Corporate Capital Structure Practices and Shareholder's Wealth of Shariah Compliant Firms of Pakistan

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Abstract

Main objective of the research is to investigate the impact of corporate capital structure practice on the shareholders wealth of sharia-compliant companies that are quoted in the Pakistan Stock Exchange. For the purpose of determining the impact, the company's shareholders wealth has been used as the dependent variable, represented by return on assets. The capital structure is used as the independent variable, and its proxies are the debt-to-equity ratio for long-term financing and the current asset to current liability ratio for short-term financing, respectively. Size, tangibility and growth were taken as control variables and determined by the sales-to-assets ratio, fixed asset to total asset ratio, and percentage change in sales respectively. Panel data of 22 shariah complaint firms according to screening criteria established by Al Meezan investment limited for the period of June 30,2008 to June 30, 2020, has been taken from listed firms in Pakistan stock exchange. All descriptive analysis, diagnostics tests and regression were applied for comprehensive data analysis. This study reveals that, for sharia-compliant businesses, sales growth is more important than tangibility or size when it comes to firm shareholders wealth. Due to the type of research that has been conducted, firms which are not shariah compliant, excluded from the panel and focus has only been given on the shariah compliant firms specifically listed in Pakistan stock exchange. The findings of this study may be applicable only shariah compliant firms as per criteria established by Pakistani shariah board. This study is explicitly completed about the capital constructure of shariah consistent firms since shariah agreeable firms are confined by interest bearing debt up to a specific cutoff, so it is consuming contemporary corporate finance issue to investigate explicitly the effect of corporate capital structure of shariah agreeable companies' shareholders wealth in Pakistani capital market.

Keywords: *Capital Structure, Shariah Compliant, Shareholders Wealth, Short- And Long-Term Financing, Equity Financing*

Introduction

The company's use of a mix of debt and equity is referred to as its capital structure. It is the sum of the company's total debt, including both short-term and long-term debt, as well as retained equity. The choice of capital structure is crucial in today's business environment which optimizes returns for several participants. In addition, this type of financial decision plays pertinent role in enhancing the company's performance. A company's performance will not be significantly impacted if it uses the right mix of financing. Because of the significant financial stakes and the potential for long-term effects on the company's goals, businesses must make the right choice, (J.S. Keshminder, Masturah Ma'in, , Khairol Syafiqah Ahmad Afindi & S.C. Chuah, , 2022).

Due to the consistent growth of Islamic finance, corporate finance strategies of shariah-based firms have become the deemed focus of researchers. Ismail, Sahudin, , Sulaiman, Rahman, & Jaafar (2019) ,Firms for being shariah-compliant need to meet some basic ruling of Islam and must not be indulging any activity like Riba , gambling , speculation and uncertainties.

However, these effects on Shariah-listed businesses were only examined in a few studies. As a result, the primary objective of this study was to investigate how Shariah firm shareholders' wealth is affected by capital structure in Pakistan's emerging market. The research is important because it helps us better understand the factors that affect the capital structure of shariah-compliant Pakistani businesses. The study also shows how the company's valuation is affected by the capital structure.

Research Problem

As a result of the rapid growth of Islamic capital market, particularly in developing Muslim nations like Pakistan, businesses are having difficulty determining the best capital structure that boosts shareholders wealth. Hassan Musse, O., Mat Nor, F., and Mohammed Ahmed, A. (2021) said that in their study of the Malaysian economy, he said that the financial and real sector of the economy, whether they are shariah-compliant or not, operate in the same way. However, when it comes to fundamental Islamic principles, Shariah-compliant companies have some structural differences from non-shariah-compliant companies. Regarding the consequences of financial leverage on corporate performance, numerous empirical research has yielded conflicting results. However past studies were mostly about Malaysian economy so This is the reason, this study is explicitly completed about the capital constructure of shariah consistent firms since shariah

agreeable firms are confined by interest bearing debt up to a specific cutoff, so it is consuming contemporary corporate finance issue to investigate explicitly the effect of corporate capital structure of shariah agreeable companies' shareholders wealth in Pakistani capital market.

Research Questions

- Does the shareholders wealth of shariah-compliant businesses depend on their capital structure?
- Does a shariah-compliant company's capital structure have a positive impact on shareholders wealth?
- Does a shariah-compliant company's capital structure have a negative impact on shareholders wealth?

Research Objectives

The aim of this study is to investigate the impact of a company's capital structure on its shareholders wealth for shariah-compliant companies listed on the Pakistan stock exchange. The following are the sub-objectives of the study's main objective:

1. The impact of short-term financing on shariah-compliant businesses 'shareholders wealth.
2. The effect of long-term financing on the shareholders wealth of businesses that adhere to the shariah
3. The impact of shariah-compliant firms' equity financing on their shareholders wealth
4. The impact of shariah-compliant firms' size on their shareholders wealth.
5. The impact that a shariah-compliant business has on its shareholders wealth.
6. The impact of expanding a shariah-compliant business on its shareholders wealth.

Literature Review

Theoretical Literature

Muncef Guizani (2020) asserts that the MM theory, the trade-off theory, and the pecking order theory are the three capital structure theories most crucial to comprehending its behavior.

Modigliani and Miller Theory

In 1958, Modigliani and Miller received an honorable prize for their notable ideas regarding the impact of a company's capital structure on its expected earnings and value. At first, its contribution was based on the premise that an organization's value does not depend on debts and

that it is unaffected by equity or debt financing. In any case, the findings were astounding; Considering the current state of affairs, it didn't seem conceivable. For the most part, funding is finished by firms with all potential factors that could influence. In 1963, Modigliani and Miller examined his thoughts and conveyed his perspectives on the real world of taxation. He concluded that the organization's value will be affected by the expansion of debt in the overall capital structure after reviewing this thought.

Trade Off Theory

Trade off theory loosened up a portion of the presumptions of the Modigliani and Mill operator (1958) hypothesis, articularly those connected with the shortfall of charges and trouble cost. This theory was first developed by Kraus and Litzenberger in 1973.It says that businesses choose their optimal leverage ratio by weighing the benefits of saving taxes against the costs of bankruptcy or debt financing.

The Pecking Order Theory

Pecking order theory, which Myers and Majluf presented in 1984, is a professional perspective on the phenomenon of corporate financing. His contribution to the field of corporate finance, which explains how choosing the best capital structure affects a company's shareholders wealth, was a significant achievement. They say that businesses use retained earnings to pay for their assets before using any kind of external financing. Even so, offering shares to new shareholders is preferable to debt financing.

Empirical Review

Firm Shareholders Wealth

Return on assets was used as a proxy for firm shareholders wealth, and firm shareholders wealth served as the dependent variable. Divide profit after interest and taxes by total assets to determine ROA.As a dependent variable, these variables have been utilized. These factors have been used as a piece of a couple of surveys, for instance, (Titman &Wessels, 1988;1995, Rajan and Zingales; Wald, 1999;Chen, 2004;Supanvanij, 2006;2008, Kim and Berger;2009, Akhtar and Oliver;Liaqat.A., 2011;2011, Sheik and Wang;Kuznetsov and Muravyev, 2001; Ogebe,and 2001 Myers).According to Sarkar (2022),Financial institutions other than banks in Bangladesh bearing significant amount of debts hold adverse impact on corporate financial performance which was measured by ROE,ROA and Tobin's Q.

Long Term Financing

The ratio of long-term debt to equity was used as a proxy for long-term financing, with long-term financing serving as the primary independent variable. It is calculated by dividing total responsibility by total resources. Numerous studies, including those by Hosh (2000), Champion (1999), Taub (1995), and Roden and Lewellen (1975), have utilized this variable. Financial leverage and the shareholders wealth of Shariah-compliant businesses were the subject of an investigation by (J.S. Keshminder, Masturah Ma'in, , Khairol Syafiqah Ahmad Afindi & S.C. Chuah, , 2022).Inverse association between these two variables were found in most of researches for the reason that, In shariah priority is given on internal sources of equity financing like undistributed profit. As a result, the majority of scholars contends , the Pecking order theory should hold true because financial leverage has an effect on the shareholders wealth of Shariah-compliant businesses. Basri (2021) asserts that large businesses have a lower likelihood of bankruptcy, necessitating a greater use of debt financing and a more effective access to capital than small businesses. The first hypothesis is demonstrated as follows:

H_{01}: Long term debt has no significant impact on company's firm shareholders wealth.

H_1: Long term debt has significant impact on company's firm shareholders wealth.

Short Term Financing

The second independent variable has been selected as short-term financing. Short-term financing is measured by the current ratio. According to Joshua Arbor (2005), there is a strong correlation between earning money and temporary financial obligations. According to José Marcos Carvalho demesquita1, José Edson Lara (2003), Abdul Ghafoor Khan (2012), Arbab Khan (2011), Nour Abu-Rub (2012), and Chin Ai Fu(1997), this ratio shows how much of the total assets have been financed by short-term loans. The ensuing theory has been developed.

H_{02}: Short term financing has no significant effect on firm's shareholders wealth.

H_2: Short term financing has a significant impact on firm's shareholders wealth.

Equity Financing

The third independent variable has been identified as equity financing. Divide the total assets by the total shareholders' equity for the purpose of measuring equity financing., The free portion of financing known as shareholder's equity (Moyer et al.,) demonstrates ownership enthusiasm for a company.1999). As a result, that sum comes from the usual shareholders, as well as unallocated

profits and capital and revenue reserves. Ordinary shareholders, like bond holders, receive returns based on profits from the company's output (Titman et al.,2011). As a result, the following hypothesis was created.

H_{03}: Equity financing has no significant impact on firm's firm.

H_3: Equity financing has no significant impact on firm's firm.

Growth

The first control variable was developed. There are a number of ways to calculate a company's growth, but this study used the percentage increase in total sales, which has been used in many reviews, such as (Dimitrov and Jain, 2007;2009, George and Hwang) Arbab Khan (2011), Onaolapo (2010), and Chin Ai Fu (1997) define it as the total increase in the company's sales over a specific time period. According to Brigham (1991), an organization's net income is divided into two parts: the first part goes to shareholders as a share of profit, and the second part stays as undivided profit. As a result, the following is the second hypothesis:

H_{04}: Firm's growth has no impact on firm's shareholders wealth.

H_4: Firm's growth has no impact on firm's shareholders wealth.

Size

The measurement serves as the second control variable. Total asset turnover has been used as a proxy for business size, and the ratio of total sales to total assets has been used to calculate total asset turnover. Papadogonas asserts (200);(1986); McConnell Allen, (1989);This variable was used in Glancey (1998).According to Cin ca e tal (2005) research, there is a significant and positive correlation between the proportions of productivity and the size of European organizations. Lawrence and others2006) asserts that the size and general equity level of Australian businesses have an impact on their shareholders wealth. In relation to use, firm size is one of those determinants that produces predictable results (Roslan et al.,2022), so the fifth hypothesis is proposed as follows:

H_{05}: Firm Size does not have impact on firm's profit.

H_5: Firm Size does have impact on firm's profit.

Tangibility

The fixed assets to total assets ratio, which is a measure of tangibility, was utilized as the third control variable. This well-known financial measure is calculated by dividing a company's total assets by its total fixed assets. Akhtar and Oliver, well-known financial researchers, 2009,

Supanvanij; Tangibility was incorporated into numerous reviews in the works of Titman and Wessels, 1988, Rajan and Zingales, 1995, 2006, Chen, 2004, Wald, 1999, and Titman. As a result, the following hypothesis was created.

H_{06}: Tangibility does not affect company's firm shareholders wealth.

H_6: Tangibility affects company's firm shareholders wealth.

Very few studies (Fatuma, 2009 and Halkano, 2012) have been dedicated for investigating the role of capital structures determinant of firm shareholders wealth and most of studies were related with capital structure. Since according to limited knowledge, no literature was found about shariah compliant firms of Pakistan under the study period, so this study is quite rare.

Research Methodology

This study adopted the concept of positivism research philosophy which is directly associated with idea of objectivism and deductive approach of research has been adopted, in order to investigate the impact of capital structure practices on shareholders wealth of shariah firms, Panel data of 22 shariah complaint firms according to screening criteria established by Al Meezan investment limited for the period of June 30,2008 to June 30, 2020, were taken from listed firms in Pakistan stock exchange. For reliability of secondary data, yearly financial statements of firms were used. Furthermore, the Fixed and Random effect methods are used to get rid of correlated errors, and the Hausman test is used to choose between them. When compared to other approaches, the panel data approach offers advantages such as less collinearity between variables, more useful data, heterogeneity, more variables, greater efficiency, and more degrees of freedom. 2005, Siddiqi; 2005, Baltagi)

Economic Model Specification

The relationship between capital structure and firm's shareholders wealth was tested by the following multiple regression model.

$$\mathbf{ROA}_{it} = \beta_0 + \beta_1 \mathbf{SF}_{it} + \beta_2 \mathbf{LF}_{it} + \beta_3 \mathbf{EF}_{it} + \beta_4 \mathbf{G}_{it} + \beta_5 \mathbf{S}_{it} + \beta_6 \mathbf{T}_{it} + \varepsilon_{it}$$

The proxies used for the dependent variables and explanatory variables with definitions and symbols are displayed in the following:

Table 1

Variables/Proxies	Measurement	Expected Signs
Dependent Variable		
Firm's shareholders wealth	Return on assets = Net profit to Total assets	ROA
Independent Variables		
Short term debt financing	Current ratio = Current assets to Current liabilities	SF
Long-term debt financing	Debt to Equity = Long term Liabilities to Equity	LF
Equity financing	Equity to Total assets	EF
Control Variables		
Size	Asset turnover = Total sales to total assets	S
Growth	% Increase in sales revenue	G
Tangibility	Fixed assets to total assets	T

(Source: Author's compilation)

Empirical Results

Descriptive Statistics

Table 2

Summary Statistics

	Return on assets	Short term financing	Long term financing	Equity Financing	Growth	Size	Tangibility
	ROA	SF	LF	EF	G	S	T
Mean	0.111	2.485	0.785	0.465	0.214	0.923	0.439
Median	0.052	1.370	0.278	0.483	0.072	0.663	0.452
Maximum	1.243	11.668	32.206	0.848	14.384	3.930	0.914
Minimum	-0.173	0.033	-42.178	0.001	-5.991	-0.003	0.049
Std. Dev.	0.204	2.573	6.766	0.235	1.377	0.736	0.236
Skewness	3.254	1.830	-2.041	-0.245	5.890	1.546	0.115
Kurtosis	15.401	5.402	28.938	1.910	62.041	5.050	1.945
Jarque-Bera	1618.399	158.153	5688.186	11.772	29903.820	113.623	9.610
Probability	0.000	0.000	0.000	0.002	0.000	0.000	0.008
Sum	22.021	492.160	155.605	92.137	42.445	182.832	87.086
Sum Sq. Dev.	8.209	1304.748	9020.809	10.944	373.826	106.732	10.980
Observations	198	198	198	198	198	198	198

(Source: EViews Results, Author's own elaboration)

As shown in Table, Average ROA of all firms under study for the period of 9 years is 11.12% that shows all selected sharia compliant firms are earning on average around 11.12% annually. As far as operating risk which is variation in return is concerned range of values from -17.30% negative returns to 124.30% positive returns and standard deviation of 20.414% shows variation in annual profit on average. Since results are from panel data of 22 firms from different sectors listed in stock market whose attributes are entirely different that is why variation in average is quite high.

As far as normality of data is concerned, in panel data absence of outliers in the raw data is unrealistic that is why above table shows that value of skewness, kurtosis and Jarque Bera are not under acceptable range of normality.

Testing Stationary Of Data

Table 3

Statistics Unit Root Test

Variables	Statistics at level	P value at level
Profitability(roa)	0.428	0.006
Size(s)	-1.170	0.001
Growth(g)	-9.139	0.000
Tangibility (t)	-4.744	0.000
Long term finance (lf)	-9.601	0.000
Short term finance (sf)	-3.705	0.000
Equity finance (ef)	0.617	0.004

(Source: EViews Results, Author's own elaboration)

if data is nonstationary, may create autocorrelation and multicollinearity problems. For eliminating such type of problems in data various unit root tests are available so Phillip Perron Test is one of the Unit Root Test that has been used for investigating the stationary of data. Each As shown in Table, P-value of growth, tangibility, long term finance and short-term finance is significant and stationary at level but P-value of firm shareholders wealth, size and equity financing is significant and stationary at first difference.

Estimation Through Stochastic Model

$$\mathbf{ROA}_{it} = \beta_0 + \beta_1 \mathbf{SF}_{it} + \beta_2 \mathbf{LF}_{it} + \beta_3 \mathbf{EF}_{it} + \beta_4 \mathbf{G}_{it} + \beta_5 \mathbf{S}_{it} + \beta_6 \mathbf{T}_{it} + \varepsilon_{it}$$

According to the objectives of study mentioned in Chapter 1, it is to determine that whether firm's shareholders wealth (ROA) depends on independent variables (LF, SF and EF) and Control variables (G, S and T) or not. For this purpose, a stochastic regression model has been developed in chapter 3 as mentioned above and Since it is panel data study so fixed or random effect model has to be run in order to identify about the model either fixed or random, Hausman test has been applied and finally it was determined fixed effect model best fits data.

Fixed and Random Effect Models Comparison

Table 4
Correlated Random Effects –Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	14.965116	7	0.0364

(Source: EViews Results, Author's own elaboration)

As it is discussed above, to know which stochastic model best fits on data whether fixed effect or random effect, Hausman test is to be applied so in our panel data, from table it is much clear, P-value is below 5% so significant which indicates null hypothesis can be rejected and concluded that fixed effect model is suitable and best fits to data. This is in line with Green (2008) recommendation

Fixed Effect Model Results And Hypotheses Testing

Table 5

Dependent variable: Firm shareholders wealth

Variables	Coefficient	Std. Error	t-statistic	Probability
Constant (C)	-0.409	0.070	-5.779	0.000
PROFITABLITY(ROA)	0.519	0.074	6.975**	0.000
SIZE(S)	-0.099	0.036	-2.726**	0.007
GROWTH(G)	0.007	0.005	1.26**	0.020
TANGIBILITY (T)	-0.141	0.113	-1.249	0.213
LONG TERM FINANCE (LF)	-0.007	0.002	-3.977**	0.001
SHORT TERM FINANCE (SF)	-0.012	0.011	-1.170	0.244
EQUITY FINANCE (EF)	0.475	0.101	4.684**	0.000

(Note: ∗∗∗Significant at 1%, ∗∗Significant at 5% and ∗Significant at 10% level)

(Source: EViews Results, Author's own elaboration)

The fixed effect model was used to summarize all of the results, as shown in the table above. Long-term finance, short-term finance, and equity financing are independent variables, and growth, size, and tangibility are control variables. Firm shareholders wealth has been considered the response variable that is tested at significance level of 5%, each hypothesis was tested.

H_{01}: Long term debt has no significant impact on company's firm shareholders wealth.

H_1: Long term debt has significant impact on company's firm shareholders wealth.

Long-term financing has a P-value of 0.0001, which is less than 0.05, as shown in the table above. This indicates that long-term debts have a positive impact on a company's profit, rejecting the null hypothesis and accepting the alternate hypothesis that long-term financing has a significant impact on a company's profit. Since the coefficient is negative, which is supported by MM proposition II and demonstrates an inverse relationship between long-term financing and firm shareholders wealth, MM theory predicts that as long-term debts rise, default risk will rise, and eventually firms' profits will fall as a result of high expected equity returns. This finding is consistent with what Seyyed Nezhad and Aghaei (2002) found: managers who take advantage of debt financing are willing to meet organizations' financial needs. Debt financing comes with interest costs, forcing businesses to pay a portion of their earnings for financing in the future. As a result, their future earnings will fall.

H_{02}: Short term debt has no significant effect on company's firm shareholders wealth.

H_2: Short term debt has a significant effect on company's firm shareholders wealth.

As shown in the above table, P-value of short-term financing is 0.2442 that is greater than 0.05 that shows short term financing has no significant impact on company's profit so null hypothesis is failed to reject and alternate hypothesis that is short term financing has significant impact on company's profit is not accepted. Since coefficient is negative that shows inverse relationship between short term financing and firm's firm shareholders wealth. The results are consistent with finding of Ebaid (2009), Afza and Nazir (2007) and Abdul (2012) who investigated that short term debts has an inverse significant association with corporate performance indicator 's shareholders wealth, measured by return on assets in the study conducted in Pakistan.

H_{03}: Equity has no significant effect on firm's firm shareholders wealth.

H_3: Equity has a significant effect on company's firm shareholders wealth.

The fact that equity financing has a significant impact on a company's profit and that the null hypothesis is rejected, and the alternate hypothesis is accepted is shown by the P-value of 0.0000, which is less than 0.05. Since coefficient is positive that shows positive connection between value supporting and company's firm execution. The findings are in line with the empirical findings of Ishaya and Abduljeleel (2014), who came to the conclusion that equity has a positive effect on firm shareholders wealth.

H_{04}: Growth does not affect company's firm shareholders wealth.

H_4: Growth affects company's firm shareholders wealth.

The P-value of Growth is 0.0207, below 5%, and which shows in significant findings, growth affects the company's profit, so the null hypothesis is rejected and the alternate hypothesis growth affects the company's profit is accepted. Since the coefficient is positive, there is a positive correlation between the growth of the company and its shareholders wealth. The outcome is in line with Miloş Laura Raisa's (2015) empirical findings regarding Romanian listed firms.

H_{05}: Size does not effect on company's firm shareholders wealth.

H_5: Size effects on company's firm shareholders wealth.

The null hypothesis is rejected, and the alternate hypothesis size affects company profit is accepted ,size of P-value is 0.0074, blow 5%, as shown in the preceding table. Since the coefficient is negative, this demonstrates an opposite relationship between a company's shareholders wealth and its size. The findings of the studies are consistent with the empirical findings made by Nor yati Ahmad and Noor Nisah Azha (2015) regarding Malaysian businesses that adhere to sharia law.

H_{06}: Tangibility does not affect firm's firm shareholders wealth.

H_6: Tangibility affects company's firm shareholders wealth.

Size has a P-value of 0.2139, which is greater than 0.05, indicating that tangibility has no effect on the company's profit and rejects the alternate hypothesis that tangibility has an impact on the company's profit. Since coefficient is negative that shows converse connection among substantial quality and company's firm execution. The findings of the studies are consistent with the empirical findings made by Nor yati Ahmad and Noor Nisah Azha (2015) regarding Malaysian businesses that adhere to sharia law.

Table 6

R-squared	0.708979
Adjusted R-squared	0.641241
Standard error of regression	0.116847
F-statistic	10.46653
Probability (F-statistic)	0.000000
Durbin-Watson stat	1.917193

(Source: EViews Results, Author's own elaboration)

R2 is 70.89%, as shown in the table above, indicating that independent variables (LF, SF, and EF) and control variables (G, S, and T) account for 70.89% of the firm's shareholders wealth. R2 is utilized by analysts for deciding the convenience of stochastic model for expectation since in our outcomes R2 is a lot of high so model is best made sense of and valuable for forecast. In addition, the model's effectiveness was further revalidated using the F-statistic, which is 10.46653, and the Probability (F-statistic) of 0. 000000. If the F-statistic (probability) is less than 0.05 and greater than 4,

Daigonistic Testing

These are the tests that the data go through to make sure they meet the demands of the employed multiple regression approaches and to ensure that the outcomes are more precise and dependable.

Multicollinearity

Table 7

Correlations Coefficients

	ROA	**DS**	**DG**	**DT**	**CSF**	**CLF**	**EF**
ROA	1.000000	0.060230	0.128191	-0.002098	0.103969	-0.312359	0.315503
DS	0.060230	1.000000	0.109457	-0.190001	-0.001930	-0.083375	0.002844
DG	0.128191	0.109457	1.000000	0.023544	-0.007802	-0.021551	0.013411
DT	-0.002098	-0.190001	0.023544	1.000000	-0.132400	0.020549	-0.025053
CSF	0.103969	-0.001930	-0.007802	-0.132400	1.000000	-0.058681	0.646776
CLF	-0.312359	-0.083375	-0.021551	0.020549	-0.058681	1.000000	-0.360241
EF	0.315503	0.002844	0.013411	-0.025053	0.646776	-0.360241	1.000000

(Source: EViews Results, Author's own elaboration)

Table 8

Variance Inflating Factors (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
CLF	4.99E-06	1.01	1.01
CSF	3.03E-05	1.37	1.03
DEF	0.021	1.14	1.14
DG	0.00005	1.01	1.01
DS	0.003	1.09	1.08
DT	0.025	1.14	1.14

(Source: EViews Results, Author's own elaboration)

Multicollinearity is the correlation between the independent variables that shows data is not robust so results from such data is not considered fit for prediction. As shown in Table.8, there is very insignificant association among every set of explanatory variables that is less than 0.5 almost in all cases except few like CSF & EF and EF & CSF. The correlation coefficients were calculated to find those explanatory variables that may have been strongly related but whose significance was mitigated by their interactions with the other variables. Further it is confirmed by (VIF) variance inflation factor as presented by Table.9, for each independent and control variable the value of VIF is almost close to 1 and very far away 10 that clearly indicates multicollinearity does not exist and there is no need to eliminate any independent or control variable from the model.

Auto Correlation

In a stochastic model, data with a serial correlation problem does not produce reliable results or accurate predictions. In order to ascertain whether or not the auto correlation issue still exists in the data, the Durbon-Watson test was utilized. The absence of auto correlation or serial correlation in the residuals is indicated by the Durbon Watson value of 1.917193, which is the closest value to 2.The term for this is "auto correlation."

Summary

The panel data were thoroughly examined in this section. Utilizing the Levin, Lin, and Chu t* unit root test, each variable was initially found to be stationary at level or first difference at the 5% level of significance. In the wake of deciding fixed of information Hausman test was applied to check either fixed impact model or irregular impact model ought to be utilized for assessment reason. The fixed effect model was chosen due to the 0.036 P-value of the Hausman test.The fixed effect model was used to test each of the six hypotheses and provide an interpretation. Diagnostic tests were performed on the residuals following estimation; the results showed that there was no multicollinearity because the VIF was 2.787, which is less than 5, that the correlation between pairs of each independent variable was almost insignificant, and that there was no auto correlation, as demonstrated by the Durbon Watson test, which was 1.91 or closed to 2, indicating that auto correlation did not exist-statistic 10.46653 further supports the model's robustness and explains 70.89% (R2) of the response data's variability around its mean.

Conclusions

Based on the results of the study, Capital structure indeed effects on firm's firm shareholders wealth so it is worth concluding that capital structure plays a vital role in determining the shareholders wealth of sharia compliant firms listed in Pakistan Stock Exchange. Long term debt financing adversely impacts firms 'shareholders wealth that is supported by Pecking order and agency theory but short-term financing does not have any impact on profit that is in line with MM (1958). Equity financing has direct positive impact on firm's profit.

By keeping into consideration the response of all three explanatory variables, in particular for sharia compliant firms this research study reveals that firms structurally preference equity financing over long term debt financing because mostly long term financing are interest based so debts financing is not encouraged in sharia and cannot exceed 37% as mentioned in screening criteria of KMI-30 and firms are indifferent about short term financing because mostly short term financing are not based on interest. Shariah compliant firms are bound to limit debt financing and they have only option to raise finance through equity.

As far as moderating role of capital structure in determining shareholders wealth of sharia compliant firms at the PSX. It is concluded that Sales growth rate has significant moderating effect, but size and tangibility does not have any impact on firm's firm shareholders wealth. In particular for sharia compliant firms (KMI-30) this research study reveals that firm's firm

shareholders wealth is not structurally tandem with tangibility and size but tandem with sales growth.

Recommendations

Since the KMI-30 index is recomposed every six months, it is evident from the aforementioned conclusions that sharia-compliant businesses should raise funds from equity financing rather than long-term debt financing for long-term capital expenditure projects or long-term investments. Since sharia-compliant businesses are not permitted to use interest-based financing, firms with excessive debt financing above a certain threshold may be screened out. Also, it is empirically evident from this research study that debt financing adversely impacts profit so it is highly recommended to make zero interest-based debt financing and even in the present day interest based economy, it should not exceed allowed threshold of debt financing for remaining shariah compliant. It will create mistrust of shareholders, customers and other stakeholders and will increase financial distress and reduce firms Sales and eventually profit. It is also recommended that sharia compliant firms should make non interest based short term financing in case of liquidity shortfall they should get credit from supplier by extending credit limit. For raising financing from equity, sharia compliant firms should not set high dividend payout because due to this policy their retained earnings will be reduced, and they will not be able to capitalize their earning whenever needed.

It is also strongly recommended that sharia compliant firms should compose capital structure in a way that comprises of high equity with noninterest based debt financing for improving firms firm shareholders wealth, building trust of shareholders, customers, managers and other stakeholders.

Suggestions for Further Research

Indeed, this research study was an attempt to fill the gap regarding role of capital structure for sharia compliant firms, but it was limited to the firms laid in KMI-30 index and profit is measured only by return on assets. Therefore, it is strongly suggested to conduct the research study by taking return on equity as measure of firm's shareholders wealth for other sharia compliant firms composed by Islamic index 225 from Pakistan stock exchange. Also, it is suggested to conduct research study for Islamic banks, Takaful based organizations and other sharia compliant organizations which are not under the scope of KMI-30 composed firms. It is also strongly suggested to conduct research studies to validate the sharia compliant criteria laid

down by scholars in the light of Quran and sunnah. Some primary research studies are suggested in the area to investigate how sharia compliant firms are contributing in the prosperity and wellbeing of society and contributing in the growth of economy. In addition to that it is suggested to explore to what extent these firms are complying the corporate governance system and other regulatory framework of SECP and FBR etc.

References

Abbas, Q. K. (2019). VOLATILITY TRANSMISSION IN REGIONAL ASIAN STOCK MARKETS. *16*, 66-77.

ABBAS, Q. K. (2019). VOLATILITY TRANSMISSION IN REGIONAL ASIAN STOCK MARKETS. *EMERGING MARKETS REVIEW, 16*, pp. 66-77.

Abu Bader, S. H. (2018). ADVANCED AND MULTIVARIATE STATISTICAL METHODS FOR SOCIAL SCIENCE RESEARCH WITH A COMPLETE SPSS GUIDE. *OXFORD UNIVERSITY PRESS.*

ABU-BADER, S. H. (2018). ADVANCED AND MULTIVARIATE STATISTICAL METHODS FOR SOCIAL SCIENCE RESEARCH WITH A COMPLETE SPSS GUIDE. *OXFORD UNIVERSITY PRESS.*

Aggarwal, R. (2018). THE FAMA-FRENCH THREE FACTOR MODEL AND THE CAPITAL ASSET PRICING MODEL: EVIDENCE FROM THE US STOCK MARKET. *JOURNAL OF RESEARCH IN CAPITAL MARKETS*.

Ali et.al. (2015). Impact of Dividend Policy on Stock Price Volatility: A Case Study of Selected Firms from Textile Industry in Pakistan. *International Journal of Academic Research in Economics and Management Sciences 2016, Vol. 5, No. 3 ISSN: 2226-3624 1 The*.

Al-Malkawi. (2007). Impact Of Dividend Policy On share price Volatility. *Global Journal of Management and Business Research Volume 12 Issue 5 Version 1.0 March 2012*.

Al-Malkawi, H.-A. N. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*.

AMIR SHAH, S. M. (2018). equity market intergrated to the equity markets of group countries ? An Empirical Analysis. *Economic Journal, 15*(45), 110-140.

Amir Shah, S. M. (2018). equity market intergrated to the equity markets of group countries ? An Empirical Analysis. *Economic Journal, 15*(45), 110-140.

ANWAAR, M. (2019). IMPACT OF FIRMS PERFORMANCE ON STOCK RETURNS (EVIDENCE FROM LISTED COMPANIES OF FTSE-100 INDEX LONDON, UK). *GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH.*

Anwar, M. (2019). IMPACT OF FIRMS PERFORMANCE ON STOCK RETURNS (EVIDENCE FROM LISTED COMPANIES OF FTSE-100 INDEX LONDON, UK). *GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH.*

AROURI, E. &. (2017). TIME-VARYING CHARACTERISTICS OF CROSSMARKET LINKAGES WITH EMPIRICAL APPLICATION TO GULF STOCK MARKETS. *MANAGERIAL FINANCE, 36*(1), 57-70.

Arouri, E. N. (2017). TIME-VARYING CHARACTERISTICS OF CROSSMARKET LINKAGES WITH EMPIRICAL APPLICATION TO GULF STOCK MARKETS. *MANAGERIAL FINANCE, 36*(1), 57-70.

Arshad., S. A. (2017). "TESTING RANDOM WALKS AND MARKET EFFICIENCY IN AN EMERGING EQUITY MARKET". *BUSINESS REVIEW CAMBRIDGE,, 9*, pp. 271-281.

ARSHAD.H, S. &. (2017). "TESTING RANDOM WALKS AND MARKET EFFICIENCY IN AN EMERGING EQUITY MARKET". *BUSINESS REVIEW CAMBRIDGE,, 9*, pp. 271-281.

Ball, B. F. (1997). A VALUATION OF STOCK PRICES . *JOURNAL OF MANAGEMENT SCIENCES*, 22-25.

Baskin, J. (1989). An Empirical Investigation of the Pecking Order Hypothesis. *Financial Management*.

Bhattacharya. (1979). Impact of Dividend Policy on Stock Price Volatility: Evidence from Sri Lanka.

Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy. *The Bell Journal of Economics*.

Bhatti, M. (2014). A STUDY OF BRANDING ISSUES AN ECONOMIC WORLD. *JOURNAL OF FINANCIAL ECONOMICS, 2*(1), 29-77.

Bilgrami, N. &. (1994). Dividend Policy Andd Stock Price Volitality In Pakistan. *Applied Economics Research Centre*.

Black, M. (1976). Dividend Theory. *Business Management Journal, Vol 3*.

CHANCHARAT, S. &. (2018). AN EMPIRICAL ANALYSIS OF THE THAI AND MAJOR INTERNATIONAL STOCK MARKETS. *FACULTY OF COMMERCE-ECONOMICS WORKING PAPERS.*

Chancharat, S. V. (2018). AN EMPIRICAL ANALYSIS OF THE THAI AND MAJOR INTERNATIONAL STOCK MARKETS. *FACULTY OF COMMERCE-ECONOMICS WORKING PAPERS.*

Chawla, G. (2008). Dividend policy decisions. *American Academy of Business*.

Chen, A. C. (2016). EARNINGS MANAGEMENT, MARKET DISCOUNTS AND THE PERFORMANCE OF PRIVATE EQUITY PLACEMENTS. *JOURNAL OF BANKING & FINANCE, 34*(8), 1922-1932.

Cheng Hong, G. (2015). INTERDEPENDENCE OF MAJOR WORLD STOCK EXCHANGES: HOW IS THE ATHENS STOCK EXCHANGE AFFECTED? SOME RECENT DEVELOPMENTS IN A CONCEPT OF CAUSALITY. J. ECONOM. *INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS, 39*(1/2), 199-211.

Chung, J. P. (2016). AN EMPIRICAL INVESTIGATION OF STOCK MARKET BEHAVIOR IN THE MIDDLE EAST AND NORTH AFRICA. *JOURNAL OF EMPIRICAL FINANCE, 17*(3), 413-427.

Dergisi, U. İ. (2015). Imapct Of Dividend Policy. *Business & Management Studies, An International Journal Vol.:3 Issue:1* .

Dev, J. (June,2013). Dividend Policy and Share Price Volatility . *Vol2*.

DIAMOND. (1967). *STOCK PRICES* .

Diamond., H. G. (1997). DIVIDEND POLICY. *the great finanical horizon* , 50-62.

Dickey Durben, F. W. (2016). COMMON STOCHASTIC TRENDS IN PACIFIC RIM STOCK MARKETS. Q. REV. ECON. FINANC.,. . *LIKELIHOOD RATIO STATISTICS FOR AUTOREGRESSIVE TIME SERIES WITH UNIT ROOT., 34*(3), 241-259.

Doaa Aly, J. S. (2010). Determinants of corporate internet reporting: evidence from Egypt. *Managerial Auditing Journal*.

Dr.Yasir Habib, Z. I. (2012). Dividend Policy and Share Price Volatility: Evidence from Pakistan. *Global Journal of Management and Business*.

Easterbrook, F. H. (1984). Two Agency-Cost Explanations of Dividends. *Frank H. Easterbrook*.

ENGLE, R. &. (2017). “CO-INTEGRATION, ERROR CORRECTION: REPRESENTATION, ESTIMATION AND TESTING”. *ECONOMETRICA, 55*, 1251-1276.

Engle, R. G. (2017). “CO-INTEGRATION, ERROR CORRECTION: REPRESENTATION, ESTIMATION AND TESTING”. *ECONOMETRICA, 55*, 1251-1276.

EsterBrook. (2012). Impact of dividend policy on stock price volatility. *Global Journal of Management and Business Research Volume 12 Issue 5* .

Ewing, B. T. (2017). THE TRANSMISSION OF SHOCKS AMONG S&P INDICES. *APPLIED FINANCIAL ECONOMICS, 12*(4), 285-290.

Fornell, C. M. (2016). STOCK RETURNS ON CUSTOMER SATISFACTION DO BEAT THE MARKET: GAUGING THE EFFECT OF A MARKETING INTANGIBLE. *JOURNAL OF MARKETING, 80*(5), 92-107.

Gallo, G. M. (2017). DYNAMIC LINKAGES BETWEEN THE CHINA AND INTERNATIONAL STOCK MARKETS. *ASIA-PACIFIC FINANCIAL MARKETS*, 211-230.

Glezakos, M. ,. (2017). VOLATILITY TRANSMISSION ACROSS MARKETS: A MULTICHAIN MARKOV SWITCHING MODEL. *APPLIED FINANCIAL ECONOMICS, 17*(8), 659-670.

Gordon. (1959). *Global Journal of Management and Business Research Volume 12 Issue 5 Version 1.0 March 2012*.

Gordon. (1963). *Developing Country Studies www.iiste.org ISSN 2224-607X (Paper) ISSN 2225-0565 (Online) Vol 2, No.2, 2012 74*.

Gordon. (n.d.). Imapct pf dividend policy on share price volatility. *Global Journal of Management and Business Research Volume 12 Issue 5 Version 1.0 March 2012* , 1959.

Gordon, M. J. (1963). OPTIMAL INVESTMENT AND FINANCING POLICY. *The Journal of Finance*.

Gujarati, D. N. (2003). *Basic Econometrics.* New York (NY): McGraw-Hill.

Gunny, K. (2010). THE RELATION BETWEEN EARNINGS MANAGEMENT USING REAL ACTIVITIES MANIPULATION AND FUTURE PERFORMANCE: EVIDENCE FROM MEETING EARNINGS BENCHMARKS. *CONTEMPORARY ACCOUNTING RESEARCH, 27*(3), 855-888.

Guo, H. (2002). QUANTITATIVE MARKET RISK DISCLOSURE, BOND DEFAULT RISK AND THE COST OF DEBT: WHY VALUE AT RISK?

H. KentBaker, D. M. (2006). In search of a residual dividend policy. *Review of Financial Economics*.

H.Meckling, M. C. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*.

Hassan Mounir El-Sady, H. I. (2012). Dividends Policies in an Emerging Market. *International Review of Business Research Papers*.

Henderson. (2018). 44.

Hidayat Ullah, S. e. (2015). The Impact of Dividend Policy on Stock Price Volatility: A Case Study of Selected Firms from Textile Industry in Pakistan. *International Journal of Academic Research in Economics and Management Sciences*.

Hussain, M. C. (2013). Dividend Policy and Stock Price Volitality. USA,Las Vegas: Frank.W.Longwood.

Hussainey. (2011). Impact of Dividend Policy on Market Capitalization of Firms Listed in Automobile Sector of KSE. *RADS Vol 3, No. 2, June 2016, 01-10*.

Hussainey and Mgbame . (2011). Impact of Dividend Policy on Market Capitalization of Firms Listed in Automobile Sector of KSE . *RADS Vol 3, No. 2, June 2016, 01-10*.

Ibrahim, B. (2017). FIRMS'SPECIFIC CHARACTERISTICS AND STOCK MARKET RETURNS (EVIDENCE FROM LISTED FOOD AND BEVERAGES FIRMS IN NIGERIA). *INTERNATIONAL JOURNAL OF INFORMATION, BUSINESS AND MANAGEMENT, 9*(1), 257.

Irfan, N. (2015). *Business and Management Sciences*, 56-57.

Kanwal Iqbal Khan, M. A. (2011). Can Dividend Decisions Affect the Stock Prices: A Case of Dividend Paying Companies of KSE . *International Research Journal of Finance and Economics* .

Khadija Farrukh, S. I. (2017). Dividend Policy. *Cogent Business and Management*.

Khalid, F. (2007). Impact Of Dividend Policy On share Price Volatility Empirical Evidance From Jordanian Stock Market. *European Journal Of Business & Management, Vol6, No 38, 2014*.

Khan et al. (2016). Iimpact Of Dividend Policy on share price volatility. *International Journal Of Acdamic Research in Economic And Management Sciences,Vol 5, No 3*.

Kinder, C. (2002). Estimating Stock Volatility .

Linter. (1962). *Global Journal of Management and Business Research Volume 12 Issue 5 Version 1.0 March 2012* .

Lintner. (1956). Instability in the dividend policy of the Istanbul Stock Exchange (ISE) corporations: evidence from an emerging market. *Emerging Markets Review*.

Majluf, M. a. (1987). *A JOURNAL OF MANAGEMENT SCIENCES* .

Masum, A. A. (2014). Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*.

Mcinnis, J. (2016). EARNINGS SMOOTHNESS, AVERAGE RETURNS, AND IMPLIED COST OF EQUITY CAPITAL. *THE ACCOUNTING REVIEW,, 85*(1), 315-341.

MCINNIS, J. (2016). EARNINGS SMOOTHNESS, AVERAGE RETURNS, AND IMPLIED COST OF EQUITY CAPITAL. *THE ACCOUNTING REVIEW,, 85*(1), 315-341.

MERTON H. MILLER. (1985). Dividend Policy under Asymmetric Information. *The Journal of Finance*.

Mian Sajid Nazir, M. M. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy . *International Research Journal of Finance and Economics* .

Modiglani, M. a. (1961). Impact Of Dividend Policy On Share Price Volatility. *Global Journal of Management and Business Research Volume 12 Issue 5*.

Modigliani, M. &. (1961). *DIVIDEND THEORIES* .

Modigliani, M. (1961). Dividend Policy. *Behavior Management Journals*.

Mohammad Hashemijoo, A. M.-A. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal of Business Studies*.

Murgheni, G. (1962). *CAPITAL STRUCTURE THEORIES* .

Nadeem nasir, D. a. (2014). Impact Of Dividend Policy On share Price Volitality . *European Journal of Business managememt vol.6 no.11th* .

Nishat. (1991; 1992; 1995; 1999; 2001). *Applied Economics Research Centre*.

Nishat. (1999). Divedend Policy. *Internation Business Journal Vol 2*.

Okafor, C. A.-M. (2014). Dividend Policy and Share Price Volatility in Nigeria.

Omet, G. (2004). Dividend Policy Behaviour in the Jordanian Capital Market. *International Journal of Business, Vol. 9, No. 3*.

Polleit, A. B. (2006). *Economic Journal, 2006, vol. 38, issue 12, 1409-1423*.

Pradhan, R. S. (2009). Effects of Dividends on Common Stock Prices. *The Nepalese Evidence*.

R. Azhagaiah, S. P. (2008). The Impact of Dividend Policy on Shareholders' Wealth. *International Research Journal of Finance and Economics* .

Rachim, D. E. (1996). Dividend policy and stock price volatility: Australian evidence. *Applied financial Econimics*.

Rashid, A., & Rahman, A. Z. (2008). Dividend Policy and Stock Price Volatility: Evidence from Bangladesh. *The Journal of Applied Business and Economics*, 77-81.

Recknorack, J. A. (2015). THE BEHAVIOUR OF STOCK ANALYSTS: EMPIRICAL EVIDENCE OF" ECONOMIC RENTS" ACROSS MARKET CAPITALIZATION ACCRUING FROM CONSENSUS FORECAST EPS ERRORS. *AESTIMATIO, 10*, 66.

RFrench, E. F. (1988). Dividend yields and expected stock returns. *Journal of Financial Economics*.

Rostami, R. (2016). THE EFFECT OF CORPORATE GOVERNANCE COMPONENTS ON RETURN ON ASSETS AND STOCK RETURN OF COMPANIES LISTED IN TEHRAN STOCK EXCHANGE. *PROCEDIA ECONOMICS AND FINANCE, 36*, 137-146.

SALIH, A. (2010). The Effect of Dividend Policy on Market Value . *Durham e-Theses*.

Salkind, N. J. (2016). STATISTICS FOR PEOPLE WHO (THINK THEY) HATE STATISTICS. *SAGE PUBLICATIONS.*

Sarah, A. A. (2016). MODELLING STOCK RETURNS VOLATILITY: EMPIRICAL EVIDENCE FROM SAUDI STOCK EXCHANGE. *INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS, 85*, 166-179.

Scholes, B. &. (1974). *A NEW VALUATION MODELS* .

shahid, s. (2016). dividend issues . *int jou og ,,,,,,,,,vol.5 nos*.

Shapiro, E. (1956). *Capital Equipment Analysis: The Required Rate of Profit.*

Shavvalpour, K. J. (2017). PETROCHEMICAL PRODUCTS MARKET AND STOCK MARKET RETURN: EMPIRICAL EVIDENCE FROM TEHRAN STOCK EXCHANGE. *IRANIAN ECONOMIC REVIEW, 21*(2), pp. 383-403.

Shiller, R. J. (1987). The Volatility of Stock Market Prices. *Cowles Foundation Paper*, 670.

Syed Akif Shah, U. N. (2016). Stock Price Volatility and Role of Dividend Policy: Empirical. *International Journal of Economics and Financial Issues, 2016, 6(2), 461-472.*

Syed Akif Shah1, Umara Noreen2. (2016). Stock Price Volatility and Role of Dividend Policy: Empirical. *Researches which are previously conducted in Pakistan is to study the association of stock prices and dividend policy but there is an lacking on the study of impact of dividend policy on share price volatility on automobile sector and most importantly sti*.

Thaler, R. (1987). Anomalies: Seasonal Movements in Security Prices II: Weekend, Holiday, Turn of the Month, and Intraday Effects. *The Journal of Economic Perspectives*.

Tribune, E. (2017). *PSX ENDS AS WORLD'S WORST MARKET IN 2017.* KARACHI: EXPRESS TRIBUNE.

Waheed, T. A. (2017). Impact Of Divisend Policy . *Research Journal Of Finance And Accounting , Vol 8, No 9* .

Yaser Pervaiz, A. Z. (2013). Impact of Liquidity on Capital Structure of Textile Sector of Pakistan . *Journal of Economics & Finance (JEF) AUGUST 2013 VOL.1, No.6* .

Ye CaiHoje Jo, C. P. (2009). Doing Well While Doing Bad? CSR in Controversial Industry Sectors. *Journal of Business ethics*.

Zolotoy, F. (2017). AGGREGATE EARNINGS AND STOCK MARKET RETURNS THE GOOD, THE BAD, AND THE STATE-DEPENDENT. *JOURNAL OF BANKING & FINANCE, 77*, 157-175.

Zuriawati Zakaria, J. M. (2012). THE IMPACT OF DIVIDEND POLICY ON THE SHARE PRICE VOLATILITY. *International Journal of Economics and Management Sciences*.