# Impact of Stock Liquidity on Capital Structure Decision: The Case Study of Manufacturing Firms in Pakistan

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#### Abstract

The core objective of this study is to explore the relationship between stock liquidity and capital structure decision of manufacturing firms in Pakistan. A sample data of 133 companies listed on the Pakistan Stock Exchange have been taken for analysis. The sample data collected was for the six years' period from 2016-2021. To investigate the relationship 3 regression models, Fixed-Effect Model, Random-Effect Model, and Weighted Least Square Model were utilized to evaluate the collected data. The result showed by Weighted Least Square Model suggested that there is a positive and significant relationship between stock liquidity and the capital structure of firms. The results were consistent with those of Abdullah and Ebrahim (2020) and Sharma and Paul, (2015). Moreover, it can be interpreted that firms have lower leverage when they have higher liquidity of stocks. (Dang et al. 2019).

Keywords: Stock liquidity, Capital structure decision, manufacturing firms, leverage

# Introduction

The literature shows that there are many strategies that a firm uses in order to finance its capital structure. Hence a question arises why firms consider it mandatory to finance their capital structure? The actual reason behind financing capital structure is to finance their operations and growth. Firms use both debt and equity financing in order to run their operations. Hence it can be concluded that a firm's capital structure comprises a unique combination of both debt and equity. Some companies use debt financing but there are many firms that are involved in equity financing. When firms acquire more liquid equity than debt securities, they have the advantage of enjoying the decreased expense associated with equity. Thus, they are motivated to have a capital structure with more equity and less debt (Abdullah and Ebrahim, 2020).

When firms having more liquid equity are financing their capital structure through equity, they enjoy the benefits because they are not bound to pay annual or quarterly cash flows and interest

payments to their equity investors rather, they pay them a certain amount of fixed dividend and in turn, their equity investors enjoy the ownership in decision making of the firms. They have ownership rights in firms because they bring money to fuel the growth of your company without demanding interest payments and annual cash flows compared to the bondholders. Stock liquidity refers to how easily an investor can buy or sell shares in the market without significantly affecting its price. Capital structure, on the other hand, refers to the combination of the firm's financial resources such as debt and equity. Liquidity is an important factor for a firm's growth and development; hence firms must consider the concept of liquidity when they need additional capital from outsiders. Thus, firms having more liquid equity than debt securities mostly prefer equity over debt financing (Rashid & Mehmood 2017). However, it's not always the case that every firm should follow the same strategy of equity financing. Firms can also engage in long-term debt financing for financing their capital structure. Moreover, if firms have less liquid stocks, they should prefer debt financing over equity because firms with less liquid stocks should pay higher risk premiums to their stockholders (Dang et al. 2019).

A firm's capital structure decision is a crucial aspect of its financial management, as it determines the way the firm finances its operations and investments. Gurmeet Singh (2015), states that insolvency and monetary risk are linked with debt financing. Companies with high expansion opportunities often go towards equity financing rather than debt financing. In Pakistan, manufacturing firms face unique challenges related to stock liquidity and capital structure. This research focuses on the relationship between stock liquidity and capital structure decisions within the context of manufacturing firms in Pakistan. This study has investigated the elements that affect the capital structure of these companies, placing special emphasis on the impact of stock liquidity. The study will use empirical evidence to analyze the factors of capital structure including liquidity, profitability, and growth. The results of this research add to the existing literature on capital structure and offer valuable perspectives on the financial management practices of manufacturing firms in Pakistan. Additionally, the study will provide guidance for policymakers and practitioners on how and where to enhance and improve the financial practices of manufacturing firms in Pakistan. Furthermore, if the transaction cost of stock or equity trading is reduced the equity will be more attractive and preferable over debt financing. Thus the assumption of this study is that there is a direct relationship between capital structure decision and stock liquidity

## Research Gap and Significance of Study

Studying the association between stock liquidity and capital structure within manufacturing firms of Pakistan is significant for several reasons. Firstly, it will provide insights into the financial management practices of manufacturing firms in Pakistan, which can help policymakers and practitioners to improve the financial performance of these firms. Secondly, the study will make a valuable contribution to the current body of knowledge on the capital structure by analyzing the determinants of capital structure, including liquidity, profitability, business risk, and growth. Thirdly, the study will fill the research gap by investigating the effects of stock liquidity on the capital structure of manufacturing companies within Pakistan, which is an important area of research given the unique challenges faced by these firms. There has been studies but not enough work has been done in the context of Pakistan. Given the ongoing financial crises in Pakistan, this study will fill the gap and provide the private sector and policymakers with potential solutions.

#### Literature Review

The manufacturing sector in Pakistan has been a significant contributor to Pakistan's economic progress and development. However, there is an insufficient correlation between the liquidity of stocks and the capital structure of manufacturing companies in Pakistan. Financial management is a crucial area for corporate firms in order to accomplish higher profitability asset utilization, market value, and growth rate. The association between capital structure, liquidity, and growth has been examined in many research articles, including in the Pakistan tobacco industry. These studies have analyzed the effect of capital structure on corporate liquidity and growth within firms. In this literature review, the study explores the existing research on the manufacturing sector in Pakistan and its growth from the context of green supply chain management, corporate performance, and efficiency.

Idrees et al. (2021) found that the effect of stock liquidity on the capital structure of firms within Pakistan is a significant area of research, given the unique challenges faced by these firms. The textile sector plays a vital role in the economic growth of Pakistan, making it a significant contributor. However, it encounters various challenges when it comes to managing liquidity and capital structure effectively. The relationship between capital structure and liquidity is

significant, and a negative association can be observed between liquidity and leverage, implying that companies with higher liquidity tend to have a lower level of leverage. This relationship suggests that liquidity can have a significant impact on a firm's capital structure. This finding is supported by Dang et al. (2019) in their study of Vietnamese listed firms.

Abdullah and Ebrahim (2020) concluded a linkage between capital structure and equity cost and states that there is a negative relationship between liquid stocks and equity cost thus firms with higher liquidity have less equity cost as compared to firms having fewer liquid stocks and more equity cost. Sadiq et al. (2021) also studied the relationship of stock liquidity with capital structure and showed similar results. They collected data from non-financial firms of Pakistan listed on the Pakistan stock exchange. Firms having more liquid stocks keep less debt securities as a result less leverage ratios and thus inverse relation between leverage and liquidity of stocks. Additionally, there is a negative relation between firms' leverage and profitability. (Sadiq et al. 2021).

Dutta et al. (2022) studied the data for 100 non-finance Indian firms. Their work also found, the relationship between the liquidity of stocks and capital structure and according to them firms that include more debt in their capital structure often face various issues ie., obligations of paying fixed payments. Additionally, their bankruptcy cost also increases. Moreover, the conflict between principal and agents also increases, which increases the internal cost and indirect cost thus, firms are more probable to have financial distress. More liquid stocks mean a firm will issue more equity and less debt securities. Equity financing in that case will be more profitable as compared to debt financing. Moreover, information asymmetry as many other studies also suggested decreases liquidity. In such a case debt financing will be better than equity financing. (Dutta et al. 2022). There is an inverse relationship between stock liquidity and leverage and as the Pecking Order theory states that for firms having illiquid stocks debt financing is preferable. The result shows an inverse relationship between liquidity of stocks and leverage. (Dutta et al. 2022).

Abidin et al. (2022) examined that firms having more liquid assets are more profitable thus firms having more liquid stocks are more profitable as compared to firms having less or no liquid stocks. According to Dong. (2020), to be profitable a firm must have a low level of leverage thus less issuance of debt securities and more equity. In a comprehensive review of the manufacturing

sector in Pakistan, Hussain et al. (2019) highlighted the importance of the manufacturing sector in the country's economic growth and development. The study provided insights into the manufacturing sector's growth from the context of technology, innovation, and human resource development. The study emphasized the need for the manufacturing sector to adopt modern technologies and improve its efficiency to remain competitive in the global market. Information asymmetry causes illiquidity. The reason is that when shareholders hold private information it increases adverse selection cost and leads to information asymmetry due to which stock liquidity decreases and illiquidity increases. There is a positive or direct relationship between proficient governance and liquidity and a negative association between stock market liquidity and leverage (Alsahlawi & Ammer, 2017).

Karmani et al. (2015) studied data of 469 companies and according to them, stock liquidity is a significant factor of capital structure and firms having an effective governance have more liquid stocks. As the cost of equity decreases, they can easily generate profit through equity liquidity.

Gurmeet Singh (2015), states that insolvency and monetary risk is linked with debt financing. Companies with high expansion opportunity often go towards equity financing rather than debt financing. Likewise, Sharma and Paul (2015), studied data of 279 firms and concluded that liquidity is one of the significant factors of capital structure. Firms having more liquid stocks are less leveraged. The reason why firms issue equity instead of debt securities is that more liquid equity has less issuance cost so they prefer to issue stock instead of issuing debt securities in order to generate or finance their capital structure. Rashid and Mehmood (2017) concluded the relationship between stock liquidity and capital structure and according to them equity having characteristics such as high cost of issuing and illiquidity are costly to issue hence firms often can prioritize to finance their capital structure through debt financing as a result their leverage level increases.

Information asymmetry among firms' managers and investors has also an impact on stock liquidity and increases the cost of equity issuing thus restricting firms' management to issue equity at the same time lack of information asymmetry decreases the cost of issuing equity thus management will go for more equity than debt in order to finance their capital structure. (Rashid & Mehmood 2017). There is a growing body of study on stock liquidity and capital structure decision for instance; Dang et al. (2019) demonstrates the impact of equity liquidity on a corporate capital

structure decision and shows that firms with higher liquidity of the stock market tend to have a negative relationship with leverage thus it will lower leverage as compared to firms having fewer liquid stocks and more debt financing. According to their argument, investors who choose to invest in stocks with lower liquidity or illiquidity may expect a higher rate of return compared to those investing in stocks with higher liquidity, they do so in order to compensate for liquidity risk because stocks that are less liquid tend to be risky as you won't be able to buy or sell your securities in the market (Dang et al. 2019).

According to Dang et al. (2019) companies sometimes choose optimal leverage and go towards debt financing than equity financing thus, they balance the tradeoff between the net cost of equity and net cost of debt financing, if there is a factor that increases equity cost such as illiquidity factor or decrease in stock liquidity than they should finance their capital structure by debt, not equity holding all other factors constant. Tung et al. (2019) conducted a similar study in the global context to account for different institutional environments. They found out that firms with higher liquidity of the stock market have low level of leverage. This demonstrates the significant but negative relationship between our two key variables i.e., liquidity of the stock market and capital structure. Moreover, they also examined that countries having tough institutional environments are subjected to a weaker or negative relationship between the variables. Overall, the review of the literature suggests that the relationship between stock liquidity and capital structure is an important area of research in financial management. The studies have analyzed the determinants of capital structure, the effect of capital structure on corporate liquidity and growth, and the role of capital structure in financial performance. However, additional research is needed to understand the correlation between stock liquidity and capital structure within manufacturing firms of Pakistan.

# 2.3 Hypothesis development

Results given in literature review for years show that there is a direct relationship between stock liquidity and capital structure as firms with higher stock market liquidity tend to have lower leverage. This has been the case in studies such as (Dang et al. 2019). To examine the relationship between the capital structure of firms and stock liquidity, a hypothesis is proposed:

HO: "There is no relationship between capital structure and stock liquidity"

H1: "There is a significant relationship between capital structure and stock liquidity."

### Methodology

The study will be carried out using quantitative analysis to measure the influence of liquidity on capital structure. The variables used in this study have been collected from the annual reports of the companies for the years 2016-2021. A sample of 133 Companies listed on the Pakistan Stock Exchange was taken for analysis.

### Variable formation

The dependent variables used in this study are a proxy for firms' capital structure. i.e., Lev (B) and Lev (M). These dependent variables are calculated as follows:

Book leverage = B.V total debt / B.V of total assets

Market leverage = B.V total debt / M.V of equity + B.V of total debt

The independent variables of the study are calculated as follows:

Stock liquidity = Log<sub>n</sub> (Total daily trading volume) / (Total of daily stock returns)

Stock turnover = Total trading volume / No. of shares outstanding for the year

Control variables are firm-specific variables. Although these variables are not of interest to the study objectives they are categorized as control variables because they can impact the outcome to a certain level. Control variables such as tangibility, firm size, book to market and return on assets potentially influence capital structure and stock liquidity. Asset tangibility is Net property, plant, and equipment divided by book value of total assets. The tangibility variable shows the tangibility of an asset. Firm size is given as the log of Book value of total assets. A firm size is a crucial indicator to show the firm potential growth). Book to market ratio is given as market value of a firm relative to its actual worth. Return on assets (ROA) is given as Earning after tax divided by total assets. ROA shows the profitability of a firm relative to its total assets.

To test the *HI* hypothesis, which states a positive relationship between capital structure and liquidity. The following are the models used to estimate their relationship:

Book leverage =  $\alpha + \beta_1$ \*Stock Liquidity + $\beta_2$ \*Stock returns+ $\beta_3$ \*Size+ $\beta_4$ \*ROA+ $\beta_5$ \*Tangibility+ $\beta_6$ \*Book to market ratio+ $\mathcal{E}$ 

Market leverage =  $\alpha + \beta_1$ \*Stock Liquidity + $\beta_2$ \*Stock returns+ $\beta_3$ \*Size+ $\beta_4$ \*ROA+ $\beta_5$ \*Tangibility+ $\beta_6$ \*Book to market ratio+ $\mathcal{E}$ 

Manufacturing companies operating in Pakistan are the target population for this study. A sample of (133) manufacturing firms was chosen from Pakistan Stock Exchange website that was operating in Pakistan. The collected data for these selected firms were from the period 2016 to 2022.

Table 1: Summary Statistics									
Variables	Mean	Median	S.D.	Minimum	Maximum				
Stock liquidity	17.0	17.3	4.26	0.000	28.7				
Stock Turnover	0.479	0.124	0.927	0.000	9.26				
Market leverage	0.465	0.472	0.280	0.000157	1.00				
Book leverage	2.51	0.511	24.9	0.000218	372.				
Tangibility	5.31	0.426	61.2	0.000	801.				
Firm size	23.0	23.0	1.95	14.9	28.0				
Book-to-Market	-0.350	-0.0697	1.61	-7.60	3.35				
ratio									
ROA	0.575	0.0487	7.77	-1.22	190.				

### **Empirical Analysis**

In the table given above it is observed that the control variable firm size has the highest mean i.e., 23.0. firm size has the highest median followed by the stock liquidity with a value of 17.3. The highest standard deviation value is exhibited by tangibility which shows that a firm's tangibility is subjected to greater variation which means more risk associated with tangibility.

# Correlation Matrix

Table 3: (critical value, two-tailed) = 0.0697

Tangibility	Firm size	BM	
1.0000	-0.2366	-0.0078	Tang
	1.0000	0.0620	Size
		1.0000	BM
ROA	Stock liquidity	Stock Turnover	
-0.0053	0.1008	0.0284	Tang
-0.2047	0.3718	0.0278	size
-0.0888	-0.0745	0.0445	BM
1.0000	-0.0261	0.0106	ROA
	1.0000	0.3669	SL
			ST
		1.0000	

The above table shows the correlation between various dependent and independent as well as control variables. Thus, it shows high correlation among dependent and independent variables. The correlation coefficient of tangibility and firm size is negative which shows a weak and negative correlation between tangibility and firm size because its value is less than 0.0697 which

is (-0.2366). Similarly, the correlation coefficient between ROA and tangibility is also negative and weak which is, (-0.0053) and weak relation because the value is less than 0.0697. Additionally, a weak negative correlation coefficient can be seen between stock liquidity and ROA which corresponds to (-0.2047) respectively. Moreover, the correlation coefficient between stock liquidity and the BM ratio is 0.3669 indicating a moderate positive correlation between both. The correlation coefficient between tangibility and the BM ratio is (-0.0888) which shows a weak and negative multi-collinearity. Stock turnover does not show any significant relation with tangibility equal to (0.0000) and size (0.0000).

Empirical Results of Hypothesis 1

Table 5. Empirical Final	ngs jor riypoines	15 1				
Dependent variables		Lev (M)			Lev (B)	
	FE	RE	WLS	FE	RE	WLS
Independent variables						
Constant	0.2298 13.8267	0.5283 0.969698	<0.0001*** 0.827151	<0.0001*** -1.74344	0.3892 0.146211	<0.0001*** 0.729493
Stock liquidity	0.5482 0.0446799	0.9958 0.000181062	0.001817*** -0.00192581	0.0117** -0.00513000	0.0041*** -0.00554804	<0.0001*** -0.006529
Stock Turnover	0.8724 0.0394018	0.8718 0.0232126	<0.0001*** 0.0283576	0.0734 <b>*</b> -0.0120009	0.5573 -0.00387359	0.0126** 0.0143560
Tang	<0.0001*** 0.388781	<0.0001*** 0.402026	<0.0001*** 0.391078	<0.0001*** 0.000885100	0.5714 8.36971e-05	<0.0001*** -0.000299
size	0.2175 -0.616075	0.7131 -0.0269893	<0.0001*** -0.0199998	<0.0001*** 0.100956	0.0092*** 0.0194958	0.1231 -0.004598
B2M	0.9470 -0.0161598	0.7328 -0.0263094	<0.0001*** -0.0313117	<0.0001*** 0.0672184	<0.0001*** 0.0933774	<0.0001*** 0.127616
ROA	0.3398 -0.0292586	0.8231 -0.00362227	<0.0001*** -0.00329421	0.0132** 0.00207758	0.0639* -0.00125665	0.0085** -0.0013229
Durbin-Watson	1.804631	1.804631	-	1.286102	1.286102	-
<i>R</i> <sup>2</sup>	0.981244	-	0.475276	0.889933	-	0.847443
F-Statistics	0.000000	-	2.1e-106	2.2e-240	-	0.000000
Heteroskedasticity			(0.000000) 791.686548			(0.000000) 91.686548
Hausman-Test			(0.439648) 5.85482			(1.1338e-11) 62.9342

Table 3: Empirical Findings for Hypothesis 1

\*\*\* indicates a P value with a 1% significance
\*\* indicates P value with 5% significance
\* indicates P with 10% significance

Table 3 given above shows the results of Hypothesis 1 and Model 1. The table presents the results of three conducted regression models. The Hausman test was employed to compare the suitability of the Fixed-Effect model and the Random-Effect model. Its purpose was to determine which model provides a better fit for the data. The significant findings from Hausman's test indicate that the Random-Effect model is the most suitable choice. Durbin Watson test was also employed for checking auto-correlation in the data set because the possibility of auto-correlation issues was also analyzed. Upon examining the Durbin-Watson statistic, it becomes evident that there is the presence of autocorrelation within the dataset. As a result, the findings of the R-E model were accepted while the F-E model was rejected. White's test for heteroskedasticity was also used. The value of heteroskedasticity shows that it is significant and thus the Random-Effect model was also rejected. The Weighted-Least square method emerged as the most consistent and reliable method. So Weighted-Least square test was the most suitable option because it consistently demonstrates significant findings. In addressing challenges related to Heteroskedasticity, and auto-correlation this test was particularly effective in order to address all those challenges which might affect the reliability of the results. Hence to improve the accuracy of the results WLS test was the most suitable option.

#### 4.11 Results and Discussion

Model 1 of hypothesis 1 uses Book leverage as a dependent variable while stock-Turnover, stock liquidity and control variables such as size, tang, BM ratio and return on assets (ROA) as independent variables to estimate the relationship between Stock liquidity and capital structure. The above *table 3* shows that the stock liquidity is significant, the estimated value of the coefficient was -0.00192581. It suggests that SL and Lev (B) has a negative relation. This interprets that if stock or equity liquidity increases firm's leverage decreases thus it would finance its capital structure through equity, not debt. This suggests that there is a significant relationship between stock liquidity and capital structure. Furthermore, it is observed that the alternative hypothesis or H<sub>1</sub> is consistent with the literature of the study (Sharma & Paul, 2015; Karmani et al. 2015). The table further shows the relation between tangibility and Lev (B) as book leverage depends on tangibility. The tangibility is significant at a 1% level and with a coefficient value estimated at

0.391078. This suggested that Lev (B) and tangibility have a positive relationship. This higher relationship between tangibility and book leverage suggests that the firm will finance its capital structure both using debt and equity financing. Similarly, table 3 shows that firm size is also significant at a 1% level. The coefficient value is equal to -0.0199998, which indicates a negative relation with book leverage. This implies that larger firms tend to have lower book leverage as compared to smaller firms. In this scenario, firms will use equity rather than debt to finance capital structure. Table 3 indicates that the BM ratio is significant at a 1% level.

The estimated coefficient is -0.0313117 which suggested that there is an inverse correlation between book leverage and BM ratio. In this scenario, it can be observed that companies with higher BM ratios generally exhibit lower levels of book leverage. Since the book-to-market ratio serves as a representation of a company's growth prospects and market valuation, it can be considered a useful proxy in evaluating these aspects. Consequently, it can be inferred that companies with higher book-to-market ratios and lower book leverage are more inclined to utilize equity financing rather than relying heavily on debt financing. ROA is significant at a 1% level and its estimated coefficient is -0.0032942. it shows an inverse relation between ROA and book leverage. As ROA increases Lev (B) decreases and firms will use less debt to finance their capital structure. The Weighted-Least Square (WLS) model exhibits an R-square value of 47.53%, indicating that the model explains 47.53% of the observed data. Moreover, the model demonstrates a significant p-value, adding to its credibility. The table also Signifies the results of Model 2 and Hypothesis 1. After conducting various tests, the Weighted-Least square method emerged as the most consistent and reliable method. So Weighted-Least square test was the most suitable option because it consistently demonstrates significant findings. In addressing challenges related to Heteroskedasticity, and auto-correlation this test was particularly effective in order to address all those challenges which might affect the reliability of the results. Hence to improve the accuracy of the results WLS test was the most suitable option.

To examine the relationship between liquidity of stocks and its impact on the capital structure of manufacturing firms in Pakistan model 2 of hypothesis 1 uses Lev (M) as a dependent variable while ST, SL and control variables such as size, Tang, BM ratio and ROA as independent variables. The aforementioned Table 3 illustrates the significance of stock liquidity at a 1% level, with an estimated coefficient value of -0.00652908. It implies that stock liquidity and Market leverage has

a negative relation because the coefficient between both is -0.00652908. This interprets that if stock or equity liquidity increases firm's Lev (M) decreases thus it would finance its capital structure through equity, not debt. These findings suggest a meaningful correlation between stock liquidity and capital structure. Furthermore, the findings of this study align with the existing literature, thereby reinforcing the acceptance of Hypothesis 1 and Model 2. Consequently, it can be concluded that there is a significant and substantiated relationship between stock liquidity and capital structure, providing support for the proposed literature. The study's outcomes are in line with the existing literature, affirming that stock liquidity has a positive influence on capital structure. (Abdullah & Ebrahim 2020; Sadiq et.al 2021; Sharma & Paul, 2015; Karmani et al. 2015). *Table 3* indicates that the stock turnover is significant at a 5% level. The estimated coefficient value of 0.0143560 indicates a positive relationship between stock turnover and market leverage.

This suggests that as stock turnover increases, market leverage also tends to increase. In other words, there is a direct association between these two variables, indicating that higher stock turnover corresponds to higher levels of market leverage. The implications of these results suggest that companies with higher stock turnover tend to exhibit higher levels of market leverage. This indicates that firms rely on debt rather than stocks to finance their capital structure. One possible explanation for this phenomenon is that increased stock turnover leads to enhanced cash flows and liquidity, thereby facilitating a greater inclination toward debt financing. Thus, firms will choose to finance their capital structure via debt rather than equity. The results indicate that Model 2, along with Hypothesis 1, is rejected, thereby accepting the null hypothesis (Ho). Furthermore, the findings of this study align with existing literature, providing additional support and validation (Dang et al. 2019; Rashid & Mehmood, 2017). The table further shows the relation between tangibility and market leverage as market leverage depends on tangibility. The tangibility is significant at a 1% level and with a coefficient value estimated at -0.000299472. This implies that market leverage and tangibility have an inverse relationship. This inverse relationship between tangibility and market leverage suggests that the firm will finance its capital structure using equity rather than debt. Size is also significant at a 1% level. The coefficient value is equal to -0.00459873, which indicates a negative relation with market leverage. Consequently, it can be inferred that smaller firms generally exhibit higher market leverage in comparison to larger firms.

In this scenario, firms will use equity rather than debt to finance capital structure. According to the findings presented in Table 4.2, the book-to-market ratio demonstrates a significant impact at a 1% level. The estimated coefficient of 0.127616 suggests a positive correlation between market leverage and the BM ratio. In this scenario, it can be observed that firms with elevated BM tend to possess higher market leverage. Thus, firms with higher BM ratios and higher market leverage tend to use debt financing rather than equity financing. ROA is significant at a 1% level and its estimated coefficient is -0.00132291. it shows an inverse relation between ROA and market leverage. As ROA increases market leverage decreases and firms will use less debt to finance their capital structure. The R-square value of the Weighted-Least Square (WLS) model stands at 84.74%, indicating that the model effectively explains 84.74% of the observed data. Moreover, the model exhibits a highly significant p-value, further affirming its statistical significance and reliability. All things considered, the WLS model indicated that the impact of stock liquidity, ROA, Tang and size have significant and all these variables have an inverse relation with market leverage. While stock turnover and BM ratios have a positive relationship with Lev (M). Additionally, The WLS model demonstrates a substantial R-square value of 84.74%, indicating a high degree of explanatory power. Additionally, the coefficients within the model exhibit a high level of significance, further affirming its robustness and validity. (Illustrated in Table 3).

#### Conclusion

There are several ways that firm uses to finance their capital structure. Some use equity financing while others use debt financing. When firms acquire more liquid equity than debt securities, as a consequence, these firms are incentivized to maintain a capital structure that emphasizes higher equity levels and reduced debt, primarily due to the advantage of benefiting from lower equity costs. (Sharma & Paul 2015). If the firm finances its capital structure through debt. It has to pay annual and quarterly interest payments as well as principal payments. While if a firm finances its capital structure through equity they pay its shareholders a certain amount of fixed dividend and in turn, its equity investors enjoy the ownership in decision-making of the firms. Therefore, our primary objective revolves around investigating the relationship between SL and the capital structure decisions made by firms. The purpose of this study was to examine the impact of stock liquidity on the choices firms make regarding their capital structure. To achieve this, we utilized a sample of 133 manufacturing companies based in Pakistan that are listed on the Pakistan Stock

Exchange (PSX). The study period spanned from 2016 to 2021. One possible interpretation is that as stock liquidity increases, it enhances the ability of firms to finance its capital structure through equity increases because of lower equity costs. But there are some factors that increase stock illiquidity such as information asymmetry in such cases debt financing will be better than equity financing. (Dutta et al. 2022). As a result, companies that possess high levels of liquidity tend to maintain a lower percentage of debt within their capital structure. Thus, in this scenario, the most attractive method of financing is equity financing rather than debt financing. (Dang et al. 2019). Thus, a substantial correlation exists between the liquidity of stocks and the capital structure decisions made by firms.

# 5.2 Suggestion and Further Research

This research study has significantly enhanced our comprehension of stock liquidity and capital structure, elucidating the relationship between enhanced equity liquidity and a shift towards greater reliance on equity financing while reducing the need for debt financing. As the data is collected through convenience sampling from the manufacturing firms of Pakistan listed on the Pakistan stock exchange, these findings are thus only based on data from developing nations which cannot be applied to other developed nations. Moreover, only convenience sampling techniques are used. Additionally, only manufacturing firms in Pakistan are targeted for the collection of data.

As data is only collected through convenience sampling more sample techniques can be used. Secondly, only manufacturing firms of Pakistan listed on the Pakistan stock exchange are selected more sectors can be targeted for the collection of data. In the future, more developed countries should be targeted for the research not only a single developing country.

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