



**NEAR EAST UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES  
DEPARTMENT OF BANKING AND FINANCE**

**IMPACT OF CAPITAL STRUCTURE ON FINANCIAL  
PERFORMANCE OF FIRMS (EVIDENCE FROM BANKING  
SECTOR OF PAKISTAN)**

**MSc. THESIS**

**IRFAN ALI KHAN**

**Nicosia  
JUNE, 2022**

**IRFAN ALI KHAN**  
**IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF  
FIRMS (EVIDENCE FROM BANKING SECTOR OF PAKISTAN)**  
**Nicosia**  
**JUNE, 2022**

**NEAR EAST UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES  
DEPARTMENT OF BANKING AND FINANCE**

**IMPACT OF CAPITAL STRUCTURE ON FINANCIAL  
PERFORMANCE OF FIRMS (EVIDENCE FROM BANKING  
SECTOR OF PAKISTAN)**

**MSc. THESIS**

**IRFAN ALI KHAN**

**Supervisor**

**Prof. Dr. Aliya IŞIKSAL**

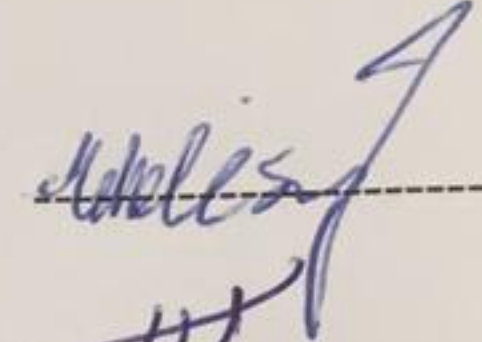
**Nicosia**

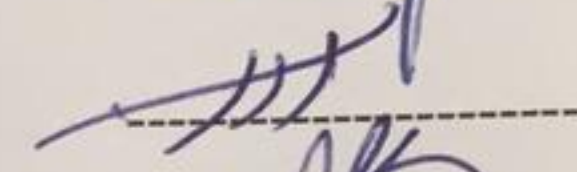
**JUNE, 2022**

### Approval

We attest to having read the thesis submitted by **IRFAN ALI KHAN** titled "IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF FIRMS (EVIDENCE FROM BANKING SECTOR OF PAKISTAN)" In addition, we are of the view that it fulfils all of the requirements, both in terms of its breadth and its level of quality, to be a thesis for the Master of Social Sciences degree.

Examining Committee	Name-Surname	Signature
---------------------	--------------	-----------

Head of the Committee:	Asst.Prof.Dr. Mehdi Seraj	
------------------------	---------------------------	---

Signature Committee Member:	Dr. Ala Faith	
-----------------------------	---------------	---

Signature Supervisor:	Prof.Dr. Aliya Işıksal	
-----------------------	------------------------	--

Approved by the Head of the Department

12/09/2022

Assoc.Prof.Dr. Turgut Tüksoy

Head of Department



Approved by the Institute of Graduate Studies

...../...../ 20...

Prof. Dr. Kemal Hüsnü Can Başer



Head of the Institute

### **Declaration**

I....IRFAN ALI KHAN.... hereby declare that this dissertation entitled IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF THE FIRMS (EVIDENCE FROM BANKING SECTOR OF PAKISTAN) has been prepared by myself under the guidance and supervision of ‘.... Dr. Aliya Isiksal....’ in partial fulfillment of the Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach and Law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the Thesis.

### **Acknowledgements**

I am very thankful to my teacher and thesis supervisor Dr. Aliya Isiksal who has supported me throughout the course of writing this thesis. Her guidance in this regard is very much appreciated, the knowledge and experience I gained working her supervision will help enormously in shaping my career.

Also I would like to thanks my friends and family who have supported me in my academic journey.

**Irfan Ali Khan**

### **Dedication**

I dedicate this accomplishment of mine to my loving and caring wife Aisha Ali Khan, without her support it would not be possible for me to achieve my goals.

### **Abstract**

This research has been conducted with primary goal to analyze the influence of capital structure (debt financing) on financial performance of firms' case study for banking industry of Pakistan. Pakistan is developing country with population of more than 200 million. Only 12% of the population are utilizing formal banking services, hence there is a large scope of work need to be done in this sector in Pakistan. This study will be helpful in the expansion of banking in Pakistan as this research will identify factors that contribute to the profitability of banking firms in Pakistan.

A sample of seven largest banks of Pakistan covering time period of 11 years from 2008 to 2018 was taken. This research has been conducted on Secondary data. The required data has been extracted from reports which each of the included sample bank has published yearly. In this research Capital structure was evaluated using the debt ratios ( Long Term Debt to Total Assets and Short Term Debt to Total Assets). While financial performance was evaluated using return on assets, return on equity, and earnings per share.

Fixed and Random effect regression models were applied in this study. Results revealed that channel of debt-finance is not a good option banks in Pakistan.

The conclusions of this research supported Pecking Order theory and suggest that banking sector should utilize equity finance and retained earnings for their business activities given the fact that these means of financing are less costly- and more reliable sources of finance for banking firms in Pakistan

## Öz

Bu araştırma, Pakistan bankacılık sektörü için firmaların örnek olay incelemesinin sermaye yapısının (borç finansmanı) finansal performansı üzerindeki etkisini analiz etmek için birincil amaç ile yapılmıştır. Pakistan, nüfusu 200 milyondan fazla olan gelişmekte olan bir ülkedir. Nüfusun sadece %12'si resmi bankacılık hizmetlerinden yararlanmaktadır, dolayısıyla Pakistan'da bu sektörde yapılması gereken çok sayıda çalışma bulunmaktadır. Bu araştırma Pakistan'daki bankacılık firmalarının karlılığına katkıda bulunan faktörleri belirleyeceğinden, bu çalışma Pakistan'da bankacılığın genişlemesine yardımcı olacaktır.

2008'den 2018'e kadar 11 yıllık bir zaman dilimini kapsayan Pakistan'ın en büyük yedi bankasının bir örneği alındı. İkincil veriler bankaların yıllık mali raporlarından elde edilmiştir. Sermaye yapısının ölçüsü olarak Uzun Vadeli Borç/Toplam Aktifler ve Kısa Vadeli Borç/Toplam oranları, finansal performans göstergeleri olarak ROA, ROE ve EPS kullanılmıştır.

Bu çalışmada sabit ve rastgele etkili regresyon modelleri uygulanmıştır. Sonuçlar, borç finansmanı kanalının Pakistan'daki bankaların iyi bir seçenek olmadığını ortaya koydu.

Bu araştırmanın sonuçları, Pecking Order teorisini destekledi ve Pakistan'daki bankacılık firmaları için bu finansman araçlarının daha az maliyetli ve daha güvenilir finansman kaynakları olduğu gerçeği göz önüne alındığında, bankacılık sektörünün iş faaliyetleri için öz sermaye finansmanı ve birikmiş kârları kullanması gerektiğini öne sürüyor.



## Table of Contents

Approval.....	ii
Declaration .....	iii
Acknowledgements .....	iv
Dedication .....	v
Abstract .....	vi
Öz .....	vii
Table of Contents .....	viii
List of Tables/ List of Figures .....	xi
List of Abbreviations.....	xii

## CHAPTER I

Introduction .....	1
Research Problem .....	2
Objective of the Study .....	2
Research Questions / Hypotheses .....	3
Contribution of the Study.....	3
Limitations .....	4

## CHAPTER II

Literature Review.....	5
Understanding Capital Structure.....	5
Debt Vs Equity.....	5
Optimal Capital Structure .....	6
Measure of Capital of Capital Structure .....	6
Measure of Financial Performance .....	7
ROA .....	7
ROE.....	7
EPS.....	8
Significance of Capital Structure .....	8
Theories of Capital Structure .....	9
The Modigliani-Miller Theory.....	10
Trade-off Theory.....	10
The Agency Cost Theory .....	13
The Pecking Order Theory.....	14

Market Timing Theory .....	15
Contracting Cost Theory .....	16
Discussions .....	16
Determinants of Capital Structure .....	20
Factors affecting firm's financial performance.....	24

### **CHAPTER III**

Related Research Studies .....	27
--------------------------------	----

### **CHAPTER IV**

Banking Industry Overview .....	50
Banks' Functions .....	50
Financial structure of Banks .....	50
Profitability of Banks .....	51
Pakistan Banking Industry .....	51

### **CHAPTER V**

Research Methodology.....	53
Research Design.....	53
Variables Selection .....	54
Conceptual Model.....	58
Empirical Model .....	59
Fix Effect Regression Model .....	59
Random Effect Regression Model.....	60

### **CHAPTER VI**

Data Analysis .....	63
Descriptive statistics .....	63
Correlations.....	65
Unit Root Analysis.....	67
Regression Analyses .....	68
ROA regression analyses .....	68
ROE regression analyses.....	70
EPS regression analyses.....	72

**CHAPTER VII**

Conclusion .....	74
Research Findings .....	74
Research Discussions .....	75
Recommendations .....	82
REFERENCES .....	84
PLAGIARISM REPORT .....	1

### List of Tables

<b>Table 3.1.</b> List of empirical related researches .....	41
<b>Table 4.1.</b> Schedule Banks in Pakistan.....	47
<b>Table 5.1.</b> summary of variables .....	53
<b>Table 6.1.</b> Descriptive statistic data.....	61
<b>Table 6.2.</b> Correlations between variables .....	63
<b>Table 6.3.</b> Unit Root Analysis .....	64
<b>Table 6.4a</b> Hausmen Test for ROA Regression Analyses .....	65
<b>Table 6.4b</b> ROA- Fixed Effect Regression Analyses.....	66
<b>Table 6.4c</b> ROA-Random Effect Regression Analyses.....	66
<b>Table 6.5a</b> Hausmen Test for ROE Regression Analyses.....	67
<b>Table 6.5b</b> ROE- Fixed Effect Regression Analyses .....	67
<b>Table 6.5c</b> ROE-Random Effect Regression Analyses .....	68
<b>Table 6.6a</b> Hausmen Test for EPS Regression Analyses .....	69
<b>Table 6.6b</b> EPS-Random Effect Regression Analyses.....	69
<b>Table 6.6c</b> EPS- Fixed Effect Regression Analyses.....	70

### List of Abbreviations

<b>R O A:</b> Return on Assets .....	1
<b>R O E:</b> Return on Equity .....	1
<b>E P S:</b> Earnings Per Share .....	1
<b>L T D T A:</b> Long Term Debt to Total Assets .....	1
<b>S T D T A:</b> Short Term Debt to Total Assets .....	1
<b>S Z:</b> Size .....	1
<b>G O P:</b> Growth Opportunities .....	1
<b>L Q D T Y:</b> Liquidity .....	1
<b>O L S:</b> Ordinary-Least-Square .....	1
<b>R E M:</b> Random-Effect-Model .....	1
<b>F E M:</b> Fix-Effect-Model .....	1

## **CHAPTER I**

### **INTRODUCTION**

This research has been conducted with primary goal to analyze the influence of financial structure (debt financing) on financial performance of firms' case study for banking industry of Pakistan. Pakistan is a developing country with much scope for expansion in banking sector, but to achieve this goal it important for banking firms to have sound financial position and take the right decisions in the given time.

As firm management has the primary goal of increasing the wealth of the owners or shareholders of the company. Many factors play vital roles in achieving this objective for example, excellent cooperative governance, an appropriate capital structure, and technology.

This research is focused on the use of capital structure in banking sector in Pakistan. To take logical financial choices about optimum capital structure to reduce its cost of capital and to accomplish this goal of increasing the wealth of banking firms in Pakistan.

A company's financial-structure is combination of debt-financing and equity-financing. A firm's choice of capital structure is essential to optimizing return to stakeholders while also enhancing the firm's capacity to compete and expand. Therefore, today's managers confront a crucial challenge of how to pick the correct mix of debt and equity to establish the best possible capital structure while maximising the return to shareholders and therefore minimising the cost of capital for the business. A combination of debt and equity is the optimal capital structure since it maximises profits and market value while keeping the firm's cost of capital low. Financial managers seek the optimum mix of debt and equity in their organisations. On the optimum capital structure, financial managers cannot make easy decisions because they lack a well-defined formula. While many economic theories exist that provide various criteria for an optimum capital structure, which have proven helpful to managers on different occasions, but specialized study is needed to assist the decision-maker in choosing the best match to determine the optimal capital structure mix for the specific industry and market in which they are operating in the given time period.

### **Research Problem**

- Pakistan is a developing country with emerging financial markets. Not much research is available on the dynamics of finance in context of Pakistan. As capital-structure is a vital variable in assessing the financial productivity for businesses, so it is important to assess its impact on the firm's financial-performance in the perspective of Pakistan banking companies in recent times.
- In this research, between capital-structure and firm's financial- performance, it would also elaborate that if connection exist than to what degree capital structure influences financial performance. This research will aid financial management in determining the best capital-structure for Pakistani banking organizations.

### **Objective of the study**

The goal of this study is to explore the effectiveness of capital structure on the profitability of Pakistani banking institutions. If there is a linkage, established then to asses, whether it is direct or adverse.

### ***This research in context of Pakistan banking industry and need for this research***

Pakistan is developing country with population of more than 200 million. According to the Access to Finance Study, just 12% of the total-population has reach to official financial services (A.2.F.S). About 32% of the remainder 88 percent receive casual service, while 56% are entirely deprived. Secondly, banking system's present branch network is insufficient to service the majority of unbanked population. Pakistan has a small number of bank branches (about 10,600), putting it among the nations with the most people per bank.

Looking at the facts mentioned, there are high prospects for expansion in this sector. As it is important for any firm to perform well financially in order to expand its business. Since capital-structure is among of the key factors, for determining the financial outcomes, hence this research will help identify the correct mix of capital structure for the banking firms in Pakistan to formulate a sound financial strategy to achieve better financial outcomes.

### **Research Hypotheses**

Main hypothesis established In this research is as below:

(H0)- There Is none relationships among capital-structure design and Pakistani banking firms' profitability.

(H1)- There Is effective relationships among capital-structure factors and Pakistani banking firms' profitability.

### **Contribution of this research**

Pakistan's banking industry has experienced amazing and unparalleled expansion in recent years. The banking industry's assets have increased dramatically, making it Pakistan's and the region's top - performing business area.

Although there are many challenges which are still faced by the industry mainly concentrate of the expansion of the industry, these include.

The banking services are available to only limited percentage of the total population, which require a great deal of expansion in this sector.

The banking system's existing branch network is insufficient to service the millions of unbanked populations. Pakistan has a small number of bank branches (about 10,600), placing it among the countries with the largest per-bank population (approximately 15,000 people per branch).

When compared to other countries at the same level of development, the private credit to GDP ratio is abysmally low at 18.4%.

Credit distribution is excessively lopsided and insufficient in comparison to the needs of our economy's producing sectors.

The banking sector has largely ignored the financing needs of Micro, Small, and Medium Enterprises (MSME), with only 25,000 borrowers accounting for 80% of total lending. (*State bank of Pakistan Survey*)

As it is obvious from the challenges discussed above that there is a great requirement for expansion and investment in Pakistan banking sector so adequate research related to all aspects of investment is needed to make investors confident in their decision making.

Since capital factors are key in determining the financial performance of the businesses according to the theories available and for expansion of any firm it is important to have a sound financial position so it is significant to assess the impact of capital structure on the banking firm's financial performance in Pakistan.



There are some past investigations available in similar context but they are either conducted in other countries or on different sectors of the economy.

This study in particular will be the up to date and specifically related to banking industry in Pakistan.

This study will be helpful for banks in Pakistan to formulate a sound financing strategy and thus will be helpful in the expansion process of the banking structure in Pakistan.

### **Limitations of this research**

The following limitations are applicable to this research:

1. The format and appropriation of financial statements reported in annual reports differs from one bank to another, which require unification or standardization of these appropriations for most accurate estimation.
2. Banks sometime use different classification systems for financial-statements reported in annual reports from one fiscal year to the next. In the same manner that some banks change the classification of some financial statement items from one fiscal year to the next, so again there will be problem of standardization.
3. Due to constraint of time and non-access to data a comprehensive sample was not analyzed in this study so there is a need for more comprehensive study for more authentic results which include and analyze more comprehensive sample that include more banks in the research.

## CHAPTER II

### Literature Review

#### Understanding Capital Structure

The capital-structure of the corporation is comprised of the following components: common stock, short-term debt, and long-term debt, as well as preferred stock. When evaluating a company's capital structure, one of the factors to take into account is the proportion of long-term, total debt, and short-term debt. When experts evaluate a firm's capital structure in terms of its responsibilities to its financiers, the debt-to-equity ratio (D/E ratio) of the company provides investors with a glimpse into how risky the company is. It's common for a firm to have a more aggressive capital structure if it has a high level of debt and also raises the level of risk it poses to investors. But this riskiness nevertheless is considered as the main vehicle of the business development. That's why a financial manager needs to select the most pleasing combination, which at the same time is less risky and also ensures the development of the business.

#### Debt vs Equity

These are the two significant ways businesses may obtain funding in the financial markets. Companies prefer to acquire debt instruments due to the apparent tax benefits as Interest payments are generally tax-deductible. On the other hand, it also enables a business or corporation, unlike equity, to maintain ownership. Additionally, as rates are lower, debt is accessible in large quantities and is simple to acquire.

Particularly during low-interest-rate periods, equity tends to be costlier than debt. However, unlike debt, the corporation is under no obligation to repay stock. Contrarily, equity indicates an interest in future profits and a stake in the company.

The balance sheet shows both debt and equity. The assets listed on the balance sheet were acquired with the help of a loan and some of the company's funds. As a result, total assets equal total debt + total equity for the business. Companies with an aggressive capital structure and a high leverage ratio borrow more money than they have in equity. The lower the leverage ratio, the more conservative the company's capital structure will be. As a traditional capital structure may lead to lower growth rates, high leverage and an aggressive capital structure may also contribute to higher

growth rates, as previously mentioned. Often known as the optimal capital structure, in order to ensure both growth and manageable risk, identifying the ideal debt-to-equity ratio is the goal of corporate management.

***Trade-offs between debt and equity.*** When deciding on a company's financial structure, owners and management must make many trade-offs. Here are a few things to keep in mind while making comparison between the two options.

### ***Equity***

- No interest rates
- Dividends are optional. There are no maturity dates. There is no capital payback. There is no capital repayment. The investor has ownership and control of the company.
- (Generally) has the right to vote (typically)
- Have the final say in the company's assets in the event of a liquidation, have a high implied cost of debt, and estimate a considerable return (dividends and capital appreciation).
- It gives you the most operational freedom possible

### **Debt**

- A specified repayment timetable
- Interest payments (generally)
- In the event of insolvency, a claim on the assets of the company
- Has a fixed payback schedule.
- 

### **Optimal Capital Structure**

Optimal capital structure with the risk factor maintained in line relates to the optimal moziac of debt and equty, which will cost the lowest. It aims to enhance the value of the company and to reduce the cost of capital. Financial managers' primary problem is deciding on this optimum ratio between equity and debt, which is both lower in cost and reasonably secure.

### **Measures of Capital Structure**

In general, financial analysts determine the robustness of a company's capitalization structure by analysing the debt ratios (total debt to total assets, long term debt to total assets, and short term debt to total assets) and the debt-to-equity (D/E)

ratio (total debt to total shareholders' equity). These ratios compare a company's total debt to its total assets.

### **Measures of Financial Performance**

Financial performance refers to a company's potential to generate profits is assessed, by utilizing different ratios obtained from financial documents, primarily the financial statement, or using stock market prices. These ratios indicate whether the business is fulfilling the owners' goals of making them richer and may be used to measure an enterprise's ability by other companies or individuals for investment possibilities or to identify patterns of performance through time. Financial performance ratios include the following.

#### ***Return on Assets (ROA)***

The most often used indicator for firm's profitability is returned on assets (ROA), which measures how well a firm manages its investments in assets and uses them to generate profits. businesses use financial proxies to keep track of, report on, and improve performance. Return On assets (ROA) is the primary measure of financial performance, according to Barber and Lyon (1996). When evaluating the connection between profit produced and assets invested, ROA is computed by formula below.

$$\text{Return on Assets} = \text{Net Income} / \text{Total Assets} * 100$$

#### ***Return on Equity (ROE)***

Return on Equity (ROE) is another measure commonly used to evaluate firm's performance. To calculate return on equity, you divide net Income by the total Assets. The return on equity (ROE) is what investors want to see in return for their money. The greater the likelihood that a business will generate its cash, the higher the return on equity. As a result, the higher the ROE, the more profitable the company will be. To put it another way, it measures how much money shareholders are getting back on their investments. An organization's return on equity (ROE) reveals how well management is allocating shareholder funds. As a result of the above statement, it may be concluded that management is more successful in using shareholders' money when ROE is higher. ROE is computed by formula below.

$$\text{Return on Equity} = \text{Net Income} / \text{Total Equity} * 100$$

### ***Earnings Per Share (EPS)***

EPS is a typical indicator for analyzing and evaluating a company's profitability and performance, since it is used to compare it to the company itself over time.

For businesses whose shares are accessible for public trade, or who intend to do so, have their earnings per share calculated and declared. EPS is calculated by dividing company's net-income of operations after deducting expenditures, and preferences stocks, with ordinary shares issued. Following equation is used to compute EPS.

$$\text{Earnings per share} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Common shares outstanding}}$$

### **Significance of Capital Structure**

The theory of capital structure drew major attention from the world of finance when Modigliani and Miler (1963) argued in their article for the first time that the trade-off between debt and equity did not have a significant influence on the value of the firm. However, this concept is based on the premise that financial markets are operating at their maximum potential. Perfect markets presume that there exists information asymmetry and there is no cost of transaction and bankruptcy. Although, in actual-world markets, these assumptions are virtually impossible to live.

After further research, Modigliani and Miller (1963) refined their hypothesis by including tax considerations. Because taxes are not applied to interest paid on debt, companies have the opportunity to reduce their overall tax burden by taking advantage of this tax subsidy. In this hypothetical situation, an increase in the debt to equity ratio will lead to an increase in the market value of the firm that is equal to or greater than the cutoff point. Here are a few such studies that show this:

According to Solomon (1963), the cost of capital must increase when there is excessive leverage. It is because markets will demand higher rates of return if there is too much debt. As a result, in order to reduce the weighted average cost of capital, companies would avoid taking on too much debt and instead try to find a happy medium between taking on debt and investing in the company yourself.

Furthermore, Kim (1978) found that between 1963 and 1970, just one-third of U.S. non-financial firms were funded by debt. These results demonstrate that when taxes are there, companies will avoid getting into the wrong financial position.

According to Baxter (1967), leveraged companies have high debt-to-equity ratios because of two main factors. In the first place, the relationship between interest rates and debt is strongly tied to the equity to debt ratio (EBITDA to equity). To put it another way, when a business takes on more obligation, its creditors will expect a higher return on the borrowed funds. The second reason is that having more debt increases the risk of defaulting on interest payments, which may lead to bankruptcy. As a result, firms would aim for a financing mix that maximizes the tax benefits associated with higher debt levels while minimizing the risk of default.

Despite this, many studies have shown the value of a debt-to-equity ratio that is optimal. Market flaws such as transaction and potential bankruptcy costs persist, which is the only basis for this conclusion.

Corresponding to Modigliani and Miler (1958), as the capital structure Irrelevance argument was the beginning of Investigating financing alternatives for the businesses. From the Modigliani's assertions the truth is, literature on the capital structure postulate has evolved to the opposing points of view, which contains more realistic assumptions. Below, the main ideas of capital structure are explored in depth.

### **Different theories of capital structure**

Ever since Introduction of Modigliani and Miler's (1958) "Irrelevance theory of capital structure," financed researchers have been interested in the theory of capital design. With the passage of time, several models of capital structure have emerged that do not acknowledge the "irrelevance model's" premise of efficient capital markets existence which is prerequisite for Irrelevance theory of capital structure. Various theories on capital are explained as following:

#### ***The Modigliani-Miller Theory***

According to Modigliani and Miller (1958), this idea in finance was initially presented. There was no explicit acknowledgement of capital structure before them. This theory proposes that any company fund its assets by either debt or equity or combining these two. They argued that capital structure has no impact on the financial performance of the company and its value. Therefore, it is also irrelevant following a market assessment of whether a corporation has high or low debt. According to Modigliani and Miller (1958), a company's profit margin or market value solely rely on operational

profit, disregarding capital structure. Mainly two essentially different kinds of capital structure irrelevance postulates are known in general. The fundamental arbitrage-based irrelevance arguments stated that irrespective of its leverage, investors' arbitrage maintains the business's value.

Hirshleifer (1966) and Stiglitz (1969) also focus their studies on this subject as other significant contributions also include studies besides the original Modigliani and Miller paper. For the second time, the dividend payment a company decides to make will have no impact on its stock price in the short term or the long term return to its shareholders. It means that in a perfect market, neither the firm's capital structure nor its dividend policy will impact its financial performance. The paper prompted significant research on the same subject, which substantially disproves the irrelevance of capital structure as a matter of theory or fact. Under several circumstances, these investigations have demonstrated that the Modigliani-Miller theorem fails. The most often factors include agency conflicts, transaction costs, assessment of taxes, bankruptcy expenses, investor clientele effects, and time-varying financial market possibilities.

### ***Trade-off Theory***

Under the trade-off theory, it has been assumed that there can be several advantages for the leverage within the dynamics of the capital structure. These are availed until the realization of the optimal capital structure. The tax advantages have been recognized under this theory as well by considering the payments of the interest. However, it has been recommended by several studies that the averages are comparatively lower in most of the firms meanwhile optimal leverage can be suggested by this theory. Numerous economists had utilized the notion of trade-off theory and it is referring to the descriptions of the groups that are related to such kinds of theories in effective manners. By utilizing all of these theories the management of the organization can easily evaluate the various benefits and costs of the leverage plans that are offered in the alternatives. Often it has been assumed as the solutions of which are specifically formulated for managing the marginal benefits as well as marginal cost.

The debate has been derived out from the original version of the trade-off theory by the Modigliani-Miller theorem. It discusses that when the income tax is added by the corporate in the original irrelevance theory and it becomes beneficial for the debt by

which it can be served to shield earning from several taxes. Hence, the positive relationship has been provoked by the trade-off theory among the financial performance and leverage by considering the normal economic conditions. Therefore, a negative relationship has been assumed by the trade-off theory among the financial performance and leverage during the financial crisis. It occurs in the results of the risk of shortage and increases in the capital that is lead towards the debts to costlier.

The major four and key characteristics of the trade of theory has been explained here;

- The debt ratio will target by the companies and this particular ratio will differ from firm to firm.
- The tangible assets will be saved by the firm relatively and these assets are relatively less skewed for the cost of the financial anguish; after that, it will be expected that these assets will be borrowed from others.
- A higher level of leverage is required to align the higher marginal tax rates.
- To borrow; there are more financial benefits for that firms that have relatively non-dent tax shields as well more taxable income.

***Static Trade-off Theory.*** It has been stated by the static trade-off theory that there must optimal capital structure to the firms that they had achieved by considering the trade-off among the cost that is against benefits which are utilized for the equity and debt. One of the most important and key incentives for the utilization of the debt is also considered as benefits for the debt tax shield. In another case, major demerits and disadvantage of the debt is referred as the cost of the probable financial distress specifically at that time when too much debt is depending by the firms.

Hence, this theory specifically leads towards the trade-off among the disadvantage of higher risk and a tax benefit of the financial anguish. While there are several other incentives and costs is involved in the equity and debt paradigm. From all of these prospects, the most important and major cost factor is the agency cost. From the conflicts of interest, agency cost can be raised easily among the management of the firm and numerous stakeholders; it occurs due to the exposure of the posting of the asymmetric information. Thus, by incorporating the agency cost into the theory of the static trade-off it has been understanding that capital structure can be examined by the firms by conducting the tradeoff among its capital structure by trading off among the debt tax advantage. It is also against the financial default risk for debt agency cost and higher debt that is specifically against the equity's agency cost.



Despite all of these criteria of the cost, it is considered under the trade-off theory shelter while it directly towards the elaboration of entire fields of details. Thus, this specific detail can be ended along with the specific statement which is essential for the postulation of the trade-off theory.

***The Dynamic Trade-off Theory.*** This specific theory depends upon the different effects of various time frames that are considered in the decision-making of finance. It is predicted as the formulating models which are required to recognize the time of function; it also requires the acknowledgment for the factors number which is specifically normally avoided in the model of single-period. In this context, the key factors are considered as the adjustments as well as expectations cost. By considering the dynamic model of the trade-off theory, usually, the optimal financing decision relies upon the financing margin. It also includes that the company can easily anticipate in the periods of subsequent. It is also considered as the matter of the facts that are specifically applied by some firms and these are planning to pay out the funds for various taxes in the next periods. Various other people can anticipate enhancing and raising the funds. For example, if the funds must have to rise properly it can perform properly in an effective manner. The most initial and first dynamic models that must be considered for saving the tax as compared to the cost of the bankruptcy in the paradigm of the trade-off; These are also recognized by the studies of Kane et al. (1984) and Brennan and Schwartz (1984). Both of these authors have critically analyzed the continuous model along with the cost of bankruptcy and transaction cost.

### ***The Agency Cost Theory***

The specific theory of the agency cost has been specifically illustrated by Meckling and Jensen and they had analyzed the conflicts of interest among the management and stakeholders who are accountable to make decisions for such kinds of various perspectives. Ultimately such kinds of conflicts are leading towards the variances in the decision making or administrative consequences of the conflicting parties. These are frequently required to have various goals and targets as well as numerous perspectives for the risk. Currently, in the specific situation, the financial managers who are accountable to the management and administrations of the firm will generally be focusing on the personal goals as compared to maximizing the wealth of the shareholders. Thus, the key issue which is occurred to the stakeholders is related to making sure that the agents or managers do not have to invest in the assets of the free

cash in the projects of the undesirable. In the prospects of the optimal capital structure, this theory is specifically enforcing and emphasizing the enhancing of the debt to equity ratio. It would require to make sure that the agents or managers are engaged in running the firm more effectively and efficiently. The agency theory specifically relies upon that beliefs will not be acted by the agents always in the effective and adequate interest of the shareholders

To elaborate further on, many times there are two various conflicts among both of these parties. The first is related to shareholders and management, the second one is among the credit lenders as well as shareholders. For instance; in the first scenarios; managers are keening or eager for tracking the profits of the company. By considering their management for their prospects at the prime interest of the shareholders' expenses, in the consequent scenario, high return is demanded by the creditors for their landed funds against the wills of the shareholders. It has been argued by Harris and Raviv (1991) that if any kind of investment can be yielded the returns must be higher as compared to the debt face value. The shareholders can take benefits from this. In another case, if the investment cannot work properly then the liability must be limited by the shareholders (Harris, *The theory of capital structure.*, 1991). Due to this whole scenario, the debt holders fell in alarming positions along with that firms have market value comparatively lower than the debt face value. It has been explained in the study of Stulz (1990) that the shareholders can be affected by debt financing in negative and positive manners. By considering its positive reviews, the managers are compelled by the debt repayments for paying out the debt and interest. It is also utilized for reducing the dilemma of overinvestment probably.

### ***The Pecking Order Theory***

It has been suggested by the pecking order theory that the companies must have leading preferences for the internal finance of the organization. It includes particular financing that is relevant to the surplus liquid assets and retained earnings. It also includes as the part of the resources external financing. If the internal resources become deficient for the projects of the financial investment then the firm can lead towards the external financing, it also decided on the various external options of the finance. Myers and Majluf are known as the leading champion of these theories; they had assumed a perfect capital market that is specifically proposed by MM (1958). The pecking order

theory has been proposed by Myers and Majluf (1984) and this theory particularly claimed for the management of the firm that is also considered as the most first and initial choice of financing. It is also used for internally generated funds as compare to seek for various external funds. It has been strongly suggested by the pecking order theory that internal financing is preferred by the firm over debt capital. It has been stated further that first of all firm utilizes the internal funds then it tries to issue the debt and at last it tries to resort to the issues of the capital equity.

The same facts have been established by the many studies which relate to that an organization can easily prefer to finance the project of new investment by utilizing the internally procured funds at the first time, after that it uses debt capital and at last it goes for the issues of the equity. It also has been recommended by the pecking order theory that the firm can make more loans and borrow more often when internal funds are generated that are not enough to carry out the requirements of the investments.

It has been confirmed by Frank and Goyal (2007), that the debt ratio of the company can be reflected in the cumulative figure for firms and external financing along with growth opportunities as well as elevated profit that is required to utilize a lesser amount of the debt capital. The profits will be retained to stay away from the external financing of the future in the case of no investment opportunities in the firm. The accumulated external financing can be reflected by the debt ratio of the firm and the corporation does not have an optimal debt ratio. By considering all of these principles of the pecking order theory; it has been stated by Harris and Raviv (1991) that the decision of the capital structure is specifically anticipated for eliminating the inefficiencies just because of the information asymmetry. It has been clarified by information asymmetry among separation of ownership, insiders, and outsiders that the firms are specifically staying away from the capital markets. It has been suggested that debt financing has conveyed in effective manners and it will lead towards the signals for the capital markets in which the firms have good ratings as well as their management is specifically confident for taking the risk of the debt financing.

It has been illustrated by Frank and Goyal (2007) that just because of the agency conflicts among the owners, managers, and investors of the outside the pecking order can be existed or take place at the time to come financing. It has been compared by Fama and French (1998) that the pecking order theory and trade-off theory can confirm which had curtained features related to the paradigms of the financial that are specifically compensated by considering the pecking order theory.

### ***Market Timing Theory***

In monetary terms, the concept of market times is also explained, where companies have their time and their problem of equity in relation to market forces. The argument is that the firm has a problem with new stocks, where prices also appear to be higher than the price and the share is bought when less important stocks are available. The marketing time concept has two versions; In the first version, which assumes that economic agents are average, and the firms also consider the financial problem directly after having some information released to reduce the problem of asymmetry between the various firms of the firm and the stock. Decreased knowledge of asymmetry also associated with rising stock prices and firm's response is also created over time. Now it is in version 2 where the theory is also said that the economic agent is rational. The reason for rational behavior is the time that changes the cost of the firm's stock. The manager explains the equity problem when he believes that costs are unreasonably low and repurchase stocks when the cost estimate is unreasonably high, and it is important that you know version 2 of the time marking concept. According to the studies of authors Graham and Harvey (2001), the manager is also believed to have been allowed to try the equity time market with many who are considered to be out of the ordinary stock report the amount in stock is not set or overstated.

From the above market point of view, the study supports speculation, where the manager also believes that they can also set time in the market, and does not immediately distinguish between financial irregularities and strong asymmetrical knowledge of market transition time.

### ***Contracting Cost Theory***

According to the author, in Myers (1977) contractual cost contracts are not widely used in a variety of cases, and a very high-end company is more likely to exceed investment opportunities, due to the risk of default. Despite the high cost of equity, this problem is greatly exacerbated, and linked by companies in terms of prospects. Therefore, it may cause the financially poor company to abandon investment opportunities and greater opportunities. Contract cost forecasts contain the company's hypothesis, and the firm also has a value that is largely based on the current value of the intangible investment opportunities that can also choose low debt rates. A sustainable, debt-free approach is also being followed to reduce the negative impact on the investment crisis. Therefore, a large mature company with few investment

opportunities will also opt for a higher credit rating, due to the lower risk of financial crisis. Therefore, the contradictory speculation also has the idea of pecking orders as well and empowering a high-growth company with a small flow rate that can have a high credit rating.

There are a variety of studies tested, with contract costs in which the hypothesis also exploits the volatility of the acquisition of growth assets and the number of books on the market, as a representative of growth opportunities.

### **Discussion**

The new serious climate has made managers more vigilant and aware of how they sustain their company activities and oversee capital design. To cope with complicated situations, capital design necessitates a dynamic approach that is a work of art. This Dynamic approach is an intellectual interaction that involves choosing a replacement from a wide range of alternatives. This rise allows board members to concentrate on the right way to increase the company's net value. The I-e Trade-off hypothesis and the hierarchy hypothesis are two main theories that are widely used in capital development. The power to establish capital development by embracing influence advantages is really underpinned by the compromise hypothesis. By adjusting the gains from interest installments and the costs of giving duty, the desired degree of control can be obtained. In terms of money, obligation is seen as advantageous because of the obligation fee shields, which tend to restrict planned cost costs while increasing after-charge incomes (Modigliani and Miller, 1958). The compromise theory now forecasts the cost and benefit study of duty finance in order to achieve optimum capital design. In fact, another well-known theory associated with capital development is the hierarchy hypothesis, which notes that concentrations finance company activities with internally generated sources first, i.e. retained benefit rather than giving duty and importance (outer financing). By pursuing a particular finance chain of command, the hierarchy theory claims to restrict the firm's insiders-outcasts problems synonymous with data lopsidedness Myers and Majluf (1984). The theory indicates that the managers first rely on the held income to fund their operations, and then, if more assets are needed, they decide to give obligation, and eventually, when giving more obligation has no rhyme or purpose, value is granted. On the one hand, the hierarchy argument supports the concept that high-productive companies will inevitably back their operations with internal savings and, as a result, will have a

lower degree of duty proportion. Though the compromise theory also depicts the favorable relationship between power and competitiveness by explaining that high-beneficial companies rely on their outside money speculations in order to secure their pay from charges through the use of influence. Another theory, known as the market timing hypothesis, has recently been established. When the cost of value is low, businesses incline toward outer value and favor duty in either situation, according to this theory. Corporate leaders understand that the sector has mispriced their dangerous protections.

By reflecting on the expense and profit of duty, the static compromise theorem assumes that there is an optimal obligation proportion that helps in amplifying a firm's estimate. The optimal point is achieved where the rewards of issuing obligations outweigh the rising current expense projections associated with issuing further obligations. The right to restrict interest installments is a major value of obligation. As a result of these incentives, companies are more likely to use duty. Myers (1984) went on to suggest that they would prefer to offer value if they felt it was mispriced in the market. In fact, financial backers become conscious that the value issuance is either fairly priced or mispriced. As a result, valuation issuance allows financial supporters to behave adversely, and the board is reluctant to offer value.

The hierarchy theory or pecking order theory, suggested by Myers (1984), clarifies that companies are likely to help new projects, first with internally generated money, i.e. held profits, then with responsibility, and eventually with problem worth if everything else fails. According to Myers, optimal capital development is difficult to describe because demand rises at the top and bottom of the "pecking order." He also argues that security-based duty issuance tends to limit out-of-control data-related funding costs. It's likely that a beneficial association exists between monetary power and substance.

The Modigliani-Miller postulate opened a debate on the curiosity of debts vs equities corresponding toward a company's capital design. As discussed above the design of capital for a firm is due to the inclusion of various financing channels. The question of choosing the best option or mix arises as different channel cost different to the firm. Minor opposing guarantee has been seen with determination, and troublesome judgment has been seen with esteem, thanks to the kept benefit. The effort and value funding of the organization was accurately discerned by an outside financial supporter. If a reasonable monetary patron feels that worth is less secure than dedication, the

company is revalued if it wishes to offer value. As a result, companies perceive internal finance to be the preferable source of funds over external funding. If the condition requires, eventually held money is used first. If a company does not have a reasonable amount of retained earnings, it may look for debt funding. If firm insiders are better informed about the firm's worth than outside financial supporters, the market can misprice the valuation. Firms at all tiers of the monetary hierarchy set up such inclinations to prevent mispricing. When the economy is normal, internal sources of capital are favored to external sources of capital, secure commitments, and then daily stocks this is been termed as pecking order theory and is a well-accepted financial paradigm.

Despite the fact that no particular funding judgment is well-defined or real, the inside-created assets may be ranked first. When the valuation is provided by the supervisors rather than a riskless duty, as Myers and Majluf (1984) demonstrate, outside financial supporters judiciously markdown a firm's stock rate. Supervisors hold a political gap from offering value at any stage possible to prevent this form of strategy from financial supporters. Their model forecasts identical results as before, with the hierarchy proceeding in such a way that managers select within reserves first, then dangerous responsibilities, and eventually worth. Firms retain incentives to stop taking in outside funding in the future as there are no speculation opportunities

The many capital structure theories have different interpretations of these issues. Each one focuses on a specific cost and advantage of different funding options, thus they aren't intended to be comprehensive.

Taxes and bankruptcy, according to the classic trade-off hypothesis, account for corporate debt usage. Given that both hypotheses have flaws, it's no surprise that this is a topic of ongoing investigation.

Because there is none ideal capital structure this leads to another financial paradigm which is based on market-timing. The theory goes on that the financing option for the firm are chosen based on market dynamics prevailing in the given time period. From this vantage point, the market timing argument looks to have the most explanatory merit.

### **Determinants of Capital Structure**

Numerous theories have been discussed in the previous section that is aimed at exploring the capital structure determinants. Even, numbers of aspects from these theories are even unobservable. In order to examine the impacts of these theories on the capital structure, it requires accounting proxies. The particular characteristics of the organization have been presented in this particular section that is believed to the effects on the choices of the capital structure. It has been observed that the firm's incentives are provided by the change in determinants that are required to the loan or borrow more or less.

#### ***Size.***

Size is referred to as an explanatory predictor that is required for variations in the leverages of the firms. The larger firms are considered as the more suitable for taking on more debt as compared to the smaller firms. It has been argued by many studies, that larger firms usually negotiate the specific terms of the loans on various particular favorable terms. It allows them for taking more loans or debt by considering the lower interest rates. The second point is related to lower risk because the ratio risk is much lower in the larger firm as compared to the smaller firms. Numbers of banks are agreeing to offers those funds on very lower interest rates advance amounts. By using such kinds of the condition their default profitability can be considerably lower. Thus, the positive relationship is seemed liked to be observed among the leverage as well as size on the contrary basis. The empirical evidence which is related to the size is considered as the probably determinants for mixed leverage of the firm. The choices of the debt-equity have been examined by Goyal (2013) for firms in India. These firms have reported a positive association among the leverage and size of the firm.

The asset's natural algorithm has been utilized by Siddik, Kairraj and Joghee (2016) as the size of proxy for the companies in Bangladesh significant positive and strong correlation has been observed among the total leverage and size.

#### ***Construction Design.***

The techniques in which a firms decides on restructuring its resources to speculate on a mozac of value, liability, or operational assets.. The formation of large amounts of concern depending on a vast no. of variables for instance exchange rate, organizational development, size and size of the business, management control, flexibility in capital formation, fundraising needs, new floating protection costs, issuance time, business evaluation rate and legal requirements. It is speculative to expect a measure of



adjustment because all of these factors are very important and the impact of each of the variables is strong over an unforeseen period of time.

Monetary issues (or monetary shortcuts) are discussed as follows:

**Currency Rate or Equity Trading.** The use of a long-term liability with share equity and share capital is called the effect of cash or exchange rate. The effects of the return on investment or profits per share have been successfully discussed on this blog. If the probability that the subsidized services yield significantly greater returns than the cost of the obligation, the profit per grant will increase without a boost in the ownership business. In fact, revenues per capita provision will also increase if proceeds are used to protect resources. In any case, the strong influence is felt most in the liability situation because (I) the cost of the obligation is usually lower than the cost of the equity share price, and (ii) interest paid on the liability is deductible from derivative benefits when interest in equity shares is not. Because of its impact on individual earnings, financial influence is one of the key factors in organizing the organization's financial structure. Organizations with significant pre-interest income and tax rates (EBIT) can use a higher level of influence to increase returns on the number of investors. One common strategy for impact assessment is to investigate the links between Earnings Per Share (EPS) to various EBIT levels under financial selection strategies. The EBIT-EPS audit is one of the most important machines for the finance manager to gain insight into the organization's financial structure board. They can consider potential vacillations in EBIT and analyze their impact on EPS under various financial systems. The benefit of each share adds even more to the tendency to lean towards however in the indication of the fact that interest is allowed to be deducted at the time of registration of the levy, the effect of the influence of the obligation is much greater.

**Sales Development and Strength.** The main design of the firm is particularly concerned with the design and soundness of its deals. If trading opportunities for a company that you rely on are truly stable, it can raise the level of the bond significantly. The tightness of the bills ensures that the company will not face any problem in collecting its fixed interest rate obligations and repayment obligations. In fact, the pace of development at deals similarly influences the choice of capital investment.

**Capital Expenses.** Every dollar investing in a firm has a cost. Financial implications refer to the basic reimbursement expected by its providers. Normal reimbursement

depends on the level of risk accepted by the financial institution. The critical level of risk is accepted by investors rather than liability. The construction of the capital must cover the basic costs of the capital. Estimating the cost of different asset sources is a complex subject and requires different treatments. Clearly it is attractive to limit the cost of money. Therefore, less expensive sources should be preferred, alternatives continue as before. The basic wellsprings of a company account are the amount of money shared, the inclination to share and the liability. The expected return from a major financial provider depends on the risk they need to try. For investors the interest rate has not been adjusted and the Board of Directors has no formal obligation to make a profit regardless of whether the profits are made by the organization. Responsible developers are reimbursed at the recommended time, while investors can return their money as soon as the organization is distorted. This leads one to conclude that the bond is a less expensive source of assets than value. The deduction for interest rates continues to reduce the cost of the obligation. Shared share capital costs less than fair value, however it is not as modest as the bond appears to be. In this way, to cover the general costs of the capital, the organization must use more responsibility.

***Risk.***

When it comes to structuring a capital of firm, there are two categories of risk to consider: (1) business risk and (2) financial risk. The fluctuation in income before interest and costs is referred to as business risk. Internal and external business risks are both possible. This can be caused by unsustainable factors including the unavailability of unwanted material, inadequacy to deal with conflict, lack of key management and so on with internal risk related to expertise in which the company leads to perform operations within the worst weather conditions.

***Profitability.***

It can be one of the important factors in how the firm's management formulate their capital structure, as the main objective for any firm is to increase share holder return, this notion can sometime lead to agency problem which refer to conflict of interest between management and shareholder but still every company strive to increase its profitability. There have been numerous studies conducted on the subject matter but this debate initially started with the prediction of Myers and Majluf (1984) that a negative association can exist among the leverage and profitability of the firm. Most of the firms are contended by them which are specifically more profitable and it will

prefer for the utilization of the retained earnings. Hence, due to such perspectives, it had lower debt ratios. Therefore, it has been posited by the trade-off theory tax shields must be linked with higher leverage for taking most of the advantage of the interest. Hence, it shows that a higher debt ratio exists in the most profitable firms. Seamed like it has been hypothesized that more debt must be issued to the profitable firms and it is specifically examined to restrict the cash flows of the future; It is also required for adequate managers to pay out the cash to the bondholders rather than to waste out the funds on the project's negative NPV. It has been hypothesized by the theory of the pecking order that there is an inverse association between leverage and profitability. On another hand; It has been hypothesized by the theories of the free cash flow and trades off that there is a direct association between leverage and profitability. There are several studies that are specifically conducted in order to test the leverage and profitability of the firm. The ownership and capital structure has been compared by Kester (1986) for the manufacturing firm of the Japan and United States (Kester, 1986). The negative association between leverage and profitability has been examined by the authors. It has been specifically measured in the terms of the market value of the equity as well as total debt to book. A similar conclusion has been drawn by Wald (1999) and Rajan and Zingales (1995) for the companies of Japan, the US, and the UK. The negative association among leverage and profitability has been examined by for the emerging market's firm's sample Siddik, Kairraj and Joghee (2016). The negative association among leverage and profitability has been examined by Sarwat(2017) for the companies of Pakistan.

### **Factors affecting firm's financial performance**

In order to keep the business running and grow in the future, one of the organization's goals is to maximize shareholder value and generate enough revenue. On the company's performance, various external and internal factors have an impact. While external variables include macroeconomic statistics, it is essential to highlight that internal factors are unique to each firm, comparable for all or most companies.

#### ***External factors***

Market tastes and opinions, national laws and regulations, and the country's economy are all examples of external factors. There are several external factors to consider.

**Economic condition.** The economic situation may impact any business in different ways. Among the numerous economic indicators, those which have a significant impact on companies include.

- Inflation
- GDP
- Interest rate
- GDP growth rate

**Political Condition.** The performance of the business may be significantly influenced by the political environment existing in the nation.

***Internal factors***

These are the company's unique factors that have a direct effect on the success of the business. These variables are under the control of the firm's management and may be adjusted appropriately. Appropriate policies may improve the financial performance, which helps toward the most excellent match for these internal variables.

**Corporate Governance.** Corporate The structures and behaviours that determine how a firm defines its goals, develops strategy and plans, analyses and reports on its performance, and manages risk are referred to as corporate governance processes.

Studies show that good corporate governance helps a business succeed. Mainly two models of company structures are identified, the shareholder model and the stakeholders model. Stakeholder models are more comprehensive and take into account all stakeholders' well-being and overall company performance, as opposed to shareholder models, which are more narrowly focused on creating wealth for owners.

**Ownership structure.** The separation of ownership and control and the dimension thus influences the division of ownership into two kinds. It can be established that the duality of right distinguished between two types of businesses: managerially-controlled businesses and owner-controlled.

- a. Owner-controlled businesses are those in which the management owns the majority of the stock.
- b. Companies that are externally controlled are those in which the management is not a majority stockholder.

**Capital structure.** For every industry, many resources are required, and funds are needed to obtain those resources. In either case, the money comes from within the country, either through retained profit or borrowed money (loans and bonds). A company's capital structure and the costs associated with its choice of financing source

influence this decision. These costs may be monetary or nonmonetary. The company's capital structure has a significant impact on its performance. The debt-to-equity ratio is referred to as the capital structure. More debt financing puts the company at greater risk of bankruptcy, but it also comes with certain tax and monitoring benefits. Reducing the company's free cash flow also helps to lessen the impact of the agency conflict. A proper capital structure should be in place to maximize the company's return while minimizing its risk exposure.

**Risk management.** A company's ability to succeed may be impacted by how well it manages risk. When a company is inherently risky, only investors willing to take on additional risk will invest in it. Investors must receive the expected return associated with the risk they are taking by managing the risk-return relationship.

**Assets Quality.** The degree of dependability of capital ratios is typically determined by asset quality and quality indicators, for example insolvency risks in financial institutions are mostly caused by asset quality and the difficulty of liquidating them. As a result, the significance of monitoring the measures that indicate asset quality are very necessary.

**Dividend Policy.** Earned earnings are allocated in particular proportions to the firm's shareholders. Dividend policy is an important strategic financial choice for a company, and it is based on a variety of factors. A variety of established theories have the ability to explain investor behavior in relation to a company's dividend policy. The impact of the dividend policy on the company's value was divided between supporting and neutral ideas

A high level of firm performance is associated with specific firm features. For instance, the profitability of a company can be measured by looking at things like the growth rate, the dividends, the company's liquidity, and sales. According to Forbes magazine from 2002, those business models with a faster growth rate can afford better equipment, which allows the assets and company size to grow over time. Superior management and employees are attracted to large companies, which in turn contribute to their success. As a result, the company and its employees work together to achieve

their goals. Few have attempted to model all of the variables, but many studies have been conducted on the firm's drivers.

**Size.** Asset possess by a companies are determinant of its size. Considering example from banking sector, which is focus of this research, generally the rate of return on assets decreases as the size grows greater. Among comparison to major banks, this rate is high in small banks. The volume of deposits in major banks, on the other hand, is larger than in local banking firms. Which suggests that a greater loans will result in a low R O A. The ability of commercial banks to invest grows as their assets grow.

The association among leverage and size has been examined by for the emerging market's banking firm's sample in Bangladesh by Siddik, Kairraj and Joghee (2016). They argued that size has significant negative relation with capital structure. Other studies for example which have assed relationship of size with leverage are Sarwat (2017) for the companies in Pakistan and Abdul Basit (2017) and Goyal (2013).

## CHAPTER III

### Related Research Studies

San and Heng (2011) is a research study conducted in Malaysia. The area of study on which this research was conducted is the construction industry of the country. This study looks at how capital structure affects business performance in construction firms in Malaysia. Main criteria of the research are discussed as under .

For this research 49 different firms within the construction industry of Malaysia were selected and employed as sample for this study. Data from annual reports of these sample firms was retrieved covering a time period ranging from 2005 till 2008. Other data for the macroeconomic variable used in this study was obtained from the World Bank and the trade ministry of Malaysia.

The main hypothesis of this study is to evaluate how capital structure impacts the financial performance of the firm. To assess this hypothesis, a pooling OLS regression model using panel data was employed in this study. Different variables used in this model are the following.

Return on Asset, Return of equity and Earning Per Share which are main measures of financial performance of any firm were employed as dependent variables to evaluate financial performance of the firms analyzed.

For independent or explanatory variables, capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios. While the control variables include (business size,)

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities, this research recommends that firms should do their best firstly to source their funds from internal earnings as this will effectively improve the company value. Hence, this study concludes itself in support of the pecking order hypothesis.

A study conducted by Kyereboah and Coleman (2007) for African microfinance firms looked into the impact of capital structure on return on equity and return on assets. The study covered the years 2000-2007. For the analysis, they used monthly data. This study discovered a negative link between leverage and critical performance indicators.

Siddik, Kabiraj, and Joghee (2016), is another research conducted in Bangladesh. The area of study on which this research was conducted is banking industry of the country. This study looks at how capital structure affects business performance of banking firms in Bangladesh. Main criteria of the research are discussed as under .

For this research 22 different banks within banking industry of Bangladesh was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2005 till 2014. Other data for the macroeconomic variable used in this study was obtained from World Bank and State Bank of Bangladesh.

The main hypothesis of this study is to evaluate how capital structure impacts the financial performance of the firm. To assess this hypothesis pooled OLS regression model using panel data was employed in this study.

Different variables used in this model are the following.

Return on Asset, Return of equity and Earnings per share which are main measures of financial performance for any firm were employed as dependent variables.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios. While the control variables include (liquidity, business size, growth rate).

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommends that firms



should do their best firstly to source their funds from internal earning as this will effectively improve the company value. Hence this study conclude itself in support of the pecking order hypothesis.

According to Umar and Sajid, (2010), from 2006 to 2009, this study looked at the top 100 Pakistani businesses to see how capital design affected business efficiency. Price-to-earnings ratio is negatively correlated with CLTA while positively associated with LTA. While no link among return on equity and current obligations, and total liabilities. Still, the study's findings show a positive linkage between return on equity and long-term liabilities and tangible assets. These findings combined led to the conclusion that its capital structure choice heavily influences a company's long-term financial success. Because of the impact of debt financing on the profitability of the firms this study conclude itself in support of pecking order theory.

According to Goyal (2103), another similar study was conducted. The study's goal is to evaluate regarding profitability of public sector banks in India and the impact of capital structures that are publicly traded on the national stock market between 2008 and 2012, as measured by ROE, ROA & EPS. While Debt to Equity and Debt to Asset were used as independent variable as proxy for capital structure. Results confirm negative relationship between debt and firms financial performance.

According to Sarwat (2017), in the context of Pakistan's cement sector, this study aims to determine the component-by-component relationship between productivity and effective working capital management. From 2007 to 2011, panel data on 18 cement companies that were publicly traded on the Korean Stock Exchange (KSE) was compiled. Return on assets (ROA), that is a dependent variable (ROA), is used to measure the profitability of businesses. Six accounting ratios are used to assess the efficiency of working capital management. The regression method of panel least squares is used in the study. Consequently, it can be inferred from this research that the effectiveness of working capital management in the cement sector of Pakistan does not significantly influence the profitability of the businesses in that industry.

According to Pratheepkanth (2011), the capital structure (C.S) of commercial organization in Sri Lanka was investigated and the impact of C.S on the financial performance was determined between 2005 and 2009.

According to it negative relationship was observed between debt and ROA which is consistent with this study. While the other financial performance variables associations with capital structure variables give mixed results.

Hasan and Alam (2014), is another research conducted in Bangladesh. the area of study on which this research was conducted are manufacturing industry of the country. This study looks at how capital structure affects business performance in pharmaceutical and chemical firms in Bangladesh. Main criteria of the research are discussed as under .

For this research 36 different companies with in manufacturing industry of Bangladesh was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2007 till 2012. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Bangladesh.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis pooled OLS regression model using panel data was employed in this study. Different variable used in this model are the following. Return on Asset , Return of equity Tobin Q and Earnig per share which are main measures of financial performance for any firm were employed as dependent variables. For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios . While the control variable include (liquidity, business size, and firm age).

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed , which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead

when it comes to financing the company activities this research recommend that firms should do their best firstly to source their funds from internal earning as this will effectively improve the company value. Hence this study conclude itself in support of the pecking order hypothesis.

Nor and Fatihah (2012) examined how debt and equity funding affected Bursa Malaysian company performance. By using a sample of 130 businesses from 2001 to 2010, they discovered a that debt is adversely related to company's profitability.

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommend that firms should do their best firstly to source their funds from internal earning as this will effectively improve the company value. Hence this study conclude itself in support of the pecking order hypothesis. The findings of this research corroborate the pecking-order-theory.

Schulz et al. (2016) the goal of this study, which uses panel data from Dutch small and medium-sized businesses, is to look at the connection between capital structure and company success from 2008 to 2015. Between 2008 and 2015, the information was gathered from these businesses. Also, two subcommittees have been set up to look into any possible differences in how the financial crisis affected businesses and how long it took to get better. Both the trade-off theory and the pecking order theory, which are major ways to study capital structure and both assume signals for the connection that are completely different from each other, were used to try to figure out what happened. As proxies for performance, two different empirical models have been made, and both of them use return on capital employed (RCOE) and return on assets as their main measurements (ROA). When we looked at the organization's capital structure, we looked at both the overall leverage and the percentage of long-term and short-term debts compared to the total assets. Finding of this study revealed that capital structure

has statistically significant relation with ROCE. This study concluded in favour of pecking order theory.

Muhammad, Shah, and Islam (2014) carried out the investigation that aims to study the relation between capital-structure and company success. Research strategy, data, and methodology are all discussed. It was determined that capital structure significantly impacted the financial performance between 2009 and 2013 in this study. Furthermore, variables affecting the capital-structure have a significant impact on businesses' success. In order to attain the required degree of productive efficiency in a company, financial analysts and managers should pay attention to factors such as optimum financial design plus efficacy resource allocation, as evident from this research finding.

According to Mirza and Javed (2013), the purpose of their research is to investigate any connections that may be made between a company's financial performance and economic indicators. Various aspects of business performance in a developing market are investigated (Pakistan). The current research looks at the profitability of Pakistani corporate enterprises time period range, 2007 to 2011 and explores relationship between several factors using a fixed effect model.

The influence of capital-structure on performance is taken into consideration. Debt-to-equity ratio has been beneficial for profitability, as shown by the findings.

Javed, Younas and Imran (2014) The influence of capital structure on the performance of 63 firms was investigated. The data cover five years, from 2007 to 2011. To determine link between business performance Return on Assets, Return on Equity and Return on Sales (ROA, ROE, and ROS) and capital design variables, Debt to Assets, Equity Over Assets and Long term Debt to Assets (DTA, EQA, LDA) using fixed Effects regression model. Despite the fact that the results showed a link between the two, the intensity of the association was found to be inconsistent. DTA and EQA exhibited a negative relationship with return on sales (ROS) when ROS was utilized as the dependent variable, while LDA showed a positive relationship with ROS. If

such decisions impact the firm's performance, managers should take care when making plans on the firm's capital-structure.

Abdul Basit (2017) This research was conducted in Malaysia. The time period in which this research was conducted ranges from year 2011 to 2015. The research problem investigated in this study was to assess how capital-structure is associated with the profitability of industrial manufacturing organisations in Malaysia.

The debt to equities, total debt to asset, and total equity to asset, ratios were injected as explanatory financial design variables in this study. The dependent variables used to quantify businesses efficacy are return on asset (ROA), return on equity (ROE), and earnings per share (EPS).

Multiple regression (Fixed and Random Effect Model) were used in this research. According to the findings of this study, to summarize, raising debt finance for an business investigated can lessen agencies problems and give tax incentives, but too much debt financing to businesses will result in poor financial-performance of the businesses.

Riddiough and Steiner (2014) looked at a sample of worldwide listed real estate investment corporations from the United States (1993-2013) and a number of European nations, including France, Germany, the United Kingdom, and the Netherlands (2001-2013). In the sample nations, they include all businesses designated as equity REITs in the SNL Financial database. They proceed by using unconditional multivariate analysis to find which combinations of capital structure features are linked to financially strong company attribute. They discovered that stronger companies utilize lower leverage, have extended debt maturities, have higher fixed-rate debt ratios, rely less on secured debt, have greater line of credit capacity but use it less, and have lower cash holdings. The results for the entire sample are quite similar to the results for the US enterprises. According to geography, European companies are more similar than American ones. European data support the previous leverage finding. The only significant finding in the European sample is the negative association between leverage and business quality. Because of this, they find that an optimum capital

structure informed by company characteristics has a lower impact on firm value in Europe than it does in the U.S. According to this view, institutional considerations in Europe may have a greater effect on the relative cost of various types of capital than company characteristic-related capital structure decisions do on firm value. They next examine the marginal impact on firm value of changes in specific capital structure dimensions in the entire sample, based on the current firm and capital structure characteristics already in existence. The unconditional multivariate analysis supported their findings, but their findings also indicate substantial interactions between the various capital structure aspects. Secured debt and leverage, for example, are both independently linked with poorer business quality on an unconditional basis. Based on the conditional analysis, leverage negatively connects business quality in the U.S., whereas secured debt has a favorable relationship. Companies with a high leverage capital structure are more likely to go bankrupt. Still, our findings indicate that firms that pledge collateral when obtaining loan capital may lessen the impact of leverage on company quality. More substantial companies with a solid asset basis may be better able to accomplish this if they use high debt levels. It's possible to detect many variations between the institutional frameworks that predominate in our European sample nations by examining the marginal impact of capital structure options on company value. In general, their findings agree with those of the unconditional multivariate study. However, in Germany, France, the Netherlands, and the U.K., excessive leverage has the most profoundly negative impact on company value. Depending on the underlying institutional framework, the international capital markets respond differently to changes in leverage levels. More extended historical data on U.S. company capital structure enables us to compare how firm value varies throughout various real estate and capital market regimes, including those preceding and following the current global financial crisis. On the whole, they find that the marginal impacts of capital structure decisions on company value are resistant to change. Revolving credit facilities have a strong positive connection with business quality, but only during times of crisis. More substantial businesses have a more significant line of credit capacity, as shown by the unconditional multivariate analysis of the whole sample. They were also able to depend more heavily on previously approved lines of credit during the crisis. At the same time, weaker companies faced significant refinancing risk, and lenders were likely less inclined to let these more inefficient firms use their lines of credit.

According to Ahmad, Abdullah and Roslan,(2013), four factors influence a firm's operational performance: size, asset growth, sales growth, and efficiency (or effectiveness). In this research, the four factors listed above serve as controls. This research focuses on the consumer and industrial sectors of the Malaysian equity market. A total of 358 observations were made from financial data from 2005 to 2010, with 58 firms serving as the study's sample firms. For each model, a set of regression analyses were run. They also used lag values instead of zero values for the proxies to ensure the full impact of a firm's capital structure. According to the findings, only STD and T.D. have a meaningful relationship with ROA, whereas ROE has a meaningful relationship with each debt level. ROE is significant.

Khalaf Taani (2013),) a research conducted on similar agenda in Jordan using almost the same variables and methodology. Although this study was carried out on the manufacturing sector of the Jordanian economy but the research share almost the similar results.

According to it negative relationship was observed between debt and ROA which is consistent with this study. While the other financial performance variables associations with capital structure variables give mixed results.

Another study done in similar context is According to Samour and Hassan (2016). This research was done on the Consumer goods industry and Technology industry of the USA. This study looks at how USA firms' capital structure affects how well they do business. The main criteria of the research explained below.

For this particular research, different companies in USA were chosen and used as samples. The information was taken from the annual reports of these sample companies from 2005 to 2012. Other information about macroeconomic variables used in this study came from the World Bank and USA Ministry of Trade.

The main goal of this study is to figure out how the firm's capital structure affects how well it does financially. In this study, an OLS regression model with panel data and fixed and random effects was used to test this hypothesis. The following are some of the different variables used in this model. Return on Asset and Return on Equity, which are two of the most important ways to measure how well a business is doing

financially, were used as dependent variables. Proxy variables based on capital structure and control variables were used for independent or explanatory variables. Long-term debt ratios, short-term debt ratios, and total debt ratios are all part of the capital structure proxies. While the control variables ( business size, and firm age).

The study's main conclusions are as follows. For the main focus of this study, which was the effect of capital structure variables on the financial performance of the analysed firm, it was found that in case of consumer goods industry debt financing derogate the financial performance of the firms. This is clear from the fact that capital structure proxies (TDTA and STDTA) have a strong negative relationship with financial profitability. While for the Technology industry the result is opposite to the previous one. This study showed that debt financing has mix effect on different industry businesses in USA. This study conclude itself in support of the Trade off theory.

According to SIRO (Sierra Ice Research Organization) (2011), researchers in Kenya conducted this study in order to determine the impact on the financial performance of a company's capital structure. The research was conducted from 2011 to 2012. It's worth noting that Kenya had political unrest during this time period, which affected the stock market. Due to the ups and downs of the trading cycle, this is an exciting time to do research. The study's subjects were all of Kenya's 61 publicly traded companies that had been properly registered with the country's capital market authorities in 2012. The Nairobi Securities Exchange manual and company brochures provided secondary data. The Statistical Package, which included regression analysis for Social Sciences software, was used to do the data analysis. The findings showed a negative correlation between a company's capital structure and its financial success on the Kenyan stock market. Studies show that when debt ratios rise, return on equity decreases, indicating that an increase in capital infusion is preferable to borrowing since the advantages of debt financing are outweighed by the cost of debt financing

According to Aziz and Abbas (2019), this research aims to determine how various types of debt financing affect a firm's performance across 14 distinct industries in Pakistan. For nine years, secondary data was gathered on 14 different sectors of the



Pakistan Stock Exchange (2006 to 2014). According to the study's findings, debt financing negatively impacts Pakistani company performance while also having a substantial effect. According to the results of this research, businesses should put higher reliance on their internal funding, which are the most cost-effective and dependable in Pakistan. The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommend that firms should do their best firstly to source their funds from internal earning as this will effectively improve the company value. Hence this study conclude itself in support of the pecking order hypothesis.

Otieno and Ngwenya,(2015) this study use a generalized linear model (GLM) as an upgrade on ordinary least regression to determine the association between capital structure and financial performance of enterprises listed on the NSE (Nairobi Stock Exchange) (OLS) from 1990 to 2012. The study found that more debt is used by efficacious corporations than by less profitable companies, probably because profitable companies are less exposed to financial risk. Firms that used more debt outscored those who used reduced debt, according to the findings. Canonical correlation was utilized to identify the variables employed in this study to quantify capital structure and performance, thus return of assets (ROA), is used as measure of firm profitability, while TDTA as a measure of financial structure. Results revealed that more debt is used by economically efficacious organizations than by less profitable firms, probably because profitable enterprises' exposure to financial risk is minimal. Furthermore, the analysis shows that organizations that use more debt outpace those that use less debt financing. As a result, this research confirms the efficiency theory that using borrowed capital lowers agency costs and improves company's profitability.

Jian, Zhiliang and Yue (2021) is another research conducted in China. The area of study on which this research was conducted is Agriculture industry of the country. This study looks at how capital structure affects business performance of agricultural firms in China. Main criteria of the research are discussed as under .

For this particular research different companies within agricultural industry of China was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2013 till 2019. Other data for the macroeconomic variable used in this study was obtained from World Bank and Ministry of Trade of China government.

The main hypothesis of this study is to evaluate how capital structure impacts the financial performance of the firm. To assess this hypothesis OLS regression model using panel data with fixed and random effects was employed in this study. Different variables used in this model are the following. Return on Asset and Return of Equity which are main measures of financial performance of any firm were employed as dependent variables. For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, and total debt ratios. While the control variables include (business size, and firm age).

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommends that firms should do their best firstly to source their funds from internal earnings as this will effectively improve the company value. Hence this study concludes itself in support of the pecking order hypothesis.

Amin W. Muger Gerald G. Nyambane and Amin W. Muger (2015) They investigate the impact of capital structure (as evaluated by long-term debt to assets and short-term debt to assets) and tax liabilities on farm yields or production and profitability as measured technical efficiency and return on assets in Australia. This study used panel

data in the analyses and used multiple regression (fix and random effect models). The researchers employed yearly data of ten years in this study.

They discovered proof that Broad acre farms in Australia are not utilizing the most advanced technologies and, as a result, are not functioning at optimum scale. The short-term debt structure of the farms has a positive relationship with technological efficiency, but a negative association with return on assets (ROA). As a result, employing short-term debt to acquire critical agricultural supplies and sustain farm operations can increase technical efficiency.

Short-term debt has an unfavorable association with Return-on-Asset, however long-term debt has no impact on agricultural efficiency or R.O.A. This might suggest, long-term debt has little impact on day-to-day management operations.

This finding is in line according to cash flow theory (trade off theory), which claims as, the advantages of short-term-debt might push the businesses to enhanced productivity. As a result, structural reforms that allow farmers accessibility to short-term finance will boost technical efficiency of farms in Australia.

Anbar and Alper (2011) use many banking particulars and general economic parameters to assess profitability of Turkish banking industry from 2002 to 2010. The research calculates the profitability of banks using the ROA and ROE ratios. In terms of bank-specific characteristics, finding of the study shows that, non-interest revenue, bank size and, and credit portfolio size and loans under follow-up all have a substantial influence on bank profitability in Turkey. In terms of macroeconomic issues, the real interest rate affect profitability. To improve banks profitability in Turkey, this study advises Turkish banks to reduce there debt proportion in capital structure.

Ibrahim et al (2019) The research explored how the capital structure of a few private banks in Iraq affects their performance. Six Iraqi-based banks were chosen for the current investigation, which covered the years 2005 till 2015.

Following an analysis of the yearly reports published by the institutions that made up the sample, the ratios that were of interest to the research were retrieved. It has been established that the factors that contribute to this research as independent variable are

the ratio of total debt to capital, the size of the bank, and the growth of its assets. On the other hand, it was established that the ratio of return on equity along with return on assets would be the dependent variable that would be used to assess the success of the bank. The panel least square model was used in this inquiry with the purpose of investigating the connection that exists between the capital structure of a bank and its overall performance. According to the findings, there is no independent variable that has a substantial impact on the return on assets (ROA). On the other side, the ratio of total debt to capital has a positive influence on return on equity (ROE) (TDC). As a conclusion drawn from the results of this investigation, it was suggested that Iraqi banks should have a sufficient amount of capital in order to lessen their exposure to risks that are not essential and to raise their likelihood of maintaining their business operations steady. This conclusion was drawn in light of the fact that the study's findings were based on the findings of the statistical analysis.

Yinusa and Samuel (2019) is another research conducted in Nigeria. The area of study on which this research was conducted are non Financial companies of the country. This study looks at how capital structure affects business performance of non financial firms in Nigeria. Main criteria of the research are discussed as under .

For this research 115 different firms with in non financial industry of Nigeria was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 1998 till 2019. other data for the macroeconomic variable used in this study was obtained from world bank .

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis Pooled OLS regression model using panel data was employed in this study. Different variable used in this model are the following.

Return on Asset and Return of equity which are main measures of financial performance of any firm were employed as dependent variables. For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, and total debt to equity ratios . While the control variable include ( business size, inflation and interest rate).

Main conclusion of this study are as following. For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus of this study it was concluded that debt financing has positive impact on the financial performance of the firms when debt is used sparingly. Because of the particular impact of debt financing on the profitability of the firms this study conclude itself in support of Agency Cost theory.

Qayyum and Noreen (2019) is another research conducted in Pakistan. The area of study on which this research was conducted are Banking industry of the country. This study looks at how capital structure affects business performance in banking firms in Pakistan. Main criteria of the research are discussed as under .

For this research 10 different banks with in banking industry of Pakistan was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2006 till 2015. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Pakistan.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. Also this study analyze and compare the capital structure of the islamic banks and conventional traditional banks which were included in the study sample. To assess this hypothesis OLS regression model using panel data with fix and random effect was employed in this study. while to compare the capital structure of the two mentioned distinct banks groups T-Test was applied. Different variable used in this model are the following.

Return on Asset, Return of equity and Earning Per share which are main measures of financial performance for any firm were employed as dependent variables.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include total debt to equity and total debt to assets ratios . While the control variable include (Equity to assets ratio and business size).

Main conclusion of this study are as following. For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus

of this study it was concluded that debt financing has mix impact on the financial performance of the firms. This is evident from the fact that For, both traditional and Islamic banks' capital structures have a negative link with ROA. In contrast, ROE has positive association with both conventional and Islamic banks' capital structures. Additionally, for both Islamic and traditional banks, capital structure explanatory factors had positive relationship with EPS. Additionally, for both Islamic and traditional banks, capital structure explanatory factors had positive relationship with EPS. This study confirms economies of scale as Size has significant positive relation with financial profitability. Because of the mix impact of debt financing on the profitability of the firms this study conclude itself in support of pecking order theory and Trade off theory for both distinct groups of banks.

Afroze and Khan (2020) is another research conducted in Bangladesh. the area of study on which this research was conducted are Pharmaceutical and chemical industry of the country. This study looks at how capital structure affects business performance in pharmaceutical and chemical firms in Bangladesh. Main criteria of the research are discussed as under .

For this research 22 different companies with in Pharmaceutical and chemical industry of Bangladesh was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2013 till 2020. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Bangladesh.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis OLS regression model using panel data was employed in this study. Different variable used in this model are the following.

Return on Asset and Return of equity which are main measures of financial performance of any firm were employed as dependent variables.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-

term debt ratios, total debt ratios, and total debt to equity ratios . While the control variable include (liquidity, business size, and firm age).

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed , which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommend that firms should do their best firstly to source their funds from internal earning as this will effectively improve the company value. Hence this study conclude itself in support of the pecking order hypothesis.

Gokulanathan and Rajesh (2021) is another research conducted in India. The area of study on which this research was conducted are banking industry of the country. This study looks at how capital structure affects business performance in banking firms in India. Main criteria of the research are discussed as under .

For this research 6 different firms with banking industry of India was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2017 till 2021. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of India.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis Pooled OLS regression model using panel data was employed in this study. Different variable used in this model are the following.

Return on Asset and Return of equity which are main measures of financial performance of any firm were employed as dependent variables.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios . While the control variable include ( business size, Interest coverage ratio and cash coverage ratio).

Main conclusion of this study are as following. For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus of this study it was concluded that debt financing has positive impact on the financial performance of the firms. This is evident from the fact that capital structure proxies ( STDTA, LTDTA and Debt to Equity ) have significant Positive relation with financial profitability. Because of the impact of debt financing on the profitability of the firms this study conclude itself in support of pecking order theory.

Chalise and Adhikari (2022) is a research study conducted in Nepal. The area of study on which this research was conducted are banking industry of the country. This study looks at how capital structure affects business performance in banking firms in Nepal. Main criteria of the research are discussed as under .

For this research 14 different firms with in banking industry of Nepal was selected and employed as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2013 till 2019. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Nepal.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis OLS regression model using panel data with fix and random effect was employed in this study. Different variable used in this model are the following.

Return on Asset , Return of equity and Earning Per Share which are main measures of financial performance of any firm were employed as dependent variables to evaluate financial performance of the firms analyzed.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios . While the control variable include ( business size, Liquidity).

Main conclusion of this study are as following. For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus of this study it was concluded that debt financing has negative impact on the financial



performance of the firms. This is evident from the fact that capital structure proxies ( LTDTA and Debt to Equity ) have significant negative relation with financial profitability as assessed by ROA and EPS. Finding of this study also suggest the Size has significant positive association with ROA.

Because of the negative impact of debt financing on the profitability of the firms this study conclude itself in support of pecking order theory.

**SUMMARY TABLE****Summary of empirical studies. Table 3.1.**

<b>No.</b>	<b>Study</b>	<b>Country</b>	<b>Time Interval</b>	<b>Method</b>	<b>Findings</b>
1	San and Heng (2011)	Malaysia	2005-2008	Pooling Regression model	Long term Debt has negative impact on ROE an EPS.
2	Kyereboah & Coleman (2007)	Sub Saharan Africa	2000-2007	OLS Regression Model	Leverage has negative relation with Financial performance.  Pecking Order Theory
3	Siddik , Kabiraj and Joghee (2016)	Bangladesh	2005-2014	Pooled OLS Regression Analysis	Leverage has negative relation with Financial performance.  Pecking Order Theory
4	Muhammad, Shah and Islam (2014)	Pakistan	2009-2013	OLS Regression Model	Leverage has negative relation with Financial performance.  Pecking Order Theory
5	Goyal, (2013)	India	2008-2012	OLS regression	Positive association of short term debt with. profitability.  Trade off Theory
6	Sarwat (2017)	Pakistan	2007-2011	Panel Least Square Regression Analysis	The Modigliani-Miller Theory

7	Pratheepkant h(2011)	Sri Lanka	2005-2009	Pooled Regression Analysis	Leverage has negative relation with Financial performance.  Pecking Order Theory
8	Hassan and Alam (2014)	Bangladesh	2007-2012	Pooled Regression Analysis	Leverage has negative relation with Financial performance.  Pecking Order Theory
9	Nor and Fatimah (2012)	Malaysia	2001-2010	OLS Regression Analysis	Leverage has negative relation with Financial performance.  Pecking Order Theory
10	Schulz (2016)	Neither Land	2008-2015	Pooled regression Analysis	Leverage has negative relation with Financial performance.  Pecking Order Theory
11	Umar and Sajid, (2010)	Pakistan	2006-2009	Exponential generalized least square regression	Debt has inverse relation with Financial profitability.  Pecking Order Theory

12	Mirza and Javed (2013)	Pakistan	2007-2011	Fixed effect Model	Mix result Trade off Theory
13	Yinusa and Samuel (2019)	Nigeria	1998-2015	OLS Regression Model	Leverage has positive relation with Financial performance. Agency Cost Theory
14	Javed, Younas and Imran (2014)	Pakistan	2007-2011	Fixed Effect Model	Leverage has negative relation with Financial performance. Pecking Order Theory
15	Abdul Basit (2017)	Malaysia	2011-2015	Fixed Effect Model	Leverage has Positive relation with Financial performance Trade Off Theory
16	Riddiough and Steiner (2014)	USA, Europe	2001-2013	Panel regression Model	Mix Results Agency Cost Theory
17	Ahmad, Abdullah and Roslan (2013).	Malaysia	2005-2010	Random Effect Model	Leverage has Positive relation with Financial performance Agency Cost Theory
18	Khalaf Taani (2013)	Jordan	2005-2009	Fix effect Model	Leverage has negative relation with Financial performance. Pecking Order Theory

19	Hassan and Samour (2016)	USA	2005-2012	Panel Regression model	Mix Results Trade Off Theory
20	SIRO (2011)	Kenya	2011-2016	OLS Regression Analysis	Leverage has negative relation with Financial performance. Pecking Order Theory
21	Aziz and Abbas (2019)	Pakistan	2006-2014	OLS Regression	Leverage has negative relation with Financial performance. Pecking Order Theory
22	Otieno and Ngwenya,(2015)	Kenya	1990-2012	Generalised linear model (GLM)	Trade off theory
23	Amin W. Mugeru and Gerald G. Nyambane,(2015)	Australia	1995-2005	Stochastic frontier estimation Model	Short Term Debt has Positive Impact on Performance Agency Cost Theory
24	Jian,Zhiliang and Yue (2021)	China	2013-2019	Multiple Regression Model	Leverage has negative relation with Financial performance. Pecking Order Theory
25	Anbar and Alper (2011)	Turkey	2002-2011	FE and RE Model	Leverage has negative relation with Financial performance. Pecking Order Theory

26	Ibrahim et al (2019)	Iraq	2005-2015	Panel OLS	Leverage has positive relation with Financial performance. Pecking Order Theory
27	Qayyum and Noreen (2019)	Pakistan	2006-2015	FE and RE Model	Leverage has negative relation with Financial performance. Pecking Order Theory
28	Afroze and Khan (2020)	Bangladesh	2013-2020	Panel OLS	Leverage has negative relation with Financial performance. Pecking Order Theory
29	Gokulanathan and Rajesh (2021)	India	2012-2021	Panel OLS	Leverage has positive relation with Financial performance. Pecking Order Theory
30	Chalise and Adhikari (2022)	Nepal	2013-2019	Panel OLS	Leverage has negative relation with Financial performance. Pecking Order Theory

## CHAPTER IV

### Banking Industry Overview

Banks are financial institutions who deposit public funds and extend loans to different entities for instance individuals or institutions. Lending might be done directly or through the financial markets as a circulation strategy. Banks are governed differently in various nations due to their crucial significance in an economy's financial security. The majority of economies have a uniform structure known as fragmented banking-saving or reserves, where by requirement the banking firms keep cash reserves that correspond to just a fraction of their current-liabilities. Despite the fact that diverse rules were designed to ensure liquidity ratios, banks are still frequently reliant on the least capital requirements based on a global formulation of Basel Accords.

#### **Banks' Functions**

Below are some of the main functions of commercial banks quoted briefly.

- Keeping cash safe for clients in several arrangements of bank accounts, for example savings, time-period, and current bank account.
- Pay consumers interest on deposits to protect their money from losing value due to inflation.
- Offering credit or loans to businesses, and peoples.
- Consultation services to businesses and wealthy individuals.
- other financial and administrative services like transferring funds from one country to another, documentation and payment arrangement in International trade etc.
- Making unique investments in a variety of businesses and boosting the economy
- Banks are considered as, curators and dealers of the economy's cash resources, which is a basic foundation for all commercial and financial endeavors.

#### **Financial structure of Banks**

Banks, like any other commercial enterprise, rely on their management's skills to control their assets efficiently, along with their capacity to create financial resources, whether internal or external, and prompt these resources toward investments that subsequently to increase and optimize their profitability.

Capital structure by literal definition means different sources of funding including, ownership, borrowing, (short- and long-term). Furthermore, financial structure refers to the many sources from which an organization has acquired funding to support its applications.

For banks its liabilities include all the deposits of clients in their bank account whether term deposits or in their current account. The term deposits will make long term liabilities while the current deposits will make short term liabilities for the bank capital structure. Besides these all the institutional borrowing of the bank account for the liability for the banks.

On the assets side all the investment made by bank whether it is investment in their expansion process by acquiring new buildings and equipment's or investment in other project for profits and capital gains are bank's assets. Besides this all the loans whether made individual consumers or to businesses are assets for banks.

### **Profitability of Banks**

Profitabilities, like other enterprises, perceived as main objective for the banking firms. It is essential for its existence and continuation, since it is regarded as the most important condition for shareholders, depositors, lenders, managers, and regulatory agencies.

Major channels of revenue for banks are interest on loans, Capital gain on investment and services charges for all other services which banks offer.

### **Pakistan Banking Industry**

Pakistan is a country of developing economy situated in south Asia.

In Pakistan, the total number of officially registered banks that were actively working had recognized as 33 by the month of June 2018. The following is a list of banks that are working in Pakistan, along with their present branch network structure.

Group or Type of Bank	(Numbers)					
	Jun-18		Dec-17		Jun-17	
	Banks	Branches	Banks	Branches	Banks	Branches
<b>1. Pakistani Banks</b>	<b>29</b>	<b>13,683</b>	<b>29</b>	<b>13,618</b>	<b>30</b>	<b>13,029</b>
i. Public Sector	9	3,198	9	3,188	9	2,986
a. Commercial	5	2,543	5	2,534	5	2,360
b. Specialized	4	655	4	654	4	626
ii. Domestic Private	20	10,485	20	10,430	21	10,043
<b>2. Foreign Banks</b>	<b>4</b>	<b>9</b>	<b>4</b>	<b>10</b>	<b>4</b>	<b>10</b>
<b>Total</b>	<b>33</b>	<b>13,692</b>	<b>33</b>	<b>13,628</b>	<b>34</b>	<b>13,039</b>

*Source: SBP report STATISTICS ON SCHEDULED BANKS IN PAKISTAN June 2018 Table 4.1.*

Most of the stakes in banking industry is hold by few largest banks in Pakistan. For instance, these seven banks are the biggest stakeholder of banking industry in the



economy. This study will also analyze these banks as these represent almost 70% of Pakistan banking industry(SBP), so that the study can be generalized on whole Pakistan banking industry.

Banks which are included in this study are as below:

- United Bank.Ltd (UBL)
- Muslim Commercial Bank.Ltd (MCB)
- Habib Bank.Ltd (HBL)
- National Bank.Ltd (NBL)
- Allied Bank.Ltd (ABL)
- Askari Bank.Ltd (ASB)
- Standard chartered Bank (STB)

Banks in Pakistan are strictly regulate under central bank. Apart from that all the banks must be compliance according too international Basel standards.

There is huge scope of expansion in the banking industry in Pakistan, as it is a growing industry and over the time more people especially in rural areas are switching to use banking services.

There are, as reported by the State Bank of Pakistan, a total of 43 million bank accounts in Pakistan, out of over 200-million people. Causes for the mentioned enormous disparity might attributed toward country's restricted access to technology, people's aversion to banks for religious reasons, and the country's vast unorganized remote areas.

## CHAPTER V

### Research Methodology

In the past capital structure has been investigated by many researcher, but this problem has received less attention in developing nations like Pakistan, particularly in the banking sector.

Although there is huge scope for expansion in the banking sector of Pakistan as only 15 percent of the whole population uses banking services so thorough research is needed related to banking industry in Pakistan so that it will be helpful in the expansion process.

#### **Research Design.**

Pakistan now has 33 distinct banks in operational. Seven of the largest banks are chosen for this investigation. For this research data for eleven years, from 2008 to 2018 was employed, in order to give credible, useful, and up-to-date results. The time period was chosen with the intention of providing analyses of the data in normal stable economic period. As restoring democracy and political and economic stability in Pakistan was obtained following the general election in 2008.

The reasons not to include year 2019 and 2020 in this study are that at the end of 2018 new government under a new political party Tehreek Insaf was formed, which the other traditional political forces strongly oppose and blamed that the election was rigged and the military and intelligence agencies supported Tehreek Insaf to bring it to power. Numerous protests were carried out through out that years and even up to present day there is higher political instability in the country.

Also from the year 2020 Corona Covid-19 virus hit the world and nothing anywhere in the world remains normal.

To confined the effect of these two external shocks, the time frame for this study limit from 2008 to 2018, which reflect normal situation in the economy.

In this research Panel data is employed, and uses (OLS) technique, with fixed effect model and random effect model. As use of similar technique has been evident from previous researches.

### **Variables Selection**

This research makes use of the following categories of variables.

#### ***Dependent Variable***

These include bank financial- performance indicators, which will be used to build an econometric model. This research employed three factors to assess bank performance, these are :

- Return- on- Assets (R O A)
- Return-on- Equity (R O E)
- Earning- Per- Share (E P S)

Employing these variables in such kind of research is evident from earlier researches.

***Return on Assets.*** R O A, shows how successfully bank's management is generating profits from, available assets. Its calculated as dividing, net profit with total-assets.

In various research, ROA has been used as a determinant of bank performance.

For example, Goyal (2013), Khalaf Taani, (2013) and Siddik, Kabiraj and Joghee (2016).

***Return on Equity.*** R O E shows the efficiency of banks in utilizing its shareholders' money. ROE is attained as, net. Profit divided with, total-assets.

While Hall and Weiss (1967) favored ROE, they stated that since there is an ideal borrowing level, ROA might fluctuate throughout industries, but ROE is more consistent and hence provides a superior assessment.

ROE has been used in other studies for example Siddik, Kabiraj and Joghee (2016) and Abdul Basit (2017).

***Earnings Per Share.*** This research also utilizes E P S, used as indicator of profitability for banks, the formula for E P S is Net-income, divided with outstanding shares.

E P S, also employed by many researchers all around the world. According to Abdul Basit (2017), government involvement may boost ROE, resulting in erratic outcomes.

To avoid inconsistencies like this, the performance of banks was determined using a third basic indicator, EPS.

Khalaf Taani (2013) claimed that earnings per share (EPS) is the most fundamental index when it comes to assessing profitability, and stated that the higher the EPS, the better.

This study utilizes R O A, R O E and E P S to gauge banks profitability This research is limited to the banking industry.

### ***Independent Variables***

Capital structure variables, in this study were included as-if explanatory variables.

To, quantify influence for capital-structure, it must first define capital structure measurements. Short-term-debt, to total assets and Long-term-debt, to total assets were taken variables for the capital structure.

This study used book values of annually issued financial reports from banking firms to compute these two independent variables. This study employ LTDTA and STDTA as capital structure proxies in order for making the research more robust. The proportion of short-term-debt, to total assets is called STDTA, while the proportion of long-term-debt, to total assets is called LTDTA.

**Control Variables.** A variety of control variables are used as explanatory variable in the model for effect isolation and making the model good fit for regression. Theses control variable are also employed in many previous studies; these variables includes as following discussed below.

**Size (SZ).** Size refer to the amount of total assets of the banking firms. Size is a representation of a certain risk. Many studies have reported different relationship between size and profitability. For example, from economies of scale, the larger the bank assets are the more profitable it would be.

Goyal (2013) also argued that banks asset size and profitability have positive link. They claimed, giant banks make more money than small banks because of economies of scale.

On the contrary Obamuyi (2013) noticed negative association between size and financial performance in the context for Nigerian banking industry.

So there are mix results about the relationship between bank size and profitability.

***GOP Growth Opportunity Rate.*** Growth opportunity rate of banking firms is employed in this research as control explanatory variable. Measured formula is Assets of this year minus Assets of one year before, divided with Assets of one year before. According to Athanasoglou et al. (2008), a bank's credit might be curtailed during economic downturns, lowering the bank's profitability. On the other end, amid economic expansion and firm growth, when all areas of the economy are operating effectively, demand for a credit might grow, thus increasing the banking firms' profitability.

Others previous researches which have included GOP as explanatory variable for financial performance are Siddik, Kabiraj and Joghee (2016) and Abdul Basit, (2017).

***Liquidity.*** In this research liquidity is used as another explanatory variable. The capacity of a bank to satisfy short-term debt commitments when they are needed is measured by liquidity.

The lower the rate of return, the more liquid the assets are. The ratio of a bank's current assets to current liabilities is used to determine liquidity.

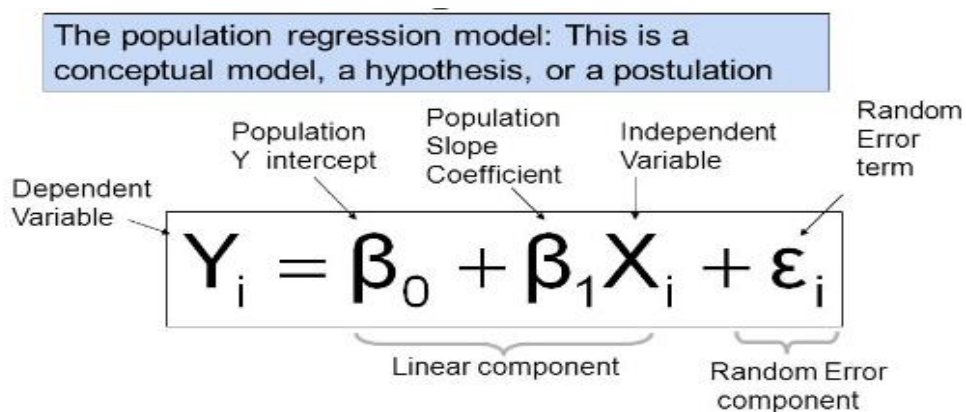
Previous studies which have included Liquidity as explanatory variable for financial performance are Siddik, Kabiraj and Joghee (2016) and Hassan and Alam (2014).

Different variables employed in this research with corresponding measuring formula are given in Table 5.1.

<b>Variables</b>	<b>Legends</b>	<b>Measuring Formula</b>
<b><i>Dependent/Explained variables:</i></b>		
(Return on Asset)	R O A	{Net. Profit. / Total. assets.} *100
(Return on equity)	R O E	{Net. Profit. / Total. Equity.} *100
(Earnings per share)	E P S	Net. Total income. / No. of Shares.
<b><i>Independent/Explanatory variables:</i></b>		
Long-term-Debt to total Assets.	LTDTA	Long-term-debt / Total. asset.
Short-term-Debt to total Assets.	STDTA	Short-term-debt / Total. asset
SIZE.	S Z	Natural-logarithm, of total. assets.
Growth Opportunity Rate.	G O P	(Assets of current year - Assets of previous year) / Assets of previous year.
Liquidity.	LQ DTY	Current-Asset / Current-Liabilities.

*Table 5.1. Variables and particulars.*

### Conceptual Model



The conceptual structure of this research is shown in Figure 6. Explanatory variables are displayed in yellow boxes. The black arrows indicate the direction of influence of those factors on the dependent variable i-e bank profitability. The three typical ratios of ROA, ROE, and EPS are used to determine profitability.

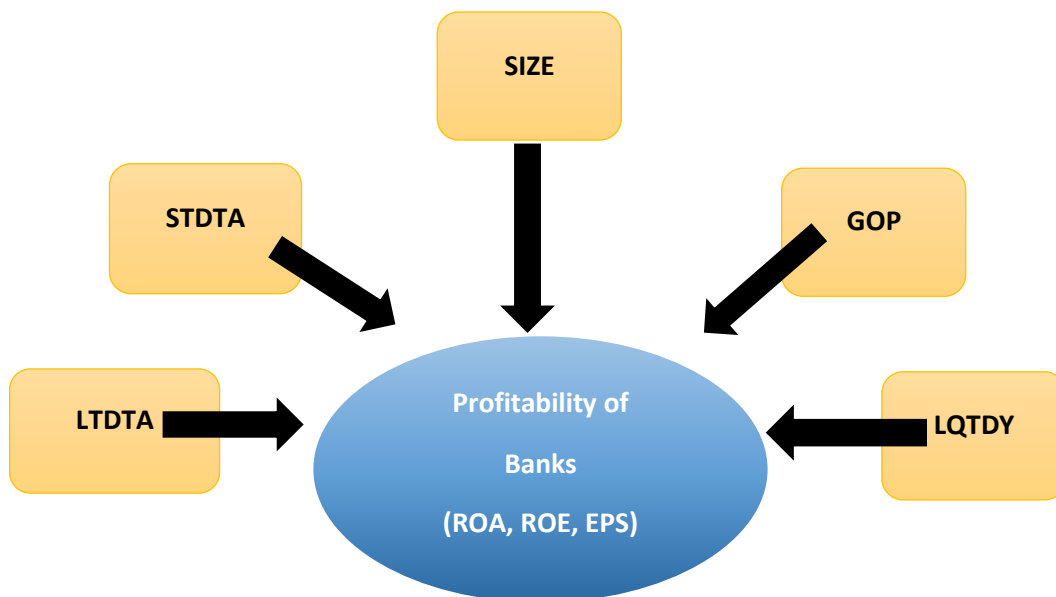


Figure 5.1

### **Empirical Model**

For the analysis, this research makes use of panel data and an OLS regression model with fix and random effect has been employed in this analysis, as similar techniques have been used in previous studies.

### **Fix Effect Regression Model.**

Fix Effect Regression Model is commonly use technique in regression analysis for panel data. Fixed effects regression estimation approach is useful in situations involving panel data because it facilitates the management of time-invariant unobserved individual traits that are correlated with the observed independent variables.

Let's suppose that the genuine linear model has the following structure.

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_i + u_{it}$$

Where,

Y= Dependent Variable

X= Explanatory Variables

Z= Unobserved Variable

$\mu$  = Error Term

i = Notation for number of Variable

t= Notation for number of time period

**by combining  $\beta_0$  and  $\beta_2 Z_i$  as  $\alpha_i$ , and  $\alpha_i$  is the fixed effect for entity i, as**

$$Y_{it} = \beta_1 X_{it} + \alpha_i + u_{it}$$

In a fixed effects regression, each model variable is subtracted by the time mean before the modified model is estimated using ordinary least squares. Using this technique, also known as "within" transformation, one may get rid of the invisible component and accurately estimate. We may use a technique known as entity-demeaned OLS to fix this. In order to remove the influence of those unobservable entity-unique but time-invariant factors from our outcome variable, the entity-demeaned in this case simply subtract from each observation its entity mean value.



$$\frac{1}{T} * \sum_{i=1}^T Y_{it} = \beta_1 * \frac{1}{T} * \sum_{i=1}^T X_{it} + \frac{1}{T} * \sum_{i=1}^T \alpha_i + \frac{1}{T} * \sum_{i=1}^T u_{it}$$

Assuming  $\alpha_i$  is constant over the time period the equation becomes

$$\frac{1}{T} * \sum_{i=1}^T Y_{it} = \beta_1 * \frac{1}{T} * \sum_{i=1}^T X_{it} + \alpha_i + \frac{1}{T} * \sum_{i=1}^T u_{it}$$

- By transforming (demeaning) the model

$$\bar{Y}_{it} = \beta_1 \bar{X}_{it} + \alpha_i + \bar{u}_{it}$$

$$Y_{it} - \bar{Y}_{it} = \beta_1 X_{it} - \beta_1 \bar{X}_{it} + \alpha_i - \alpha_i + u_{it} - \bar{u}_{it}$$

$$Y_{it} - \bar{Y}_{it} = \beta_1 (X_{it} - \bar{X}_{it}) + (u_{it} - \bar{u}_{it})$$

After Subtracting the time mean from each variable the model uses the same estimator as OLS which is Given as

$$\hat{\beta} = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{n \sum x_i^2 - (\sum x_i)^2}$$

### Random Effect Model.

Another technique that may be used in analyses utilizing panel data is known as the random effect model.

As discussed above fixed-effects approach just acknowledges the existence of individual differences. As a result, the parameter may be calculated by suppressing the constant and including a dummy variable for each cross-sectional unit or simply subtracting time means of each variable from each variable observation. However, in Random Effect regression model uses generalized least squares (GLS) estimation, taking into consideration the structure of the error factor, this model may be used to achieve more efficiency in some cases. Using "quasi-demeaned" data, or variables from which we deduct a portion of their average  $\theta$ . The random effects model's GLS estimator for the slope parameters is given as.

Suppose a model with Y as dependent and X as independent variable

$$\mathbf{y} = \mathbf{X}\beta + \varepsilon, \quad \text{where, } E[\varepsilon | \mathbf{X}] = 0, \quad \text{Cov}[\varepsilon | \mathbf{X}] = \mathbf{\Omega}.$$

$$\hat{\beta}_{RE} = \left( X' \Omega^{-1} X \right) \left( X' \Omega^{-1} y \right)$$

$$\Omega^{1/2} = \sigma_{\eta}^{-1} \left( I - T^{-1} \theta \iota_T \iota_T' \right)$$

$$\text{where } \theta = 1 - \frac{\sigma_{\eta}}{\sqrt{\sigma_{\eta}^2 + \sigma_u^2}}, \quad \sigma_{\eta}^2 = \text{Variance}$$

This study adopts an econometric model, in which banking firms profitability is showed as BPit, explained by ROA, ROE and EPS for banking firm of Pakistan in in year t. The model is stated underneth:

$$\mathbf{BPit} = \alpha_0 + \beta_1 \mathbf{CSit} + \lambda_1 \mathbf{CONTit} + \varepsilon_{it} \quad (1)$$

For the mentioned regression equation, BP represent banking firm's profitability measures in time period t i-e (dependent variables). CSit corresponds to the capital structure variables (independent variables). CONTit represent control variables, which include GOP growth opportunity rate, Size and Liquidity of the banks for the time period t.  $\varepsilon_{it}$  represent the error term and  $\alpha_0$  corresponds to a bank performance intercept or constant.

In this study, it has three parameters for bank, assessing banks profitability or performance, namely, ROA, ROE and EPS, the regression models for this research will be as below.

$$ROA_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 SIZE_{it} + \lambda_2 GOP_{it} + \lambda_3 LQTDY_{it} + \epsilon_{it}$$

(2)

$$ROE_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 SIZE_{it} + \lambda_2 GOP_{it} + \lambda_3 LQTDY_{it} + \epsilon_{it}$$

(3)

$$EPS_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 SIZE_{it} + \lambda_2 GOP_{it} + \lambda_3 LQTDY_{it} + \epsilon_{it}$$

(4)

where  $\beta_1$ , and  $\beta_2$  are the regression coefficient or slope for the capital-structure variables LTDTA, and STDTA, and  $\lambda_1$ ,  $\lambda_2$  and  $\lambda_3$  are regression coefficient/slope of control variables, which are SIZE, GOP and LQTDY, respectively.

## CHAPTER VI

### DATA ANALYSIS

#### Descriptive statistics

In this research, descriptive statistics are utilized to analyze the nature and trend of the data. Information on descriptive statistics, such as mean, the range of the values by Minimum and Maximum, standard deviations, and skewness and kurtosis data distribution test values for all the variables employed are given in table 6.1.

The average provided by mean values show the central trend of the data within each variable. The mean value for ROA is 1.5033 with minimum value of 1.5247 and maximum value of 4.5471 and standard deviation which is measure of dispersion from means is 0.81 which much lower as compare to mean (14.6209) and Standard Deviation (6.18) of ROE. Which shows that ROA has been relatively consistent for the banks analyzed over the time period of the study as compare to ROE, which has reported higher fluctuations over the time period as evident from the standard deviation.

For Earning per share mean value is 10.9759 while standard deviation is much higher at value of 7.36.2.

Mean of LDTA is 0.8837 while for STDTA is 0.0180 while standard deviation for STDTA is much lower i-e 0.0139 as compare to that of LTDTA i-e 0.3977.

Among the control variable standard deviation for GOP is higher at 7.16 followed by LQTDY at 6.3302. while size has lower standard deviation of 0.6898 with mean of 20.4742 and maximum range of 21.7808 and lower range of 18.2192, which shows that there is small difference among the size for the banks analyzed.

Skewness is another statistical term which measure distribution's asymmetry. A distribution is term as asymmetrical if its left and right sides do not reflect each other perfectly otherwise in symmetrical distribution show a perfect bell shape.

Any data distribution can have skewness that is right (or positive), left (or negative), or zero. While right-skewed distributions are longer on the right side and have statistically positive numerical values, while left-skewed distributions are longer on the left side of their peaks and have negative numerical values.

All variable observed in this research have skewness value close to zero apart from STDTA which has positive skewness of 2.1055 which indicate that few banks have occasionally included higher short term debt in their capital structure.

Other variables for whom relatively significant skewness values are observed are ROA, GOP and LQTDY they are positively skewed while LTDTA is negatively skewed at -0.8316 which shows that for some banks over the time decline in the Long term debt have been incurred from time to time

Similar to skewness, the statistical term "kurtosis" is used to define distribution pattern in a sample data. While skewness makes a distinction between extreme values in one tail against the other showing negative or positive value indicating the extreme values in the lower or high ends in the sample. While kurtosis evaluates extreme values in either tail, which means it only describe the extremity in the distribution but don't show it is below the mean or above the mean.

In capital structure variable higher value of Kurtosis is observed for STDTA at 7.1216 as compare to LTDTA which is 3.211 which show high extreme in STDTA over the time which is also evident from the skewness observation for STDTA.

For dependent variable relatively high Kurtosis is observed for ROA followed by ROE while for EPS it has the lowest value at 1.77 comparatively which indicate that the EPS for the banks have been consistent and the EPS have not been to any extreme for any bank over the time period.

In control variable GOP has reported high Kurtosis value at 6.4021 followed by LQDTY at 3.1111 and SIZE at 3.1444.

DESCRIPTIVE STATISTICS TABLE								
	ROA	ROE	EPS	LTDTA	STDTA	SIZE	GOP	LQTDY
<b>Mean.</b>	1.50	14.62	10.97	0.88	0.01	20.47	12.25	9.82
<b>Maximum.</b>	4.54	33.20	24.18	0.94	0.06	21.78	42.68	29.49
<b>Minimum.</b>	0.01	1.23	0.02	0.77	0.001	18.21	-7.05	1.89
<b>Std. Dev.</b>	0.81	6.18	7.36	0.39	0.0139	0.68	7.16	6.33
<b>Skewness.</b>	0.69	-0.20	0.14	-0.83	2.1055	-0.29	0.98	0.89
<b>Kurtosis.</b>	4.52	3.34	1.77	3.2	7.1216	3.14	6.40	3.11
<b>Observations.</b>	77	77	77	77	77	77	77	77

*Table 6.1*

### Correlations

The variables are compared between each pair using the bivariate correlation. All the required study variables—dependent and explanatory—are subjected to this test. Correlation studies' importance is determined by how well they reveal the relationships between the pairs of variables and whether there are any problems with multicollinearity among the explanatory components.

Numerically, the correlation matrix values fall between +1 and -1, denoting perfect positive connection and perfect negative association, respectively.

In the table give below, refer to how different variables used in this research are correlated to each other.

The findings show that there are moderate relationships between the variable pairs. However, for ROA and ROE, because the two measurements give the same information from different perspectives, return on equity and return on assets have a strong and positive connection.

The table 6.2. indicate that long, term debt ratios is negatively correlated with ROA, ROE and EPS, while positive correlation is observed between STDTA and ROA and negative correlation between STDTA and ROE and EPS.

Size and return on assets correlate negatively. These might suggest that smaller banks are more efficient or that massively lucrative banks choose to maintain fewer assets but invest in different investments programs. Though there is a positive correlation between profitability as determined by earnings per share and bank size as determined by total assets.

<b>CORELATION TABLE</b>								
	<b>ROA</b>	<b>ROE</b>	<b>EPS</b>	<b>LTDTA</b>	<b>STDTA</b>	<b>SIZE</b>	<b>GOP</b>	<b>LQTDY</b>
<b>ROA</b>	1							
<b>ROE</b>	0.794	1						
<b>EPS</b>	0.633	0.555	1					
<b>LTDTA</b>	-0.465	-0.038	-0.057	1				
<b>STDTA</b>	0.104	-0.156	-0.131	-0.762	1			
<b>SIZE</b>	-0.035	0.005	0.464	0.259	-0.284	1		
<b>GOP</b>	0.010	0.150	0.253	0.203	-0.052	0.164	1	
<b>LQTDY</b>	-0.228	-0.128	-0.133	0.265	-0.500	0.164	-0.062	1

*Table 6.2*

### Unit Root Analysis

On panel data, the unit root test was used to prevent the formation of false regression results. The null hypothesis in this investigation is that there is no unit root in the panel, while the alternative hypothesis is that there is unit root in the panel. The outcome of the test indicates that there is no unit root for any variable at the level being tested. Which indicate that the data fit for Fixed and Random effect regression analysis.

Details of the tests are given as following.

#### UNIT ROOT ANALYSIS AT LEVEL.

Variable	<i>Levin, Lin &amp; Chu Unit Root Test.</i>		<i>Phillips-Perron.Fisher Unit Root Test.</i>		COMMENTS
	Statistic	Prob.	Statistic	Prob.	
<b>ROA</b>	-2.041	0.0206	25.0472	0.0341	Reject Null Hypothesis
<b>ROE</b>	-3.59022	0.0002	25.7304	0.0280	Reject Null Hypothesis
<b>EPS</b>	-3.88818	0.0001	25.9759	0.0261	Reject Null Hypothesis
<b>LTDTD</b>	-2.50466	0.0061	35.5988	0.0012	Reject Null Hypothesis
<b>STDTA</b>	-3.84435	0.0001	41.2998	0.0002	Reject Null Hypothesis
<b>SIZE</b>	-1.80177	0.0358	29.6448	0.0085	Reject Null Hypothesis
<b>GOP</b>	-2.54685	0.0005	26.0126	0.0258	Reject Null Hypothesis
<b>LQTDY</b>	-7.48593	0.0001	28.7095	0.0114	Reject Null Hypothesis



Table 6.3

**Regression Analyses**

As already discussed the regression models used in this study are:

$$ROA_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 SIZE_{it} + \lambda_2 GOP_{it} + \lambda_3 LQTDY_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 SIZE_{it} + \lambda_2 GOP_{it} + \lambda_3 LQTDY_{it} + \varepsilon_{it}$$

$$EPS_{it} = \alpha_0 + \beta_1 LTDTA_{it} + \beta_2 STDTA_{it} + \lambda_1 GOP_{it} + \lambda_2 SIZE_{it} + \lambda_3 LQTDY_{it} + \varepsilon_{it}$$

**Capital structure and ROA regression analyses**

To assess the effect of financial structure on ROA of Banks, this study applied the pooled OLS, fixed and random effect models. The Hausman specification test in Table 6.4a provided a p-value of 0.2048. This value is greater 0.05 thus, random effect model is most appropriate for estimation.

<b>Hausmen Test.</b>			
<b>Test Summary</b>	<b>Ch-sq Statistic</b>	<b>Ch-sq.d.f</b>	<b>Prob</b>
Cross-Section Random	8.4835	6	0.2048

Table 6.4a

**Fixed Effect Regression Analysis.**

<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	12.177	3.763	3.235	0.002
<b>LTDTA</b>	-4.979	4.890	-1.018	0.312
<b>STDTA</b>	-12.732	7.728	-1.647	0.104
<b>SIZE</b>	-0.340	0.203	-1.677	0.099
<b>GOP</b>	0.003	0.006	0.446	0.657
<b>LQTDY</b>	0.003	0.014	0.262	0.793

<b>R Square</b>	0.81	<b>Durbin Watsan Stat</b>	2.28
<b>Adjusted R Square</b>	0.78		
<b>F-Statistic</b>	21.62		
<b>Prob F-Statistic</b>	0.0000		

Table 6.4b

**Random Effect Regression Analysis.** The random effect estimation shows that financial structure variables, long term debt to total asset and short term debt to total assets both have negative effect on ROA and are significant variables at 5 % and 10 % probability.

SIZE is also significant at 1% probability and has negative impact on ROA.

Further Durbin Watson statistics values of 2.31 confirm that there is no autocorrelation among variable and adjusted R-square of confirm that the model account for 77.3% variation in ROA, hence both values confirm that the model is a good fit and the regression is valid. As shown in table 6.4c.

<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	9.884	2.682	3.684	0.0005
<b>LDTA</b>	-5.913	2.589	-2.283	<b>0.025</b>
<b>STDTA</b>	-11.369	6.951	-1.635	<b>0.100</b>
<b>SIZE</b>	-0.200	0.078	-2.549	<b>0.013</b>
<b>GOP</b>	0.003	0.006	0.467	0.641
<b>LQTDY</b>	0.002	0.009	0.250	0.803

<b>R Square</b>	0.793	<b>Durbin Watsan Stat</b>	2.31
<b>Adjusted R Square</b>	0.773		
<b>F-Statistic</b>	40.240		
<b>Prob F-Statistic</b>	0.000		

Table 6.4c

*Capital structure and ROE regression analyses*

To assess the effect of financial structure on ROE of banking firms, this study applied regression, fixed and random effect models. The Hausman specification test in Table 4.4 provided a p-value of 0.3310. This value is greater 0.05 thus, random effect model is most appropriate for estimation. As shown in table 6.5a.

<b>Hausmen test.</b>			
<b>Test Summary</b>	<b>Ch-sq Statistic</b>	<b>Ch-sq.d.f</b>	<b>Prob</b>
Cross-Section Random	6.8912	6	0.3310

Table 6.5a

<b>Fixed Effect Regression Analysis.</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	63.618	41.647	1.527	0.132
<b>LTDTA</b>	-0.337	58.332	-0.005	0.995
<b>STDTA</b>	-106.644	86.320	-1.235	0.221
<b>SIZE</b>	-2.665	2.452	-1.086	0.281
<b>GOP</b>	0.125	0.080	1.556	0.125
<b>LQTDY</b>	0.045	0.163	0.276	0.783
<b>R Sqaure</b>	0.545	<b>Durbin Watsan Stat</b>	2.437	
<b>Adjusted R Square</b>	0.449			
<b>F-Statistic</b>	5.698			
<b>Prob F-Statistic</b>	0.00001			

Table 6.5b

**Random Effect Regression Analysis.**The random effect estimation shows that financial structure variables i-e long term debt to total asset and short term debt to total asset have negative impact on ROE. STDTA is significant at 10 % probability, while LTDTA at 15 %

SIZE is significant at 5 %and has negative impact on ROE. While GOP is having positive relationship with ROE and significance at 10% probability.

Further Durbin Watson statistics has values of 2.51 confirm that there is no autocorrelation among variable and adjusted R-square confirm that the model account for 44% variation in ROE, hence both values prove that the model is a good fit and the regression is valid. As shown in table 6.5c..

<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	75.128	28.052	2.678	0.009
<b>LTDTA</b>	-36.736	23.008	-1.596	<b>0.115</b>
<b>STDTA</b>	-126.143	72.915	-1.730	<b>0.088</b>
<b>SIZE</b>	-1.707	0.923	-1.850	<b>0.069</b>
<b>GOP</b>	0.133	0.075	1.757	<b>0.083</b>
<b>LQTDY</b>	-0.046	0.106	-0.434	0.665
<b>R Sqaure</b>	0.49	<b>Durbin Watsan Stat</b>	2.51	
<b>Adjusted R Square</b>	0.44			
<b>F-Statistic</b>	10.10			
<b>Prob F-Statistic</b>	0.00			

Table 6.5c
------------

*Capital structure and EPS regression analyses*

To assess the effect of financial structure on EPS of banking firms, this study applied regression, fixed and random effect models. The Hausman specification test in Table 6.6a provided a p-value of 0.0017. This value is less than 0.05 thus, fixed effect model is most appropriate for estimation. As shown in table 6.6a.

<b>Hausmen test.</b>			
<b>Test Summary</b>	<b>Ch-sq Statistic</b>	<b>Ch-sq.d.f</b>	<b>Prob</b>
Cross-Section Random	21.2131	6	0.0017

Table 6.6a

**Random Effect Regression Analysis.**

<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	24.950	16.623	1.500	0.138
<b>LTDTA</b>	-23.623	14.171	-1.666	0.100
<b>STDTA</b>	-64.209	42.109	-1.524	0.132
<b>SIZE</b>	-0.130	0.753	-0.172	0.863
<b>GOP</b>	0.136	0.045	2.964	0.004
<b>LQTDY</b>	-0.022	0.065	-0.344	0.731

<b>R Sqaure</b>	0.85	<b>Durbin Watsan Stat</b>	2.09
<b>Adjusted R Square</b>	0.84		
<b>F-Statistic</b>	61.56		
<b>Prob F-Statistic</b>	0.00		

Table 6.6b

**Fixed Effect Regression Analysis.**The fixed effect regression shows that financial structure variables i-e long term debt to total asset and short term debt to total asset have negative impact on EPS.LTDTA and STDTA are significant at 10 % probability.

While GOP is having positive relationship with EPS and is significant at 1% probability.

Further Durbin Watson statistics has values of 1.95 confirm that there is no autocorrelation among variable and adjusted R-square confirm that the model account for 87% variation in EPS, hence both values prove that the model is a good fit and the regression is valid. As shown in table 6.6c.

<b>Variable</b>	<b>Coefficient</b>	<b>Std.Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>C</b>	38.744	24.102	1.607	0.113
<b>LTDTA</b>	-65.677	35.341	-1.858	<b>0.068</b>
<b>STDTA</b>	-93.261	51.287	-1.818	<b>0.074</b>
<b>SIZE</b>	1.256	1.483	0.846	0.400
<b>GOP</b>	0.142	0.048	2.942	<b>0.004</b>
<b>LQTDY</b>	-0.049	0.100	-0.497	0.621
<b>R Sqaure</b>	0.89	<b>Durbin Watsan Stat</b>	1.95	
<b>Adjusted R Square</b>	0.87			
<b>F-Statistic</b>	39.08			
<b>Prob F-Statistic</b>	0.00			

Table 6.6c
------------

## CHAPTER VII

### Conclusion

#### Research Findings

According to the findings of this study, (LTDTA) long term debt and (STDTA) in the capital structure have a negative influence on the financial profitability of banking enterprises in Pakistan. This is confirmed by the regression result where both LTDTA and STDTA have negative relation with ROA of the banking firms in Pakistan. This finding is consistent with Hassan and Samour, (2015), Khalaf Taani, (2013) and Siddik, Kabiraj and Joghee (2016). Further ROA has inverse relation with size of the firms. Which indicate that larger banking firms are not managing their assets efficiently.

This research revealed LTDTA have no or little association with ROE, the Modigliani and Miller Theorem (1958) supports this notion, which state that if all other factors stay constant, capital structure has no influence on company performance. However, in today's globe and in economies such as Pakistan's, it is hard to keep everything consistent. However, STDTA has negative impact on ROE and is significant at 10% probability. Same relation is observed for size and ROE as in case of ROA that is bigger the size of the banks lower the ROE and ROA. However, another significant variable is the growth rate of the banking firm with ROE, growth rate has positive association with ROE.

In case of impact of capital structure on EPS, LTDTA and STDTA show a negative relationship with EPS, according to this study. Which again illustrate that banking firm in Pakistan are not managing their debt efficiently.

Also in the regression analyses for EPS, growth of banking firms (GOP) has found to be positively related to EPS.

So it is concluded that this study support Pecking order theory. This theory, as introduced by Myers and Majluf in 1984, states that corporations should not rely too much on debt financing rather they should first employ internal financing, such as retained earnings, before turning to debt financing and then issue shares as a last option for financing. When managers have to decide which source of financing to use first, they should choose internal resources, and if those are insufficient, then firms should

acquire debt. So to increase the financial efficacy of the firm's managers in the banking industry in Pakistan need to stress on internal finances rather than depending too much on debt. Or the other explanation for this can be that banks in Pakistan are not managing their funds, acquired through institutional borrowing or depositor's liability efficiently and consequently banks are paying more interest to lenders or depositors than revenue or profits banks are generating.

This study also observed that size has negative association to the performance of banks for both ROA and ROE in Pakistan. Which indicate that larger banking firms are not managing their assets efficiently.

The positive association of GOP with ROE and EPS suggest that there is good scope for the banking sector in Pakistan given the fact if the banks manage their funds in efficient way and restrain from excessive borrowings and making reduce interest rate to depositors to achieve a profitable spread.

As a result, this research argue that capital structure has a major detrimental influence on the performance of Pakistani banks. These negative effects, may be explained by the characteristics of undeveloped capital markets in developing countries such as Pakistan, which include information asymmetry, tight loan covenants, and other factors that result in a high debt cost. Also as banks generate its revenue by loaning out depositors' funds on higher interest rate, in Pakistan being in Islamic country because of religious reasons, where interest is prohibited by Islam, this notion is not accepted well by the general population, so it makes it harder for banks to loan out the funds easily. Alternatively, banks should strive to find ways of investments for example Ijara and Muradaba etc which are not against Islam and win over public confidence.

### **Research Discussions**

Khalaf Taani, (2013) a research conducted on similar agenda in Jordan using almost the same variables and methodology. Although this study was carried out on the manufacturing sector of the Jordanian economy but the research share almost the similar results.

According to it negative relationship was observed between debt and ROA which is consistent with this study. While the other financial performance variables associations with capital structure variables give mixed results.



Siddik, Kabiraj and Joghee (2016), this investigation assessed, implications of capital structure decision on the profitability of bangladeshi banks, using data from 22 banks from 2005 to 2014. All capital structure factors, such as TDTA, LTDTA, and STDTA, show substantial inverse effects on ROA, according to the findings. TDTA and STDTA were also discovered to have significant detrimental effects on ROE. Also LTDTA and STDTA had considerable detrimental effects on EPS, according to the findings of this study.

Growth possibilities, size, and inflation all have favorable associations with bank performance in developing economies, such as Bangladesh, although liquidity and GDP have negative associations.

As a result, it was determined, that leverage had a major negative influence on Bangladeshi bank performance. The finding of this study is almost consistent with my research as both studies postulated that capital structure has negative impact on the financial performance of the firms. Although in case of size both studies are in contrast to each other.

Hassan and Samour, (2015) findings suggest that the influence of capital structure on business performance varies by industry. For instance, in the Consumer Services, Healthcare, and Technology industries, this study uncover statistically validated relationships. For example, regarding the impact of long-term debt on firm performance in the IT industry, this study discovers a link. This study shows a negative relationship, implying that a greater amount of long-term debt resulted in worse company performance. This is due to the fact that the technology industry is both research and capital demanding, as well as long-term oriented, which means that these companies frequently require large amounts of external cash, but the return on their borrowed funds is paid back several years later.

Similar result was observed in my research where a significant negative relation was established between Long term debt and banks ROA.

Abdul Basit (2017) This research was conducted in Malaysia. The time period in which this research was conducted ranges from year 2011 to 2015. The research problem investigated in this study was to assess how capital-structure is associated with the profitability of industrial manufacturing organizations in Malaysia.

The debt to equities, total debt to asset, and total equity to asset, ratios were injected as explanatory financial design variables in this study. The dependent variables used to quantify businesses efficacy are return on asset (ROA), return on equity (ROE), and earnings per share (EPS). Multiple regression (Fixed and Random Effect Model) were used in this research. According to the findings of this study, to summarize, raising debt finance for an business investigated can lessen agencies problems and give tax incentives, but too much debt financing to businesses will result in poor financial-performance of the businesses.

Comparing the finding of this study with current research it can be seen that in the nutshell both findings are contradictory to each other. As Abdul Basit, 2017 stress on positive impact of debt on the financial performance of firms which is evident from the positive significant impact on earnings per share, while this research finding suggest that debt financing is not a smart option in terms of financial performance of banking firms in Pakistan as shown by the negative relationship between Debt variable and ROA, ROE and EPS. These opposite findings of both studies can be result of the matter of fact that two researches were conducted in different economies with diverse time period and on different business industries.

Gerald G. Nyambane and Amin W. Muger (2015) They investigate the impact of capital structure (as evaluated by long-term debt to assets and short-term debt to assets) and tax liabilities on farm yields or production and profitability as measured technical efficiency and return on assets in Australia. This study used panel data in the analyses and used multiple regression (fixed and random effect models). The researchers employed yearly data of ten years in this study. They discovered proof that Broad acre farms in Australia are not utilizing the most advanced technologies and, as a result, are not functioning at optimum scale. The short-term debt structure of the farms has a positive relationship with technological efficiency, but a negative association with return on assets (ROA). As a result, employing short-term debt to acquire critical agricultural supplies and sustain farm operations can increase technical efficiency.

Short-term debt has an unfavorable association with Return-on-Asset, however long-term debt has no impact on agricultural efficiency or R.O.A. This might suggest, long-term debt has little impact on day-to-day management operations.

This finding is in line according to cash flow theory (trade off theory), which claims as, the advantages of short-term-debt might push the businesses to enhanced productivity. As a result, structural reforms that allow farmers accessibility to short-term finance will boost technical efficiency of farms in Australia.

Qayyum and Noreen (2019) is another research conducted in Pakistan. The area of study on which this research was conducted are Banking industry of the country. This study looks at how capital structure affects business performance in banking firms in Pakistan. Main criteria of the research are discussed as under .

For this research 10 different banks with in banking industry of Pakistan was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2006 till 2015. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Pakistan. The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. Also this study analyze and compare the capital structure of the islamic banks and conventional traditional banks which were included in the study sample. To assess this hypothesis OLS regression model using panel data with fix and random effect was employed in this study.while to compare the capital structure of the two mentioned distinct banks groups T-Test was applied. Different variable used in this model are the following.Return on Asset, Return of equity and Earning Per share which are main measures of financial performance for any firm were employed as dependent variables.For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include total debt to equity and total debt to assets ratios . While the control variable include (Equity to assets ratio and business size).

Main conclusion of this study are as following.For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus of this study it was concluded that debt financing has mix impact on the financial performance of the firms.This is evident from the fact that For, both traditional and Islamic banks' capital structures have a negative link with ROA. In contrast, ROE has positive association with both conventional and Islamic banks' capital structures. Additionally, for both Islamic and traditional banks, capital structure explanatory factors had positive relationship with EPS. Additionally, for both Islamic and

traditional banks, capital structure explanatory factors had positive relationship with EPS. This study confirms economies of scale as Size has significant positive relation with financial profitability. Because of the mix impact of debt financing on the profitability of the firms this study concludes itself in support of pecking order theory and Trade off theory for both distinct groups of banks. As both the studies confirm that debt has detrimental effect on the financial profitability of the firm, this can be because of the fact that financial industry in Pakistan has not fully developed and bigger banks have assets which they cannot utilize optimally. As in Pakistan common people being not prone toward getting loans from bank for houses, cars, businesses and other consumer products so as a result much of the bank assets remains idle.

Jian, Zhiliang and Yue (2021) is another research conducted in China. The area of study on which this research was conducted is Agriculture industry of the country. This study looks at how capital structure affects business performance of agricultural firms in China. Main criteria of the research are discussed as under .

For this particular research different companies within agricultural industry of China was selected and applied as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2013 till 2019. Other data for the macroeconomic variable used in this study was obtained from world bank and ministry of trade of China government.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis OLS regression model using panel data with fixed and random effect was employed in this study. Different variables used in this model are the following. Return on Asset and Return of equity which are main measures of financial performance of any firm were employed as dependent variables. For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, and total debt ratios. While the control variables include ( business size, and firm age).

The following points are the primary conclusions drawn from this research: For the effect of borrowings to finance firms, on the successfulness of the companies analyzed, which was the principal subject of this study, it was concluded that debt is not actually beneficial in this case. This research is of the opinion that too much

debt is not efficient and this could lead to deteriorating the company value. Instead when it comes to financing the company activities this research recommend that firms should do their best firstly to source their funds from internal earning as this will effectively improve the company value. This study revealed that debt finance has negative association with the agriculture businesses in China and hence supported Pecking order theory. This study revealed that debt finance has negative association with the agriculture businesses in China and hence supported Pecking order theory and prove consistency with current research findings.

Chalise and Adhikari (2022) is a research study conducted in Nepal. The area of study on which this research was conducted are banking industry of the country. This study looks at how capital structure affects business performance in banking firms in Nepal. Main criteria of the research are discussed as under .

For this research 14 different firms with in banking industry of Nepal was selected and employed as sample for this study. Data from annual reports of these sample firms was retrieved covering time period ranging 2013 till 2019. other data for the macroeconomic variable used in this study was obtained from world bank and state bank of Nepal.

The main hypothesis of this study is to evaluate how capital structure impact the financial performance of the firm. To assess this hypothesis OLS regression model using panel data wit fix and random effect was employed in this study. Different variable used in this model are the following.

Return on Asset , Return of equity and Earning Per Share which are main measures of financial performance of any firm were employed as dependent variables to evaluate financial performance of the firms analyzed.

For independent or explanatory variables capital structure proxies along with control variables were used. The capital structure proxies include Long-term debt ratios, short-term debt ratios, total debt ratios, and total debt to equity ratios . While the control variable include ( business size, Liquidity).

Main conclusion of this study are as following. For the effect of capital structure variables on the financial performance of the analyzed firm, which were the main focus of this study it was concluded that debt financing has negative impact on the financial

performance of the firms. This is evident from the fact that capital structure proxies ( LTDTA and Debt to Equity ) have significant negative relation with financial profitability as assessed by ROA and EPS. Finding of this study also suggests the Size has significant positive association with ROA. Because of the negative impact of debt financing on the profitability of the firms this study concludes itself in support of pecking order theory which is also consistent with current study.

Many studies conducted on same subject reported mixed connection between capital structure and firm's financial performance, as the discussion on few studies were mentioned above. But on the broader view although findings were mixed in many studies but each of the research has stronger inclination toward either negative or positive impact of capital on the performance of firms.

Based on the findings of these studies, it can be stated that capital structure and company performance do have a negative relationship.

As shown in this study that capital structure has a negative influence on banks performance in Pakistan such as confirmed by the ROA, ROE and EPS regression.

So this study rejects the first null hypothesis. And as a result this study supports pecking order theory.

Financial managers must choose to finance through retained earnings rather than significantly relying on loan capital in their capital structure. They can, however, use borrowed capital as a last option and, if feasible, should use short-term debt and should make efficient investment of funds acquired through deposits or institutional borrowing. Financial managers should strive to achieve an ideal level of capital structure and maintain it as much as feasible in order to maximize the performance of their businesses.

This negative relationship implies that the government should establish legislative laws and programs to aid banking businesses in significantly lowering their reliance on excessive debt and simplify ways for banks to loan or invest funds.

### **Recommendations**

Increasing the value of the firm requires careful consideration of the optimal capital structure. Therefore, in order to increase the value of the company, the organization has to devise a strategy that incorporates both debt and equity investments. The manner in which a corporation finances its operations, whether via the use of debt or equity, is referred to as its capital structure. If this structure is properly arranged, the cost of capital will be reduced, which will result in an increase in the value of the firm. The capital structure is the most critical option that can be made by management since it affects the risk and return that is presented to shareholders. If a company does not adequately organize its capital structure and does not make effective use of its available capital, the company may run into financial difficulties while attempting to carry out its commercial operations.

According to this study, debt has a negative impact on banks profitability as assessed by ROA, ROE and EPS. Taking on more debt than necessary will increase the cost of capital and have a detrimental impact on the bank's performance. According to the research, banks in Pakistan should utilize less debt since it reduces their financial performance. Banks in Pakistan should rely more on their internally generated funds that is retained earnings, since they are the most cost-effective and trustworthy.

This potentially detrimental effect of the capital structure on the profitability of banks may also be attributable to the fact that bank in Pakistan are not investing the funds efficiently acquired through deposits and hence the cost of financing is more than the revenue.

To tackle this problem, it is recommended that banks in Pakistan should minimize its borrowing and lowering the term deposits from public if they can't invest the acquired funds optimally as it will result in higher cost of finance and lower revenue and consequently decrease profitability or loss. This objective can be achieved by lowering the interest rate on deposits to avoid excessive funds and effectively investing the available funds so that banks do not hold idle funds and maximum revenue are generated.

As debt finance can help with concerns like agency payments and tax payments. As a result, to take advantage of debt financing, banks may increase their company's debt

level but specifically short term debt which has reported weak association with the financial performance, but after proper evaluation.

Since Pakistan is an Islamic country where general population have strong affection for Islam and Islam strongly prohibit interest, so it become very hard for banks in Pakistan to loan out funds to the general people to generate revenue which is a traditional and major source of revenue for banks, as people in Pakistan have a bad attribute toward interest because of religious reasons. It is suggested that banks in Pakistan should get effectively involve in Islamic banking and try engage people with them financially and socially by winning their confidence. This way banks can effectively manage their funds and make high profitability.

Because of negative relationship between SIZE and financial performance larger banks are suggested to decrease their unprofitable liabilities and evaluate their investment policies properly with easy and effective options available for people to work together with banks. Also the should increase their effort to utilize their assets optimally.

So it's necessary that before deciding on a capital structure, a bank's management in Pakistan should assess the influence of debt financing on the company's performance. Also because of this unfavorable association, the government of Pakistan should enact legislation and initiatives to assist banking sector in particular, in reducing their reliance on excessive debt and provide easy channels of equity financing for them. Also such arrangement, laws and policies from government are necessary which should create effective and safe environment for banks to invest their funds efficiently.



## References

- Abubakar, A. (2015). Relationship between financial leverage and financial performance of deposit money banks in Nigeria. *International Journal of Economics, Commerce and Management*, 3(10), 759-778.
- Abdul Basit (2017) *International Journal of Accounting & Business Management*-Vol. 5 (No.2), November, 2017 ISSN: 2289-4519
- Afroze and Khan (2020) Impact of Capital Structure on Firm Performance: Evidence from the Pharmaceuticals & Chemicals Sector in Bangladesh. *THE COST AND MANAGEMENT*-ISSN 1817-5090, VOLUME-50, NUMBER-01, JANUARY-FEBRUARY 2022
- Ahmad, Z., Abdullah.M.A, and Roslan.M (2012), “Capital Structure Effect on Firms Performance: Focusing on Consumers and Industrials Sectors on Malaysian Firms” *International Review of Business Research Papers* Vol. 8. No.5. Pp. 137 – 155
- Albertazzi, U., &Gambacorta, L. (2009). Bank profitability and the business cycle. *Journal of Financial Stability*, 5(4), 393-409.
- Alshatti, A. S. (2015). The effect of the liquidity management on profitability in the Jordanian commercial banks. *International Journal of Business and Management*, 10(1), 62.
- Alshatti, A. S. (2016). Determinants of banks’ profitability– the case of Jordan. *Investment Management and Financial Innovations*, 13(1), 84-91.
- Amin W. Muger and Gerald G. Nyambane,(2015) *Australian Journal of Agricultural and Resource Economics*, 2015, vol. 59, issue 2, 208-224
- Anbar, A., &Alper, D. (2011). Bank specific and macroeconomic determinants of commercial bank profitability: Empirical evidence from Turkey. *Business and economics research journal*, 2(2), 139-152.
- Athanasoglou.P (2008). Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability. *Journal of International Financial Markets Institutions and Money* 18(2):121-136
- Aziz and Abbas (2019) *Open Journal of Economics and Commerce* Volume 2, Issue 1, 2019, PP 8-15, ISSN:2638-549X
- Baker, M., and J. Wurgler, (2002), “Market timing and capital structure”, *Journal of Finance* 57.
- Balasubramaniam, C. S. (2012). Non-performing assets and profitability of commercial banks in India: assessment and emerging issues. *Abhinav, National Monthly Refereed Journal of Research in Commerce & Management*, 1(7), 41-52.

- Barth, M. E., Beaver, W. H., & Landsman, W. R. (1996). Value-relevance of banks' fair value disclosures under SFAS No. 107. *Accounting Review*, 513-537. 80
- Batten, J., & Vo, X. V. (2019). Determinants of bank profitability—Evidence from Vietnam. *Emerging Markets Finance and Trade*, 55(6), 1417-1428.
- Baxter N.D (1967) Leverage, Risk of Ruin and the Cost of Capital. *The Journal of Finance*, 22, 395-403.
- Brennan, M.J., and E.S. Schwartz, (1984), "Optimal financial policy and firm valuation", *Journal of Finance* 39.
- Cassar G. and Holmes, S. (2003), "Capital Structure and Financing of SMEs: Australian Evidence", *Accounting and Finance*, vol. 43, no. 2, pp. 123-147.
- Castanias, R. and DeAngelo, H. (1981), "Business Risk and Optimal Capital Structure", *University of Washington Working Paper*.
- Coleman, S. and Cohn, R. (1999), "Small Firms' Use of Financial Leverage: Evidence from the 1993 National Survey of Small Business Finances", *University of Hartford Working paper*
- Chalise and Adhikari (2022). The Impact of Capital Structure and Firm Size on Financial Performance of Commercial Banks in Nepal- The Efforts, *Journal of Education and Research* Volume 4, Issue 1, February, 2022, pp. 102-111
- Clark, J. A. (1986). Single-equation, multiple-regression methodology: Is it an appropriate methodology for the estimation of the structure-performance relationship in banking? *Journal of Monetary Economics*, 18(3), 295-312.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of management*, 37(1), 39-67.
- Cornett, M. M., & Saunders, A. (2003). *Financial institutions management: A risk management approach*. McGraw-Hill/Irwin. 81
- DeAngelo, H. and R. Masulis, (1980), "Optimal Capital Structure under Corporate and Personal Taxation", *Journal of Financial Economics*, vol. 8, no. 1, pp. 3-29.
- De Miguel, A. and Pindado J. (2001), "Determinants of Capital Structure: New Evidence from Spanish Panel Data", *Journal of Corporate Finance*, vol. 7, no. 1, pp. 77-99.
- Fama, E., and K.R. French, (2002), "Testing trade-off and pecking order predictions about dividends and debt", *Review of Financial Studies* 15, 1-33.
- Ferri, M.G. and Jones, W.H. (1979), "Determinant of Financial Structure: A New Methodological Approach", *The Journal of Finance*, vol. 34, no. 3, pp. 631-644
- Frank.M. and Goyal.V (2007), "Trade-off and Pecking Order Theories of Debt".working paper, NBER 16180.

- Garcia, M. T. M., & Guerreiro, J. P. S. M. (2016). Internal and external determinants of banks' profitability: The Portuguese case. *Journal of Economic Studies*, 43(1), 90-107.
- Gokulanathan and Rajesh (2021) Impact of Capital Structure on Financial Performance of Small Finance Banks- *International Journal of Mechanical Engineering*. Vol. 6 (Special Issue, Nov.-Dec. 2021). ISSN: 0974-5823
- Goyal (2013) Impact of Capital Structure on Performance of Listed Public Sector Banks in India. *International Journal of Business and Management Invention*. ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X- www.ijbmi.org Volume 2 Issue 10| October. 2013| PP.35-43
- Gueyie, J. P., Guidara, A., & Lai, V. S. (2019). Banks' non-traditional activities under regulatory changes: impact on risk, performance and capital adequacy. *Applied Economics*, 51(29), 3184-3197.
- Graham .R J and Harvey. C (2001). The theory and practice of corporate finance: evidence from the field. *Journal of Financial Economics*, 2001, vol. 60, issue 2-3, 187-243
- Hassan .M and Alam.J (2014) Influence of Capital Structure on Firm Performance: Evidence from Bangladesh. *International Journal of Business and Management*; Vol. 9, No. 5; 2014-ISSN 1833-3850 E-ISSN 1833-8119
- Hassan and Samour (2016), Department of Business Studies Uppsala University Master Thesis.
- Harris.M and Raviv.A (1991). The Theory of Capital Structure. *The Journal of American Finance Association*. Volume 46, Issue 1. 297-355
- Heid, F. (2007). The cyclical effects of the Basel II capital requirements. *Journal of Banking & Finance*, 31(12), 3885-3900.
- Hirshleifer. J (1966). Investment Decision Under Uncertainty: Applications of the State-Preference Approach. *The Quarterly Journal of Economics*, 1966, vol. 80, issue 2, 252-277
- Ibrahim et al (2019), Koya University *Journal of Humanities and Social Sciences (KUJHSS)*- DOI: 10.14500/kujhss. v2n1y2019.pp118-123
- Islam, M. A., Sarker, M. N. I., Rahman, M., Sultana, A., & Prodhan, A. S. (2017). Determinants of Profitability of Commercial Banks in Bangladesh. *International Journal of Banking and Financial Law*, 1(1), 1-11.
- Jabbar, H. (2014). Determinants of banks profitability. *IOSR Journal of Business and Management*, 16(1), 109-111.

- Jian,Zhiliang and Yue (2021) Capital structure and financial performance in China's agricultural sector : a panel data analysis. Project: Intellectual capital efficiency of agricultural listed companies in China, *Custos e Agronegocio* 17(2):445-463
- Jaffe, J. F. and Westerfield, R. (1984), "Leverage and the Value of a Firm under a Progressive Income Tax: A Correction and Extension", *Journal of Banking and Finance*, vol. 8, no. 3, pp. 491-494.
- Javed Younas and Imran (2014) *International Journal of Academic Research in Economics and Management Sciences*, Sep 2014, Vol. 3, No. 5- ISSN: 2226-3624
- Jensen, M.C., and Meckling.W .H, 1976, "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics* 3, 305-360.
- Johnsen, P. C. and McMahon, R. G. P. (2005), "Cross-Industry Differences in SME Financing Behavior: An Australian Perspective", *Journal of Small Business and Enterprise Development*, vol. 12, no. 2, pp. 160-177.
- Jordan. J., Lowe. J. and Taylor, P. (1998), "Strategy and Financial Management in UK Small Firms", *Journal of Business Finance and Accounting*, vol. 25, no. 1, pp. 1-27
- Kyereboah-Coleman, A., (2007), "The impact of capital structure on the performance of micro-finance institution", *The Journal of Risk Finance*, 8(1), 56-71.
- Kadioglu, E., Telceken, N., &Ocal, N. (2017). Effect of the asset quality on the bank profitability.*International Journal of Economics and Finance*, 9(7), 60.
- Kane. A (1984). How Big is the Tax Advantage to Debt. *The Journal of American Finance Association*. Volume 39, Issue 3. 841-853
- Ketyenya, R. P., &Mwaura, M. F. (2017). THE INFLUENCE OF FINANCIAL STRUCTURE ON BANK PERFORMANCE IN COMMERCIAL BANKS IN EAC COUNTRIES. *International Journal of Finance and Accounting*, 2(5), 15-28.
- Kester, C.W. (1986) Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporations. *Financial Management*, 15, 97-113.
- Khalaf Taani (2013) The Relationship between Capital Structure and Firm Performance: Evidence from Jordan, *Journal of Finance and Accounting*1(3):41
- Kim.S.J (1978) A MEAN-VARIANCE THEORY OF OPTIMAL CAPITAL STRUCTURE AND CORPORATE DEBT CAPACITY, *The Journal of American Finance Association*. Volumee 33, Issue 1. 45-63
- Kraus, Alan & Litzenberger, Robert H, 1973. "A State-Preference Model of Optimal Financial Leverage," *Journal of Finance*, American Finance Association, vol. 28(4), pages 911-922,

- Michaelas, N., Chittenden, F. and Poutziouris, P. (1999), "Financial Policy and Capital Structure Choice in U.K. SMEs: Empirical Evidence from Company Panel Data", *Small Business Economics*, vol. 12, no. 2, pp. 113–130.
- Mirza and Javed (2013) Determinants of financial performance of a firm: Case of Pakistani stock market, *Journal of Economics and International Finance* 5(2):43-52
- Modigliani, F., and M.H. Miller, (1958), "The cost of capital, corporate finance and the theory of investment", *American Economic Review* 48, 261-297.
- Modigliani, F., and M.H. Miller, (1963), "Corporate income taxes and the cost of capital: A correction, *American Economic Review*" 53, 433-443.
- Muhammad, Shah and Islam (2014) The Impact of Capital Structure on Firm Performance: Evidence from Pakistan, *Journal of Industrial Distribution & Business* 5(2):13-20
- Myers, S.C., and N.S. Majluf, (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13, 187-221.
- Myers (1977). Determinants of corporate borrowing. *Journal of Financial Economics*. Volume 5, Issue 2, November 1977, Pages 147-175
- Nor & Fatimah (2012). Reviewing relationship between capital structure and firm's performance in Malaysia. *International Journal of Advances in Management and Economics*, 1(4), 151-156
- Obamuyi (2013). Factors Influencing Investment Decisions in Capital Market: a Study of Individual Investors in Nigeria. *Organizations and Markets in Emerging Economies* 4(1):141-161
- Otieno and Ngwenya,(2015) Determinants of banks' profitability in a developing economy: evidence from Nigeria. *Organizations and markets in emerging economies*, 4(08), 97-111. 84
- Petersen, M. and Rajan, R. G. (1994), "The Effect of Credit Market Competition on Lending Relationships", *National Bureau of Economic Research Working Paper*, no. 4921.
- Pal, K., & Soriya, S. (2012). IC performance of Indian pharmaceutical and textile industry. *Journal of Intellectual Capital*, 13(1), 120-137.
- Pratheepkanth, P. (2011), "Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka", *International Refereed Research Journal* 2(2), 171-183.
- Petria, N., Capraru, B., & Ihnatov, I. (2015). Determinants of banks' profitability: evidence from EU 27 banking systems. *Procedia Economics and Finance*, 20, 518-524.
- Pettinger.T. (2017). Purposes of Banks. Economics help blog. Available at: <https://www.economicshelp.org/blog/glossary/banks/>

- Rajan, R. G. and Zingales, L. (1995), "What Do We Know About Capital Structure? Some Evidence from International Data", *Journal of Finance*, vol. 50, no. 5, pp. 1421-1460.
- Rahman, M. M., Hamid, M. K., & Khan, M. A. M. (2015). Rasul, R. (2019). The relationship between dividend policy and firm value in the IFRS adoption era: a case of Borsa Istanbul, Master thesis, NEU.
- Riddiough and Steiner ( 2014) Capital structure and firm performance. European Public Real Estate Association Research Center. 25(1), 3–27.
- Saini, P., & Sindhu, J. (2014). Role of commercial bank in the economic development of India. *International Journal of Engineering and Management Research (IJEMR)*, 4(1), 27-31.
- San, T. O and Heng, B. T (2011), "Capital Structure and Corporate Performance of Malaysian Construction Sector", *International Journal of Humanities and Social Sciences*, 1(2), 28-36.
- Sarwat (2017) Impact of Working Capital Management on the Profitability of Firms: Case of Pakistan's Cement Sector. *Journal of Advanced Management Science* Vol. 5, No. 3, May 2017
- SBP( State Bank of Pakistan) [www.sbp.gov.pk](http://www.sbp.gov.pk)
- Schulz (2016) Intra-and extra-bank determinants of Latin American Banks' profitability. *International Review of Economics & Finance*, 45, 197-214. 85
- Siddik, Kabiraj and Joghee (2016) *Int. J. Financial Stud.* 2017, 5, , 13; doi:10.3390/ijfs5020013
- SIRO. K (2011) ) Determinants of bank profitability in a developing economy: Empirical evidence from Kenya. *Journal of business economics and management*, 10(3), 207-217.
- Stiglitz, J.E. (1969), "A re-examination of the modigliani-miller theorem", *American Economic Review* 59, 784-793.
- Stulz.R.M (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*. Volume 26, Issue 1. 3-27
- Solomon, E. (1963) Leverage and the Cost of Capital, *Journal of Finance*, 18, 273-279.
- The World Bank <https://data.worldbank.org>
- Turnbull M Stuart (1979), Debt Capacity. *The Journal of American Finance Association*. Volume 34, Issue 1. 931-940
- Qayyum and Noreen (2019). Impact of Capital Structure on Profitability: A Comparative Study of Islamic and Conventional Banks of Pakistan- *Journal of Asian Finance, Economics and Business* Vol 6 No 4 (2019) 65-74

Umar and Sajid (2010). Impact of Capital Structure on Firms' Financial Performance: Evidence from Pakistan-Research Journal of Finance and Accounting [www.iiste.org](http://www.iiste.org) ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)-Vol 3, No 9, 2012

World Bank data (2019). World Development Indicators, Pakistan banking sector. Available at: <https://databank.worldbank.org/home>

Wald, J. K. (1999), "How Firm Characteristics Affect Capital Structure: An International Comparison", *Journal of Financial Research*, vol. 22, no. 2, pp. 161–187.

Yinusa and Samuel (2019) Capital Structure and Firm Performance in Nigeria. *African Journal of Economic Review*, Volume VII, Issue I, January 2019

## IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF FIRM: A CASE STUDY FROM BANKING SECTOR OF PAKISTAN

### ORIGINALITY REPORT

<b>15%</b>	<b>14%</b>	<b>7%</b>	<b>5%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

<b>1</b>	<b>docs.neu.edu.tr</b> Internet Source	<b>1%</b>
<b>2</b>	<b>issuu.com</b> Internet Source	<b>1%</b>
<b>3</b>	<b>koreascience.or.kr</b> Internet Source	<b>1%</b>
<b>4</b>	<b>ujcontent.uj.ac.za</b> Internet Source	<b>1%</b>
<b>5</b>	<b>mafiadoc.com</b> Internet Source	<b>&lt;1%</b>
<b>6</b>	<b>etd.aau.edu.et</b> Internet Source	<b>&lt;1%</b>
<b>7</b>	<b>repository.mua.ac.ke</b> Internet Source	<b>&lt;1%</b>
<b>8</b>	<b>Submitted to Coventry University</b> Student Paper	<b>&lt;1%</b>



