



## COMPARATIVE DETERMINANTS OF FIRM VALUE IN SHARIAH-COMPLIANT AND NON-COMPLIANT FIRMS: EVIDENCE FROM PAKISTAN

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### Abstract

This study examines the effect of dividend policy on firm performance in Pakistan. It compares Shariah-compliant (SC) and non-compliant (NC) non-financial listed firms. The study uses panel data from 2012 to 2022. Firm performance is measured through return on assets, return on equity, and earnings per share. Dividend policy is measured through dividend payout, dividend per share, and price earnings ratio. Control variables include firm size and debt-to-equity ratio. Random and Fixed Effects models were applied after running diagnostic tests. Results show that for SC firms, return on assets, return on equity, size, and dividend payout improve performance, while debt-to-equity reduces it. For NC firms, earnings per share, return on assets, dividend payout, price earnings, and debt-to-equity improve performance. Dividend per share has no significant effect in both groups. The study suggests that dividend policy has different effects depending on Shariah status. Policymakers should promote dividend strategies that enhance performance and encourage sustainable growth. Investors can use these findings to make better portfolio decisions. Future research can extend this study by including financial firms, other markets, or additional variables like corporate governance and ownership structure.

**Keywords:** Dividend Policy, Firm Performance, Shariah-Compliant Firms, Non-Compliant Firms, Panel Data, Pakistan, Corporate Finance

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## 1. INTRODUCTION

Firm value has been an essential notion in business finance for decades since it captures the extent to which a firm creates wealth for shareholders and maintains growth over the long run. Firm value is generally measured in terms of market-based indicators, such as valuation multiples and market capitalization. For instance, the price-to-earnings ratio captures investor optimism regarding profitability, growth opportunities, and risk exposure. While determinants here are largely established in developed economies, they have less certain implications in emerging markets due to poorer governance, structural inefficiencies, and greater information asymmetry (Ben-Nasr & Ghouma, 2022; Farrukh et al., 2017; Jensen & Meckling, 1976).

The most striking development in the emerging markets, particularly in Pakistan, has been the rising dominance of SC companies. SC companies are founded on Islamic finance concepts, under which interest-based lending, speculative contracts, and investments in forbidden industries such as gambling, alcohol, and conventional banks are prohibited. Compliance refers to meeting screening requirements, such as constraints on leverage and sources of revenue, as mandated by the Securities and Exchange Commission of Pakistan (SECP). SC companies accounted for more than 65% of the total market capitalization of the Pakistan Stock Exchange (PSX), according to the SECP's Islamic Finance Bulletin (2023). In contrast, compliant securities increased from 120 in 2021-22 to 138 in 2022-23. These needs influence financial arrangements and investor attitudes in different ways. On the one hand, Shariah compliance can limit financing flexibility since companies cannot heavily depend on debt or specific investments (Yildirim, Masih, & Bacha, 2018). On the other hand, compliance builds credibility, minimizes risk exposure, and reinforces investor trust by projecting ethical regulation and transparency (Anwer, Mohamad, Paltrinieri, & Hassan, 2021; Bakri & Yong, 2023).

While prior research in Pakistan and other emerging markets has examined firm value in relation to profitability (Iqbal, Waseem, & Asad, 2014), leverage (Naz, Shah, & Kutan, 2017), firm size (Azhagaiah & Priya, 2008), and dividend policy (Ullah, Suliman, Nargas, & Ullah, 2021), most studies have focused exclusively on conventional firms or on isolated determinants. Recent work has begun to highlight differences between SC and NC firms, particularly in relation to dividend behavior and shareholder wealth (Akbar, Khan, Haq, & Amin, 2023). However, comprehensive comparative analyses of SC and NC firms, integrating multiple determinants of firm value, remain limited.

This study addresses that gap by investigating whether SC firms create more value than NC firms in Pakistan. Specifically, it examines the impact of profitability, leverage, firm size, and dividend policy on firm value, measured through market capitalization and price-to-earnings multiples. Through its comparative approach, the research adds to the literature on corporate finance and Islamic finance and provides information useful to investors, managers, and policymakers.

## 2. LITERATURE REVIEW

The determinants of firm value have been extensively researched, and profitability, leverage, company size, and dividend policy have been identified as the most critical. All these determinants have been extensively studied in various markets. However, their role in emerging markets remains questionable. In SC companies, these relationships are influenced not only by financial considerations but also by regulatory and ethical screening processes that limit debt financing and non-permissible revenues.



## 2.1 Profitability and Firm Value

Profitability is consistently recognized as one of the most powerful determinants of firm value. Increased earnings per share (EPS), ROA, and ROE are linked to healthier market capitalization and stock prices, as they ensure future cash flows (Iqbal, Waseem, & Asad, 2014; Farrukh et al., 2017). For SC businesses, profitability becomes even more significant, as they have restricted access to debt capital, so earnings become the major determiner of financial strength (Anwer et al., 2021).

*H<sub>1</sub>: Profitability has a significant positive impact on firm value.*

## 2.2 Leverage and Firm Value

Leverage is another key determinant of valuation that indicates both its risks and benefits. Debt, according to trade-off theory, increases firm value through tax shields, whereas pecking-order theory (Fama & French, 1998; Modigliani & Miller, 1963) illustrates firms preferring internal financing to external debt. Empirical findings are mixed: some studies find that moderate leverage improves firm value, while others argue that excessive reliance on debt erodes shareholder wealth, particularly in emerging markets (Okafor, Mgbame, & Chijoke-Mgbame, 2011; Naz et al., 2017). For SC firms, debt is restricted under Shariah principles, which may limit financial flexibility but also reduce risk exposure (Yildirim et al., 2018).

*H<sub>2</sub>: Leverage has a significant negative impact on firm value.*

## 2.3 Firm Size and Firm Value

Firm size has also been studied as a determinant of value, with larger firms generally expected to benefit from economies of scale, broader market access, and stronger investor confidence. Evidence from emerging markets, however, is inconclusive. While some studies report a positive relationship, others highlight insignificant or negative effects due to inefficiencies and higher agency costs (Abdullah, Shah, & Iqbal, 2018; Azhagaiah & Priya, 2008; Iqbal et al., 2014). For SC firms, size may play an enhanced signaling role, as larger compliant firms could be viewed as more stable and trustworthy by investors.

*H<sub>3</sub>: Firm size has a significant positive impact on firm value.*

## 2.4 Dividend Policy and Firm Value

Dividend policy remains one of the most widely discussed drivers of shareholder wealth and firm valuation. According to signaling theory, dividend payments reduce information asymmetry by signaling management's confidence in future earnings (Miller & Rock, 1985), while agency theory emphasizes their role in reducing conflicts of interest between managers and shareholders. Empirical evidence in Pakistan confirms a positive link between dividends and firm value (Ullah et al., 2021). Recent studies emphasize that SC companies are likely to pay higher dividends, which increases their appeal to investors (Akbar et al., 2023).

*H<sub>4</sub>: Dividend policy significantly and positively affects firm value.*

Overall, profitability, leverage, size, and dividend policy are commonly thought of as major firm value determinants. Nevertheless, while there is considerable research on traditional firms, fewer studies examine SC and NC firms in the same empirical framework. Given SC firms now dominating the capital market in Pakistan, it is critical to determine whether such financial and structural differences result in systematically higher firm value. This research fills that void by investigating the comparative value creation of SC and NC firms listed on the Pakistan Stock Exchange.

The literature always indicates that dividend policy and profitability add value to the firm (Iqbal et al., 2014; Farrukh et al., 2017; Ullah et al., 2021), and recent findings emphasize



that SC firms pay higher dividends and use more earnings to signal performance (Akbar et al., 2023). Evidence regarding leverage and size is less robust: while moderate debt can sometimes enhance value, high leverage typically diminishes it (Naz et al., 2017; Okafor et al., 2011); the value-size relationship remains inconclusive across various settings (Azhagaiah & Priya, 2008; Ben-Nasr & Ghouma, 2022). In general, earlier research supports the significance of these determinants but offers scant comparative evidence between SC and NC companies in Pakistan, which this research attempts to fill.

### 3. RESEARCH METHODOLOGY

#### 3.1 Data and Sample

The study is based on secondary data extracted from Eikon DataStream, which provides comprehensive financial and market information for listed firms. The population consists of all non-financial companies listed on the Pakistan Stock Exchange (PSX). To distinguish between SC and NC firms, the screening criteria of the Karachi Meezan Index (KMI) were applied. These criteria exclude firms with excessive leverage, interest-based income, and activities deemed non-permissible under Shariah law (e.g., gambling, alcohol, tobacco). Applying these filters resulted in a final sample of 66 SC firms and 50 NC firms. The data covers multiple years, allowing for the construction of a balanced panel dataset. The use of panel data provides greater variability, reduces multicollinearity among explanatory variables, and improves estimation efficiency compared to cross-sectional or time-series data alone.

#### 3.2 Variables

##### 3.2.1 Dependent Variable

###### Market Capitalization (MC):

Firm value is measured through market capitalization. It reflects the total value of a company as perceived by the stock market. Market capitalization captures investor confidence, growth opportunities, and overall financial health. Prior studies use MC as a reliable proxy for firm value in both developed and emerging markets (Iqbal, Waseem, & Asad, 2014; Farrukh et al., 2017).

##### 3.2.2 Independent Variables

###### Price-to-Earnings Ratio (PE):

PE ratio is used as a measure of market performance. It reflects how much investors are willing to pay for each unit of earnings. A higher PE shows optimism about growth and profitability, while a lower PE reflects uncertainty or undervaluation (Ben-Nasr & Ghouma, 2022).

###### Return on Equity (ROE):

ROE measures profitability by showing returns generated for shareholders from equity. Higher ROE is expected to raise firm value since it signals efficient use of resources. Prior evidence links ROE to stronger firm valuation (Iqbal et al., 2014).

###### Return on Assets (ROA):

ROA captures overall efficiency in using assets to generate profits. A higher ROA signals stronger performance and improves investor trust. Empirical studies confirm a positive link between ROA and firm value (Farrukh et al., 2017).

###### Firm Size (Size):

Size is measured through the natural logarithm of total assets. Larger firms are usually considered more stable, benefit from economies of scale, and enjoy greater access to capital markets. However, in some emerging markets, size may also lead to inefficiencies (Azhagaiah & Priya, 2008).



### Debt-to-Equity Ratio (DTE):

DTE measures leverage and financial risk. A higher ratio shows greater dependence on debt financing. Trade-off theory suggests that debt can increase value through tax benefits, but excessive debt raises financial distress costs. In SC firms, leverage is limited by Shariah restrictions, which may affect its role in valuation (Naz, Shah, & Kutan, 2017; Yildirim et al., 2018).

### Dividend Payout Ratio (DPO):

DPO represents the percentage of earnings distributed as dividends. According to signaling theory, a stable payout signals financial strength and reduces information asymmetry. Studies in Pakistan confirm that higher payout ratios increase firm value (Ansar, Butt, & Shah, 2015; Ullah et al., 2021).

### Dividend per Share (DPS):

DPS measures the cash dividend paid per share. Higher DPS indicates greater direct returns to investors. However, its effect may vary across markets, as some investors value payout consistency more than the absolute dividend amount (Akbar et al., 2023).

### 3.3 Empirical Model

To examine the determinants of firm value, the following panel regression model is applied:

$$MCit = \beta_0 + \beta_1 PEit + \beta_2 ROEit + \beta_3 ROAit + \beta_4 Sizeit + \beta_5 DTEit + \beta_6 DPOit + \beta_7 DPSit + \epsilon_{it}$$

Where:

MCit = Market capitalization of firm  $i$  at time  $t$  (dependent variable)

PEit = Price-to-earnings ratio

ROEit = Return on equity

ROAit = Return on assets

Sizeit = Firm size, measured as natural logarithm of total assets

DTEit = Debt-to-equity ratio

DPOit = Dividend payout ratio

DPSit = Dividend per share

$\epsilon_{it}$  = Error term

### 3.4 Diagnostic Tests

Before proceeding to regression analysis, it is essential to determine the appropriate panel data estimation technique and ensure the reliability of the explanatory variables. Therefore, a series of diagnostic tests were conducted, namely the Breusch-Pagan Lagrangian Multiplier (BPLM) test, the Hausman test, and the Variance Inflation Factor (VIF) test.

#### 3.4.1 Breusch-Pagan Lagrange Multiplier (BPLM) Test

The BPLM test was conducted to decide between Pooled OLS and Random Effects models. For SC firms, the test results favored the Random Effects model, indicating that firm-specific variations were significant and should be captured. For NC firms, the test supported further testing using the Hausman specification test.

#### 3.4.2 Hausman Test

The Hausman test was applied to choose between Random Effects and Fixed Effects models. For NC firms, the test results supported the Fixed Effects model. This means that unobserved firm-specific factors were correlated with the independent variables, making Fixed Effects a more consistent estimator. For SC firms, Random Effects was retained, as the test results showed no significant difference between the two estimators.



### 3.4.3 Variance Inflation Factor (VIF) Test

Multicollinearity occurs when independent variables are highly correlated with each other, inflating standard errors and reducing the reliability of coefficient estimates. The VIF test was conducted for all explanatory variables. A VIF value above 10 typically indicates a serious multicollinearity problem. A mean VIF value closer to 1 suggests no major concern. For SC firms, the mean VIF was 1.94, while for NC firms, it was 2.64. Both values are well below the critical threshold of 10, confirming that multicollinearity is not an issue. This ensures that the independent variables contribute unique explanatory power to the regression models.

The diagnostic tests collectively ensure the robustness of the empirical approach:

Panel data methods are superior to pooled OLS (BPLM test).

Random Effects are appropriate for SC firms, while Fixed Effects are appropriate for NC firms (Hausman test). Multicollinearity is not a concern (VIF test). These steps validate the reliability of the empirical model and justify the subsequent use of panel regressions to analyze the determinants of firm value.

## 4. RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

The descriptive statistics for SC firms are depicted in Table 1. MC, which represents firm value, has a mean of 9.16 and a median of 9.23. The standard deviation is 1.88, showing moderate variation in firm value across the sample. The minimum and maximum values confirm that there are large differences in market performance among firms.

PE has a mean of 38.30, while the median is only 15.20. The high standard deviation of 101.95 indicates extreme variation. The difference between the mean and the median shows that the distribution is skewed by a few firms trading at very high multiples.

ROE shows an average of 17.50, but the values range from -93.04 to 217.78. This wide spread highlights that some firms have very poor performance, while others generate very high returns. ROA has a mean of 9.86 with less variation compared to ROE. The range from -19.35 to 33.59 still shows efficiency differences across firms.

**Table 1: Descriptive Statistics for Shariah-Compliant Firms**

Variable	Obs	Mean	Median	Std. Dev.	Min	Max
MC	395	9.158	9.227	1.882	3.861	13.242
PE	341	38.301	15.200	101.945	3.700	837.800
ROE	384	17.495	16.230	30.926	-93.04	217.78
ROA	388	9.857	10.050	8.963	-19.35	33.59
Size	393	16.007	16.067	1.663	11.846	20.318
DTE	390	44.862	11.055	101.457	0.000	663.38
DPO	371	34.266	34.750	27.748	0.000	98.51
DPS	395	21.146	4.410	60.970	0.000	425.00

Size has a mean of 16.01 and a standard deviation of 1.66, which suggests that most firms in the sample are of relatively similar scale compared to other variables.



DTE has a mean of 44.86, but the median is much lower at 11.06. The very high standard deviation of 101.46 shows that leverage is unevenly distributed. Some firms carry no debt, while others are highly leveraged.

DPO has an average of 34.27 with a median of 34.75. This indicates that many firms distribute about one-third of their earnings as dividends, although some pay close to nothing and others distribute almost all their profits. DPS has a mean of 21.15, but the median is only 4.41. The high standard deviation shows that most firms pay small dividends, while a few pay very large amounts.

Overall, the statistics reveal substantial variation in PE, ROE, DTE, and DPS, while MC, ROA, Size, and DPO are more balanced. This variation provides a useful basis for examining how profitability, leverage, firm size, and dividend policy affect MC in SC and NC firms in Pakistan. Table 2 shows the descriptive statistics for NC firms. MC has a mean of 8.08 with a median of 8.13. The standard deviation of 1.64 indicates moderate variation in firm value. The minimum and maximum values confirm that some firms are much smaller or larger than the average.

PE shows a mean of 30.50, but the median is only 9.50. The very high standard deviation of 112.36 reflects extreme variation. The maximum value of more than 1000 suggests that a few firms trade at unusually high multiples, which raises the overall mean. ROE has an average of 15.36 with a wide range from -130.90 to 238.63. This indicates that while some firms face severe losses, others generate very high equity returns. ROA shows a mean of 6.92 and a median of 6.68 with less variation than ROE. The spread from -11.99 to 24.96 still suggests clear differences in efficiency across firms.

Size has a mean of 16.15 with a small standard deviation of 1.21. This shows that most firms are of similar scale compared to the variation seen in other variables.

**Table 2: Descriptive Statistics for Non-Compliant Firms**

Variable	Obs	Mean	Median	Std. Dev.	Min	Max
MC	303	8.076	8.130	1.637	5.117	12.578
PE	253	30.500	9.500	112.360	1.100	1007.50
ROE	286	15.363	9.855	37.624	-130.9	238.63
ROA	292	6.921	6.680	6.135	-11.99	24.96
Size	298	16.147	16.230	1.206	13.631	19.233
DTE	294	183.922	123.475	456.047	-170.5	4502.05
DPO	284	23.727	20.105	24.953	0.000	98.63
DPS	297	6.882	1.250	29.245	0.000	228.00

DTE has a very high mean of 183.92 and a median of 123.48. The standard deviation is 456.05, which indicates huge variation in leverage. The maximum value above 4500 shows that some firms are extremely dependent on debt. The negative minimum reflects accounting adjustments where equity is negative.

DPO has an average of 23.73 with a median of 20.11. The spread from 0 to 98.63 suggests that some firms retain all profits, while others distribute almost everything to shareholders. DPS has a mean of 6.88 and a median of only 1.25. The standard deviation of 29.25 shows that most firms pay little or no dividends, while a few pay very large amounts.



Overall, the results show that profitability, leverage, and dividend distribution vary widely across firms. This variation makes it useful to examine how ROE, ROA, Size, DTE, DPO, and DPS influence MC in the context of SC and NC firms in Pakistan.

#### 4.2 Correlation Analysis

The correlation results for SC firms in Table 3 show that MC is strongly and positively related to Size and moderately related to ROE, ROA, DPO, and DPS. This indicates that larger and more profitable firms with active dividend policies tend to have higher market value. PE shows weak and mostly negative links with other variables, suggesting limited alignment between valuation multiples and fundamentals. ROE is strongly correlated with ROA and DTE, highlighting the role of profitability and leverage. Dividend measures (DPO and DPS) are positively associated with MC, ROE, and ROA, confirming that dividend policy is linked to both profitability and firm value. Overall, Size, profitability, and dividends appear to be the key drivers of MC, while leverage plays a minor role.

**Table 3: Correlation Matrix for Shariah-Compliant Firms**

Variables	MC	PE	ROE	ROA	Size	DTE	DPO	DPS
MC	1.000							
PE	-0.089	1.000						
ROE	0.381	-0.132	1.000					
ROA	0.376	-0.255	0.514	1.000				
Size	0.892	-0.102	0.228	0.138	1.000			
DTE	0.047	0.038	0.620	-0.081	0.062	1.000		
DPO	0.376	-0.201	0.344	0.367	0.265	0.143	1.000	
DPS	0.300	-0.061	0.489	0.374	0.195	0.248	0.401	1.000

The correlation results for NC firms in Table 4 show that MC is strongly linked with Size and moderately with ROE, ROA, DPO, and DPS. This suggests that larger and more profitable firms that pay dividends tend to have higher market value. PE has weak and mostly negative associations with other variables, showing little connection with fundamentals. ROE is highly correlated with ROA and DPS, highlighting that profitable firms are also active dividend payers. DTE shows weak or negative links with most variables, indicating that leverage is not an important factor for value in NC firms. Overall, Size, profitability, and dividends drive MC in NC firms, while leverage remains insignificant.

**Table 4: Correlation Matrix for Non-Compliant Firms**

Variables	MC	PE	ROE	ROA	Size	DTE	DPO	DPS
MC	1.000							
PE	0.032	1.000						
ROE	0.438	-0.074	1.000					
ROA	0.450	-0.239	0.642	1.000				
Size	0.820	-0.036	0.266	0.332	1.000			
DTE	-0.025	-0.031	-0.045	-0.157	-0.093	1.000		
DPO	0.343	-0.132	0.331	0.106	0.233	0.005	1.000	
DPS	0.376	-0.013	0.815	0.318	0.220	0.206	0.402	1.000



#### 4.3 Multicollinearity Test (VIF)

Table 5: VIF Results for Shariah-Compliant Firms

Variables	VIF	1/VIF
ROE	3.690	0.271
DTE	2.560	0.391
ROA	2.290	0.436
DPS	1.460	0.686
DPO	1.360	0.734
Size	1.120	0.890
PE	1.100	0.913
<b>Mean VIF</b>	<b>1.940</b>	

The variance inflation factor (VIF) results in Table 5 indicate that multicollinearity is not a serious concern among the explanatory variables for SC firms. All VIF values are well below the threshold of 10 suggested by Hair et al. (2010) and Kutner et al. (2004). The highest VIF is observed for ROE at 3.69, followed by DTE at 2.56 and ROA at 2.29. These values suggest moderate correlation but remain acceptable for regression analysis. The remaining variables, including DPS, DPO, Size, and PE, all have VIF values close to 1, which reflects very low collinearity. The mean VIF of 1.94 is also well below the cut-off level of 5 confirming that multicollinearity does not pose a threat to the reliability of the regression estimates.

Table 6: VIF Results for Non-Compliant Firms

Variables	VIF	1/VIF
ROE	6.420	0.156
DPS	4.740	0.211
ROA	2.490	0.402
DPO	1.280	0.783
DTE	1.240	0.803
Size	1.200	0.833
PE	1.110	0.898
<b>Mean VIF</b>	<b>2.640</b>	

The VIF results for NC firms in Table 6 also show that multicollinearity is generally within acceptable limits. The highest VIF values are observed for ROE (6.42) and DPS (4.74). Although ROE is comparatively higher, it still falls below the critical threshold of 10 recommended by Hair et al. (2010) and Kutner et al. (2004), indicating that collinearity is not severe. ROA also shows moderate correlation at 2.49. The remaining variables (DPO, DTE, Size, and PE) all have VIF values close to 1, reflecting very low collinearity. The mean VIF of 2.64 is well below the conservative benchmark of 5, confirming that the explanatory variables do not suffer from problematic multicollinearity.



#### 4.4 Model Selection Tests

Table 7 shows the results of the Breusch-Pagan Lagrange Multiplier test and the Hausman test for SC and NC firms. For both groups, the BPLM test is highly significant. This means random effects are better than pooled OLS (Baltagi, 2008). For SC firms, the Hausman test is not significant. This shows the random effects model is suitable. For NC firms, the Hausman test is strongly significant. This means the fixed effects model is more reliable (Hausman, 1978). Based on these results, the study uses random effects for SC firms and fixed effects for NC firms.

**Table 7: BPLM and Hausman Test Results**

Test	SC Firms	NC Firms
BPLM ( $\chi^2$ )	133.00***	163.09***
Hausman $\chi^2$	0.67	80.33***
p-value	0.213	0.000

#### 4.5 Results of the Main Model

The regression results for SC firms are shown in Table 8. According to the results, several variables significantly affect MC. Profitability is important. Both ROE and ROA have strong positive effects on MC. This supports H<sub>1</sub>. The finding is in line with Iqbal et al. (2014) and Farrukh et al. (2017), who showed that profitable firms create more value. It also agrees with Demsetz & Villalonga (2001), who highlighted the role of earnings for SC firms.

Leverage has a negative and significant impact on MC. This supports H<sub>2</sub>. The result agrees with Naz et al. (2017) and Okafor et al. (2011), who argued that high debt reduces value in emerging markets. It also supports Yildirim et al. (2018), who found that debt restrictions in SC firms reduce financial risk.

**Table 8: Random Effects Results for Shariah-Compliant Firms**

Variables	Coef.	Std. Err.	t-value	p-value	Sig
PE	0.001	0.0003	2.21	0.027	**
ROE	0.014	0.003	4.45	0.000	***
ROA	0.020	0.007	2.68	0.007	***
Size	0.865	0.041	20.89	0.000	***
DTE	-0.002	0.001	-2.97	0.003	***
DPO	0.003	0.001	2.11	0.035	**
DPS	0.001	0.001	0.76	0.450	ns
Constant	-5.252	0.666	-7.89	0.000	***
Overall R <sup>2</sup>	0.869				

Firm size has the strongest positive effect on MC. This result supports H<sub>3</sub>. It agrees with Azhagaiah and Priya (2008) and Iqbal et al. (2014), who found that large firms benefit from economies of scale and investor confidence. The result also suggests that for SC firms, size acts as a signal of stability.

Dividend policy also matters. DPO is positive and significant, showing that higher dividend payout increases MC. This result supports H<sub>4</sub>. It is consistent with Ansar et al. (2015), Ullah et al. (2021), and Akbar et al. (2023), who reported that dividends enhance firm value and play a signaling role in SC firms.



On the other hand, DPS has no significant effect on MC. This means H<sub>4</sub> is only partially supported. While payout matters, the absolute amount of dividend per share is not as important. This contrasts with Ullah et al. (2021), who found both payout and per-share dividends significant in Pakistan.

Overall, H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub> are accepted, while H<sub>4</sub> is partially accepted. The high R<sup>2</sup> value of 0.869 shows that the model explains most of the variation in MC for SC firms.

**Table 9: Fixed Effects Results for Non-Compliant Firms**

Variables	Coef.	Std. Err.	t-value	p-value	Sig
PE	0.001	0.0002	2.05	0.042	**
EPS	0.005	0.002	2.50	0.014	**
ROE	0.004	0.004	1.06	0.290	ns
ROA	0.024	0.011	2.20	0.029	**
Size	-0.019	0.101	-0.18	0.854	ns
DTE	0.0004	0.0002	2.21	0.029	**
DPO	0.003	0.001	2.43	0.016	**
DPS	-0.004	0.005	-0.79	0.432	ns
Constant	7.992	1.651	4.84	0.000	***
R <sup>2</sup>	0.221				

The regression results for NC firms in Table 9 show a different pattern compared to SC firms. Profitability has mixed effects. ROA and EPS are positive and significant, while ROE is not significant. This means H<sub>1</sub> is partially supported. The positive effect of ROA and EPS agrees with Iqbal et al. (2014) and Farrukh et al. (2017), who reported that profitability adds to firm value. The weak role of ROE suggests that investors in NC firms may not rely on equity returns alone to judge value.

Leverage has a positive and significant effect on MC. This result rejects H<sub>2</sub>. It supports the trade-off theory, where debt creates value through tax shields. It is consistent with studies such as Okafor et al. (2011) that show moderate debt can enhance firm value. However, it contrasts with Naz et al. (2017), who found that higher debt reduces value in Pakistan.

Firm size has no significant effect on MC. This rejects H<sub>3</sub>. The result indicates that, for NC firms, larger size does not necessarily improve valuation. This aligns with Ben-Nasr and Ghouma (2022), who argued that size effects can be weak or negative in some markets. Dividend policy shows a mixed picture. DPO is positive and significant, while DPS is not. This means H<sub>4</sub> is only partially supported. The result supports Ullah et al. (2021) and Ansar et al. (2015), who reported that dividends signal firm strength. However, the lack of effect for DPS shows that investors may focus more on payout ratios than the absolute dividend amount.

Overall, H<sub>1</sub> and H<sub>4</sub> are partially supported, H<sub>2</sub> is rejected, and H<sub>3</sub> is rejected. The R<sup>2</sup> value of 0.221 is much lower than in SC firms. This means the model explains only a small part of the variation in MC for NC firms.



The results highlight clear differences between SC and NC firms. For SC firms, profitability, size, and dividend policy strongly drive firm value. ROE and ROA are highly significant, and size shows the strongest effect. DPO also adds value. Leverage, however, reduces firm value, confirming the restrictive but stabilizing role of Shariah rules. These findings fully support H<sub>1</sub>, H<sub>3</sub>, and H<sub>4</sub>, while H<sub>2</sub> is confirmed with a negative effect.

In contrast, NC firms show weaker and inconsistent relationships. Profitability is only partly significant, as ROA and EPS matter but ROE does not. Leverage is positive, which goes against H<sub>2</sub>, suggesting debt is used to create value in NC firms. Size has no role, rejecting H<sub>3</sub>. Dividend policy matters only in terms of payout ratio but not dividend per share, giving partial support to H<sub>4</sub>.

The explanatory power is also very different. SC firms show a high R<sup>2</sup> of 0.869, meaning the model explains most of the variation in firm value. For NC firms, R<sup>2</sup> is only 0.221, which indicates weaker explanatory power. This suggests that in NC firms, other factors beyond profitability, leverage, size, and dividends may drive value.

Overall, SC firms display more consistent and stronger value drivers, while NC firms show weaker and mixed effects. This reflects how Shariah screening enhances financial discipline and investor trust, leading to stronger valuation effects in SC firms.

## 5. Conclusion

This study explored how profitability, leverage, size, and dividend policy affect firm value in SC and NC firms in Pakistan. The analysis shows clear differences between the two groups. SC firms demonstrate stronger and more consistent value drivers. Profitability through ROE and ROA plays a key role in creating value. Larger firm size also has a strong positive effect, and dividend payout further strengthens valuation. Leverage, however, lowers value in SC firms, showing how restrictions on debt under Shariah rules protect against risk and align with ethical finance principles.

For NC firms, the results are more mixed. Profitability matters partly, as ROA and EPS increase value but ROE does not. Leverage increases value, showing reliance on debt financing, but this also carries higher risks. Firm size does not improve value, suggesting that scale alone does not convince investors in NC firms. Dividend policy affects value only when measured through payout ratio, not dividend per share. Overall, the explanatory power of the model is much stronger for SC firms, which means their value is explained better by financial and structural factors. For NC firms, many other influences outside the tested variables may play a role.

These findings highlight the growing importance of SC firms in the Pakistani market. Shariah compliance is not only a religious requirement but also a financial system that enforces discipline and transparency. It makes firms less dependent on risky financing and strengthens investor trust. This explains why SC firms achieve stronger and clearer links between financial decisions and market value.

The results offer several lessons for policymakers and regulators. First, the SECP should continue to strengthen Shariah screening as it improves investor confidence and market discipline. Second, managers of NC firms should be encouraged to improve transparency and adopt stronger governance practices to enhance valuation. Third, dividend policy should be given priority, especially in NC firms, as regular and transparent payouts can reduce information gaps. For investors, the results highlight that SC firms offer more reliable signals of value creation. For managers, the findings emphasize that profitability and dividend consistency are the strongest tools to build firm value.



This study is limited to four main determinants. Future research can extend the framework by including governance quality, ownership structure, and ESG factors. A sector-level comparison of SC and NC firms could also add depth. Finally, cross-country studies on emerging markets would help test whether these findings are unique to Pakistan or more general.

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