CAPITAL STRUCTURE DETERMINANTS OF ISLAMIC AND CONVENTIONAL BANKS OF PAKISTAN

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Abstract. *The major objective of this research is to explicate as to how conventional and Islamic banks opt for their capital structures and what are the variables that affect their decisions regarding their capital structure. Data was gathered through the yearly reports of the KSE indexed companies from the years 2004-2014. For analysis, ordinary least square (OLS) is applied in order to obtain the results. The outcomes of study demonstrate that the conventional banks are more leveraged as compared to the Islamic banks. In addition, the conventional banks are bigger in size than Islamic banks and possess higher level of profitability. The fixed operating resources possessed by the Islamic banks are more in comparison to the conventional banks. The outcomes show that the profitability and tangibility are inversely associated with book leverage however the bank size has significant nexus with the book leverage of Islamic banks. On the other hand, profitability, growth and tangibility are negatively related to book leverage in whereas the bank size positively impacts the decisions of the conventional banks for choosing the capital structure. Earning volatility shows no impact on capital structure decisions. These outcomes warrant that the banks need to develop an understanding related to the bank specific factors which would help them to decide regarding the capital structure of these banks. This study provides a framework for future researchers for deeper exploration.*

Keywords: Conventional banks; Islamic banks, ordinary least square, State Bank of Pakistan

Introduction

Capital structure is about the blend of equity and debt (Sheikh & Qureshi, 2017). A mixture of firm equity and debt enhances the value of the firm and its generally limits the cost of capital. The obligation superfluity proposes that

when capital markets are impeccable which means no topsy-turvy data, no charges, no exchange costs and no insolvency and organization costs and so on (Modigliani & Miller, 1958). At the end of the day, the decision amongst obligation and value is just superfluous. In either case, if the business duties prevail than the capital structure needs an extraordinary arrangement as a result a duty deductible cost and produces a significant expense shield (Miller & Modigliani, 1963). Moving on the similar lines, responsible financial decision making, and value speculators additionally increment the estimation of the firm. In any case, considering hazard and subsequent expenses of higher obligation, the exchange of hypothesis expresses that organizations can make a decision about the capital structure by estimating the expenditures and benefits of more responsibility.

The advantages of obligation incorporate the assessment deductibility of premium cost and diminishment of free money issue. The expenses of obligation incorporate potential expenses and office clashes amongst shareholders and obligation holders (Fama & French, 2002). On the flip side, pecking request hypothesis says that firm will get, as opposed to issuing value when inward subsidizes are deficient to fund the usage of capital program (Myers & Majluf, 1984). Free income hypothesis proposes that levels of responsibility can increase the firm's incentive notwithstanding the danger of budgetary trouble when a company's working income fundamentally surpasses its productive speculation openings (Jensen, 1986). In whole, unique contingent hypotheses of capital structure recommend distinctive obligation levels because of the way that every hypothesis depends on various presumptions. For example, exchange off hypothesis depends on expenses and advantages of an extra dollar of obligation, pecking request hypothesis depends on lopsided data, and free income hypothesis accentuates organization costs.

Past researches have examined the impact of the components of the specific factors of the companies related to the capital structure as well as the anticipations of various models for instance (Ahmed Sheikh & Wang, 2011; Tanveer, 2015). Nevertheless, the past attempts have overlooked the financial companies from the investigation for making best choices are in various other directions. In addition, banks will undoubtedly take after the controls confined by the national bank of the nation with a specific end goal to keep up the certainty of the partners on the monetary framework. Although arrangement choices made by the administrative experts give a more extensive structure to the bank chiefs anyway they may settle on choices of their own decision to make an incentive for the shareholders.

All the more imperatively, the watched varieties in the bank capital structure globally are subjected to it (Gropp & Heider, 2010). In spite of the fact that bank resources and capacities are not the same as those of non-money related firms however observational proof proposes that differences between financial and non-financial firms are more important than perceived. Subsequently, minimal studies have been conducted on the factors the impact of capital structure of the conventional banks and the observational reviews are few reasons that have evoked the requirement for this exact examination (Amidu, 2007; Diamond & Rajan, 2001; Gropp & Heider, 2010). Specifically, this paper intends to look for the appropriate response of the accompanying inquiries.

1. How does the conventional and Islamic bank opt for their capital structure?
2. How does the capital structures of conventional and Islamic commercial banks are impacted by the bank specific factors?

Based on the extensive literature review conducted by the researcher, there exists a niche in the empirical literature regarding the effect of bank specific factors and the debt and equity proportion of conventional and Islamic banks. It is further expected that the results obtained from the analysis of this study would provide a platform to the bankers for the better understanding regarding the capital structure.

The upcoming section 2 presents an overview of the past literature, both theoretical and empirical. The research methodology and analysis are explained in section 3 whereas the conclusion and recommendations are presented at the end of the article in section number 4.

2. Review of Literature

According to Diamond and Rajan (2000) few studies have investigated the impact if bank specific capital structure. In order to understand the factors of capital structure of the bank, it is necessary to develop an understanding regarding the bank performance. It has been recommended that a capital structure of the bank can develop impacts of liquidity, expenditures of bank and the tendency to borrower refund. It has further been insisted that the data of 200 largest public banks of USA among the years of 1991-2004 proposed an outcome that capital structure is impacted by bank specific variables (Gropp & Heider, 2010). It has further been emphasized that an association between banks and non-financial capital structures. Additionally, it has been found by various other researchers that banks capital structure is influenced by comparative factors (Frank & Goyal, 2009; Rajan & Zingales, 1995).

Further a study has been conducted on nineteen Ghanaian banks. The data was taken from the years 1998-2003 in which the factors impacting the capital structure of the banks were studied (Amidu, 2007). Further information has been obtained from 14 OIC countries from the years 1999-2009 by Karim, Hassan, Hassan, and Mohamad (2014) that the development occurs in both Islamic and conventional banks. Furthermore, it has been explored that either capital structure is related to both Islamic and conventional banks. The outputs also show that credit development responds to the capital structure in both Islamic and conventional banks. Additionally, it has been found that the outcomes of the impact capital structure are larger as compared to the highly encouraged banks. Furthermore, the data regarding the banks and neighborhood offices has been collected from Taiwan in order to investigate the impact of capital structure (Kuo & Chi-Haw, 2003). It has been proposed by Kuo and Chi-Haw (2003) that household banks are not as profitable as other banks. Additionally, the local banks have better liquidity ratio as compared to other banks. Moving on further, the determinants of capital structure have been unveiled by Mohammed and Mekonnen (2015) in Ethiopian banks. It can be seen that the bank size and liquidity are the crucial determining factors of capital structure. Outcomes demonstrate that advancement and risk associated with the banks depend on the capitals structure. Overview of the variables of this study is illustrated in Table 1.

Table 1 *Variables' Definition*

Variable	Abbren.	Definition
Book leverage	BLev	Total Liabilities divided by total assets
Profitability	Profit	Profit after tax divided by total assets
Bank size	BSIZE	Natural log of total assets
Tangibility	Tang	Fixed operation assets divided by total assets
Growth	Growth	Rate of change in total assets
Earnings volatility	EV	Profit prior to tax deduction-Profit before tax deduction t-1 divided by profit after tax deduction

3. Empirical Methodology

4.1 Context

Since the creation of Pakistan, the conventional banks obtain a leading position in Pakistan and its economy as it not developed and mature economic structure. The advancement in obtaining the monetary benefits has suddenly come to stop due to nationalization of the commercial banks. It benefits in saying that security exchange was started in 1991 for financial specialists. Additionally, the government used the approach of privatization and hence the

majority of the business exercises for the general population segment. Precisely, the novel organization is noteworthy where various commercial banks were allowed in restricted area.

4.2 Research methodology

The example contains information crosswise over banks and after some time making it board information. Accordingly, we utilize board information systems (i.e. pooled customary slightest squares, settled impacts and arbitrary impacts) to evaluate the impacts of bank-particular factors on book leverage of regular and Islamic banks. The arbitrary impacts technique demonstrates that variety crosswise over banks is thought to be irregular and uncorrelated with informative factors. In addition, Hausman test used to pick which one board econometric procedure either settled impacts or irregular impacts best clarifies our estimations (Hausman, 1978). The fundamental relapse is communicated as:

$$y = \alpha + X\,\beta + u$$

4.3 Empirical Results

Capital structure demonstrates that capital structure is identified with the debt to equity ratio of both Islamic as well as commercial banks in country. A negative relationship between the profitability and book leverage persists. Associating within the relapse comes about demonstrate that productivity is contrarily identified with book leverage of Pakistani conventional as well as the Islamic banks. A negative connection amongst profitability and book leverage is reliable with the expectations of pecking request hypothesis. The outcomes shown in table Tables 2 and 3 depict that mean values and values of standard deviation of both types of banks are in acceptable range.

Table 2 *Descriptive Values of Islamic Banks*

Variables	Obs.	Mean	Standard deviation	Min.	Max.
$BLEV_{it}$	41	0.9664	0.1420	0.6023	0.8425
$PROF_{it}$	41	-0.0008	0.0133	-0.0411	0.0177
$SIZE_{it}$	41	18.711	0.911	16.218	19.316
$GROW_{it}$	41	0.4904	0.6627	-0.9806	3.6699
$TANG_{it}$	41	0.0495	0.0355	0.0190	0.2196
$EVOL_{it}$	41	-0.9257	9.5933	53.255	16.339

Table 2 shows that descriptive statistics of Islamic banks whereas the descriptive statistics of commercial banks are shown in table 3.

Furthermore, the correlation has been shown is depicted in Table 4 and 5. The results of Islamic and conventional banks are shown in table 6 and 7. The

negatively significant relationship exists between the usage of debt to equity ratio and profitability as emphasized by (Amidu, 2007; Gropp & Heider, 2010; Mohammed & Mekonnen, 2015). Moving on further, according to Hellwig (2014), the bank size is shown to have positive relationship with the book leverage.

Table 3 *Descriptive Values of Commercial Banks*

Variables	Obs.	Mean	Standard deviation	Min.	Max.
$BLEV_{it}$	176	0.931	0.0544	0.678	0.984
$PROF_{it}$	176	0.004	0.032	0.078	0.039
$SIZE_{it}$	176	19.155	1.1044	15.92	21.392
$GROW_{it}$	176	0.3000	0.2584	0.2277	2.9000
$TANG_{it}$	176	0.0394	0.0267	0.0034	0.2245
$EVOL_{it}$	176	-0.4133	4.394	33.544	14.580

Table 4: *Correlation of Islamic Banks*

Variables	$BLEV_{it}$	$PROF_{it}$	$SIZE_{it}$	$GROW_{it}$	$TANG_{it}$	$EVOL_{it}$
$BLEV_{it}$	1.00					
$PROF_{it}$	0.30^{***}	1.00				
$SIZE_{it}$	0.88^{***}	0.64^{***}	1.00			
$GROW_{it}$	0.05	-0.12	-0.04	1.00		
$TANG_{it}$	-0.66^{***}	-0.48^{***}	-0.68^{***}	-0.09	1.00	
$EVOL_{it}$	0.03	0.42^{*}	-0.01	0.23^{***}	-0.114	1.00

***, **, * Significance level 1%, 5%, and 10% level respectively

The outcomes suggest that the bigger firms possess a potential to gain more because of their larger capacity bear the risk and their size is larger to dissolve. The big commercial banks would like to store their finances as there is a potential of hazard and disaster. The banks also possess an extensive branching system. The extensive branches enable the banks to survive as their potential to withstand the changing environment because of their capacity to survive the changes at the minimum costs relative to the banks having a limited branching system. The positive association between the book leverage and bank size has discovered by (Mohammed & Mekonnen, 2015; Tchuigoua, 2014). Growth is seen to possess an inverse association with the debt to equity ratio of the conventional banks. The negative relationship between the growth and capital structure is seen to confirm the propositions of pecking order theory. Additionally, the negative association shows that it is anticipated with the firms and its recommendations that higher growth opportunities motivate the

executives to play their role in order to acknowledge the risky behavior that transfers from the responsibility holders to stakeholders.

Table 5 *Correlation of Commercial Banks*

Variable	***BLEV*** $_{it}$	***PROF*** $_{it}$	***SIZE*** $_{it}$	***GROW*** $_{it}$	***TANG*** $_{it}$	***EVOL*** $_{it}$
BLEV $_{it}$	1.00					
PROF $_{it}$	0.07	1.00				
SIZE $_{it}$	0.31***	0.50***	1.00			
GROW $_{it}$	-0.18**	-0.01	-0.14***	1.00		
TANG $_{it}$	-0.33***	-0.45***	-0.47***	-0.06	1.00	
EVOL $_{it}$	0.21	0.00	0.100	0.40***	-0.10	1.00

***, **, * Significance level 1%, 5%, and 10% level respectively

The negative association is inconsistent with pecking order theory which argues that the companies with safe resources possess a potential to gain more as they hold on more motivation is liquidation of the non- profitable resources. As argued further by the researchers, the organizations with a close association with the debt providers need to provide less insurance (Berger & Udell, 1994). Since it is known that the commercial banks would satisfy all the requirement of the state bank of Pakistan prior to their operation. Most importantly, because of the weak and fragile corporate administration in the state assume that an important part is obtaining the assets and substitute it for the physical security.

Table 6 *Impact of Independent Variables on Dependent Variables (Islamic Banks)*

Variables	DV BLEV it					
	OLS		FE		RE	
	Co-efficient	t-statistics	Co-efficient	t-statistics	Co-efficient	t-statistics
C	-0.95***	-4.62	-0.14	-0.50	-0.96***	-4.61
PROFit	-2.15	-1.50	-2.56**	-2.76	-1.55	-1.37
SIZEit	0.09***	6.62	0.02***	5.54	0.10***	6.62
GROWit	0.02	0.84	0.01	0.82	0.02	0.95
TANG it	-0.62	-1.53	-2.40***	-4.48	-0.63	-1.53
EVOL it	0.00	0.51	-0.00	-0.59	0.00	0.51
N	41		41		41	
R2	0.62		0.59		0.62	
F-statistics	27.99		34.97		27.17	

***, **, * Significance level 1%, 5%, and 10% level respectively

At the end, the profitability shows a positive association which approves the clauses of pecking order theory also. The study recommends that

companies with profitability level possess a potential to obtain more as compared to the firms with unstable income level. The positive nexus is strong as it possesses the varieties of the debt because the State Bank of Pakistan reports the financial outcomes after every two months rather than annually. Hence it could be established that unstable debts and acquiring rates because of the cash supply in economy and compulsive political as well as financial conditions can impact the development of the bank.

Table 7 *Impact of Independent Variables on Dependent Variables (Commercial Banks)*

Variables	DV $BLEV_{it}$					
	OLS		FE		RE	
	Co-efficient	t-statistics	Co-efficient	t-statistics	Co-efficient	t-statistics
C	0.71***	7.52	0.95***	7.95	0.72***	8.33
$PROF_{it}$	-0.43**	-3.26	-0.66***	-4.63	-0.55***	-3.75
$SIZE_{it}$	0.02***	3.67	0.00	0.95	0.01	2.44
$GROW_{it}$	-0.02	-2.47	-0.03***	-3.22	-0.03***	-3.99
$TANG_{it}$	-0.57*	-2.91	-0.88***	-3.77	-0.76***	-3.74
$EVOL_{it}$	0.00	0.33	0.00*	2.77	0.00*	2.71
N	176		176		176	
R^2	0.55		0.52		0.54	
F-statistics	16.84		18.77		16	

The outcomes of the analysis demonstrate that the Pakistani banks opt for their capital structure exclusively from non-financial firms. Uniquely the decision of the firms is resultant of the administrative requirements as it is seen ordinarily by the experts. The choice of capital structure of the banks majorly depends on the innate qualities of the bank itself. Moreover, the decision of the firms is by all means impacted by the relative factors as recognized by non-monetary firms. The favorable and unfavorable outcomes of the determining factors and the activities carried out by the directors could encourage the shareholders to carry out a review regarding capital structure of the bank.

4. Conclusion

This study examines that how the conventional as well as Islamic banks opt for their capital structure. This study also explored that what are most significant aspects that impact the choice of the banks regarding capital structure. For estimation of results, the information was extracted from the yearly reports of the banks indexed on KSE through the period of 2004-2014.

The outcomes suggest that the conventional banks have greater leverage as compared to the Islamic banks. Furthermore, the conventional banks are larger in size as compared to the Islamic banks and at the same time they possess safer earnings and higher profitability. The Islamic banks have comparatively more fixed operating assets as compared to the conventional banks.

The outcomes of the regression show that the profitability shows a negative association with the book leverage. The clauses of pecking order theory are confirmed with the negative association between the profitability and leverage ratio. Next factor of bank size shows a positive association with book leverage. The outcomes confirm the propositions of trade off theory. Moving on further, the growth is negatively in relationship with book leverage. The results are consistent with the propositions of pecking order theory and agency theory. The factor of tangibility was found to possess negative association with book leverage, but volatility shows the positive association. Both the outcomes show a consistency with the clauses of trade off theory. Among all the variables under investigation, the capital structure of both conventional and Islamic banks is majorly impacted by profitability, bank size and tangibility. As regards to capital structure of conventional banks particularly, bank size, growth, tangibility and volatility came out to be the most important determining factors. Interestingly, similarity in the directions and signs of the coefficients as compared to the clauses of various capital structures predict that regulations are not applicable to the capital structure of the banks.

The study under investigation also presents some important policy implications as well. First of all, the study suggests that the policy makers of Pakistan should produce a favorable environment of business so that they can favorably decide according to the requirements of rules and regulations. The results of this study would fill up the niche in literature with reference of capital structure and Pakistani context. The findings of the study would be helpful for the bank managers to develop an understanding regarding the bank specific factors and their impact over choice of capital structure. This particular attempt also provides grounds for future researchers to include more variables for a much-detailed review regarding the capital structure.

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