The Effect of Capital Structure and Ownership Structure on Banks Performance

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Abstract: The study aim to explore the relationship of capital and ownership structure with the performance of conventional and Islamic banking in Pakistan. By employing the annual data from 2007-12, the results of ordinary least square method the study shows that Capital structure measure of Return on Assets has significant relationship with capital structure and ownership structure. Return on Equity has significant and positive relationship with capital structure. Ownership structure is also significant with Return on Equity. Earnings per share are significant with capital structure.

Key words: Capital Structure · Ownership Structure · ROA · ROE · EPS

INTRODUCTION

When a firm gives equity, debt and hybrid securities by financing its whole assets and operations is called capital structure. Equity has two categories which are common stock and preferred stock while debt has three categories: debt for short period of time, debt for long period of time and the combination of both debts i.e. total debt. A firm issues some hybrid securities as well as above mentioned sources of financing. These securities have both the characteristics of debt and equity such as income bond. Capital structure has always been one of the debatable topics among Finance scholars. It is always a crucial decision for every firm. It has always been effort of firm managers to have the optimum capital structure which shows their concern to have the minimum cost of capital with maximum value for the organization. Modigliani and Miller [1] was the pioneer who started debate on capital structure. They are of the view that firm value would certainly not concerned with capital structure in the absence of bankruptcy cost and tax benefit.

In most of the cases, Financial Managers find it difficult to manage the real determinism of capital structure.

There is a possibility that the firm capital structure may change time to time according to the needs and requirements. When a firm uses more debt, the fixed obligations of the firm increases. It predicts better future earnings of the firm. While selecting the optimum capital structure, the tradeoff between risk and return must be kept in mind. Horne and James [2] are of the view that the risk and profitability of the investment can determine firm value.

By having a good blend of debt and equity, it will provide a company an edge over the other companies. It has been tried through literature to prove that there must be a mixture of both debt and equity in every organization. If a firm uses 100% equity, it may have to bear high taxes or poor governance. If a firm uses more debt, it may face the problems that all the profit would be distributed among creditors who are only interested in interest on their principal amount. Kim [3] views that by using more debt of a company may affect bad on the performance of the firm.

Many theories describe the performance of the firm in relation to capital structure. Agency theory states that there is an agency problem among owners (shareholders) and management. Managers are more interested in their personal benefits and personal growth and shareholders want to maximize their wealth. Debt financing is the better option because it lessens firm free cash flows. The reason behind this is that they have to pay the fixed amount of taxes for this debt which they have taken. Modigliani and Miller [4] elucidate that more debt capital should be used than equity.

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State bank of Pakistan regulates and controls the banking activities and makes the monitory policy decisions in Pakistan. In last few years, Pakistani banking sector has involved private sector and foreign investors to get the better results. Thus they created healthy competition between conventional and Islamic banking sector; both have great competition in motivating their customers and devise innovative products and provide best services for them. Every bank tries to produce some innovative products and services to retain their customer and for their growth.

Pakistan is an ideological state and came into existence in 1947 in the name of Islam. Islamic banking system has been very popular in Pakistan due to Riba free banking. The state bank's role in making Islamic banking successful can't be denied in keeping with conventional banking. This devised many strategies: First strategy is the establishment of Islamic bank and the combination of both Islamic and conventional banking. Second strategy is that Islamic banking was encouraged. Third strategy is to have the standalone branches of existing commercial banks. Capital adequacy ratio is the ratio of bank's capital to its risk. It is also known as Capital to Risk asset ratio. Capital adequacy ratio is the ratio which determines the bank's capacity to meet the time liability and risks such as credit risk. Banks capital structure includes the short term as well as long term debt. They can borrow from state bank of Pakistan to meet their long term financing needs.

There are many studies available on capital structure. These studies describe its effect on performance of the firm. Saeed *et al*. [5] study brought into light that there exists a relationship between capital structure and profitability. An association of capital structure and Pakistani banks' profit has been shown by them. There are a few studies which elucidate that banks performance in Pakistan has an effect of capital structure.

Several modern corporations are run by the professional executives these days. These professional executives owe a small fraction of the shares in the company. There is an ongoing debate on the ownership structure and the separation of ownership from its control. According to Williamson [6], serving managers prefer their own interest as compare to the shareholders.

The impact of capital as well as ownership structure on Islamic and conventional banks performance has been examined in this study. Many banks are still facing the problem of selecting the optimum capital structure. The relationship of capital as well as ownership structure with banks performance has been analyzed in this study.

Problem Statement: Banking industry has been one of the most important services for mankind. For the economic development of any country banks play vital role. There have been so many drastic changes in banking industry for the last 60 years. Islamic and conventional banks have rivalry among them. There has been bond between Islamic and Conventional banking in Pakistan and many Gulf States. Both Islamic and conventional banks try to satisfy their customers according to their needs and wants by providing innovative products and services. Every firm has to take important decisions on capital structure. Banks are not exceptional. The debate regarding capital structure was started by Modigliani and Miller [1]. They opined this relationship will cut down the assumptions of taxes, transaction cost and provide conducive environment for the markets if the firm performance remain bad in capital structure. However many researchers after their study found a positive link between capital structure and firm performance According to our best knowledge, let alone a book even a single study does not address this relation about bank performance. So first of all we have to find material about the required topic so that we can analyze its impact on capital structure and ownership structure in relation to bank performance in Pakistan.

Objectives of the Study: The objective of this study is to ascertain the interrelation of capital and ownership structure with the performance of conventional and Islamic banking in Pakistan.

Significance of Study: There has been lot of debate among policy makers regarding firm's performance depending on capital structure. This will be the foremost study in relation to Islamic and conventional banking in Pakistan on the bases of capital structure and ownership structure.

Literature Review
Capital Structure: Miller and Modigliani [1] brought to light the fact that there was no relation between capital structure and the value of the firm. Both repel to each other. The idea behind this theory is that there must be conducive capital market without any taxes. There were the assumptions which were not valid.

Rajan and Zingales [7] analyzed the determinants of capital structure in view of financial decisions in the majority of industrialized countries. For this an effort has been made to fill the gap. It is yet to be seen that whether the capital structure of America and other countries is

similar or not. They have also analyzed some institutional differences found across the countries and their impact on financing decisions. They find that G7 countries have the same level of leverage and existed difference cannot be explained easily. Marsh [8] concludes that choice between debt and equity markets are foremost of the part influences the companies and past history of securities prices.

Rozeff [9] Dividend policy continues to be an area which has some questions which are unanswered. Some questions have been answered but in a conflicting way and some questions are still to be asked. He argued that increase in dividends relative to earnings lower agency cost but raise the cost of external financing. He found a negative link between dividend payout and leverage.

Kester [10], after having a larger sample of manufacturing corporations in Japan and United States and study the capital and ownership structure, test the hypothesis that Japanese manufacturing is more levered than U.S manufacturing. However their results suggest, that when levered is measured on market value basis and adjusted for liquid assets, significant differences in country differences in leverage between the U.S and Japan. On the other hand if leverage is measured on book value basis then higher leverage is found in Japan.

Shyam-sunder and Mayers [11] they said that if a firm needs external funds it will prefer debt over equity Owing to the lower cost of information. The base of this theory is the information asymmetry among investors and managers. Managers have more information as compare to outside investors about the firms future riskiness.

Abbasi and Rub [12] established a model for the measurement of the effect of capital structure on the efficiency on the banks. The result shows that there is a negative relationship between leverage and bank profits. Pastory *et al*. [13] findings suggest that there is negative association between capital structure and bank performance.

Ownership Structure: For the last 20 years, there have been lots of changes in the regulations of banking industry all over the world. owing to market integration and financial deregulation, scope of banking industry is reshaping day by day and due to this the role of banks is not only limiting to a financial intermediary, but they are also now offering new products and innovative services to their customers. Saunders *et al*. [14] empirically proved a positive link between managerial stock ownership and incentives of risk taking. Further they suggest that the

banks which are controlled by shareholders are tends to take more risk as compare to the banks which are controlled by managers.

Laeven and Levine [15] infer that the owners who are powerful in the banks tend to take high risk. Pindado and Torre [16] have discussed that ownership structure of a firm can be helpful source to explain the choice between debt and equity. It shows that the control of the firm is largely banking upon the capital structure. There is not straight relationship between ownership and capital structure. They prove that self-interested agents play a key role in the decision of a capital structure. They can have the debt ratios according to their own interest.

Arosa *et al.* [17] concluded by showing that there is not any direct association of ownership concentration on the attitude of the shareholders. Depending on the generation of the family who are managing the firm Ownership concentration and firm performance are different. When there are low levels of control rights, he concluded a positive relationship between ownership concentration and corporate performance of the firms. Further he concluded a Negative relationship when there is high level of ownership concentration.

Research Methodology: Banks performance is measured by using the ratio measures. Ratios measure can be seen in many studies such as Hasan and Butt [18], Sehrish *et al.* [19]. There are many advantages of using the ratio method. One of the most important benefits by using the ratio methods specially in measuring the bank performance is that it compensates disparities. Banks are not equal with respect to size and capital. One of the quality of using the ratio measures is that when we use the ratio measure this removes the disparities and brings them at par.

Data: Data for this study has been collected from State Bank of Pakistan, websites of the selected banks for this study and Karachi Stock Exchange. Five banks have been selected from Conventional banking industry and Five Banks from Islamic banking industry. All of the banks which are selected in this study are listed in KSE. Data for 2005-2012 has been used for this study.

Variables of the Study: Ebaid [20] used ROA, ROE and Gross Profit Margin to measure the firm performance. Firm performance is measured by Bokhari and Khan [21] by using ROA, ROE, NPM and EPS. In this study Capital structure is an independent variable which can be measured by short term debt and long term debt.

Ownership Structure is also another independent variable, which will be measured by the ratio of number of shares held by BOD to total number of shares outstanding.

The dependent variables for this study are firm performance which will be measured by Return on equity (ROE), Return on Assets (ROA) and Earning per share (EPS).

Ordinary Least square regression and correlation model will be opted to find out the association between capital structure, ownership structure and firms performance.

RESULTS AND DISCUSSIONS

Descriptive Statistics: Table 2 provides the details for descriptive statistics of variables that are used in our analysis. The First row of the table indicates the mean of the variable includes ROA, ROE, EPS, OS, LTDTC, STDTC and TDTC. Median values can be seen in the second row of the table for the given variables which define the middle value of the data. Maximum and Minimum Values can be seen in the third and fourth row of the table respectively. The fifth row of Std. Dev. explains the variability of variables from their mean values.

The results of Jarque-Bera test explain whether the sample follow the normal distribution or not? The probability of Jarque-Bera shows that all the variables have normal distribution.

Capital, Ownership Structure and its Effect on Banks Performance Measured Through ROA: Table 3 shows all the variables at first column and then there are three models which are showing the different results. In model one the relationship of ROA is checked with STDTC and OS, model 2 indicating the relationship of ROA with LTDTC and OS, model 3 indicating the relationship of ROA with TDTC and OS. Firm performance is negatively and significantly associated with STDTC measured by return on assets. Further significant and positive association is found between LTDTC and firm performance measured by ROA. There is a significant negative relationship of Total debt to capital with firm performance measured by ROA. It is also shown that there is positive and significant association between Ownership structure and firm performance, when the firm performance is measured by ROA. These findings are consistent with Khan. He also finds negative and significant association of STDTA and TDTA, when the

Table 1:

Variables	Measurement
Dependent Variables	
Return on equity	Net Income/Total Equity
Return on Assets	Net Income/Total Assets
Earnings Per Share	Net Income/shares outstanding
Independent Variables	
Long term debt to capital	Long term debt/capital
Short term debt to capital	Short term debt/capital
Total Debt to Capital	Total Debt/Capital
Ownership Structure	No. of shares held by board of directors/total number of shares outstanding

Table 2:

	ROA	ROE	EPS	OS	LTDTC	STDTC	TDC
Mean	-0.046562	-0.034291	-0.002978	0.000200	0.012080	0.002104	0.001905
Median	-0.077676	-0.032627	-0.032960	0.044796	0.009797	0.054103	0.003717
Maximum	0.089347	0.180571	0.206538	0.116814	0.065223	0.116923	0.009306
Minimum	-0.158009	-0.178339	-0.187009	-0.126705	-0.017233	-0.124591	-0.015477
Std. Dev.	0.086349	0.111417	0.123590	0.103760	0.026002	0.101332	0.007426
Skewness	0.545131	0.563500	0.331933	-0.167386	0.830258	-0.207472	-1.663930
Kurtosis	1.849820	2.582769	2.136296	1.180283	2.956200	1.165085	4.461796
Jarque-Bera	52.01075	29.90725	24.57462	70.89379	57.13910	73.28869	273.5882
Probability	0.000000	0.000000	0.000005	0.000000	0.000000	0.000000	0.000000
Observations	497	497	497	497	497	497	497

Table 3:

Model	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Variables	ROA			ROE			EPS		
Constant	-0.037	-0.056	-0.037	-0.042	-0.0683	-0.0421	0.0014	-0.034	0.0014
	[-15.57]	[-18.54]	[-15.57]	[-12.53]	[-27.88]	[-12.549]	[0.3785]	[-10.61]	[0.3785]
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.7052)	(0.000)	(0.000)
STDTC	-4.7123			4.04			-2.4066		
	[-13.99]			[8.64]			[-4.536]		
	(0.000)			(0.000)			(0.000)		
LTDC		0.7867			2.8044			2.5528	
		[6.4481]			[28.405]			[19.768]	
		(0.000)			(0.000)			(0.000)	
TDTC			-4.7123			4.0427			-2.4066
			[-13.99]			[8.6417]			[-4.536]
			(0.000)			(0.000)			(0.000)
OS	5.17	0.6944	0.4649	-3.16	1.1597	0.8770	3.223	1.2309	0.8171
	[15.73]	[22.71]	[19.28]	[-6.92]	[46.877]	[26.195]	[6.2224]	[38.03]	[21.52]
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R^2	0.6389	0.5350	0.6389	0.5816	0.8171	0.5816	0.5627	0.7457	0.5627
Adj. R^2	0.6374	0.5331	0.6374	0.5799	0.8163	0.5799	0.5610	0.7447	0.5610
F	437.07	284.19	437.07	343.43	1103.64	343.43	317.95	724.42	317.95
Prob. F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DW Stat	2.2589	3.2683	2.2589	1.5609	1.6917	1.5609	2.2030	3.030	2.2030

firm performance is measured through ROA. The results of Abor [22] are also consistent he founds that the relationship between STD and TD with ROA is statistically significant and negative. Sheikh and Wang [23] founds that ROA is negatively associated with all the measures of capital structure. Myers and Majluf also state that there is a positive association among long term debt and the profitability. Salim and Yadav [24] also concluded a significant and negative association among capital structure and firm performance, when the performance is measured by ROA. The adjusted determination coefficient R^2 shows that 63.89% of the variations of the ROA were explain with conjunct by the independent variables in the model of STDTC and in LTDTC and TDTC this ratio is 53.50% and 63.89% respectively.

Capital, Ownership Structure and its Effect on Banks Performance Measured Through ROE: Table 3 shows all the variables at first column and then there are three models which are showing the different results. In model one the relationship of ROE is checked with STDTC and OS, model 2 indicating the relationship of ROE with LTDTC and OS, model 3 indicating the relationship of ROE with TDTC and OS. There is a significant positive association among Short term, long term and total debt to

capital with firm performance, when firm performance is measured by ROE. Further there is a negative and significant association between Ownership structure and STDTC with firm performance, it also have significant positive association with long term debt to capital as well as total debt to capital. Abor [22] found a positive and significant association among STDTA and ROE. He further concluded that there is a significant positive association between total debt to capital and ROE. There is negative association between Long term debt to capital and ROE. By we increasing the short term debt, the profits of the company increase due to low level of interest rate. While the results of Salim and Yadav [24] founds a significant negative association between ROA and Capital structure. The adjusted determination coefficient R^2 shows that 58.16% of the variations of the ROE were explain with conjunct by the independent variables in the model of STDTC and in LTDTC and TDTC this ratio is 81.71% and 58.16% respectively.

Capital, Ownership Structure and its Effect on Banks Performance Measured Through EPS: Table 3 shows all the variables at first column and then there are three models which are showing the different results. In model one the relationship of EPS is checked with STDTC and

Table 4:

Probability	ROA	ROE	EPS	OS	LDTC	STDC	TDC
ROA	1						

ROE	0.756001	1					
	0.0000	-----					
EPS	0.939058	0.909641	1				
	0.0000	0.0000	-----				
OS	0.704180	0.720018	0.737957	1			
	0.0000	0.0000	0.0000	-----			
LTDTC	-0.222212	0.060261	-0.031471	-0.550161	1		
	0.0000	0.1798	0.4839	0.0000	-----		
STDTC	0.676662	0.735532	0.726998	0.997658	-0.527855	1	
	0.0000	0.0000	0.0000	0.0000	0.0000	-----	
TDTC	-0.605812	-0.023767	-0.390881	-0.358991	0.484327	-0.294314	1
	0.0000	0.5971	0.0000	0.0000	0.0000	0.0000	-----

OS, model 2 indicating the relationship of EPS with LTDTC and OS, model 3 indicating the relationship of EPS with TDTC and OS. Table shows that when the performance of the firm is measured by EPS, Short term and total debt to capital has negative significant association with firm performance. On the other hand long term debt to capital has significant positive association with firm performance. There is a significant positive association between Ownership structure and firm performance. These results for the association between EPS and STDTC and TDTC are consistent with the findings of Salim and Yadav [24] they founds a significant and negative relationship between them. The adjusted determination coefficient R^2 shows that 56.27% of the variations of the EPS were explain with conjunct by the independent variables in the model of STDTC and in LTDTC and TDTC this ratio is 74.57% and 56.27% respectively.

Correlation Matrix: Table 4 represents the correlation matrix which shows the association between variables of this study. The diagonal elements of the correlation between variables with themselves are always equal to one. ROA indicates a positive association with all the variables except LTDTC and TDTC. ROE have Positive association with all the variables except TDTC. EPS have positive association with OS and STDTC and negative relationship with LTDTC and TDTC. OS have positive association STDTC and negative association with LTDTC and TDTC. LTDTC have negative association with STDTC and positive association with TDTC. STDTC have negative association with TDTC [25-27].

CONCLUSION

It has been tried in this study to find the effect of capital structure and ownership structure on the performance of the banks, as a comparative analysis of Islamic and conventional banks in Pakistan. Theoretical literature of capital structure specifically the Modgliani-Miller theorm, trade off theory and pecking order theory was reviewed to provide a sufficient understanding that capital structure and ownership structure could affect firm performance. Extensive literature was reviewed to provide and identify the proxies of capital structure, ownership structure and to measure firm performance. Return of Assets (ROA), Return of equity (ROE) and Earning per share (EPS) is used to measure firm performance. Short term debt to capital (STDTC), Long term debt to Capital (LTDTC) and Total debt to capital (TDTC) is used to measure the capital structure. The study is conducted on banking sector of Pakistan, a total sample of 10 banks is selected in which 5 of them are Islamic and 5 are conventional.

To find the relationship of capital structure, ownership structure and banks performance, a series of regression has been used. Capital structure measure of Return on Assets (ROA) has significant relationship with capital structure and ownership structure. While STDTC, TDTC has negative and LTDTC has positive effect. Return on Equity (ROE) has significant and positive relationship with capital structure. Ownership structure is also significant with ROE. Earnings per share are significant with capital structure, while STDTC, TDTC has negative relationship and LTDTC has positive relationship.

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