





“Market share and firm performance: Moderated and mediating effects of firm size and corporate governance”

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MARKET SHARE AND FIRM PERFORMANCE: MODERATED AND MEDIATING EFFECTS OF FIRM SIZE AND CORPORATE GOVERNANCE

Abstract

Firm performance is of global interest for sustainable growth and is a function of multiple factors. Market share is often considered the source of competitive position and ability to generate financial performance. By understanding these dynamics, organizations can develop tailored strategies incorporating corporate governance to enhance competitiveness for improved performance outcomes. This study examines the impact of market share on firm performance, considering the moderated effect of firm size and mediating effects of corporate governance with capital structure, growth, and innovation as control variables. This study relies on seven-year firm-level data, utilizing an uneven sample of 40 non-financial companies listed on the Nepal Stock Exchange (NSE) and encompassing 280 observations. A causal-comparative research design was used with Process Macro tools in a moderated mediating model to examine the hypotheses. The results revealed a significant impact of market share on firm performance, i.e., ROA ($\beta = 0.195, p < 0.01$) and Tobin's Q ($\beta = 0.232, p < 0.01$). Additionally, firm size moderated negatively ($\beta = -0.82, p < 0.01$), while corporate governance positively mediated the relationship ($\beta = 0.184, p < 0.01$; Tobin's Q: $\beta = 0.188, p < 0.05$). Control variables had no significant impact on corporate governance. The study highlights the implication of balance of market share, corporate governance, and innovation with firm size for the firm's performance. By utilizing these insights, firms can create strategic initiatives to boost competitiveness, improve resource allocation, and reinforce governance practices.

Keywords

corporate governance, innovation, firm performance, firm size, market share

JEL Classification

G30, G32, L25

INTRODUCTION

Researchers have long investigated competitive strategy and focused on assessing the association between market share and firm performance (Bhattacharya et al., 2022; Liu et al., 2022). Understanding how a company's market share impacts its performance metrics is essential for making strategic decisions, allocating resources, and positioning competitively (Bhattacharya et al., 2022). As a significant measure of a company's competitive position, market share can affect various performance results, such as profitability, growth, and operational efficiency. Many scholars (e.g., Wernerfelt & Montgomery, 1988) reported a strong influence of market share on firm performance, i.e., accounting profit of business units. Competitive market share is considered the competitive strategy for the firm's performance (Farida & Setiawan, 2022; Liu et al., 2022; Sheikh, 2018) and is the function of competitive innovation and competitive advantage (Huang et al., 2022). However, few studies revealed mixed evidence on the relationship between market share and firm performance (Mubeen et al., 2022; Sattar et al., 2020; Sheikh, 2018; Fosu, 2013). The findings of competitive market

share on firm performance differ in different studies due to differences in the contextual and cultural factors, such as innovation, capital structure, firm size, and corporate governance issues (e.g., Mubben et al., 2021; Ting et al., 2021; Michaelides et al., 2019; Sheikh, 2018; Belloc, 2012). Corporate governance and firm size may influence the firm performance by facilitating business decisions and the innovation process within the firm (Li & Chen, 2018; Chen et al., 2014; Campello & Hackbarth, 2012) through the policy of change and innovation management to improve performance (Dang et al., 2018). Considering these facts, it is interesting to examine how market share influences firm performance in the presence of corporate governance and firm size for robustness.

1. LITERATURE REVIEW

Firm performance is the core focus of corporate finance and is a crucial factor in financial decisions (Edeling & Himme, 2018; Sulong et al., 2018). A competitive market share position contributes to a profound comprehension and enhanced performance by reinforcing competitive advantages. The fundamental objective of any firm should be to augment its financial value and achieve a sustainable competitive environment and organizational goals (Schaltegger & Wagner, 2011). Following the efficiency theory, this study examines the impact of market share based on the notion that firms with higher market share reduce the overall cost by optimizing the economies of scale (Sulong et al., 2018). Likewise, the study follows another theoretical stance, i.e., market power theory, which illustrates that firms with significant market shares enjoy market power advantages (Ariss, 2010). It believes that the large market share facilitates competitiveness in offering discounts to sellers and higher bargaining power in purchasing raw materials and supplies, resulting in a positive relationship between market share and firm performance.

Market share is a critical indicator of a firm's competitive expertise (Edeling & Himme, 2018; Sulong et al., 2018). As a firm augments its market share, this can significantly influence its overall performance. This is because when a firm expands its market presence and scale, it can lower production costs, offer competitive prices, and achieve more significant sales volumes (Covin et al., 2000). This restrains the growth of competitors, ultimately resulting in increased profitability. The competitive environment allows businesses to build an image that provides a competitive advantage (Saeidi et al., 2015).

Additionally, a more prominent position of a firm's competitive standing in the market diminishes the agency conflicts between owners and managers while also curbing managerial complacency, ultimately resulting in enhanced firm value (Abbas et al., 2019; Li et al., 2019). Managers in the expanded business environment face more bankruptcy and liquidation risk than those in the concentrated environment; they try to establish a valuable and successful firm to prevent job loss. Besides, increased competition motivates the firm to achieve higher performance (Ammann et al., 2013). Some studies investigated the effects of market share and firm performance, but the results are scarce. However, Javeed et al. (2020) revealed a negative effect of market share on firm performance, while Tingvall and Poldahl (2006) reported a curvilinear relationship. Ammann et al. (2013) demonstrated that competition is a favorable instrument for shareholders, as it compels top management to exert more significant effort, thereby reducing stakeholder conflicts and enhancing firm performance (Liu et al., 2022; Sattar et al., 2020; Giroud & Mueller, 2011).

The literature on financial management suggests that senior-level managers play a crucial role in shaping the governance fundamentals, which subsequently have a significant impact on a company's performance (Jackling & Johl, 2009); senior-level managers are influencers in adopting governance practices. Brander and Lewis (1986) and Simerly and Li (2000) argued that implementing governance practices and using debt enables firms to compete effectively in a fiercely competitive environment, encouraging managers to prioritize leveraging for greater profits (Ammann et al., 2013). Moreover, good governance practices result in higher capital expenditures, reduced spending on acquisitions, and a decreased likelihood of diversification. Further, corporate gov-

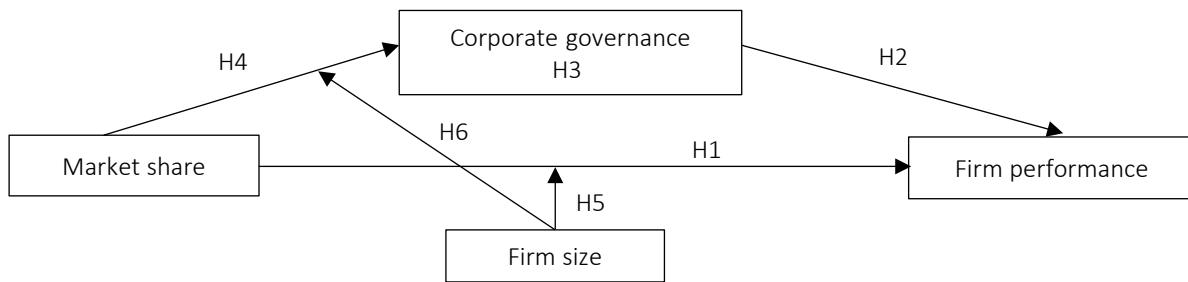


Figure 1. Study framework

ernance mechanisms serve to monitor managers and safeguard the interests of shareholders (Christensen et al., 2015), resulting in significant benefits for shareholders (Bhagat & Bolton, 2008). Gompers et al. (2003) claim that enhanced corporate governance and robust shareholder rights diminish agency-related costs while simultaneously boosting investor confidence in the potential cash flows of firms. Corporate governance is considered the most disciplinary part that permits a firm to sell ethical products, which creates trust from the public and increases firm performance (Haniffa & Hudaib, 2006). A firm's performance is undoubtedly influenced by various factors, including competition, which can be strategically and competitively attained with strong corporate governance.

Boubakri et al. (2005) examined the positive effect of governance practices on firm productivity and performance. Good governance practices create opportunities and enhance competitiveness in concentrated product markets, increasing benefits.

Organizational factors could be determinants in realizing the benefits of the market competition (Sheikh, 2018). The firm's size could limit the organization's capacity in identifying market opportunities and advancing organizational resources. Firm size alters performance, productivity, and business activities to achieve organizational goals (Li & Chen, 2018; Mubeen et al., 2022). The empirical reasons through which the firm size influences the connection between market share and firm performance are essential to identify, similar to the relationship between market share and corporate governance. Large firms are presumed to exhibit strong corporate governance practices that contribute to increased financial benefits. In contrast, small firms with comparatively weaker cor-

porate governance may face limitations in achieving superior firm performance. Likewise, large firms enjoy more resources adapting to changing business environments, advancing technology, and strengthening supply chain activities.

Firm performance due to the value derived from shareholders, customers, and other stakeholders may be controlled by various factors. The firm's growth, capital structure, and innovation can control performance (Mubeen et al., 2022). Sales growth, as a proxy for growth opportunities, was identified as the change agent in the firm's sales. Promotional expenses and investment in R&D act as a proxy for innovation (Sridhar et al., 2014). Innovation reflects management's decision to change existing products, launch new products, allocate resources, and increase R&D intensity (Lee et al., 2019), improving the firm's value and resulting in enhanced performance. Likewise, capital structure enables a firm to expand its product offerings, consequently exerting a positive influence on performance (Salim & Yadav, 2012). Debt empowers a firm to engage more assertively in the market, manufacture goods, and conduct profitable ventures. Debt costs are comparatively lower than equity, which also avoids diluting shareholder ownership. Thus, utilizing debt capital within an organization confers a competitive advantage by facilitating the introduction of new products, thereby enhancing firm performance.

Based on these discussions, a general objective of the study was to analyze the impact of market share, corporate governance, and firm size on firm performance. Figure 1 shows the conceptual framework. To test the impact of the test variables on firm performance, the following hypotheses were developed:

- H1: *Market share statistically significantly and positively influences firm performance.*
- H2: *Corporate governance has a positive effect on firm performance.*
- H3: *Corporate governance mediates the relationship between market share and firm performance.*
- H4: *Market share has a positive effect on corporate governance.*
- H5: *Firm size moderates the effect of market share on firm performance.*
- H6: *Firm size moderates the effect of market share and corporate governance on firm performance.*

2. METHODS

This study relies on firm-level data spanning 2016 to 2022, utilizing a somewhat uneven sample of 40 non-financial companies listed on the Nepal Stock Exchange (NSE), encompassing 280 observations. The sample predominantly includes hydropower companies established after the 2015 AD earthquake. On April 25, 2015, Nepal experienced a devastating earthquake, which resulted in many manufacturing firms being irregular in operations, failing to produce and publish audited reports, and experiencing continuous financial losses. Thus, this study investigated the firms that consistently hold annual general meetings and regularly report financial statements to the regulatory authorities and the public, covering seven years of data.

2.1. Variable definition

Market share is the primary exogenous variable in this study. Giroud and Mueller (2011) evinced that companies in noncompetitive industries gain more advantages from effective governance than those in competitive industries. They revealed that the Herfindahl–Hirschman index (HHI) has a low value, which produces weak governance and vice versa. Zou et al. (2015) used HHI to indicate market share as these firms typically compete on sales, reflecting the level of competition within the

industry regarding revenue. Moreover, this study followed Jain et al. (2013) and Javed et al. (2020) approach, implying each firm's sales to measure market competitiveness based on the total industry sales, i.e., HHI. This index indicates the firm's market position based on industry revenue.

This study used the Corporate Governance Index (CGI) via the Horwath composite ratings in three categories: the board size, the audit committee, and the number of independent directors. Prior studies have used the G-index suitable for all systems (Jiraporn et al., 2012; Klock et al., 2005); however, in Australia, CGI is being used as an internal corporate governance mechanism for measuring corporate governance quality that identifies the discipline of performing managers of the firm (Pham et al., 2011). This study included the quality of firms' internal structures and controls, creating a composite value based on three categories: board size, audit committee, and independent directors.

The extant literature shows various measures to compute firm performance, such as return on asset (ROA), market price (MP), return on equity (ROE), dividend payment, Tobin's Q, and earnings per share (Javed et al., 2020). This study used ROA, ROE, and Tobin's Q to measure firm performance. ROA reflects the overall performance based on production metrics (Javed et al., 2020). ROE is prevalent in corporate governance literature and gauges performance from the owner's perspective based on historical outcomes. However, Tobin's Q assesses the firm's performance with a forward-looking perspective (Frank et al., 2020). It represents the replacement value of the firm's book value; hence, investors view a higher Q as a positive signal for better future investment returns.

3. RESULTS

Table 1 displays the summary statistics and variance inflation factor of all the variables used in this study. Panel A (Table 1) shows the mean, standard deviation, and correlation coefficients of study variables, and panel B exhibits the VIF values of explanatory variables. The VIF values shown in Panel B (Table 1) show no issue of multicollinearity, as all the VIF values are less than 5 (Shrestha, 2020).

Table 1. Descriptive statistics

Variable	Mean	SD	Panel A							Panel B	
			1	2	3	4	5	6	7	TOL	VIF
FP	5.98	9.36	1								
CS	0.38	0.30	-.497**	1						0.89	1.13
Growth	0.25	1.44	-0.014	0.117	1					0.97	1.03
Inv	0.02	0.03	.340**	-.174*	-0.076	1				0.94	1.06
MS	0.02	0.03	0.128*	0.105	-0.056	.174*	1			0.79	1.27
CG	3.95	0.71	0.014	-0.005	-0.057	0.085	.369**	1		0.70	1.43
FS	7.98	1.10	-0.083	.191*	-0.094	0.077	.375**	.511**	1	0.67	1.49

Note: ** indicates $p < 0.01$, * indicates $p < 0.05$. FP – Financial performance, CS – Capital structure, Inv – Innovation, MS – Market size, CG – Corporate governance index, FS – Firm size.

Panel A (Table 1) shows the distribution of performance measurement and independent variables along with moderating, mediating, and control variables. Market share is positively and significantly associated with firm performance, while capital structure is associated negatively. This result is consistent with the pecking order hypothesis. One hundred sixty-one firm-year observations show that firms used 38 percent of their total assets for their potential investment.

3.1. Testing the hypotheses

Model 1 (Table 2) includes the control variables of capital structure, growth, and innovation, which shows that none significantly impact corporate governance. Based on controlling these three variables, market share was included as the independent variable. It is found that the firm's market share has a positive impact on both ROA (model 4: $\beta = 0.195, p < 0.01$) and Q (model 11: $\beta = 0.232, p < 0.01$), accepting H1. The result also shows that corporate governance has a negative and significant (model 11: $\beta = -0.202, p < 0.05$) impact on firm performance, rejecting H2. Further, it is found that market share has a positive and significant (model 2: $\beta = 0.218, p < 0.01$) impact on corporate governance, accepting H4.

The mediating effect was tested with three steps, according to Su et al. (2020). It is found that market share is significant and positive ($\beta = 0.218, p < 0.01$) on corporate governance (Table 2), exploring that the firm with a large market share will have better corporate governance practices. The result indicates that the market share has a positive and

significant impact on corporate governance and firm performance in terms of ROA and Tobin's Q . After including the mediator, the coefficient (model 7: $\beta = 0.088, p > 0.1$) of market share on the firm performance in terms of ROE has disappeared, indicating that corporate governance plays a fully mediating role on the relationship between market share and ROE. However, it has a significant impact on ROA ($\beta = 0.184, p < 0.01$) and Tobin's Q ($\beta = 0.188, p < 0.05$), meaning that corporate governance has partial mediation on the relationship between market share and firm performance in terms of ROA and Tobin's Q . This result supports H3.

To examine the moderating impact, the interaction terms of market share and firm size were included in the regression model (Table 3). Model 3 (Table 3) reveals that the interaction term has a negative and insignificant impact on corporate governance, while a negative and significant (model 5: $\beta = -0.82, p < 0.01$) impact with an increase of R^2 of 0.045 on firm performance (ROA). This result indicates that firm size moderates the impact of market share on firm performance. The result is consistent with the findings of previous studies (e.g., Javeed et al., 2020), arguing that small firms have low growth and financial strength. Moreover, the results imply a negative association between market share and firm performance in firm size; large firms established earlier and in the stable phase have low chances of growing more, resulting in low performance, supporting H5 and H6 for ROA. The interpretation is like that of Benito-Osorio et al. (2016), highlighting that the large firms' performance follows the U shape.

Table 2. Regression result

Variable	CG		ROA			ROE			Q		
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
CS	-0.013	-0.145*	-0.478***	-0.495***	-0.503***	-0.201**	-0.218***	-0.225***	-0.063	-0.11	-0.139
Growth	-0.051	0.013	0.059	0.064	0.064	0.046	0.053	0.054	0.017	0.037	0.039
Inno	0.062	-0.017	0.231***	0.204***	0.204***	0.11	0.093	0.092	0.173***	0.133	0.129
MS		0.218***		0.184***	0.195***		0.088	0.098		0.188**	0.232***
FS		0.444***		-0.061	-0.038		0.013	0.033		0.072	0.162
CG					-0.054			-0.047			-0.202**
R ²	0.07	0.301	0.31	0.339	0.341	0.058	0.066	0.086	0.037	0.084	0.113
ΔR ²		0.231		0.029	0.002		0.008	0.002		0.047	0.029
Adj R ²	0.012	0.275	0.295	0.314	0.311	0.037	0.031	0.026	0.015	0.05	0.072
F-stat	0.335	11.469	20.26	13.62	11.37	2.787	1.894	1.605	1.714	2.44	2.792

Note: CG = Corporate governance, ROA = Return on asset, ROE = Return on equity, Q = Tobin’s Q, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, $N = 161$.

Table 3. Moderating effects

Variable	CG		ROA			ROE		Q	
	M1	M2	M3	M4	M5	M6	M7	M8	M9
CS	-0.013	-0.145*	-0.131	-0.495***	-0.451***	-0.218***	-0.192**	-0.11	-0.115
Growth	-0.051	0.013	0.012	0.064	0.062	0.053	0.052	0.037	0.037
Inno	0.062	-0.017	-0.018	0.204***	0.203***	0.093	0.092	0.133	0.133
MS		0.218***	0.845	0.184**	0.954***	0.088	1.261	0.188**	-0.052
FS		0.444***	***0.464	-0.061	0.000	0.013	0.049	0.072	0.065
MS_FS			-0.641		-0.82***		-1.198		0.245
R ²	0.07	0.301	0.306	0.336	0.383	0.066	0.082	0.084	0.085
ΔR ²		0.231	0.005	0.030	0.047		0.016	0.002	0.001
Adj R ²	0.012	0.275	0.274	0.314	0.355	0.031	0.044	0.055	0.043
F-stat	0.335	11.469	9.69	13.62	13.65	1.894	1.971	2.44	2.038

Note: CG = Corporate governance, ROA = Return on asset, ROE = Return on equity, Q = Tobin’s Q, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, $N = 161$.

4. DISCUSSION

This study developed a moderated-mediating link to examine the impact of market share on firm performance. The findings revealed a significant impact of market share on firm performance, especially on corporate governance, return on asset, and Tobin’s Q. This is consistent with the results of Abbas et al. (2019) and Javeed et al. (2020). The study also revealed a significant mediating effect of corporate governance in predicting the relationship between market share and firm performance measured with Tobin’s Q. This result implies that firms in the emerging economy tend to foster themselves by improving firm status, which tends to be led using an innovative idea that helps to gain first mover advantage of their product to lead the market and increase profitability. In addition, results revealed negatively moderated effects of firm size in the relationship between mar-

ket share and firm performance. These findings empirically state that large firms invest in CSR, decreasing profitability. Further, large firms are found to have failed to leverage their assets and profits to excel in profitability.

Many researchers have examined the direct impact of market share on firm performance. However, they reported mixed findings. Some findings (e.g., Abbas et al., 2019; Javeed et al., 2020) show a positive association, while others (e.g., Bloom et al., 2010; Tingvall & Poldahl, 2006) reported a negative or curvilinear relationship. This study strongly suggests that every firm focuses on good governance practices (either discretionarily or mandatorily) for higher firm performance, as by Das (2022).

Findings with the controlling effect of capital structure in the association between market share and firm performance support the findings of Mubeen

et al. (2022) and Le and Phan (2017), suggesting that debt financing facilitates tax savings to increase profitability. Similarly, the study used innovation as one of the control variables, suggesting that more concentration on innovation and creation facilitates increased market share and financial performance, as Byukusenge et al. (2016) claimed.

The study suggests that competitive firms invest more in the market to increase market share, which should apply governance compliance in their firms,

leading to firm performance. Market share positively influences firm performance, indicating that larger firms will be more innovative with new products that lead to increased financial value. The result further reveals that firm size negatively and significantly moderates the impacts of market share on firm performance. This could be because large firms focus on corporate governance and social responsibility with less focus on innovation. Another probable argument for this result could be the limited scope of increase in market share in the competitive market.

CONCLUSION

This study investigates the intricate impact of market share, corporate governance, and firm size on firm performance, providing critical insights into how these factors interrelate. The findings reveal that market share positively influences firm performance, particularly regarding return on assets and Tobin's Q. The study emphasizes that firms in emerging markets often use innovative strategies to gain a first-mover advantage, enhancing their market position and profitability. However, it identifies a moderating effect of firm size, where larger firms experience low returns from increased market share.

While market share remains a significant driver of firm performance, its impact is mediated by corporate governance practices and moderated by firm size. Larger firms might face difficulties converting market share into profitability due to more investment in CSR instead of innovation balancing the corporate governance practices. Therefore, firms of all sizes should strive to balance market expansion with effective governance and innovation strategies to enhance financial performance.

Market share positively and significantly impacts firm performance; however, these benefits are substantial with good governance practices. The findings suggest that firms can excel financially by adopting governance practices. Additionally, the results indicate that firm size is crucial in enhancing financial well-being. Investors are suggested to invest in strategies like market expansion, product innovation, and competitive pricing to enhance market share and achieve better financial outcomes through a strong commitment to corporate governance standards. A balance between corporate governance and innovation is suggested to increase financial performance. Overemphasizing governance at the expense of innovation can be detrimental.

Strong governance practices lead to ethical business compliance, increased investor confidence, and a stable market environment, benefiting the economy and society. Policymakers can support this by promoting business education programs emphasizing governance and innovation. Market share, corporate governance, and innovation are vital for firm performance. Considering the firm size, managers must balance these elements effectively to achieve optimal results, contributing to economic growth and stability.

This study offers valuable insights and implications; however, it also faces limitations that warrant attention in future research. Focused solely on non-financial listed firms and employing a cross-sectional approach, future investigations could benefit from including financial firms and non-listed entities. Utilizing a broader database could enhance the generalizability of findings. Additionally, the absence of control variables such as market-to-book ratio, firm age, variability, cultural factors, and corporate social responsibility leaves room for further exploration into their effects on the outcome variable. Relying solely on secondary data derived from audited financial statements may limit the depth of analysis, suggesting the potential for surveys to gather insights from practicing managers.

AUTHOR CONTRIBUTIONS

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