

Business Group's Performance: Market and Non-Market Measures in Pakistan

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Abstract

This study examines the influence of market and non-market strategies on the financial performance of firms affiliated with business groups. The study analyzed 136 non-financial firms affiliated with business groups, listed on the Pakistan Stock Exchange for the period 2010 to 2020. Market strategies focused on firm related resources diversification, financial constraints and internal capital generation rate. Whereas, non-market strategies focused on political connections and corporate social responsibility. Using fixed effect panel regression model, we found that for business-group firms, both market and non-market strategies significantly increase financial performance. Diversification, financial constraints and internal capital generation drive market success, while political connections and strong corporate social responsibility contribute through non-market measures. This suggested that business group affiliated firms should carefully choose a mix of market and non-market resources for optimal performance. This is also suggested that regulatory authorities shall introduce such policies that smoothen the business operations and encourage managers of affiliated firms to employ more combinations of market and non-market resources to get competitive advantage and promote responsible business practices within the groups.

Keywords: Business groups, Market strategy, Non-market strategy, financial performance

Introduction

Companies that value stakeholder's perspective show more interest in serving distinct shareholders by adopting different courses of action (Wrona & Sinzig, 2018). Market strategy (MS) positions a firm in its enterprise and permits it to pursue aggressive advantage by growing abilities associated with cost leadership, differentiation, and other strategic orientations. MS take under consideration the firm's internal resources that it is able to use to operate and build aggressive advantages, together with its tangible and intangible assets. Non-market strategy (NMS) places its emphasis on the firm's connection to politico-legal and socio-cultural aspects, and this is often highlighted in emerging nations (Lin, Chen, & Lin, 2014; Yin, Singhapakdi, & Du, 2016). The cause of this, takes a look at is to enhance know-how of the ways in which a business group firm's internal resources and its socio-cultural activities influence its financial performance. These business groups encompass a multitude of firms linked through inter-corporate shareholdings and companies that, despite their legal independence, are interconnected through a web of both formal and informal relationships, fostering a tendency for coordinated endeavors.

This study investigated effects of market and non-market strategy measures on the financial performance of firms affiliated with business groups in Pakistan. In previous studies, researchers have mostly focused on how a firm performance can be enhanced using firm related internal resources and have ignored other factors that can be profitable for the firm. This problem provoked us to focus non-market measures so that body of literature could be broaden.

Historical studies focused return-on-assets (ROA), stock prices, and various financial performance indicators. In contrast, this greater emphasis on study focused influence of strategic resources and capabilities on performance. First, this study has taken into account a comprehensive view of financial performance of firms rather than only simple accounting measures of performance. Secondly, this study explored and categorized corporate social performance and political influence as non-market strategy measures, in detail to cover a comprehensive stakeholder view. Unlike earlier studies that predominantly relied on a single indicator to gauge corporate social responsibility (CSR) and financial performance, this research incorporated a variety of indicators and took into consideration multiple stakeholders to comprehensively assess firm performance.

Literature Review

This study considers affiliated firm resources and identified measures that should be focus of managers. It emphasized role and importance of stakeholders of a firm. Not only has it considered internal but external stakeholders. Market and non-market strategy both underscore the significance of resources and stakeholders. These strategies have significantly contributed to the development of our theoretical framework. The most prominent ones are “*stakeholder theory*” given in 1984 by R. Edward Freeman, says that organizations should show keen interest in meeting needs of its stakeholders rather than focusing only on its shareholder wealth. Improving the economic viability should not be the ultimate goal rather giving to society shall be one among the top goals. Majority of our variables explain importance of stakeholders like political connections, CSR and financial performance. Latter two were measured through construction of index with help of various sub-variables each defining different stakeholder. So our study revolves around stakeholders and well aligned with the stakeholder theory.

Our study also delves into the “*resource-based perspective (RBV)*”, which is a management framework employed to identify the strategic resources that a company can leverage to attain a lasting competitive advantage. Barney's 1991 paper, “Firm Resources and Sustained Competitive Advantage,” is commonly acknowledged as a seminal piece in the evolution of resource-based thinking. RBV posits that firms exhibit heterogeneity due to their possession of distinct resources, leading them to formulate unique combinations of strategies. Therefore, it is important for organizations to choose a mix of resources that provides optimal performance. Consequently, it is crucial for the groups to pick the mixture of resources that provide highest quality overall performance. Our study provided useful insights for managers working in developing countries to choose appropriate market or non-market strategies by selecting the best resources and focusing on critical resources.

Market Strategy Measures (MS)

Market strategy refer to steps carried out by firms to improve their performance by aligning market actors together with competition, customers and suppliers (Dewnarain, Ramkissoon, & Mavondo, 2019; Morgan & Vorhies, 2018; Zollo, Minoja, & Coda, 2018). For this reason, we have identified following measures of market strategy:

Internal Capital Markets

One of the many internal resources used by firms is availability of internal capital markets. There are mostly two common ways for this, one is a firm uses its own capital or retained earnings and other is better performing firms of a business groups share their internal cash to fund the weaker sister firms. Group

affiliates can provide protection to member firms by way of sharing risks via beneficial aid moving from a properly-acting affiliate to poor performers at time of financial misery. Group affiliated firms with more internal capital availability face less shortage of funds for their investment projects thus increasing their operational performance, return on equity and leverage than standalone firms (Buchuk et al., 2014).

He, Mao, Rui, and Zha (2013) found that business groups in China pool up their funds from all better performers and use these funds for where these are most profitable improving their performance. This phenomenon reduces transaction cost that a firm otherwise have to bear due to external financing (Chang & Hong, 2000; Dewaelheyns & Van Hulle, 2010). Such advantages arise due to their substantial operational and financial interlinkages and because they are managed by a common group of insiders (Gopalan et al., 2007). Similarly, Lin (2020) conducted research in the Taiwanese market, focusing on group internal capital markets and investment performance and found positive relationship between both.

Studies advocating negative impact on business affiliates performance includes Chang and Hong (2000) who using different measures of internal capital markets concluded that provision of debt guarantees significantly depresses the profitability of the guarantor but improves the profitability of the guarantee. The performance of helper affiliate may decrease as a result of rent seeking behavior and due to agency problems (Scharfstein & Stein, 2000). These relationships lead to formulation of hypothesis for this study:

H1: *Firms affiliated with business groups that utilize more internal capital have low financial performance.*

Diversification

Business group level diversification represents the span of industries in which all the member firms of a business group engage. This reflects the range of business in which each affiliate works. Diversification can be related or unrelated. Most commonly, related diversification leads to good profits whereas unrelated diversification is deteriorating (Wang, Chen, & Chang, 2011).

Oyedijo (2012) targeted Nigerian firms and showed that product-market diversification positively affects corporate financial performance along growth. His work also demonstrated that firms pursuing related or unrelated diversification strategies showed excellent performance and grow faster as compared to those firms that employ both type of strategies to work. It was also found that a firm's related diversification and its financial performance are positively correlated and such diversifiers performed better as compared to unrelated and mixed diversifiers. Grant et al. (1998) and Markides (1992) reported that as relationship between different business lines decreases this positive effect will become negative and administrative costs will continue to increase, thus Hakrabarti (2007) identified that diversification is detrimental for both group affiliates and independent firm's financial health thus it suppresses their performance.

Sindhu, Haq, and Ali (2014) explored that diversification and firms' performance have a positive relationship and diversification enhanced performance of Pakistani firms. Other researchers who advocated the same relationship between diversification and firm performance include Boz, Yigit, and Anil (2013) and Nwaeke and Wodu (2012). Likewise, Lei and Schmit (2009) studied a sample of insurance group firms and found that highly diversified insurance firms show improved financial performance. Wang et al. (2020) worked on framework of capability, diversification strategy and performance and examined if a group affiliate has a good business marketing capability to work, a high level diversification will improve performance and if it has strong R&D capability it should achieve a low level diversification to show better performance. Borda et al. (2017) explored the positive moderating impact of diversification on a firm's foreign operations i.e. multinationality and its performance and this impact is more positively pronounced on performance of service sector firms than manufacturing firms. Based upon these evidences we can say hypothesize that:

H2: *Group affiliated firms that are more diversified show low financial performance.*

Financial Constraints

Financial constraint is any factor that restricts the amount or quality of investment options. When firms have more options of financing available to be opted then they are said to have fewer financial constraints. Conversely, firms with fewer available options are considered to be significantly constrained and, as indicated by He et al. (2013), tend to rely on internal capital markets due to their limited access to external financing., firms choose to use internal capital markets to carry out their investment expenses (Cetenak & Vural, 2015).

In recent studies, Lou et al. (2021) found that a firm investment performance is affected due to higher financial constraints using data of Chinese listed firms. Ullah et al. (2014) found Firms with ISO certification exhibit notably reduced levels of financial constraints in comparison to non-ISO certified firms, and ISO certification is significantly and positively linked to firm performance. So, we can hypothesize:

H3: *Group affiliated firms with less financial constraints have high financial performance.*

Non-Market Strategy Measures (NMS)

The increasing importance on non-market activities encouraged researchers to analyze its linkages with various elements such as firm performance and acceptance (Mellahi, Frynas, Sun, & Siegel, 2016; Parnell, 2018). In contrast to market strategies, Balaji, Jiang and Jha (2019) identified non-market activity as a tool for business leaders to interact in way that minimizes conflicts with direct and indirect stakeholders and better reaping the reward later (Wei, Hu, Li, & Peng, 2015). Mellahi et al. (2016) introduced two dimensions of non-market strategy (NMS). Social NMS encompasses corporate social responsibility (CSR) Dupire and M'Zali (2018) and such activities for society on part of business world (Iyer & Jarvis, 2019), while political NMS encompasses the relationships between firms in the political sphere, political influence and competitors (Parnell, 2017). The details of each type of measure of non-market strategy in our study are as follows:

Political Connections

Turbulent relationships between state and business world have advocated huge keeping organizations to keep private and professional terms with politicians and bureaucrats are crucial. It involves a trade between companies and political or influential individuals, where firms offer political campaign contributions, personal kickbacks, and bribes, and in return, politicians provide access and opportunities to these firms (Faccio, 2006; Shleifer & Vishny, 1994). Other practices include lobbying efforts and engaging politicians to serve on their Board of Directors (Houston et al., 2012). Chaney et al. (2011) classified a company as politically connected if at least one of its significant shareholders (anyone directly or indirectly controlling at least 10% of the votes) or top directors had affiliations with parliament, a minister, a head of state, or had strong connections to a politician or political party, or were employed by any government body.

Joni et al. (2020), based on a sample of 250 firms in Indonesia, suggested that firms with politically connected supervisory boards experience lower costs of debt/equity capital, but having politically connected Boards of Directors does not lead to the same benefits. Saeed (2013) explored the negative impact of political connections on the economic life and performance of individual firms in Pakistani.

H4: *Group affiliated firms without politically connected board of directors have high financial performance.*

Corporate Social Responsibility (CSR) is a concept whereby firms identify their obligations towards society and devise their business policies accordingly. Social citizenship causes companies not to restrict themselves to only earning profits for them.

Kamasak et al. (2019) discovered the impact of corporate social responsibility and corporate political activities as an interaction term in Turkey demonstrating that interaction term had a positive effect on financial performance. Malik and Kanwal (2018) examined the influence of CSR disclosure practices on the financial performance of pharmaceutical firms in Pakistan and identified a positive correlation. In contrast, Mehralian et al. (2016) worked on pharmaceutical firms in Iran and found CSR is insignificant to affect organizational performance. Studies showing negative relationship include that of Martinez-Conesa et al. (2017) where it was observed that a negative relationship exists between CSR activities and a firm's financial performance.

H5: Group affiliated firms with high CSR activity have low financial performance.

Methodology

Data Collection, Sources and Sample

This particular study includes sample of business group affiliated 136 non-financial firms of Pakistan for the period 2010 to 2020. The reason for excluding financial firms is they have different accounting methods and structures. Annual data is used for our sample. Data for variables is taken from annual reports of firms, from individual firm's website, website of Pakistan Stock Exchange (PSX) and State Bank of Pakistan data portals. The variables under study along with their operational measurement are shown in Table no. 1 below:

Data Description

Table no. 1 defines firm financial performance (FPINDEX) being dependent variable of study, FPINDEX has four variables and further sub variables, so we have created index of our dependent variables following Zhou et al. (2021), the weight of the FPINDEX indicator is determined based on the information it holds. To achieve this, principal component analysis is employed. CSRINDEX denotes corporate social responsibility index. CSRINDEX variable as shown in Table no. 2, has further five sub variables; shareholders, employees, creditors, government and society and this index is further calculated using principal component analysis, getting the weighted index following Zhou et al. (2021). Table no. 3 shows rest of independent variables, ICGR is measured following Fabozzi and Markowitz (2011) and Thapa et al. (2020), DIV is diversification a dummy variable where Least diversified groups operate in 1-4 industries, Moderately diversified groups encompass those with 5-7 industries, and the Most diversified groups are those with more than 7 industries, assigned values of 1, 2, and 3 respectively following Khanna and Palepu (2000a), and Anna Lamin (2007)¹, FC following (Hall et al. 2016), SZ stands for size of a firm. PC is dummy variable that takes values of 1 in year where an affiliated firm has any Board of Director (BoD) who is currently or have worked in past in any government organizations and 0 in years where it doesn't have any such politically connected BoD following Chaney et al. (2011).

Table No. 1**Financial Performance Indicators**

¹ In her dissertation “The Effect of Business Group Affiliation on Firm Strategy: submitted to The Faculty of the Graduate School of “The University Of Minnesota” for the degree of doctor of philosophy in 2007.

Sr no.	Variable	Symbol	Measurement	Type
1	Financial Performance	FPINDEX		Dependent variable
(a)	Growth Ability	Growth rate of net Fixed assets	NAGWTH	Net fixed asset at the end of this year/ net asset at the end last year
		Operating profit growth rate	OPGWTH	Operating profit of this year/operating profit previous year
(b)	Profitability	Return On Total Asset	ROA	Net Profit/Total Assets
		Return On Equity	ROE	Net Profit/Equity
(c)	Quality of Earnings	Earnings Per Share (diluted)	EPS	Net Profit/Common shares outstanding
(d)	Risk Management	Debt to Total Assets ratio	DTA	Total Debt/Total Assets
		Debt to Equity ratio	DTE	Total Debt/Equity

Table No. 2**Corporate Social Responsibility Indicators**

Variable	Symbol	Measurement	Type
CSR Index	CSRINDEX		Independent variable
Shareholders (Dividend payment rate)		Dividend per share/EPS	
Staff (Staff expense rate)		Management expense/operating income	
Government (Tax proportion)		Income tax/Net income	
Society (Proportion of public welfare donations)		Donations/ Net income	

Table No. 3**Operational Definition of variables**

Variable	Symbol	Measurement	Type
Internal Capital generation rate	ICGR	ROE x (1- Dividend payout ratio)	Independent variable
Diversification	DIV	No. of industries in which a group operates	Independent variable
Financial Constraints	FC	Shorter net capital/total assets where, Short term net capital = cash+ receivables+ inventory- acct payables (A higher ratio means less constraint)	Independent variable
Political Connections	PC	Current/Ex govt. officials serving on Board of directors	Independent variable
Size	SZ	Log of total assets	Control variable

Econometric Model:

We have derived the following equations:

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \varepsilon_i \dots\dots\dots(1)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \beta_2 FC_{i,t} + \varepsilon_i \dots\dots\dots(2)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \beta_2 FC_{i,t} + \beta_3 ICGR_{i,t} + \varepsilon_i \dots\dots\dots(3)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \beta_2 FC_{i,t} + \beta_3 ICGR_{i,t} + \beta_4 SZ + \varepsilon_i \dots\dots\dots(4)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 PC_{i,t} + \varepsilon_{i,t} \dots\dots\dots(5)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 PC_{i,t} + \beta_2 CSR_{i,t} + \varepsilon_{i,t} \dots\dots\dots(6)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 PC_{i,t} + \beta_2 CSR_{i,t} + \beta_3 SZ_{i,t} + \varepsilon_{i,t} \dots\dots\dots(7)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \beta_2 FC_{i,t} + \beta_3 ICGR_{i,t} + \beta_4 PC_{i,t} + \beta_5 CSR_{i,t} + \varepsilon_{i,t} \dots\dots\dots(8)$$

$$FPIndex_{i,t} = \alpha_0 + \beta_1 DIV_{i,t} + \beta_2 FC_{i,t} + \beta_3 ICGR_{i,t} + \beta_4 PC_{i,t} + \beta_5 CSR_{i,t} + \beta_6 SZ_{i,t} + \varepsilon_{i,t} \dots\dots\dots(9)$$

Results and Discussions

Table No. 4 shows the mean value of FPINDEX is .023, mean value of DIV is 1.70 which suggest that our sample has mostly business groups that fall under categories from least diversified to moderately diversified, mean value of FC is -.119, ICGR has 0.069 mean value showing internal capital generation rate of most group affiliated firms is 6.9% and mean of PC is 0.932, mean of SZ is 15.55, mean of CSRINDEX is 0.0086.

Table No. 4**Descriptive Statistics**

Variables	Obs	Mean	ST. Dev	Min	Max
FPINDEX	1496	0.0235	.5841	-2.1899	4.8768
DIV	1496	1.7098	.6644	1	3
FC	1496	-0.119	.7013	-11.3	1.007
ICGR	1496	0.0693	.0914	-9.70	-17.7
PC	1496	0.932	.2509	0	1
CSRINDEX	1496	.0086	1.2113	-9.855	19.705
SZ	1496	15.5551	1.7020	8.3	19.5

Table No. 5 shows pairwise correlation among variables where it can be seen that all other independent variables have positive and significant correlation with dependent variable except size (SZ) that has negative correlation with dependent variable FPINDEX. The respective results are supportive for our hypothesis.

Table No. 5**Pairwise Correlations**

Variables	FPINDEX	DIV	FC	ICGR	PC	CSRINDEX	SZ
FPINDEX	1.000						
DIV	0.007	1.000					
FC	0.025	-0.003	1.000				
ICGR	0.145	-0.037	0.028	1.000			
PC	0.043	0.143	-0.066	0.004	1.000		
CSRINDEX	0.037	0.059	-0.011	-0.004	0.026	1.000	
SZ	-0.092	0.075	0.321	0.060	0.083	-0.0712	1.000

Table No. 6 demonstrates variance inflation factor to check the multicollinearity among independent variables. A VIF of greater than 5 indicates that multicollinearity problem exists among variables, whereas our results show none of variable is having VIF value more than 5 so the said problem doesn't exist in our data sample.

Table No. 6**Variance Inflation Factor**

	VIF	1/VIF
DIV	1.03	0.969
FC	1.13	0.887
ICGR	1.01	0.994
PC	1.04	0.964
CSRINDEX	1.01	0.989
SZ	1.14	0.873

Panel Regression Results

Generally three models are used on panel data, pooled OLS (common effect), fixed effect and random effect model. Further two more tests Likelihood and Hausman test are performed to confirm which model is fit for our study. The Hausman test results decide either fixed effect or random effect is appropriate.

This study employed Hausman test using econometric models and p-value of our results remained ($P < 0.05$), thus rejecting the null hypothesis of test i.e. Random effect model is good, suggesting fixed effect panel regression model is good fit for our study. In model 1, in Table no.7, DIV is significantly and positively affecting a business group affiliated firm's financial performance as diverse business groups are more profitable, they have more segments to serve, enjoy revenues from portfolio of products than firms working in same line of business Kamau and McCormick (2016), and our findings are supported by Lei and Schmit (2009) and Sindhu, Haq, and Ali (2014). Model 2 shows that DIV is positive significant and FC is also positively significantly affecting financial performance contradicting Ullah (2014) and the reason is the firms who face shortage of funds will only opt for most profitable investment option and this guides managers to improve their management decisions thus improving performance. Moreover, many financially constrained group affiliated firms are provided with resources from other better performing affiliates and they enjoy the benefits through rent seeking. In model 3, DIV and FC remained positive significant while ICGR is positively significant to affecting firm performance, more a firm has ability to use its own capital or retain earning more of its performance will enhance and in this regard our findings are supported by Lin and Yeh (2020) as we have seen in light of past research evidences available that business group share risks of sister firms by providing security through sharing their resources at the time of financial turmoil and less dependence on external financing can help a business group to restrict its profit outflows in form of paying interest expenses. Model 4 reports that DIV, FC and ICGR are positive and significant whereas size (SZ) which is a control variable is negative and significant to firm performance.

Table No. 7**Financial Performance & Market Strategy Measures**

Dependent variable: FPINDEX	Model 1	Model 2	Model 3	Model 4
DIV	1.060*** (0.000)	1.080*** (0.000)	1.149*** (0.000)	1.224*** (0.000)
FC		0.095*** (0.009)	0.088** (0.014)	0.107*** (0.003)
ICGR			0.064*** (0.000)	0.061*** (0.000)
SZ				-0.085** (0.010)
R-square	0.280	0.284	0.291	0.295
P-F statistics	0.0000	0.0000	0.0000	0.0000

Significance Level at ***1%, **5%, *10%

Table no. 8, model 1, PC is positive and significant to performance contradicting findings of Saeed (2013) and supported by Tsai (2019). This indicated that having board of directors who are politically connected (as per our definition too) or have been linked/employed with government bodies improve the performance of a business groups by helping their firm remove barriers for working, access to insider information on regulatory policies, becomes a source to maximize business ventures and minimize monetary losses (Colli & Colpan, 2016). Model 2 shows PC is positive significant, CSRINDEX is positively significantly affecting financial performance and results are in line with that of Al-Shammari (2022), Malik and Kanwal (2018) which indicated that higher CSR will leave a better image of a firm in society and prove to be profitable. Public and government consider such firms responsible and help them gain benefits of a good reputation. Model 3 results show that PC and CSRINDEX are positive significant whereas SZ is negative and significant with dependent variable FPINDEX.

Table No. 8
Financial Performance & Non- Market Strategy Measures

Dependent variable: FPINDEX	Model 1	Model 2	Model 3
PC	0.250* (0.078)	0.253* (0.075)	0.287** (0.045)
CSRINDEX		0.027** (0.030)	0.077** (0.028)
SZ			-0.069** (0.035)
R-square	0.274	0.276	0.279
P-F statistics	0.0000	0.0000	0.0000

Significance at $p < ***1\%$, $**5\%$, $*10\%$

Table no. 9 model 1 enclosed results for market and non-market measures where DIV is positive and significant to financial performance and in line with Binuyo et al. (2020), FC is positive significant contradicting Leong & Yang (2021), ICGR is positive significant and supported by He et al. (2013), PC is positive significant contradicting findings of Joni et al. (2020), CSRINDEX is positive and significant advocated by findings of Shahzad et al. (2019) while model 2 shows DIV, FC, ICGR, PC, CSRINDEX all are positive and significant but control variable SZ is negative and significant with R-square value of 0.300.

Table No. 9
Financial Performance, Market & Non- Market Strategy Measures

Dependent variable: FPINDEX	Model 1	Model 2
DIV	1.144*** (0.000)	1.228*** (0.000)
FC	0.088** (0.015)	0.109*** (0.003)
ICGR	0.647*** (0.000)	0.060*** (0.000)
PC	0.262* (0.062)	0.307** (0.029)
CSRINDEX	0.025** (0.038)	0.025** (0.035)
SZ		-0.094*** (0.000)
R-square	0.295	0.300
P-F statistics	0.0000	0.0000

Significance at $p < ***1\%$, $**5\%$, $*10\%$

Robustness Check

Table no. 10 show robust results to our models. For this we have employed feasible generalized least square method (FGLS). The presence of serial correlation and heteroscedasticity and cross sectional dependence problem makes feasible generalized least square (FGLS) more efficient and consistent than ordinary least squares or fixed effect models (OLS; Petersen, 2009). We tested the presence of heteroscedasticity and serial correlation using further tests. The Wooldridge test for autocorrelation rejected the null hypothesis of no autocorrelation ($F(1,135)=6.143$, $p\text{-value}=0.0144$) and Breusch pagan/Cook-Weisberg test also rejected the null hypothesis of no heteroscedasticity $\chi^2(1)=13.76$, $p\text{-value}=0.0002$. The results showed that our variables have same sign of coefficients and most of them are significant like our baseline fixed effect model. This further strengthens the validity of our results.

Table No. 10**Robustness check through Feasible Generalized Least Square Method**

Dependent variable: FPINDEX	Model 1	Model 2
DIV	0.026 (0.037)**	
FC	0.007 (0.507)	
ICGR	0.029 (0.003)***	
SZ	0.031 (0.000)***	0.033 (0.000)***
PC		0.011 (0.067)*
CSRINDEX		0.004 (0.332)
Wald chi2(P-value)	60.32(0.000)***	72.22 (0.000)***

Significance at $p < ***1\%$, $**5\%$, $*10\%$

Summary of Results

The results of this study show that all null hypotheses H1, H2, H3, H4, and H5 are rejected and alternate hypothesis are accepted. All the market strategy and non-market strategy measures remained significantly positive. Our control variable size remained negative and significant in relation to financial performance. High correlation and multicollinearity problem doesn't exist in data. The results were further robust using FGLS model and we have seen that different models validated and supported our finding. The results were completely in line with evidences from literature and all findings remained aligned with concepts of Stakeholder theory and Resource-view based theory.

Conclusion

The study shed light on business group affiliated firms in Pakistan along how market and non-market measures impact financial performance of affiliated firms. Using fixed panel regression model, we found market strategy measures diversification, financial constraints, internal capital generation rate positively affects financial performance of these firms whereas non-market strategy measures political connections and corporate social responsibility are also positive and significant to affect financial performance. Theoretical base of the study are two concepts resource-based theory and stakeholders theory. Market and non-market strategy measures are firm related resources and align well with the concept of resource based theory. Our variables of study focus on direct and indirect stakeholders of business groups including dependent variable i.e. financial performance, and are perfectly in coherence with concept of stakeholder's theory.

Policy Implications

This study is useful for managers to understand importance of non-market measures. It emphasizes that managers must also gain knowledge and identify new non-market resources to improve their profitability. Policy makers should also devise favorable corporate governance policies to help business conglomerates to gain benefits from their market and non-market resources.

Limitations of Study

This study is not free from limitations as it included only public listed firms of major business groups due to data availability constraints and private unlisted firms of these business groups need to be considered

and a clearer picture of business groups strengths needs to be unfold. Limited data leads to limited sample size in this study. More advance econometric models may help us overcome technical errors and improved results.

Future Research/Recommendations

Future scholars can introduce new non-market measures and analyze their performance impact. They can introduce new and improved proxies for the measures used in this study. Future researchers can target a sample that contains listed and unlisted private firms of business groups based on data availability and analyze the impact of market and non-market measures by comparing the performance of both types of sample firms.

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