

# FINANCIAL STRUCTURE AND FIRM'S FINANCIAL PERFORMANCE: EMPIRICAL EVIDENCE OF FINANCIAL SECTOR OF PAKISTAN

# QUANG LINH HUYNH<sup>1,\*</sup>, MARYAM ASHRAF<sup>2</sup>, ERUM SHAIKH<sup>3</sup> and WAQAS AHMAD WATTOO<sup>4</sup>

<sup>1</sup>Faculty of Business Administration, Ho Chi Minh City University of Food Industry, Vietnam.

# **ABSTRACT**

The basic purpose in the study is to find out the effect of financial structure (equity financing and debt financing) along with other determining factors on performance of companies in overall Pakistani Financial Industry of companies listed in PSX for the period of ten years from 2010-2020. The Financial sector's Performance is measured by EBIT to Total Assets (Profitability) in the study while debt financing and equity financing as measure of financial structure along with other determining factors like firm's size, firm's growth, liquidity ratio, tax ratio and interest coverage ratio were used as independent variables. The source of data was "Financial statement analysis of the companies in Pakistani Financial Industry". It is an annual publication by state bank of Pakistan", available online at their respective website. The Fixed Effect Regression Model was used in the study after conforming its significance through Hausman specification test (1978) at Prob > Chi² = 0.0006. The nature of data set was short panel while the targeted population was around 182 firms of financial sector. The research used a sample of 140 companies of this sector and excluded the remaining firms due to their deficiency of providing complete financial data for the period of study. The findings of the study revealed that financial structure (equity financing and debt financing) has significantly positive effect on financial structure in overall Pakistani Financial Industry. The other determining factors of financial performance are firm's size and liquidity ratio that significantly affecting the financial performance in this sector.

Keywords: Financial sector, financial structure, Firm's Performance.

# 1) INTRODUCTION

Ross (1977) stated in his book entitled; principles of corporate finance, "the basic duty of every financial manager is arrange an optimal mix of financing or financial structure that will enhance shareholder's wealth as well as firm's value". The term financial structure and capital structure are used interchangeably, (Ross, 2000). However some of the researchers like Meckling and Jensen (1976), Kishor (1998), Bashir (2012), Pasha (2013) were of the view that there is a slight difference between the term capital structure and financial structure. The term capital structure includes the mix of equity financing and long term debt financing while the term financial structure includes the capital structure plus short term debt financing. It may also be referred to as liability side of balance sheet. The study relating to capital structure or financial structure is important due to the fact that a careful selection for each



<sup>&</sup>lt;sup>2</sup>Visiting Faculty Member at Department of Accountancy, Superior University of Lahore, Pakistan.

<sup>&</sup>lt;sup>3</sup>Department of Business Administration, Shaheed Benazir Bhutto University, Sanghar Campus, Pakistan.

<sup>&</sup>lt;sup>4</sup>Department of Commerce, Bahauddin Zakariya University Multan, Pakistan.

<sup>\*</sup>Corresponding author Email: linhhq@hufi.edu.vn



component of Financing can affect the financial performance of firm and hence will maximize shareholder's wealth which is the sole objective of financial manager in a firm.

A similar study conducted by Bashir (2012) on all the sectors of non-financial industry as well as by Pasha (2013) on textile sector revealed that there are industry specific factors that can affect firm's financial performance in that industry. The current study not only focuses on financial structure trends in all the 10 sectors of financial industry but also identify their effect on these sectors' performance individually and comparatively.

The current empirical research is important and significant from the scenario that no previous study could show the research findings regarding all the sectors of financial industry in Pakistan. The Current study will provide a baseline for the future research relating to all the 10 sectors of this industry. It will not only identify the effect of financial structure; equity financing and debt financing, but also the other related factors on firm's financial performance in all the sectors of financial industry in Pakistan for the period 10years (2010-2020). David Durand (1952) stated that debt financing increases firm's performance but his theories like Net income approach and Net operating income approach could not justify his point of view empirically. Latter on Franco Modigliani along with Marton Miller (1963) provide operational justification of net operating income approach to be valid in their seminal research and concluded that profitability (ROA) is an accurate measure of firm's performance or firm's value. According to Ross (1977), "The basic duty of every financial manager is to design an appropriate mix of financial structure that will increase the firm's value or performance". This concept not only increases the shareholder's wealth maximization but also enhances the firm's market value. The current studies would answer this puzzle that what is the effect of financial structure along with other determinants on firm's performance in all the sectors of financial industry of Pakistan.

- To find the significant effect of financing mix and other determining factors in the companies relating to Pakistani financial sector for 10years (2010-2020).
- To identify the correlation between all the factors (variables) of the study.
- To identify consistency of the current research with the previous studies and findings.
- And to also find the prevailing sources of financing in Pakistani Financial Industry among equity financing and debt financing.

#### 2) LITERATURE REVIEW

# 2.1. The Background of Study

The basic obligation of every financial manager in firm is that he/she has to finalize an optimal mix of financing that will not only increase the shareholder's wealth but also enhance the per share market value as well as the firm's value, (Bashir, 2012). The financial structure is basically shows the financing by shareholders in the form of equity financing as well as financing by debt holders (creditors/vendors) in the form of debt financing. The difference between the shareholders and debt holders lies with the facts that former has voting right for the selection of board of directs and management while the later has the preference for





distribution of their claims in case of liquidation of the firm. There are several issues related with the association between shareholders and management of the firm. An agency relationship is being established between shareholders and the management of the firm when boards of directors are elected. The shareholders expects from their management to make decision in their favour as to increase the shareholder's wealth. Sometimes the management has to make some decision which are beneficial either for the society or for the firm but it do not increase the shareholder's wealth which creates agency problem and results in agency cost. Bashir (2012) stated that the board of directors bestow the duty of managing finance to the person called 'financial manager', so that he may easily management that how much investment is required from both sources financing, equity and debt, and how these funds would be best utilized to increase not only the shareholder's wealth but also the firms value. The theoretical basis of this topic comes from the study conducted by David Durand (1952) and Modigliani and Miller (1958) & (1963), which is explained on the later pages.

#### 2.1.1. David Durand (1952)

The study on firm's value maximization was first suggested by David Durand (1952), about 61 years ago after which this area of research attracted the attention of economic and finance researchers from all over the world to make empirical research contribution. David Durand (1952) tried to explain the association between the value of firm and capital structure concepts by presenting three different theories naming "NI", "NOI" and "Traditional approach". His concentration was to resolve issue of the level of optimal financing mix that increases the firm's performance. The explanation of his theories is given below under the specific heading of concern

#### 2.1.2. Net Income Theory (Ni Approach)

The Net Income Theory as presented by David Durand (1952) states the relevance of decision relating to capital structure for increasing the firm's value. He was of the view that the inclusion of debt financing in financial structure increases firm's value as well as the WACC (Weighted average cost of capital) is decreased and vice versa. This Approach assumes that: lesser cost of debt financing than equity, no taxation and there is no financial risk perception by the shareholders due to the use of debt financing. David Durand (1952) recommended through Net Income theory that the firm should use 100% debt financing (or 0% equity) as capital structure to increase the value of firm as well as market price of the shares. As a result the weighted average cost of capital will be minimum enough to that it will cost nothing.

# 2.1.3. Net Operating Income Theory (Noi Approach)

David Durand (1952) also presented another theory called Net Operating Income theory which is just the opposite of his first theory; Net income theory. Net operating income theory states that decision relating to capital structure is irrelevant for increasing the value of firm as well as the market price of the share. This theory basically focuses on the financial risk perception by the shareholders in case of debt financing in capital structure. David Durand (1952) stated that inclusion of debt financing do not influence either the value of firm or its market price of share. It means that increase in the level of debt financing just increases the





WACC due to risk perception by the investors as they demand risk premium to compensate the additional risk which causes to increase cost of capital but the firm's value and market price of the share remains constant.

# 2.1.4. Traditional Theory (T Approach)

David Durand (1952) also provided another theory called as traditional approach in order to clarify his concept of optimal capital structure. This theory is basically the mixture of both the above theories presented by David Durand. He, first time presented as precise and acceptable definition of optimal capital structure through traditional theory. According the David Durand, "Optimal capital structure is the point the value of firm is maximum and cost financing is minimum". He defines three stages for the selection of optimal capital structure in traditional approach. He stated that at first stage, the cost of capital decreases due to increase in debt financing. In second stage the cost of capital becomes constant due to continuous increase in debt financing while on the third stage the overall cost of capital (WACC) start increase due to increase in debt financing. The shareholders perceive financial risk and demand risk premium to compensate financial risk due to debt financing.

# 2.1.5. Modigliani and Miller (1958, 1963)

David Durand (1952) was successful in establishing a proper and acceptable definition of optimal capital structure by his three theories but he was unable to operationally justify all his theories. This problem was resolved by two later researchers named and Franco Modigliani and Merton Miller through their seminal research in 1958. Both of these researchers not only justify the operationally one theory of David Durand; Net operating Income approach, but also provide the empirical evidence for its application. Their finding in this scenario opens a new door for empirical research on the topic of capital structure and firm's value/performance.

Modigliani and Miller (1958) presented a concept of arbitrage in their seminal research to support the net operating income approach. They stated that at any mixture of capital structure, the value of firm is determined by return on assets (ROA) while the cost of capital remains constant without any effect by debt financing. According to them, the value of both levered and un-levered firm can be made equal if arbitrage process is being utilized in the market. The concept of arbitrage process states that buying securities from the market where its price is low and selling the same in another market where the price of security is high. To make their argument more strong, they presented three prepositions which are later called MM Models.

**Preposition I**, states that, "At any level of debt financing, the WACC and Firm's value remains constant".

**Preposition II**, states that, "Cost of equity  $(K_e)$  becomes equal to WACC  $(K_0)$  in case of the firm with full equity financing and in case of inclusion of debt financing the cost of equity as well as the WACC increases due to risk premium demand by shareholders".





**Preposition III**, states that, "The cost of equity (K<sub>e</sub>) is not depends upon the way of investment by the firm".

Modigliani and Miller (1958) make the conclusion through their seminal research as well as by providing three prepositions and arbitrage theory that firm's value do not depend upon the capital structure decision hence it is irrelevant to consider optimal capital structure decision for increasing firm's value as well as market price of the shares. They empirically proved that it is return on assets (ROA) that determine the firm's value rather than optimal mix of capital structure. However later on, both the researcher accepted and recommended debt financing for availing the tax shield advantage. Modigliani and Miller (1963), "Due to Debt financing, the tax shield advantage can be availed which increases the firm's value.

# 2.1.6. Latest Development in the Study

The current study basically focus on the identification of empirical factors including financial structure; equity financing and debt financing, that significantly affect the financial performance of the companies included in Pakistani Financial Industry and listed in Karachi stock exchange for the period of 2007-2011. According to SBP (2012), "The Pakistani Financial Industry includes the 10 categories of institutions namely; Banking sector companies, Companies relating to DFIs, Companies relating to Investment Banks, Companies Relating to Leasing sector, Companies relating to Modaraba sector, Insurance Companies, Exchange companies, Mutual Fund (close ended), Housing finance and Venture Capital respectively". The research will make a combine analysis of all sectors in common to identify common factors as well as individual analysis to sector specific factors that may affect the financial performance of targeted population. The foreign research evidence is provided mostly for banking, development financial institution and insurance sectors for all the determinants of firm's performance which are stated on the next page.

"If there are two banks, having first owned by owners and the second owned by management, the second bank will earn more than the first bank", (Vernon, 1971). He made this study to empirically identify the effect of ownership on bank's performance (profitability). "Bank's ownership, if controlled by government as non-profit organization, have negative and significant relationship with bank's profit", (Short, 1979). "The Commercial bank's profitability (performance) is significantly influenced by time, location, bank's size and management effect", (Haslem, 1968). "Depending upon the nature of Balance sheet, it has the significant effect, positive or negative, on bank's profitability", (Mullineaux, 1978). "Cash Demand Deposit as cheaper source of financing have significant effect on balance sheet profit of the bank", (Simirlock, 1985).

Bourke (1989) revealed in her empirical research, "Internal factors as liquidity, expenses of staff and capital ratios are the part of profitability, net profit before interest and tax, of banking sector". She was the first researcher who empirically found the above important factors for bank's performance and concluded that these factors have positive association with profitability. The findings of Bourke (1989) was also conformed and verified by Thornton and Molyneux (1992). They also found the same positive relationship with both







dependent and independent variables. Zoellner and Hester (1996) found, "some factors can significantly affect the bank's earnings due to some changes in the figures of balance sheet". They made this empirical research on all the banks of Kansas City with the subject of balance sheet items and bank's earnings. Another empirical research showed, "The market value of capital of a bank is significantly influenced by new entry's legal restrictions and interstate branching prohibition", (Peltzman, 1968). It was the first study that tests empirically that the performance of bank is affected by regulations. "Profitability of a bank is significantly influenced by inflation", an empirical finding by (Revell, 1980), (Bourke, 1989) and (Thornton and Molyneux, 1992). Haron and Sudin (2004) empirically identified and concluded, "Profit sharing ratio between fund providers and banks shows a mutual advantage while the profit sharing ratio between fund users and bank is considered to be favorable for bank". They also found in their empirical study that conventional and Islamic bank's profit is positively and significantly influenced by bank's size, rate of interest and inflation. However they found that money supply and market share has significant and negative relationship with bank's profitability. Ismi (2004) revealed in his study, "Countries have opened their doors for international banks in order to provide facilities to decrease involvement of government and controlling the rate of interest". This development and facilities has enabled the international banks to open their branches and subsidiaries in developing countries all over the world which has increased the functioning of foreign banks and has expand their investment in other territories of the world in order to diversify.

Hore and Claessens (2012) however revealed adverse results in their empirical research and showed, "increase in the number of foreign banks has decreased the number of domestic or local banks in a country, these changes has made researcher to consider the reform factor while measuring profitability and its determinants for banks". Athanasoglou et al (2005) concluded, "A sound banking sector with profitability enables itself to survive in case of shocks with negative effect and can also take part in the financial system's stability". Marshall (2009) found, "Crises and failures are basically caused by the poor performance of banking sectors which leads to financial crises and as a result it finally bring an economy toward financial meltdown as was happened in 2007 for United states of America". Heffernan (1996) and Shekhar (2007) concluded in their empirical research, "A fast and sound banking system is only possible when it is commanded and regulated by Government and central bank which enables it to protect the fund providers as well as economy and also saves the banking system to face any financial crises". These empirical studies show that banking performance was taken attention in order to save the overall economy from financial crises. Shippo et al (2011) revealed, "Both internal as well as external factors can significantly affect the overall banking sector's financial performance". Another study conducted by Athanasoglou et al (2005) explained that the size of the bank, management efficiency, capacity of risk management and capital are the internal factors influencing the banks while rate of interest, economic growth, inflation and ownership are considered important external factors that significantly influence the banking sector's financial performance.





Bonaccorsi and Berger (2006) found, "Shareholders wealth maximization, increase in firm's value as well as market price of shares is possible through the efficient use of financial resources with effective control on cost". There is significant and sensitive association between debt financing and firm's financial performance as concluded by (Akinyoye, 2008). Line et al (2000), Rosen and Gorton (1995), Mehran (1995), Lehn and Demsetz (1985), etc., found that ROA, ROI and ROE are accounting measures which are used for firm's financial performance. Sandberg and Hoffer (1987) found, "growths of market share as well as growth of sales are considered as broader measure of firm's financial performance". Mathur et al (2000) concluded, "Leverage has an adverse and significant relationship with firm's financial performance measure return on assets (ROA)". Another study conducted by Tian and Zeitun (2007) found significantly negative association between Long term debt financing and Tobin's Q (as financial measure of performance)". Moyer and Krisnan (1997) also found that there is an adverse and significant association between capital structure and firm's financial performance.

"During the period of 2000-2004, all Islamic banks financial ratios shows comparatively efficient and superior results than that of conventional or commercial banks in Pakistan", a study conducted by (Mahmood, 2005). Another study conducted as comparison of conventional and Islamic bank by (Ahmed, Akhtar and Ali, 2011) revealed, "Commercial bank's profitability is influenced significantly by the factors like Gross domestic product, management of assets, efficiency of operations and adequacy ratio of capital". Another study conducted by (Sadaqat, Ali and Akhtar, 2011) also revealed, "Conventional banks perform better than Islamic banks in Pakistan in terms of returns and assets".

While comparing the Indian and Pakistani banks, (Ataullah et al, 2004) found that banks of the both countries; india and Pakistan, need to improve their operational efficiency". This study was conducted by collecting the financial data related to banks of Pakistan and India for the period of 1988-1998. They also found that model based on loan was much efficient than the model which was based on income. Niazi and Burki (2006) used the financial data collected from the financial statement of almost 40 banks for the period of study from 1991 to 2000 and found, "estimated score of efficiency is influenced

#### 3) RESEARCH METHODOLOGY

This research empirically analyzes the effect of financial structure (equity financing and debt financing) along with other factors on firm's financial performance. The researcher used short panel data (or micro panel data) of financial industry of Pakistan for a total number of 182 companies representing 10 sectors naming Banks, Development Financial Institutions, companies relating to leasing, Investment banks, companies relating to insurance, exchange companies, venture capital companies and companies relating to housing finance sector for the period of 10years (2010-2020). The population of the current study includes a total number of 182 companies relating to the Pakistani Financial Industry for the period of 10years (2010-2020). Three methods are statistically and econometrically applicable to analyze the panel data naming Pooled ordinary Least Square, Fixed effect and random effect





regression models as suggested by Baltagi (2005). In order to choose between Fixed effect and random effect regression modeling, Hausman specification test (1978) is used as tool while in order to choose between random effect or Pooled OLS, Lagrangian Multiplier test is being used. If hausman specification test (1978) is significant within the limit of 5%, fixed effect regression model is selected otherwise the choice will be further distributed between random effect and Pooled OLS. If Lagrangian Multiplier test is significant within the limit of 5%, random effect regression model is used otherwise the final and last selection will be on Pooled OLS/ Constant Coefficient Model. Tobin's Q, Profit margin and Earnings per share (EPS) are used as measure of firm's financial performance, Bashir (2012), Ali (2011), Kasim et al (2010) and Siddique (1998). The other variable includes Firm's size, Liquidity, firm's growth, tax and interest coverage ratio.

**PROFITABILITY** = 
$$\frac{\text{EBIT}}{\text{TOTAl Assets}}$$

(i) **Financial Structure** = Debt financing + Equity Financing

Debt Financing = 
$$\frac{\text{ToTalDebts}}{\text{TotalAssets}}$$

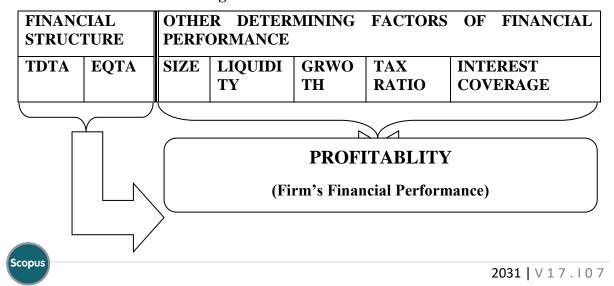
Equity Financing = 
$$\frac{\text{ToTalShareholder's Equity}}{\text{TotalAssets}}$$

- (ii) **Size** = Natural Log of Total Sale (Revenue) or Natural Log of Total Assets
- (iii) Liquidity is defined as "The current assets to current liabilities".
- (iv) **Growth** is defined as "Change in total assets to Total Assets".
- (v) **Tax Ratio** is defined as "Current year Tax to Earnings before taxation
- (vi) Interest Coverage Ratio can be described as "EBIT to Interest paid".

#### 3.1. Theoretical Development of Mode

Explained and Explanatory variable of the study are represented in the following theoretical model for the purpose of empirical analysis. The dependent (Explained variable) is represented by Profitability and the independent variables (explanatory variables) are represented by Financial Structure (Debt financing and Equity Financing), Firm's size, Liquidity, Growth, Tax Ratio and Interest Coverage ratio in the following figure 3.1 as follows:

Figure 3.1: Theoratical Model





# 3.2. Econometric Development of Model

After analyzing the model established by Baltagi (2005), the following econometrics model has been established.

$$\begin{aligned} \textbf{FP_{it}} &= \beta_0 + \sum_{i=1}^{n-1} \beta + \mu i + \beta_1 (Financial\ Structure)_{it} + \beta_2 (Firm\text{'s}\ Size)_{it} + \beta_3 (Liquidity)_{it} + \beta_4 (Growth)_{it} + \beta_5 (Tax\ Ratio)_{it} + \beta_6 (INT\ COV)_{it} + \sum_{i=1}^{n-1} \beta\ JXit + V_{it} \end{aligned}$$

 $Y_{it} = Firm's$  Financial Performance $\beta_0 = Y$ -intercept $\sum_{i=1}^{n-1} \beta + \mu i = Firm's$  Specific fixed effect $\beta_1$ .  $\beta_6 =$  represents parameters or slope coefficientsX1-X6 = Explanatory Variables representing financial structure, Firm's Size, Liquidity, growth, tax ratio and interest coverage ratio.  $\sum_{i=1}^{n-1} \beta JXit =$  Time varying and individual effects  $V_{it} =$  other Unobservable factors

# 3.3. Hypothesis for Financial Structure

H0: The Financial structure has a positive effect on Firm's Performance.

H1: The Financial Structure has a negative effect on Firm's Performance.

Table 4.1: Summary statistics

Variations Obs Mean STD

Vars	Variations	Obs	Mean	STD	Min	Max
Profitability	Within	T=5		.1286094	8972757	.4564062
	Between	n= 72		.0705695	0859174	.5048883
	Overall	N= 700	.0683796	.1465092	-1.033265	.627667
<b>Debt Financing</b>	Within	T=5		.1628495	.8534218	2.397513
	Between	n= 72		.6826671	.0085512	5.514037
	Overall	N= 700	.6770171	.698113	.0032888	6.423534
Equity	Within	T=5		.5902688	9.493005	2.850057
Financing	Between	n= 72		.739555	4.474716	1.000853
	Overall	N = 700	.2784099	.9430084	-12.15559	1.064767
Firm's Size	Within	T=5		.3890365	12.01619	17.92932
	Between	n= 72		2.299636	11.55927	20.65369
	Overall	N = 700	16.23215	2.319645	9.962511	20.86605
Liquidity	Within	T=5		53.8533	299.7081	572.0004
	Between	n= 72		57.56205	.1938724	350.5822
	Overall	N = 700	21.74664	78.59167	.0752378	780.049
Growth	Within	T=5		.1947017	2.417676	1.072938
	Between	n= 72		.0848895	.4129405	.2682174
	Overall	N = 700	.0385106	.2122138	2.869127	.6373033
Tax ratio	Within	T=5		21.67441	133.5964	284.515
	Between	n= 72		12.07209	28.10135	89.51
	Overall	N= 700	1.12423	24.77684	149.9802	372.9008
Interest	Within	T=5		232.8497	2495.964	2304.43
Coverage Ratio	Between	n= 72		135.7062	253.2536	1114.924
	Overall	N = 700	12.3339	269.1282	1473.913	3407.02





# 3.4. Hypothesis for Firm's Size

H0: Firm's Size has a positive effect on Firm's Performance.

H1: Firm's Size has a negative effect on Firm's Performance.

# 3.5. Hypothesis for Liquidity

H0: The firm's Liquidity has a positive effect on Firm's Performance.

H1: The firm's Liquidity has a negative effect on Firm's Performance.

# 3.6. Hypothesis for Growth

H0: Firm's Growth has a positive effect on its performance.

H1: Firm's Growth should have a negative effect on its performance.

# 3.7. Hypothesis for Tax Ratio

H0: Tax ratio should have a positive effect on firm's performance.

H1: Tax ratio has a negative effect on firm's performance.

# 3.8. Hypothesis for Interest Coverage Ratio

H0: Interest Coverage ratio has a positive effect on firm's Performance.

H1: Interest Coverage ratio has a negative effect on firm's Performance.

#### 4. RESULTS AND DISCUSSION

#### 4.1. Descriptive Statistics

The above table 4.1 relating to the study shows the descriptive statistics of the study of effect of financial structure on financial performance in Pakistani Financial Industry for the period of 10years (2010-2020). It shows a total number of financial firms used as sample of the study are 140, while the number of observations counts as 700 (140×5). The term "Within" indicates year to year variation while the term "Between" indicates firm to firm variation in different results of descriptive statistics stated in the table 4.1. The above table indicates that debt financing contribute about 68% on average in the study in overall Pakistani Financial Industry while its standard deviation shows the overall deviation as 70%, within deviation at 162% while between deviation indicates 68% variations. The above table also indicates that profitability on average contributes 6.83% in the study while its overall deviation from standard is about 146%, between variation is about 7% while within variation is about 129%.

As far as concern to firm's size, it contributes on average as 162% in the study while its deviation shows an overall value as 2.319, between as 2.2996 and within as 0.3890. The value of liquidity shows that it contributes on average as 21.7466 while its deviations shows as 78.59 overall variation, 57.56 between variation and 53.85 as within variation. Firm's growth indicates that it contributes on average 3.9% in the study while its deviations shows that it has an overall variations as 0.2122, between variations as 0.08489 and within variation





as 0.1947. It indicates that the firms in financial sectors are growing at the average rate of 3.9% in Pakistan for the period of study 2007-11. The table 4.1 also indicates that the tax ratio contributes on average as 1.1242 while its spread or deviation shows an overall value of 24.77, between as 12.07 and within as 21.67. At the end the interest coverage ratio contributes on average as 12.334 in the study while its deviation from mean shows overall as 269.1282, between as 135.70 while within as 232.8497.

# 4.2. Correlation Analysis

Table 4.2

	PRF	DF	EQF	SZ	LQ	GR	TX	ICR
PRF	1.000							
DF	0.0897	1.000						
EQF	0.0285	-0.8266	1.000					
SZ	0.2065	0.3211	-0.1554	1.000				
LQ	-0.1282	-0.2018	0.1579	-0.2095	1.000			
GR	0.0090	0.1317	-0.1097	-0.0249	-0.1139	1.000		
TX	0.0149	0.0418	-0.0222	0.0010	-0.0059	-0.0482	1.000	
ICR	0.0116	0.0040	-0.0008	0.0109	-0.0131	-0.0650	-0.0004	1.000

The above table 4.2 indicates that profitability having the positive correlation with debt financing and shows and coefficient's value as 0.0897. It indicates that debt financing increases profitability in Pakistani Financial Industry for the period of study. The above table also indicates that equity financing also has a positive correlation with profitability of firms in Pakistani Financial Industry with coefficient's value as 0.0285 less than debt financing. The above table also indicates that there is a negative correlation between equity financing and debt financing with coefficient's value as -0.8266. Firm's size, Firm's growth, tax ratio and Interest coverage ratio also have the positive correlation with firm's profitability in Pakistani Financial Industry with coefficient's correlation value as 0.2065, 0.0090, 0.0149 and 0.0116 respectively. All the above factors increase Pakistani Financial industry performance for the period of study 10 years (2010-2020). Liquidity shows negative correlation with profitability with coefficient's correlation value as -0.1282. It means that liquidity decreases financial performance of Pakistani financial Industry for the period of study. The table 4.2 also indicates that firms larger in size in Pakistani Financial Industry prefers debt financing because there is a positive correlation between size of the firm and debt financing while equity financing indicates negative correlation with firm's size which means that equity financing decreases firm's financial performance in the study. The coefficient value of correlation between firm's size and debt financing shows as 0.3211, while firm's size shows correlation coefficients as -0.1554 with equity financing. The table 4.2 also indicates that there is a negative correlation between liquidity ratio and debt financing with coefficient value as -0.2018 and positive correlation with equity financing with coefficient's value as 0.1579. It indicates that more liquid firm's prefers to use equity financing as source of finance and take debt financing in lesser proportion. Firm's growth factor having positive





relationship with debt financing and negative relationship with equity financing with coefficient's of correlation value as 0.1317 and -0.1097 respectively. It means that more growing firms in Pakistani Financial Industry prefer debt financing rather than equity financing while designing their financing structure.

# 4.3. Regression Analysis

**Table 4.3** 

Explained Variable = Profitability = EBIT/Total Assets (Financial Performance)					
<b>Explanatory Variables</b>	Coefficients	t-values	P-values		
Debt Financing	.051378	2.50	0.013**		
<b>Equity Financing</b>	.0417387	2.88	0.004***		
Firm's Size	.0095344	2.68	0.007***		
Liquidity Ratio	0001662	-1.67	0.095*		
Firm's Growth	.0005682	0.02	0.987		
Tax Ratio	.0000588	0.19	0.847		
Interest Coverage Ratio	4.39e-06	0.16	0.875		
Constant	1293172	-2.31	0.021**		
Targeted Population	182 Financial Firms				
Time Period	5 years (2007-2011)				
Sample Size	140 Financial Firms				
<b>Total Observations</b>	700 (140 × 5)				
F (7,281)	3.63				
Prob> F	0.0009				
Corr (u_i, xb)	-0.9477				
R2 – within	0.0233				
R2 – between	0.2429				
R2 – overall	0.0725				
F test that all u_i = 0	F(71, 281) = 1.24, Prob > F = 0.1170				
<b>Hausman Specification Test (1978)</b>	$Prob>Chi^2 = 0.0000$	5			
Lagrangian Multiplier Test	$Prob>Chi^2 = 0.0000$	)			
Software used for data analysis	STATA 11				
Significant at 1% (*), Significant at 5% (**), Significant at 10% (***)					

# 4.4. Findings and Discussions

The regression results as indicated in table 4.3 shows the empirical analysis for the study of effect of financial structure and other determining factors on performance of financial industry of Pakistan for the period 10 years (2010-2020). The targeted population of the study includes 182 financial firms while the researcher included only 140 firms in the study for empirical analysis and excluded the remaining firms due to their deficiency of financial data for the period of study. The table indicates that the regression model is statistically fit with





the value of Prob>F = 0.0009 showing the overall statistical significance of the model. The Overall  $R^2 = 7.25\%$  shows that profitability is explained by independent variable and remaining 92.75% is explained by other factors. The  $R^2$  "between" = 24.29% shows firm to firm variation as explained by independent variables while the remaining variation is explained by other factors. The  $R^2$  "Within" = 2.33% year to year variation as explained by independent variables while the remaining variation is explained by other factors. The researcher analyzed fixed effect regression and random effect regression models on the panel data set and after applying Hausman Specification test (1978); showing significance at Prob>Chi² = 0.0006, concluded that fixed effect model is appropriate for the study according to Baltagi (2005).

The estimated model is as follows

 $\begin{aligned} FP_{it} &= \text{-.}1293172 + (\sum_{i=1}^{n-1} \beta + \mu i) + .051378 \text{ (Debt Financing)}_{it} + .0417387 \text{ (Equity Financing)}_{it} \\ &+ .0095344 \text{ (Firm's Size)}_{it} + \text{-.}0001662 \text{ (Liquidity)}_{it} + .0005682 \text{ (Firm's Growth)}_{it} + .0000588 \\ &\qquad \qquad \text{(Tax Ratio)}_{it} + 4.39e\text{-06 (Interest Coverage ratio)}_{it} \end{aligned}$ 

#### **Discussion**

The table 4.3 indicates that there is a positive association between debt financing and firm's financial performance with coefficient's value as .051378 significant at 5% with P-value as 0.013. It shows that a one unit increase in debt financing will increase firm's financial performance by 0.051378. More profitable firms prefer to use debt financing as it is cheaper source of financing. David Durand (1952) also having the same point of view that maximum that financing leads to increase firm's value and market value of share that results in to increase in firm's financial performance. The positive relationship also accepts the null hypothesis showing the same association between both the variable and rejects the alternative hypothesis of the study. The positive and significant association between debt financing and financial performance of firms is also consistent with similar findings by Kakani (1998), Shah and Khan (2006) as well as Tukel (2012) The regression analysis indicated in table 4.3 also shows that there is a positive and highly significant association between equity financing and firm's performance measure profitability with coefficient's value as 0.417387 and corresponding P-value as 0.004 significant at 1% level. It indicates that a one unit increase in equity financing will increase firm's performance by 0.0417387. The positive association between equity financing and firm's performance accepts the null hypothesis which states the same positive association between both the variable and rejects the alternative hypothesis. This finding is also consistent with the similar findings of the other researchers like Hijazi and Tariq (2007), Ali et al (2009), Bashir (2012). The regression results indicate that there is a positive and significant association between firm's size and financial performance with coefficient's value as 0.0095344 and respective P-value as 0.007. It indicates that a one unit increase in firm's size would result an increase in firm's performance by 0.0095344. This positive relationship accepts the null hypothesis with same relationship and rejects the alternative hypothesis. The finding is similar and consistent with the following researchers, Tukel (1998), Shah and Sultan (2004), Ali et al (2010), Bashir (2012). The table 4.3 indicates





that liquidity ratio has significant but negative relationship with firm's financial performance with the value of coefficient as -0.0001662 and P-value as 0.095. It indicates that a one unit increase in liquidity would result as decrease in firm's performance by 0.0001662. This negative association between both the variables rejects the null hypothesis but accepts the alternative hypothesis showing the similar relationship. The finding is similar and consistent with the researchers like Reddy (1988), Tariq (2006), Awan (2009), Bashir (1012) and Malik (2012). The results of the table 4.3 indicates that there is Positive and un-significant association between firm's growth and firm's financial performance with the value of coefficient as 0.0005682 and P-value as 0.987. It indicates that a one unit increase in firm's growth will increase firm's performance by 0.0005682. This positive relationship accepts the null hypothesis and rejects the alternative hypothesis. The finding is also consistent with the similar finding by Shaheen and Awan (2002), Bashir (2012) and Tariq (2012). Bashir (2012), Reddy and Kakani (1998), Tariq and Hijazi (2006), Malik and Shaheen (2012), Ahmed et al (2010), Awan et al (2011), etc. The table 4.3 showing the regression analysis of the study indicates that there is a positive association between tax ratio and financial performance with coefficient's value as 0.0000588 and P-value as 0.847. It shows that a one unit increase in tax ratio will increase firm's performance by 0.0000588. This positive relationship rejects the null hypothesis but accepts the alternative hypothesis. The finding is consistent with similar finding of the following researchers like Kamran and Akram (2009), Faisal (2010), Bashir (2012) and Kashif and Wagas (2012), table 4.3 also indicates that there is a positive and unsignificant association between interest coverage ratio and firm's financial performance with coefficient value as 4.39e-06 and P-value as 0.875. It indicates that a one unit increase in interest coverage ratio will increase the firm's performance by 4.39. This positive relationship accepts the null hypothesis and rejects the alternative hypothesis. This finding is also consistent with the similar findings by Islam (2012), Bashir (2012) and Waqas (2010).

**Table 4.4.Expected and Observed Signs** 

Sr #	Explanatory Variables	Expected Signs	Observed Signs	Null Hypothesis (Accepted/Rejected)	Significance
1	Debt Financing	(+/-)	(+)	Accepted	Sig (5%)
2	Equity Financing	(+/-)	(+)	Accepted	Sig (1%)
3	Firm's Size	(+/-)	(+)	Accepted	Sig (1%)
4	Liquidity Ratio	(+/-)	(-)	Rejected	Sig (10%)
5	Firm's Growth	(+/-)	(+)	Accepted	NS
6	Tax Ratio	(+/-)	(+)	Rejected	NS
7	Interest Coverage Ratio	(+/-)	(+)	Accepted	NS





#### 5. CONCLUSION AND RECOMMENDATIONS

# **5.1. Findings in Summarized Form**

The researcher empirically identifies the effect of financial structure along with other determining factors on firm's financial performance in the overall Pakistani Financial Industry. Profitability was used as measure of financial performance in the study while the financial structure was measured by debt financing as well as equity financing. The other determining factors of firm's financial performance were; firm's size, liquidity ratio, firm's growth, tax ratio and interest coverage ratio. As table 4.4 shows, the summarized finding of each variable is given as follows:

The findings of the study revealed that debt financing having positive and significant (at 5%) relationship with performance of companies in overall Pakistani Financial Industry for the period of study. It accepted the null hypothesis. Equity financing have also positive and significant (at 1%) relationship with performance of companies in overall Pakistani Financial Industry. It accepts the null hypothesis. The findings of the study revealed that firm's size having positive and significant (@1%) relationship with performance of companies in overall Pakistani Financial Industry for the period of study. This positive relationship accepted the null hypothesis stating the same positive association between both of variables. Liquidity ratio revealed significant (@ 10%) and negative relationship with performance of companies in overall Pakistani Financial Industry. It rejects the null hypothesis and accepts the alternative hypothesis stating the same negative association between both the variables. The findings of the study revealed that there is a positive but un-significant association between firm's growth and performance of companies in overall Pakistani Financial Industry for the period of study. This finding accepted the null hypothesis while rejecting the alternative hypothesis. Tax ratio revealed that there is un-significant but a positive association between it and performance of companies in overall Pakistani Financial Industry for the period of study. This positive relationship rejected the null hypothesis while accepting the alternative hypothesis stating the similar association between both of the variables. The findings of the study show that there is un-significant and positive association between interest coverage ratio and performance of companies in overall Pakistani Financial Industry for the period of study. This positive association between both of the variable accepts the null hypothesis while rejecting the alternative hypothesis.

#### 5.2. Conclusion

The summarized findings explained above revealed some of the most important and determining factors in overall Pakistani Financial Industry for the period of study. It revealed that financial structure along with firm's size and liquidity has significant effect on performance of companies in overall Pakistani Financial Industry. These factors play a very important role for increasing or decreasing the firm's financial performance. Equity financing and debt financing (Financial structure) along with firm's size having positive effect on firm's performance while the liquidity have negative effect on firm's performance, in overall Pakistani Financial Industry. It can be inferred from the findings that equity financing as well





as debt financing have the determining effect on firm's performance but equity financing have highly significant effect as compared to debt financing. It means that the firms in overall Pakistani Financial Industry use more proportion of equity financing and lesser proportion of debt financing in their financial structure to increase their performance. Firm's larger in size also performance well due to their better and advanced infrastructure that increases their efficiency in operation and ultimately leads to increase their financial performance.

# 5.3. Recommendations and Policy Implications

The findings and conclusion of the study recommends that the firms in Pakistani Financial Industry should increase more proportion of equity financing as compared to debt financing in their financial structure to increase financial performance. In addition these firms should also consider their size and liquidity position in order to accelerate their financial performance rapidly. The findings of the study also implies that the financial managers of the firms in Pakistani Financial Industry should take great care while making decision about the financing mix as it the most important determining factor of firm's performance in Pakistan. More proportion of equity financing and an appropriate level of debt financing in financial structure may accelerate the firm's financial performance in this sector.

# 5.4. Limitations and Suggestions

The study empirically found the effect of financial structure (equity financing and debt financing) along with other determining factors on performance of companies in overall Pakistani Financial Industry for the period of study 2010-2020. The findings of the study are restricted to the firms of Pakistani Financial Industry only. These findings are not applicable on non-Pakistani Financial Industry because the structure of their financial structure and their operations including the nature of their business is entirely different. The researcher used limited number of factors with book value measure which are applicable in overall Pakistani Financial Industry but the future research may include to some specific sectors of financial industry which could help them to find sector specific determinants of financial performance.

#### **REFERENCES**

Abor, J., (2005), "The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in Ghana", the Journal of Risk Finance, Vol 6, Issue 5, PP 438-445.

Afza, T., and Hussain, A., (2011), "Determinants of Capital Structure across selected Manufacturing sectors of Pakistan", International Journal of Humanities and Social Sciences, Vol 1, Issue 12, PP 254-262.

Ahmed, F., Junaid-ul-Haq, Nasir, R.U., Ali, M., and WasimUllah, (2011), "Extension of Determinants of Capital Structure: Evidence from Pakistani Non-Financial Firms", African Journal of Business Management, Vol 5 (28), PP 11375-11385.

Ahmed, N., Ahmed, Z., and Ahmed, I., (2010), "Determinants of Capital Structure: A case of Life Insurance Sector of Pakistan", European Journal of Economic, Finance and Administration Sciences, Issue 24, PP 8-12.

Ali, K., Akhtar, M.F., and Sadaqat, S., (2011), "Innovation and Changes in Capital Structure: Using Econometrics Practices Fixed Verses Random", Research Journal of International Studies, Issue 20, PP 130-139.





Ali, L., (2011), "The Determinants of Leverage of the Listed Textile Companies in India", European Journal of Business and Management, Vol 3, Issue 12.

Allen, D.E., and Mizunu, H., (1989), "The Determinants of Corporate Capital Structure: Evidence from Japan, the Journal of Applied Economics, Vol. 21, PP 569-585.

Amir Shah, S.A, (2010), "Determinants of Corporate Financing Patterns and their effect on Corporate Financial Performance", PhD theses, Department of Management Sciences, Muhammad Ali Jinnah University, Islamabad Pakistan.

Anderson, T., (2007), "Econometrics", Thomas Anderson & Ventus Publishing APs.

Awan, T.N., Rashid, M., and Zia-ur-Rehman, M., (2011), "Analysis of Determinants of Capital Structure in Sugar and Allied Industries of Pakistan", International journal of Business and Social Sciences, Vol 2, Issue 1, PP 221-229.

Baltagi, B.H., (2005), "Econometrics Analysis of Panel Data", 3rd Edition, Jhon, Wiley and Sons Ltd.

Barclay, M.J., Smith, C.W., and Watts, R.L., (1995), "The Determinants of Corporate Leverage and Dividend policies", Journal of Applied Corporate Finance, Vol. 7, PP 4.

Bashir, Z., (2012), "Empirical Analysis of the factors affecting the debt financing decision and the firm's performance: Evidence of non-Pakistani Financial Industry". Lambert Academic Publication, Germany, ISBN 978-3-659-35657-5, PP 1-185

Baskin, J., (1989), "An Empirical Investigation of Packing Order Hypothesis", the Journal of Finance and Management, Issue 18, PP 26-35.

Baxter, N., (1967), "Leverage, Risk of Ruin and the Cost of Capital", the Journal of Finance, Vol. 22, PP 395-403.

Bevan, A.A., and Danbol, J., (2000), "Dynamics in the Determinants of Capital structure in the UK", Department of Accounting and Finance, University of Glasgow, Working paper 2000/9.

Bhaduri, S., (2002), "Determinants of Corporate Borrowings: Some Evidence from the Indian Corporate Structure", Journal of Economics and Finance, Issue 26, PP 200-215.

Bhat and Kumar, R., (1980), "The Determinants of Financial Leverage: Some Further Evidence", Chartered Accountant, Vol. 29, PP 451-456.

Boodhu, R., (2009), "Capital Structure and Performance of Mauritius Listed Firms: Theoretical and Empirical Evidence", Master's Theses.

Bradley, M., Jarrel, G., and Kim, E.H., (1984), "On the Existence of Optimal Capital Structure: Theory and Evidence", Journal of Finance, Issue 39, PP 219-226.

Chaplinsky, S., and Niehaus, G., (1993), "Do inside ownership and Leverage Share Common Determinants?", Ouarterly Journal of Business and Economics, Issue 32, PP 51-65.

Chen, J.J., (2004), "Determinants of Capital Structure of Chinese Listed Companies", Journal of Business Research, Issue 57, PP 1341-1351.

Chowdury, M.U., (2004), "Capital Structure Determinants: Evidence from Japan and Bangladesh", Journal of Business Studies, Vol. xxv, Issue No. 1, PP 23-45.

DeAngelo, H., and Masulis, R., (1980), "Optimal Capital Structure under Corporate and Personal Taxation", Journal of Financial Economics, Issue 8, PP 3-30.

Delcoure, N., (2007), "The Determinants of Capital Structure in Transitional Economies", Journal of International Review of Economics and Finance, Issue 16, PP 400-415.





Drobetz, W., and Fix, R., (2003), "What are the Determinants of Capital Structure?: Some Evidence from Switzerland", Department of Finance, Working paper 4/03.

Fama, E., (1980), "Agency Problem and Theory of Firm", Journal of Political Economy, Vol 88, Issue 2.

Fama, E.F., and Jensen, M., (1983), "Agency Problem and Residual Claims", Journal of Law and Economics, Vol. 26, PP 327-349.

Ferri, M.J., and Jones, W.H., (1979), "Determinants of financial Structure: A new Methodological Approach", Journal of Finance, 34(3), PP 631-644.

Frank, M.Z., and Goyal, V.K., (2003), "Testing the Packing Order Theory of Capital Structure", Journal of Financial Economics, Vol 67.

Gill, A., Bigger, N., and Mathur, N., (2011), "The Effect of Capital Structure on Profitability: Evidence from United States", International Journal of Management, Vol. 28, Issue 4, Part 1.

Graham, J.R., (2000), "How Big are the Tax benefits of Debt?", The Journal of Finance, Vol 5, PP 1901-1942.

Gropp, R., Heider, F., (2009), "Determinants of Bank Capital Structure", Working paper series No 1096, European Central Bank.

Harris, M., and Revive, A., (1990), "Capital Structure and Informational Role of Debt", Journal of Finance, Vol 45, PP 321-349.

Hausman, J.A., (1978), "Specification Tests in Econometrics", Econometrica, Issue 46, PP 1251-1271.

Hijazi, S.T., and Tariq, Y.B., (2006), "Determinants of Capital Structure: A case of Pakistani Cement Industry", The Lahore Journal of Economics, Vol 11, Issue 1, PP 63-80.

Huang, G., and Song, F.M., (2002), "The Determinants of Capital Structure: Evidence from China", China Economic Review, 17(1), PP 14-36.

Hussain, I., (2011), "Growth and Financing Behavior of firms of Textile Industry of Pakistan: A panel Data Analysis".

Jensen, M., (1986), "Agency Cost of Free cash flows, Corporate Finance and Takeovers", American Economic Review, Issue 76, PP 323-329.

Kakani, R.K, and Reddy, V.N, (1998), "Econometrics Analysis of Capital Structure Determinants", Indian Institute of Management Calcutta, Working Paper No. 333-1998.

Karadeniz, E., Kandir, S.Y., Iskenderoglu, O., and Onal, Y.B., (2011), "Firm Size and Capital Structure Decision: Evidence from Turkish Lodging Companies", International Journal of Economics and Financial Issues, Vol 1, Issue 1, PP 1-11.

Kayo, E.K., and Kimura, H., (2011), "Hierarchical Determinants of Capital Structure", Journal of Banking and Finance, Issue 35, PP 358-371.

Kim, H., and Berger, P.D., (2008), "A comparison of Capital Structure determinants: The United States and the Republic of Korea", The Multinational Business Review, Issue 16, PP 79-100.

Kochhar, R., (1997), "Strategic Assets, Capital Structure and Firm Performance", Journal of Financial and Strategic Decisions, Vol 3, Issue 10.

Krishnan, N.V., and Moyer, C.R., (1997), "Performance, Capital Structure and Home Country: An analysis of Asian Countries", Global Finance Journal, 8 (1), PP 129-143.

Mackie-Mason, J.K., (1990), "Do Taxes effect Corporate Financing Decision?", Journal of Finance, Issue 45, PP 1471-1493.





Marsh, P., (1982), "The Choice between Equity and Debt: An Empirical Study", Journal of Finance, Issue 37, PP 121-144.

Marton, M.H., (1977), "Debt and Taxes", The Journal of Finance, Vol 32, Issue 2, PP 261-275.

Maskimovic, and Zechner, (1991), "Debt, Agency Cost and Industry Equilibrium", Journal of Finance, Vol. 46, PP 1619-1643.

Mazhar, A., and Nasr, M., "Determinants of Capital Structure Decision: Case of Pakistani Government owned and Private Firms".

Memon, F., Bhutto, N.A, and Abbas, G., (2010), "Capital Structure and Firm performance: A case of Textile sector of Pakistan", Asian Journal of Business and Management sciences, Vol 1, Issue 9, PP 9-15.

Memon, P.A., Khaliq, A., Akbar, S., and Abbas, G., "Capital Structure Determinants: An Empirical study of Food and Personal Care Industry of Pakistan", Sukkur Institute of Business Administration.

Modigliani, F., and Miller, M., (1958), "The Cost of Capital, Corporation Finance and the theory of investment", The American Economic Review, Vol 48, Issue 3, PP 261-297.

Morellec, E., (2001), "Assets Liquidity, Capital Structure and Secured Debt", Journal of Financial Economics, Issue 61, PP 173-206.

Myers, S.C., (1984), "The Capital Structure Puzzle", Journal of Finance, Vol 39, PP 575-592.

Myers, S.C., and Mujluf, N.S., (1984), "Corporate Financing and Investment Decisions: When Firms have information but investors do not have", Journal of Financial Economics, Issue 13, PP 187-221.

Myers, S.C., and Stewart (1977), "Determinants of Corporate Borrowings", Journal of Financial Economics, Issue 5, PP 47-175.

Nosa, O.A., and Ose, E.D., (2010), "Capital Structure and Corporate Performance in Nigeria: An Empirical Investigation", Ambros Alli University, journal of Management Sciences, Vol 1, Issue 1, PP 43-52.

Onaolapo, A.A., and Kajola, S.O., (2010), "Capital Structure and Firm's Performance: Evidence from Nigeria", European journal of Economics, Finance and Administration Sciences, Issue 25, PP 70-82.

Ooi, J., (1999), "The Determinants of Capital Structure: Evidence on UK property Companies", Journal of Property, Investment and Finance, 17(5), PP 464-480.

Ozkan, A., (2001), "Determinants of Capital Structure and adjustment to Long Run Target: Evidence from UK companies Panel data", Journal of Business Finance and Accounting, Vol. 28, PP 175-199.

Padachi, K., and Seetanah, B., (2007), "Stock Market Development and Financing Choices of Firms: Case study of a SIDS", International Review of Business Research Papers, Vol 3, Issue 2, PP 305-325.

Park, H., (1998), "The Effect of National Culture on Capital Structure of the firms", International Journal of Management, Issue 15, PP 204-211.

Prasetyo, A.H., (2011), "Systematic Risk and Capital Structure in Emerging Indonesian Market", International Conference on Economics, Business and Management, Vol 2, PP 132-138.

Pratheepkanth, P., (2011), "Capital Structure and Financial performance: Evidence from Selected Business Companies from Colombo Stock Exchange Srilanka", International Referred Research Journal, Vol 2, Issue 2, PP 171-183.

Rafiq, M., Iqbal, A., and Atiq, M., (2008), "The Determinants of Capital Structure of the Chemical Industry in Pakistan", Lahore Journal of Economics, 13 (1), PP 139-158.

Rajan, R.G., and Zingales, (1995), "What do you know about capital Structure?: Some Evidence from International Data", Journal of Finance, Issue 50, PP 1421-1446.





Ramlal, I., (2009), "Determinants of capital Structure among non-quoted Maritain firms under specificity of Leverage: Looking for a modified Packing Order Theory", International Research Journal of Finance and Economics, ISSN 1450-2887, Issue 31, PP 83-92.

Roshan, B., (2009), "Capital Structure and Ownership Structure: A Review of Literature", The Journal of Online Education New York, PP 1-8.

Ross, S., (1977), "The Determination of Financial Structure: The Incentive Signaling Approach", Journal of Economics, Issue 8, PP 23-40.

Sabir, M., and Malik, Q.A., (2012), "Determinants of Capital Structure: A study of Oil and Gas Sector of Pakistan", Interdisciplinary Journal of Contemporary Research in Business, Vol 3, Issue 10, PP 395-400.

San, O.T., and Heng, T.B., (2011), "Capital Strucuture and Corporate Performance in Malaysian Construction Sector", International Journal of Humanities and Social Sciences, Vol 1, Issue 2, PP 28-36.

Sayeed, A.M., (2011), "The Determinants of Capital Structure for selected Bangladeshi companies", International Review of Business Research papers, Vol. 7, Issue No. 2, PP 21-36.

Scott, D.E., (1972), "Evidence on the Importance of Financial Structure", Journal of Finance and Management, Issue 1, PP 45-50.

Scott, J.H., (1976), "A theory of Optimal Capital Structure", Bell Journal of Economics, Issue 7, PP 33-54.

Scott, J.H., (1977), "Bankruptcy, Secured debt and optimal capital structure", Journal of Finance Vol. 32, PP 1-19

Seppa and Raul, (2008), "Capital Structure Decision: Research in Estonian non-financial companies", Baltec Journal of Management, Issue 3 (1), PP 55-70.

Shah, A., and Hijazi, T., (2004), "The Determinants of Capital Structure of Stock Exchange Listed Non-Financial Firms in Pakistan", Pakistan Development Review, 43:4 Part 2, PP 605-618.

Shah, A., and Khan, S., (2007), "Determinants of Capital Structure: Evidence of Pakistani Panel Data", International Review of Business Research Paper, Vol 3, Issue 4, PP 265-282.

Shah, S.M., and Amir (2007), "The Determinants of Corporate Debt Policy, Pre and Post Financial Market Reforms: A case from Textile Industry of Pakistan", The Pakistan Development Review, Issue 46:4, PP 465-478.

Shaheen, S., and Malik, Q.A., (2012), "Effect of Capital Intensity, Size of Firm and Profitability on Debt Financing in Textile Industry of Pakistan", Interdisciplinary Journal of Contemporary Research in Business, Vol 3, Issue 10, PP 1061-1066.

Shen, G., (2008), "The Determinants of Capital Structure in Chinese Listed Companies", PhD theses, School of Business University of Ballarat, Australia.

Shiekh, N.A., and Wang, Z., (2011), "Determinants of Capital Structure: An Empirical Study of Firms in Manufacturing Industry of Pakistan", Journal of Managerial Finance, 37 (2), PP 117-133.

Shuetrim, G., Lowe, P., and Morling, S., (1993), "The Determinants of Corporate Leverage: A panel data Analysis", Research Discussion Paper 931, Economic Research and Economic Analysis Department, Reserve Bank of Australia.

Siddique, S.S., (2012), "Capital Structure Determinants of Non-financial institutions in Bangladesh", World Review of business Research, Vol 2, Issue 1, PP 60-78.

Sinan, A., (2010), "How do firm's Characteristics Effect Capital Structure?: Some UK Evience", Master's Theses, Kingston University London.







Sinha, S., (1992), "Inter-Industry Variation in Capital Structure in Indian", Indian Journal of Finance and Research, Vol. 2, PP 13-26.

Smith, C.W., and Watts, R.L., (1992), "The Investment opportunity set and corporate financing dividend and compensation policies", Journal of Financial Economics, Issue 32, PP 263-292.

Stohs, M.H., and Mauer, D.C., (1996), "The Determinants of Corporate Debt Maturity Structure", Journal of Business, Vol 69(3), PP 279-312.

Taub, A.J., (1975), "Determinants of Firm's Capital Structure", Review of Economics and Statistics, Vol. 57, PP 410-417.

Taub, A.J., (1995), "Determinants of Firm's Capital Structure", The Review of Economics and Statistics.

Teker, D., Tasseven, O., and Tukel, A., (2009), "Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis", International Research Journal of Finance and Economics, ISSN 1450-2887, Issue 29 (2009).

Titman, S., and Wessels, R., (1998), "The Determinants of Capital Structure Choice", Journal of Finance.

Warner, J., (1977), "Bankruptcy cost: Some Evidences", Journal of Finance, Issue 32, PP 337-347.

Williamson, O., (1988), "Corporate Finance and Corporate Governance", Journal of Finance, Issue 43, PP 567-591.

Wooldridge, J.M., "Introductory Econometrics: A modern Approach", 2<sup>nd</sup> Edition.

Zeitun, R., (2009), "Ownership Structure, Corporate Performance and Failure: Evidence of Panel Data of emerging market, a case of Jordan", Corporate Ownership and Control, Vol 6, Issue 4, PP 96-114.

Zeitun, R., and Tian, G.G., (2007), "Capital Structure and Corporate performance: Evidence from Jordan", Australasian Accounting, Business and Finance Journal, Vol 1, Issue 4, article 3.

