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Risk and Capital Structure: Empirical Evidence fromSharia'h and Non-Sharia'h Firms

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Risk and Capital Structure: Evidence from Sharia'h and Non Sharia'h Firms

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Abstract: The research tries to matriculate the effect of risk on the capital structure of the firm in sharia'h compliant and non-sharia'h compliant firms of Pakistan. The paper chooses three independent variables, which are systematic risk, credit risk, and liquidity risk, and three dependent variables for capital structure (debt, non-current debt, and current debt to asset) to evaluate the connection between them. The panel data after sharia'h screening was left with 81 sharia'h firms and 276 non- sharia'h firms. The data was collected from 2015 to 2019 which was taken from the state bank of Pakistan. The analysis showed, there was no significant effect of credit and systematic risk on sharia'h firms. While credit and liquidity, risk had a significant effect on non-sharia'h firms. The one-point incline (decline) in CR, increases (decreases) LVTD by 0.0027 points in non-sharia'h firms. The liquidity risk had a significant effect on sharia'h companies. So, one-point increases (decreases) in QR, incline (decline) LVSTD by 0.037 points in non-sharia'h firms and 0.0218 in sharia'h firms. The study provides suggestions for future researchers and gives key ideas about policy implications on risk management to the managers while making decisions on capital structure.

Keywords: capital structure; risk; firm size; shari'ah; non-shari'ah firms

Introduction

The primary aim of this paper is to find the impact of systematic, credit, and liquidity risk on the leverage of the firm, by controlling the effects of size, growth, and profitability of the firm. The study provides a metrical analysis between sharia'h and non-sharia'h firms operating in Pakistan. KMI Sharia'h index is used to spilt Pakistan's' between sharia'h and non-sharia'h firms.

Capital structure is still an ambiguous entity among scholars, many theorists have tried to explain the capital structure and its determinants. Still, (Campbell & Rogers, 2018) theorized that companies try to find optimal policies for Corporate Finance Trilemma (debt, cash holding, and equity payout) at the same time but companies have failed to do. But (Ardalan, 2018) researched the optimal capital structure for firms that exist in the market. (Alkhatib, 2012) found that shareholders' wealth may be impacted by the optimal level of capital structure.

The firms' risk is defined as the volatility of a particular entity. Investment risk can be defined as the difference between expected and actual returns. This study offers three different approaches to evaluate risk: systematic risk, credit risk, and liquidity risk. Systematic and credit risk are widely debated in stock markets (Kim, Gu, & Mattila, 2002). Liquidity risk (LR) is explained as the risk that the company might not be able to pay back its current liabilities but its current incomes or assets. (Kawaguchi, 2016)researched the oil and gas sector liquidity risk. (Awin, 2018) researched liquidity risk and its determinants in the oil and gas industry.

Credit risk (CR) is explained as the probability of the borrower not paying back the loan amount to the lender at a specified date. Lender losing the amount plus any interest on that amount causes net cash flow to decrease and increase collection cost. (AL-Tamimi & Al-Mazrooei, 2007). Systematic

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risk (SR) is defined as the specific securities contribution in the portfolio risk. Systematic risk is usually measured by securities' beta.

Islamic finance is not a new principle. But previous studies in Islamic finance focused on profitability and its impact on other factors ((Azad, Azmat, & Hayat, 2019); (Saba, Ariff, & Rasid, 2020)), stability in sharia'h firms (Albaity, Mallek, & Noman, 2019). Recently, Islamic finance research literature shifted sharia'h firms' profitability and finding its determinants (Ho & Mohd-Raff., 2019) sharia'h firms and earning management (Farooq & AbdelBari, 2015); capital structure and its impact on performance (Ahmed, Arsad, & Said, 2017). (Cheong, 2021) researched that barriers to debt financing might lower the sharia'h firm risk because higher debt will limit the firm's ability to pay operational payments.

This study contributes to the literature in many ways. Firstly, no previous study tried to find the impact of risk on the capital structure of the firms in metrics of sharia'h compliance of firms. This study tries to compare sharia'h and non-sharia'h firms, and whether the risk has any effect on the capital structure of relative firms. Secondly, there is not much literature on the effect of risk on capital structure. This study tries to answer whether the risk is a determinant in creating a capital structure or not.

Research Problem

The financing decision of any firm is highly dependent on risk and capital structure. Many firms across the globe whether they are sharia'h or non-sharia'h find it difficult to decide their capital structure keeping in mind the risks.

After going through literature awareness is required among the decisions makers regarding the relationship of risk and capital structure specifically how it changes among sharia'h and non-sharia'h firms.

Research Objectives

The primary purpose of the study is to find the impact of systematic, credit, and liquidity risk on the capital structure of the firm by controlling the effects of firm size, growth, and profitability. This study investigates the following objectives.

- To look for the effect of Credit risk (CR) on capital structure (CS) in sharia'h and non-sharia'h organizations.
- To look for the effect of Systematic risk (SR) on capital structure (CS) in sharia'h
- and non-sharia'h organizations.
- To look for the effects of Liquidity risk (LR) on capital structure (CS) in sharia'h and non-sharia'h organizations.
- To suggest useful recommendations to key decision-makers and future researchers on the core topic of sharia'h and non-sharia'h organizations.

Literature Review

Capital structure in any organization is formed by a mixture of debt and equity financing. Organizations distinct their capital structure by financing decisions, an organization

makes these decisions to avoid any financial or fiscal implications, they might face in the future. The solvency ratio is used to calculate capital structure, which is total debt to the total asset. (Modigiliani & Miller, 1958) theorized that the capital structure, CS, of any organization does not affect the firm value excluding any transactional costs and external market deficits. Thus, stating that bankruptcy risk and transactional costs drive the capital structure of any organization.

Risk and Capital Structure in Metrics of Sharia'h

(Tahir, et al., 2020) studied the relationship of risk and capital structure considering seasonal and non-seasonal firms. (Danila, et al., 2020) found a significant impact of credit risk on capital structure.

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(Amiri & FadaeiNejad, 2018) found out that credit risk has a negative impact on the capital structure of the firm.

(Ward, 1993) explained firm risk as to the financial risk of an organization. Firm risk is aligned with earning of the firm. (Hamada, 1972) researched the relation of risk and capital structure and predicts that 21% to 24% of capital structure is explained by risk. The study focused on systematic risk and its effect on capital structure.

Academic studies on pecking order theory, suggest that higher risk leads to higher debt. And the rationale behind this is that investors would want more returns increasing the cost of capital. This is backed by (Sorokina, 2014), and (Ariff & LucCAN., 2008).

The trade-off theory negates this hypothesis and states the risk has a negative impact on the capital structure of the firms, and it is reported by (De Jong, Kabir, & Nguyen, 2008). Later, (Yildirim, et al., 2018) hypothesis that firm's risk has a negative impact on both sharia'h and non-sharia'h firms.

Sharia'h is a regulatory system that governs according to Islamic principles. In business, sharia'h provides clear guidelines for operating a business in an ethical environment and with strict regulatory frameworks. Sharia'h compliance is usually formulated under two major criteria. Qualitative criteria deal with the organizations involved in operations prohibited by Islam (Alcoholic products, pork usage, etc.). Quantitative measures are formulated by creating thresholds for financing decisions that are allowed in Islam (debt financing, interest-earning ratios threshold, etc.).

(Durand, K., & Limkriangkrai, 2013) explained that the saints' stocks (firms that do not involve themselves in gambling, firearms, alcohol, tobacco, and military weapons) have lower risk than no saint stocks. (Hong & kacperczyk, 2009) researched that sin stock (firms that do involve themselves in gambling, firearms, alcohol, tobacco, and military weapons) have a higher risk.

Systematic Risk and Capital Structure in Metrics of Sharia'h

(Tripathi & Thukral, 2018) researched a strong relationship between capital structure and systematic risk. (Qin & Zhou, 2019) researched the impact of leverage, firm value, and size of the firm on the SR of commercial banks. The study further illustrated that leverage has a negative impact on systematic risk. (Tripathi & Thukral, 2018) researched a strong relationship between capital structure and systematic risk. (Jaffar, Muhamat, Basri, & Alwi, 2020) capital structure is the most crucial factor of systematic risk.

(Sahar & Sahar, 2015) discussed the effect of capital structure on firm performance in sharia'h firms in the Malaysian stock exchange. The research also focused on the capital structure on market risks of the firms. (Akbari & Mohammad, 2013) researched the panel data of 115 companies in the Tehran stock exchange from the year 2005 to 2012. Research further predicted that there is a direct relation between systematic risk and leverage ratio.

(Iqbal & Shah, 2012) also tried to analyze the linkage between financial indictor and systematic risk on the firm. 93 non-financial firms were chosen from KSE (Karachi stock exchange) for the period of 2005-2009. The study used liquidity, firm size and value, dividend policy, and leverage ratio as metrics of measuring financial variables. They couldn't find any relationship between firm capital structure and systematic risk.

Companies following Sharia'h will avoid the prohibited industries which lowers the risk in the companies. Similarly, a greater level of disclosure lowers the overall risk in the firm as researched by (Dhaliwal, Li, Zhang, & Yang, 2011). But seeing other operations such as agency problems and cost of capital to reduce debt in the firms might increase the debt so because of these initial hypotheses to be tested are.

H1; Systematic risk has no significant effect on capital structure in sharia'h compliant firms.

H2; Systematic risk has a significant effect on capital structure in non-sharia'h compliant firms.

Credit Risk and Capital Structure in Metrics of Sharia'h

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(Gilchrist & Mojon, 2018) researched credit risk increases because of the nature of agreements. They investigated credit risk measures in Euro area banks and non-financial firms. Results indicated that there is an indirect effect between capital structure and credit risk.

(Buchdadi, Nguyen, Putra, & Dalimunthe, 2020) studied relation among the capital structure, credit risk, and capital sustainability ratio in the nine banks using the bank's credit risk indicators. (Tulcanaza & Lee, 2019) hypothesized that in large corporation's leverage of the firm is affected by the credit risk of the firm. (Woo, Kwon, & Yuen, 2020) found out that there is a negative relationship between capital structure and credit risk in the shipping industry.

(Iqbal & Kume, 2015) worked on 22 non-financial firms using multivariate regression analysis. Researchers found a negative linkage between leverage and the credit risk of the firm. (Srivastava, 2014) focused on finding the determinants of capital structure in Indian firms. He used profitability, size, tangibility, growth, and credit risk. The relationship between all these variables was found negative towards the capital structure.

(Cheong, 2021) explained the firm risk and its effect on shariah and non-shariah firms. 2160 firms were used across six geographical locations. Research also used default risk to measure firm risk and tried to find the relation of risk and sharia'h compliance of the firms.

Although companies change their capital structure based on different variables. But sharia'h firms form their structure not only on the financial indicators but also on their core value and that is why research hypothesizes.

H3; Credit risk has no significant effect on capital structure in sharia'h compliant firms.

H4; Credit risk has a significant effect on capital structure in non-sharia'h compliant firms.

Liquidity Risk and Capital Structure in Metrics of Sharia'h

(Khan, Khan, Ramakrishnan, Abbas, & Mahar, 2020) researched the liquidity risk and firm performance. The research used different matrices to find the determinants of liquidity risk and then tried to find their relationships with firm performance.

(Sumani & Ahmad, 2020) tried to examine the effect of corporate governance and capital structure and then its effect on liquidity policy. It tried to examine the mutual effects of capital structure and liquidity policy on each other. Sampling used 109 companies to find the linkage. (Iqbal, Chaudry, & Iqbal, 2017) found effect of liquidity risk on capital structure and cash flow sensitivity.

(Burksaitiene & Draugele, 2018) focused the research on liquidity risk and how it impacts the capital structure of the firm. The research found no significance between capital structure and liquidity ratio.

Companies try to increase their financing when their liquidity increases and try to use debt financing to generate cash inflows and that is why research hypothesizes.

H5; Liquidity risk has no significant effect on capital structure in sharia'h compliant firms.

H6; Liquidity risk has a significant effect on capital structure in non-sharia'h compliant firms.

Firm Performance, Size, Growth, and Capital Structure in Metrics of Sharia'h

(Nenu, Vintila, & Ghergina, 2018) analyzed the capital structure and its impact on firm performance and risk. (Niskanen & Niskanen, 2019) tried to find the impact of capital structure and firm performance with relation to the credit risk of the firms.

(Degryse, De Goeij, & Kappert, 2012) researched that there is a direct relationship between leverage and firm size and the growth of the firm. (Sheikh & Wang, 2011) also researched on major determinants of capital structure and found out the positive relationship between size and growth of the firm.

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(Saba, Ariff, & Rasid, 2020) found out the relationship between firm performance concerning sharia'h and non-sharia'h firms in the Malaysian stock exchange. The research also focused on determinants of firm performance in sharia'h firms and find its relationship with leverage, growth, and size.

Shariah and Non-Shariah Firms

The Dow Jones Islamic Market Index (DJIMI) is pioneer in the field of Shari'ah-compliant indices as its defining and implementing Shari'ah screening methodology. The Dow Jones Global Index (DJGI) provides certain criteria according to the Islamic Laws and sharia to define any firms status as sharia or non-sharia. Following are the criteria of screening as qualitatively and quantitatively.

Qualitative Screening	Quantitative Screening
Business not to be done Alcohol, Tobacco, Haram products, Weapons, Conventional Banks & Insurances Corporations, Cinema, Bars, Gambling, Music, etc.	Accounts Payables Accounts receivables Total of Cash and interest-bearing securities

Research Methodology

Data and Sample

The present study uses data from 2015-2019 collected from DataStream, WorldScope and the Balance Sheet Analysis published by the State Bank of Pakistan. The data for 2020 was left out to avoid any impact COVID-19 had on the firms in Pakistan. All the nonfinancial firms listed on Pakistan Stock Exchange for the entire period are taken as a sample. Those firms that did not remain listed throughout the sample period, firms with negative equity and firms with incomplete data were excluded from the sample. The final sample constitutes a balanced panel of 357 firms from 37 industries, of which 81 are SC and 276 are NC. The sample firms were classified as SC and NC by using the screening criteria of the Karachi Meezan Index-30 index. The shariah criteria was formed based on accounting standards of KMI Meezan bank screening criteria specifical for this study and then cross referenced with KMI sharia'h index presented by Karachi stock exchange and Meezan bank. Following are 6 basic criteria's for differentiating Sharia and Non-Sharia firms followed by KMI.

Sr No.	Criteria	Description	Formula
1	Business of the Investee Company	Business of the investee companies must be Halal not Haram	---
2	Interest Bearing Debt to Total Assets	Debt (Bearing Interest) should be less than 37% of Total Assets	(Debt/Assets) <37%
3	Non-Compliant Investments to Total Assets	Investment to Non-Compliant should be less than 33% of Total Assets	(Non-Compliant Invest/Assets)<33%
4	Non-complaint Income to Total revenue	Income from Non-Compliant Should be Less than 5% of total revenue	(Income From Non-Complaint/Total Income) <5%
5	Illiquid Assets to Total Assets,	Fixed assets should be More than 25% of Total Assets	(Fixed Assets/Total Assets)>25%

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6	Net Liquid Assets/Share Vs Market Price/Share	Market Price per share should be at least equal to or greater than net liquid assets per share.	Net Liquid Assets Per share = (Total Assets- Illiquid Assets - Long Term Liabilities-Current Liabilities)/No. of Shares Outstanding

Variables

The study uses three proxies for capital structure: Total debt to asset ratio (LVTD); non- current debt to the asset (LVLTD); current debt to the asset (LVSTD) as a dependent variable. Systematic, credit and liquidity risk are the independent variable. Profitability, size, and growth are chosen as control variables. Following Table provides a detailed description of the variables.

Name of variables	Proxy	Measurements	Source of definition
Independent variables			
Capital Structure	Total debt to asset	Total debt/asset	(Pattiruhu & Paais, 2020)
	Current debt to assets	Current debt/asset	(Sahar & Sahar, 2015)
	Non-current debt to assets	Non-current debt/asset	(Sahar & Sahar, 2015)
Dependent variables			
Risk	Systematic risk	Beta = Return = ln (Pt/Pt-1)	(Tahir, et al., 2020)
	Credit risk	(Altman) Z-Score	(Shah, Ullah, & Khalid, 2012)
	Liquidity risk	QR	(Kaddumi & Kilani, 2020)
Control variables			
Control variables	Firm size	Ln (total assets)	(Tahir, et al., 2020)
	Profitability	ROA	(Saba, Ariff, & Rasid, 2020)
	Firm growth	(Assetsŧ - Assetsŧ-1)/ Assetsŧ-1	

Econometric Model

To find the impact of risk (credit, liquidity, and systematic) on capital structure, the study uses a multiple regression model. The analysis has three models with each having two steps. First, we try to find results for sharia'h and then non-sharia'h firms. The equation used in the research is given below, study estimates for sharia'h and non-sharia'h firms separately.

Model 1

$$LV_{(TD)it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(SR_{it}) + \beta_3(LR_{it}) + \beta_4(FS_{it}) + \beta_5(FG_{it}) + \beta_6(PR_{it}) + e_{it}$$

Model 2

$$LV_{(LTD)it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(SR_{it}) + \beta_3(LR_{it}) + \beta_4(FS_{it}) + \beta_5(FG_{it}) + \beta_6(PR_{it}) + e_{it}$$

Model 3

$$LV_{(STD)it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(SR_{it}) + \beta_3(LR_{it}) + \beta_4(FS_{it}) + \beta_5(FG_{it}) + \beta_6(PR_{it}) + e_{it}$$ Here, LV is the leverage of the firm, where TD stands for total debt, LTD stands for non- current debt, STD stands for current debt. SR stands for systematic risk, CR stands for credit risk, LR stands for liquidity risk. FS stands for firm size; FG is firm growth and PR stands for profitability. 'i' stands for a firm, and '*t*' stands for time. β_0, β_1, β_2, β_3, β_4, β_5 and β_6 are coefficients and '*e*' stands for error.

Empirical Results

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The study shows empirical evidence through descriptive statistics, Pearson correlation analysis, and regression analysis for the impact of systematic, liquidity, and credit risk on capital structure for both Sharia'h-compliant firms and non-sharia'h compliant firms in Pakistan.

Descriptive Statistics

Table 1 & 2 shows the output of the descriptive analysis for both sharia'h and non-sharia'h firms in Pakistan. The mean value of LVTD for sharia'h (non-sharia'h) firms is 0.24 & 0.84. The average value of LVLTD for sharia'h (non-sharia'h) firms is 0.068 & 0.2427. The average value of LVSTD for sharia'h (non-sharia'h) firms is 0.18 & 0.6015.

Table 1. Sharia Firms Statistics).

Variables	PR	FG	FS	LV STD	LV LTD	LVTD	LR	CR	SR
Observations	407	407	407	407	407	407	407	407	407
Mean	6.88	0.09	15.2	0.18	0.06	0.248	1.31	30.9	0.015
Max	36.94	2.74	20.45	0.359	0.258	0.369	13.28	360.4	1.76
Min	-160.3	-0.74	9.56	0.007	0	0.02	0	-3,470.	-1.6
STD	12.77	0.264	1.87	0.083	0.061	0.089	1.56	183.38	0.467

Table 2. Non-Sharia Firms Statistics).

Variables	PR	FG	FS	LV STD	LV LTD	LV TD	LR	CR	SR
Observations	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383	1,383
Mean	0.257	0.103	15.21	0.601	0.242	0.844	1.03	29.3	0.063
Max	135.4	14.64	20.26	11.57	10.8	13.34	273.9	270.00	2.54
Min	-88.5	-0.868	8.009	0.0011	0	0.003	0.00001	-14.17	-8.3
STD	13.78	0.4797	2.000	0.807	0.698	1.21	10.34	248.08	0.574

The average value of SR for sharia'h firm and non-sharia is 0.0153 & 0.063. The mean value of CR for sharia'h and non-sharia'h firms is 30.958 and 29.30641 respectively. The average value for LR of sharia'h firm & non-sharia'h firm 1.31 & 1.034. The average value of FS for sharia'h and non-sharia'h firms is 15.269 and 15.217 respectively. The mean value of sharia'h firm and non-sharia'h for FG is 0.098 & 0.1035. The average value of PR for sharia'h and non-sharia'h firms is 6.88 and 0.257 respectively.

Pearson Correlation

Table 3 & 4 illustrates the Pearson correlation among the variables in both sharia'h and non-sharia'h firms. The correlation matrix is used to find multicollinearity between the variables used in the study. The dependent variables of capital structure (LVTD, LVLTD, LVSTD) have values greater than 0.7 but we are using different models to evaluate the impact of risk and we found from previous studies ((Wang, 2013); (Sahar & Sahar, 2015)) have same variables for capital structure. Other than this both sharia'h and non-sharia'h indicate that multicollinearity does not exist in the data.

Table 3. (Pearson Corelation Matrix of Sharia Firms).

Variables	SR	CR	LR	LVTD	LVLTD	LVSTD	FS	PR	FG
SR	1								
CR	0.013	1							
LR	-0.053	0.0946	1						
LVTD	0.052	-0.007	-0.5	1					
LV LTD	0.049	-0.012	-0.18	0.428	1				
LV STD	0.019	0.001	-0.033	0.745	-0.282	1			
FS	-0.042	0.013	-0.013	0.183	0.149	0.084	1		

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PR	0.072	0.3187	0.074	0.048	-0.015	0.082	0.34	1	
FG	0.011	0.153	0.038	-0.0016	0.05	-0.038	0.1148	0.262	1

Table 4. (Pearson Corelation Matrix of Non-Sharia Firms).

Variables	SR	CR	LR	LVTD	LVLTD	LVSTD	FS	PR	FG
SR	1								
CR	0.07	1							
LR	0.032	0.676	1						
LVTD	-0.032	-0.065	-0.05	1					
LV LTD	0.0209	-0.0366	-0.0237	0.776	1				
LV STD	-0.0667	-0.0665	-0.055	0.8385	0.307	1			
FS	-0.01	-0.2316	-0.1298	-0.341	-0.2501	-0.2996	1		
PR	0.0921	-0.2021	-0.0042	-0.3432	-0.1892	-0.3531	-0.355	1	
FG	0.0144	-0.0534	-0.034	-0.0592	-0.0321	-0.0617	0.0791	0.336	1

Regression Analysis

Table 5,6 and 7 shows the results of regression analysis for the impact of systematic, credit and liquidity risk on the capital structure. The systematic risk has no significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) for both sharia'h and non-sharia'h firms. Credit risk has no significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) for sharia'h firms but has a significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) for non-sharia'h firms. The CR proxy used in the study is Altman Z-score, thus an increase in Z-score decreases CR. So, a significant negative impact of Z-score means CR has a positive impact on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}). The one-point incline (decline) in CR, increases (decreases) LV_{TD} by 0.0027 points in non-sharia'h firms. The one-point increases (decreases) in CR, increases (decreases) LV_{LTD} by 0.0004 points in non-sharia'h firms. The one-point incline (decline) in CR, increases (decreases) LV_{STD} by 0.00044 points in non-sharia'h firms. The liquidity risk has a significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) for both sharia'h and non-sharia'h firms except for LV_{LTD}, LR has an insignificant effect on LV_{LTD}. LR proxy used in the study is QR, an increase in QR decreases LR. So, a significant negative impact of QR means LR has a positive impact on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}). The one- point incline (decline) in CR, increases (decreases) LV_{TD} by 0.040 points in non-sharia'h firms and 0.0285 in sharia'h firms. The one-point increases (decreases) in QR, increases (decreases) LV_{LTD} by 0.0067 in sharia'h firms. The one-point increases (decreases) in QR, incline (decline) LV_{STD} by 0.037 points in non-sharia'h firms and 0.0218 in sharia'h firms.

Table 5. (LVTD of Sharia & Non-Sharia Firms).

	LVTD (Total Debt to Asset Ratio)							
Variables	Sharia'h firms Dependent variable (LVTD)				Non-Sharia'h firms Dependent variable (LVTD)			
	Coeff	Std. Err	T-stat	PV	Coeff	Std. Err	T-stat	PV
constant	0.1619	0.03267	4.96	.000	2.8576	0.19996	14.29	.000
SR	0.00589	0.00812	0.72	0.469	0.0346	0.04749	0.73	0.465
CR	5.45E06	2.10E-5	0.25	0.803	-0.0027	0.00052	-5.27	.000
LR	-0.0286	0.00243	-11.75	.000	-0.0407	0.01451	-2.81	.005
FS	0.00805	0.00215	3.74	.000	-0.1298	0.01303	-9.96	.000

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PR	0.00017	0.00033	0.52	0.601	-0.0213	0.00208	-10.27	.000
FG	-0.0036	0.01482	-0.24	0.808	-0.0553	0.10225	-0.54	0.589
r^2	0.2853				0.2209			
Adjusted r^2	0.2746				0.2175			

Table 6. (LVLTD of Sharia & Non-Sharia Firms).

	LVLTD							
Variables	Sharia'h firms Dependent variable (LVLTD)				Non-sharia'h firms Dependent variable (LVLTD)			
	Coeff	Std. Err	T-stat	PV	Coeff	Std. Err	T-stat	PV
constant	-0.0117	0.02594	-0.45	0.651	1.431	0.15609	9.17	.000
SR	0.00734	0.00645	1.14	0.256	0.0594	0.03707	1.6	0.109
CR	1.89E-0	1.70E-05	0.11	0.913	-0.0014	0.0004	-3.38	.001
LR	-0.0067	0.00193	-3.49	.000	-0.008	0.01133	-0.71	0.48
FS	0.00596	0.00171	3.49	.001	-0.0768	0.01017	-7.55	.000
PR	-0.0005	0.00027	-2.04	.042	-0.0073	0.00162	-4.51	.000
FG	0.01507	0.01177	1.28	0.201	-0.008	0.07981	1.01	0.311
r^2	0.0683				0.0855			
Adjusted r^2	0.0543				0.0815			

Table 7. (LVSTD of Sharia & Non-Sharia Firms).

	LVSTD							
Variables	Sharia'h firms Dependent variable (LVSTD)				Non-sharia'h firms Dependent variable (LVSTD)			
	Coeff	Std. Err	T-stat	PV	Coeff	Std. Err	T-stat	PV
constant	0.1737	0.03301	5.26	.000	1.999	0.16924	11.81	.000
SR	-0.0015	0.00821	-0.18	0.86	-0.0023	0.0402	-0.06	0.954
CR	3.56E-06	2.20E-05	0.16	0.872	-0.0018	0.00044	-4.11	.000
LR	-0.0218	0.00246	-8.88	.000	-0.0371	0.01229	-3.02	.003
FS	0.00209	0.00217	0.96	0.337	-0.0884	0.01103	-8.02	.000
PR	0.00072	0.00034	2.12	.034	-0.0186	0.00176	-10.57	.000
FG	-0.0187	0.01498	-1.25	0.213	-0.0598	0.08654	-0.69	0.489
r^2	0.1776				0.1968			
Adjusted r^2	0.1653				0.1933			

Moreover, FG has an insignificant effect on capital structure (LVTD, LVLTD, LVSTD) for both sharia'h and non-sharia'h firms. FS has a significant positive effect on capital structure (LVTD, LVLTD) for sharia'h firms. Expect for LVSTD, FS does not affect LVSTD. FS has a significant negative effect on capital structure (LVTD, LVLTD, LVSTD) for non-sharia'h firms. PR has no effect on LVTD for sharia'h firms. PR has a positive effect on LVSTD while a negative impact on LVLTD, in sharia'h firms. While PR has a negative impact on capital structure (LVTD, LVLTD, LVSTD) for non-sharia'h firms.

Discussion

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This study tries to investigate the impact of systematic, liquidity, and credit risk on the capital structure by controlling the variables like profitability, firm growth, and size. This study provides a detailed comparative analysis between sharia'h and non-sharia'h firms operating in Pakistan. Sharia'h criteria were established for this study matching the criteria of the KMI screening index. The screening was compared with the Pakistan stock exchange and KMI screening report of the sharia'h index.

The SR has no significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) in both sharia'h and non-sharia'h firms. So, we can accept the hypothesis(1) of SR and reject the Hypothesis

(2) likewise the results of (Tahir, et al., 2020) & (Iqbal & Shah, 2012). The results indicate that Shariah and non- sharia'h firms do not use SR variables while making capital structure decisions in Pakistan.

The CR has no significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) in sharia'h firms while has a significant effect in non-sharia'h firms. These results prove the hypothesis 3 and 4. These results of hypothesis 4 are consistent with the previous study (Orichom & Omeke, 2021). For non-sharia'h firms, the incline(decline) in CR causes an incline(decline) in capital structure. Sharia'h firms have no impact of CR on the capital structure because capital structure is not affected by credit risk in sharia'h firms, but it might be because of decision makers' faith and investors' perception of debt borrowing.

The LR has a significant effect on capital structure in both sharia'h and non-sharia'h firms. This proves hypothesis 6 but rejects hypothesis 5. These results are consistent with the previous study (Effiong & Ejabu, 2020). The increase (decrease) in LR, increases (decreases) capital structure. This might be because once the liquidity risks the managers of both sharia'h and non-sharia'h firms try to increase their working capital at once. And borrowing from the lender is one the efficient. This increases the capital structure of the firms. It also means in lenders easily borrow funds from the firms in Pakistan's environment.

FG has no significant effect on capital structure (LV_{TD}, LV_{LTD}, LV_{STD}) in both sharia'h and non-sharia'h firms. While FS has mixed results on capital structure. FS has a positive impact on the capital structure of sharia'h firms. While FS has a negative impact on the capital structure of non-sharia'h firms. An increase in FS, increase in the capital structure of sharia'h firm might be because the cost of capital increases as the firm size increase. Thus because of interest tax exemption and cost of capital might be the reasons that company increase their debt. PR shows a negative impact on the capital structure of sharia'h firms. This might be because as sharia'h firms get more profitable they neglect the cost of capital and interest tax exemptions and reduce their capital structure.

Conclusion

Overall, the study deduced that the sharia'h firm's capital structure is not impacted by risk but by some other decisions. While the decisions of non-shariah firms' regarding capital structure are influenced by different Risks. In future the researchers can check the impact of operational risk on capital structure of Shariah and Non- Shariah Firms, while using different sectors specifically. Furthermore, different factors like, board of directors' faith, investors' perceptions and CSR can be analyzed in risk and capital structure scnerio.

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