.62</b>	<b>0.60</b>	<b>0.62</b>	<b>0.61</b>	<b>0.59</b>	<b>0.67</b>
<b>5Yr Revenue Growth</b>	<b>0.44</b>					
<b>5Yr Total Asset Growth</b>	<b>0.32</b>					
Total Sample Firms		233	223	217	199	203

**Panel B: Non-Business Group Firms – Control Firms**

	<u>All years</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Variables	Mean	Mean	Mean	Mean	Mean	Mean
Current Ratio	1.31	1.21	1.21	1.27	1.74	1.15
Debt-to-Assets	0.52	0.53	0.57	0.52	0.54	0.42
Debt Leverage	6.99	5.13	14.07	4.83	4.60	6.33
Dividend/Net Profits	19.84	14.17	18.76	22.41	18.70	25.15
Dividend Per share	1.83	1.09	1.44	2.39	1.99	2.25
Gross Profit Margin (%)	5.23	9.07	1.82	1.84	8.43	4.97
Operating Profit/Sales	(0.25)	(.11)	(.29)	(.25)	(.13)	(.47)
<b>ROA (%)</b>	<b>5.00</b>	<b>4.09</b>	<b>3.90</b>	<b>7.04</b>	<b>6.51</b>	<b>3.48</b>
<b>Tobin's Q</b>	<b>0.82</b>	<b>0.80</b>	<b>0.84</b>	<b>0.82</b>	<b>0.83</b>	<b>0.82</b>
<b>5Yr-Revenue Growth</b>	<b>0.35</b>					
<b>5Yr-Asset Growth</b>	<b>0.29</b>					
Total Sample Firms		249	233	228	207	211

**Table 5****Selective Summary Statistics**

The summary statistics present the five-year mean values on key financial characteristics for group and non-group firms during 1998-2002. All firms were listed on the Karachi stock exchange during the test period.

**Panel A: Business Group Firms – Experimental Firms**


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**Five-Year Average (1998-2002)**

<b>Industry</b>	<b>CR</b>	<b>D/A</b>	<b>DL</b>	<b>D/NP</b>	<b>DPS</b>	<b>GPM</b>	<b>OP/S</b>	<b>ROA</b>	<b>TbQ*</b>
Textile Sp&Weav.	0.91	0.47	5.80	43.66	1.66	10.84	0.05	10.04	0.64
Textile Composite	1.09	0.46	16.23	28.72	5.11	9.49	0.04	8.11	0.61
Woolen,Syn&Rayon	1.80	0.23	2.05	48.86	2.03	12.01	(.07)	6.93	0.46
Sugar & Allied	1.34	0.37	2.40	24.14	0.89	8.14	0.02	5.33	0.54
Cement	1.00	0.32	0.75	27.05	0.66	11.71	0.04	3.38	0.54
Fuel & Energy	5.67	0.25	0.58	49.48	1.15	20.99	0.18	9.81	0.46
Eng,Auto,All,C&E	1.28	0.28	5.94	35.03	1.91	8.91	(.02)	7.87	0.52
Chem&Phram.	1.61	0.22	0.71	56.74	2.60	22.00	0.06	8.67	0.69
Food&All,Vanasp.	1.21	0.50	0.52	42.50	2.79	16.92	0.02	8.92	1.27

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**Panel B: Non-Business Group Firms – Control Firms**


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**Five-Year Average (1998-2002)**

<b>Industry</b>	<b>CR</b>	<b>D/A</b>	<b>DL</b>	<b>D/NP</b>	<b>DPS</b>	<b>GPM</b>	<b>OP/S</b>	<b>ROA</b>	<b>TbQ</b>
Textile Sp&Weav.	0.73	0.60	6.31	7.40	0.59	0.54	(.04)	5.16	0.76
Textile Composite	0.84	0.47	8.65	21.20	0.83	0.33	(.14)	5.41	0.69
Woolen,Syn&Rayon	1.03	0.44	7.96	22.25	0.61	(19.9)	(.55)	1.75	0.62
Sugar & Allied	0.76	0.44	5.14	16.24	0.62	8.79	0.02	2.81	0.59
Cement	0.65	0.38	3.74	16.48	0.30	6.67	0.02	1.38	0.55
Fuel & Energy	1.29	0.23	1.21	43.42	3.75	21.88	0.11	7.40	0.60
Eng,Auto,All,C&E	1.11	0.45	3.73	16.67	1.24	(4.98)	(.16)	2.08	0.76
Chem&Phram.	1.31	0.25	2.80	34.46	2.77	(2.36)	(.25)	8.48	0.77
Food&All,Vanasp.	4.90	1.72	3.29	(.46)	8.05	(4.21)	(2.03)	1.68	2.14

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\*CR = Current Ratio; D/A = Debt/Total Assets; DL = Debt Leverage; D/NP = Dividend/Net Profit; DPS = Dividend Per Share; GPM = Gross Profit Margin; OP/S = Operating Profit/Sales; ROA = Return on Total Assets; TbQ = Tobin's Q.



**Table 6****Comparative Summary Statistics**

The comparative summary statistics present the averages of Five-year growth on selective variables for group and non-group firms for the 1998-2002 periods. All firms were listed on the Karachi stock exchange during the test period.

**Business Group and Non-Business Group Firms – Comparative Summary Statistics on Selective Variables by Industry**

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	Year-Over-Year Five-Year Average (1998-2002)			
	Revenue 5Yr Growth		Total Assets 5Yr Growth	
	Group	Non-Group	Group	Non-Group
Textile Sp&Weav.	0.27	0.35	0.16	0.28
Textile Composite	0.48	0.32	0.84	0.25
Woolen,Syn&Rayon	0.26	0.47	0.07	0.25
Sugar & Allied	0.08	0.06	0.01	0.55
Cement	0.46	0.10	0.99	0.04
Fuel & Energy	0.14	(0.01)	0.79	0.44
Eng,Auto,All,C&E	0.31	0.28	1.19	0.28
Chem&Phram.	0.24	0.27	0.29	0.51
Food&All,Vanasp.	1.32	0.42	0.70	0.53

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## References

- Claessens S. 1997. Corporate Governance and Equity Prices: Evidence from the Czech and Slovak Republics. *Journal of Finance* 52: 1641-1658
- Claessens S, Djankov S, Lang L.H.P. (2000). The Separation of Ownership and Control in East Asian Corporations. *Journal of Financial Economics* 51, 111-135.
- Encarnation, D. (1989). *Dislodging Multinationals: India's Comparative Perspective*. Cornell University Press: Ithaca, NY.
- La Porta, Lopez-de-Silanes, Shleifer, Vishny (2000). Investor performance and corporate governance. *Journal of Financial Economics*. 58, 3-27.
- Guillen, Mauro F. (2000). Business Groups in Emerging Economies: A Resource-based View. *Academy of Management Journal*, 43(3), 362 – 381.
- Gunduz Lokman and Tatoglu Ekrem., “A Comparison of the Financial Characteristics of Group Affiliated and Independent Firms in Turkey”, *European Business Review*; Bradford: 2003, Vol. 15, Issue 1, pgs 48-54.
- Khanna, T., and Krishna, Palepu (2000). The Future of Business Groups in Emerging Markets: Long-run Evidence from Chile.” *Academy of Management Journal*, 43(3), 268-286.
- Khanna, T. (2000). Business Groups and Social Welfare: Existing Evidence and Unanswered Questions. *European Economic Review* 44, 748-761.
- Khanna, Tarun and Krishna, Palepu (1997). Why Focused Strategies may be wrong for Emerging Markets. *Harvard Business Review*, 75(4), 41-51.
- Khanna, Tarun and Krishna, Palepu. (1999). The Right Way to Restructure Conglomerates in Emerging Markets. *Harvard Business Review*, 77(4), 125-134.
- Khanna, T. & J. W. Rivkin. (2001). Estimating the Performance Effects of Business Groups in Emerging Markets. *Strategic Management Journal* 22, 45-74.