Roles Of Capital Structure On Banks Profitability; Case Study From Commercial Banks In Iraq

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ABSTRACT

Capital structure decisions of corporations received a great deal of attention in the finance literature. The decision on how to finance the operations of a corporation has an important role in its financial performance. Against this background, this paper examines the impact of capital structure decisions on the profitability of commercial banks listed on the Bagdad Stock Exchange for the period from 2009 to 2020. According to the findings, commercial banks with higher debt ratios tend to have lower profitability in Iraq. This finding is robust against a series of control variables, including different debt ratios and profitability measures.

Keywords; profitability, capital structure, total debt to asset ratio, total debt to equity ratio, bank size and sales growth

INTRODUCTION

Ideally, capital structure in a contemporary era is a unique puzzling common debate in corporate finance literature (Brounen&Eichholtz, 2001). The determinant of this concept is defined as the collection of debt and equity that jointly create the total capital of an economic entity. This combination considers a strategic choice for financial and other managers. Thus, the proportion of each capital structure determinant in banks' capital is a vital decision since the profitability of each business entity is easily affected by such decisions. This implies thorough consideration should be given on this issue since the capital structure has such a direct effect on business profitability

When a firmfaces unstable financial conditions and that have a financial deficit, the manager or financial decision-makers

have to make proper financial and managerial decisions to achieve the firm's sustainability. Debt restructuring is one of the ways that can be relied on by a firm. Thus, choosing debt restructuring definitely needs expert skill and analytic abilities, so decision-makers can properly decide financial restructures. An ideal collection of capital structure will reduce the cost of financing and increase the firm's value. Therefore, it is relevant for managers to understand the origin theory of capital structure.

Problem statement

The success of any financial institution depends on its business environment; this is because a dynamic business environment is a hotbed for the right capital mix, which is crucial in maximizing shareholder value. These institutions rely on their capability of ascertaining, evaluating and examining the risks in a refined approach. Therefore, to evaluate and deal with the various risks, the financial institutions should develop valuable techniques of ascertaining the right capital needs, which can cushion the unexpected losses due to market, credit and operational risk vulnerabilities.

Additionally, with the unpredictable business environment, starting with the 2007 financial crisis to the current COVID-19 pandemic, the banks have become more exposed, and the good sustainable performance of the banking sector at large is becoming more questionable. In this regard, there is a need to understand the internal strategies for financial institutions as a backup approach since controlling the external environment is quite difficult.

Gap in knowledge

Existing research works on capital structure analyze firms' capital structure and its impacts on the profitability of a company. Generally, optimal debt lessens the cost of capital in a company while capitalizing on the company's value on the other hand. This means that the optimal debt ratio is identified as one which improves a company's profitability. However, there is a divergence of knowledge within the existing research works, and this does not only happen in the abstracttexts but also the experiential stance. For instance, studies by Ngobo&Capiez (2004), Goddard et al. (2005) and Serrasqueiroet al. (2011) find a association negative between capital structures specifical debt on a company's profitability. Conversely, Berger & Di Patti (2006), Margaritis&Psillaki, (2010) revealed a positive connection. In their studies, other studies such as Mesquita& Lara (2003) and Moscu (2014) reveal both negative and positive effects of a company's profitability. With the above divergence, the motivation for researching on this topic is to ascertain the true finding.

Significance of the study

This study seeks to examine the impact of capital structure on the profitability of commercial banks in Iraqi. This research aims to increase understanding of this topic and help various stakeholders; for instance, it will help bank managers find ways to develop an optimal capital structure that will help them maximize the shareholder's value. Secondly, it will help them predict the outcomes of the various alterations a firm can undertake on its capital structure. This study will also help the management ascertain the unseen cost of capital that the shareholders convey as an outcome of capital financing decisions. Lastly, this study adds to the knowledge of the financial field, which will help future academicians and researchers develop further knowledge.

Literature Review

Originally the core concept of capital structure introduced by Modigliani & Miller 1958, since this period, many studies have addressed the issues of optimal capital structure and their determinants. At present of initial theories capital structure determinants are viewed and explored based on distinctive perspectives from trade-off, agency cost and pecking order theory to market timing theory. Even though most practical explorations of the capital structure were noted to be spread in developed countries (Tamulyte, 2012), few have presented matter choice of capital structures in the banking industry from developing nations and Iraq.

A recent and similar study in Iraqi banks entitled "the impact of the capital structure on Iraqi banks performance" was investigated by Jadah et al., 2020. A panel data for the period of 2009 to 2008 of eighteen selected banks have been gathered to generate a study objective which includes the influence of capital structure on banks profitability.

1.2 Theoretical Literature Review

Signaling theory

The debt signaling theory explains the stock's future performance regarding any present pronouncements on its debt. Any announcement made regarding the company taking debt is perceived as a positive step which shows that the company is creditworthy and is financing its growth.

The signaling theory is all about debt, and in the presence of asymmetric information, the company can be connected with profitability (Connelly et al., 2011). In the business environment, companies are always seeking new growth opportunities, and investors would always wish to know if such companies are seizing these opportunities by detecting the direct or indirect signals shown by these companies.

Some of these signals arise from the corporation's management which can be termed as a direct signal, but also, on the other hand, indirect signals could be in the form of taking on more debt which can also be denoted as 'debt signals,' which can be positive or negative and can impact how a company's stock goes eventually.

Corporations raise debt in two forms; debt and equity. However, the former is the most favored method because it carries a lower cost than the latter. Therefore, with the decision to use debt financing by issuing corporate bonds, the investors develop a positive outlook that the company is footing solidly and is trying to find new growth opportunities at a lower cost.

Agency-cost theory

The agency costs theory outlines two conflicting impacts of debt on a company's profitability. First, the profitability is positive when it comes to the agency costs of equity between shareholders and managers; second, the profitability is negative when the agency costs result from the cost of debt between shareholders and lenders (Manso, 2008).

In this regard, the agency cost of debt becomes the conflict of interest amongst the shareholders and debt holders of a company on the grounds of the decisions made by the company's management.

Some of the actions taken by the company's debt holders to restrict the actions of the management with regards to using the capital include the agency costs, and this action can be taken if the debt holders believe that the management is biased on taking actions that would help shareholders instead of themselves.

Most often, the cost of debt matches with the agency cost of equity which can be described as the conflict of interest arising between the company's management team and its shareholders. For instance, one of the actions of the managers could be the desire to venture into a risky investment, hoping to benefit the shareholders through a high rate of return. On the other hand, the debt holders would want the management to implement safer investments by putting restrictions on the usage of their money to reduce risk. Therefore, the push and pull arising from these two sides lead to the agency's cost of debt.

Despite the prevalent conflicts, there will always be a principal-agent problem because the managers are in control of the debt holders' money. Nonetheless, certain such as implementing measures debt protect lenders from covenants can borrowers from risks such as defaulting payments due to financial actions, which can

Tax theory

The tax theory brings another illustration of profitability, especially the application of the tax-deductibility of interest, income tax and non-debt tax shield principles. Issuing debt is quite different from borrowing in one major perspective; a company receives money from public investors instead of accepting money from the bank. Further, in exchange for cash, the company offers a promise to repay the principal alongside the interest at a future date in the form of a

Methodology

The present study depends on secondary data to obtain research objectives. Secondary data means numerical data that the researcher has not collected at first, instead of this data previously for a particular purpose was collected for other purposes.

Research instrumentation

This research aimed to explore the influence of capital structure on Iranian banks' profitability. A quantitative approach was applied, which entails collecting numerical data from the financial statements of the sample to analyze the capital changes in relation to the banks' performance. Alongside the quantitative approach, a postpositivist paradigm was employed. This approach means that the ideas as seen by the turn detrimental. Such covenants include publishing the financial key ratios, such as the maximum debt-to-asset ratio, which entails the company's capital levels. Whenever such covenants are broken, the lender has the right to call back the debt commitment from the defaulter.

bond. In some countries, such as the US, bonds do not bear the same tax laws as commercial loans(Rao & Stevens, 2007). For instance, companies can deduct the interest payments on bonds which lowers the total cost of financing. Corporations can seek interest deductions in some situations even when they haven't made any payments. On the other hand, loans that are belowmarket rates are subjected to 'imputed interest,' which is the interest to a loan regardless of whether the interest has been paid or not.

researcher influence what they observe and, therefore, the conclusion in the study. Some post-positivism techniques employed include; cause and effect thinking, variables and hypothesis development which were useful in the statistical data analysis.

Hypothesis development

Based on the theories discussed, the following hypotheses were developed and tested to answer the research question.

For model one, the focus was if the debt-toasset ratio had an impact of the banks' profitability. Therefore, the following hypotheses were developed.

H0: Banks profitability would not be significantly associated with the total D/A ratio

H1: Banks profitability would be significantly associated with the total D/A ratio

For model two, the focus was if the debt-toequity ratio impacted the banks' profitability. This description leads to two hypotheses:

Conceptual framework

H0: Banks' profitability is not associated with debt to equity ratio

H1: Banks' profitability is significantly associated with debt to equity ratio



The population of the study and sample size

The numerical financial information of banks' financial statements, particularly from the selected banks' income statements and balance sheets, comprised the prime and ultimate origin of data for this analysis. Mainly, this information was acquired from the banks' electronic websites and the Iraq stock exchange, which listed the annual statements of respective banks. Ultimately the data of 10 profitable bank financial statements were employed between the years of 2009 to 2020, and thus a balanced panel of 10 banks data was constructed for the study.

Regression test

Mainly to conclude the required conclusion regarding study objectives concentrating the impact of capital structure on banks profitability, the study very crucially relied on regression model estimation. Here, the unique function to reveal the study's independent variable on predictors was multiple regression models. Generally, in this investigation, to draw a conclusion about the effects of capital structure on commercial banks profitability, the models below have been explained.

Model One

The first model explains the extent of the total debt to asset ratio on banks'

Hence, table of coefficient model one explains the explanatory power of total D/A ratio on banks profit, and produce that one point elevate of predictor variable with the assumption that other variables not changed, bank profit will decrease by approximately 1.174,in addition A Negative effect of total debt to asset ratio as one of the capital

 $\begin{aligned} Profitability &= constant + B_1 D/A + E_{dit} \\ PRO &= 2.95 \text{-} 1.174 \ (D/A) + E_{dit} \end{aligned}$

profitability. The Value of R square from table (3) of 0.507 this implies 50% of the variability in banks profitability is obtained by the variability of total debt to asset ratio. This value denotes that definitely there may be a number of relative factors which practically affect banks profit

structures element with the bank's profitability of (-1.174), simply might be due to thehigher-cost debt and related restrictions related to the dependence on debt financing, as explained and empirically proved by (Ebsid; 2009; BoKein et al 2010 and SheiKh and Wang, 2011), And the ultimate model demonstrated as follows:

Table 3: MODEL SUMMARY FOR MODEL ONE

Mode	Model Summary														
Model	R	R	Adj	usted]	RStd. I	Error of	Change Statistics						Durbin-		
		Square	Squ	are	the Est	timate	R S	quare	F	df	1df2	Sig.	F	Watson	
							Chan	ge	Chang	ge		Change	e		
1	.712	.507	.503	2.47925		.507		121.361 1		118	.000		.583		
a. Prec	a. Predictors: (Constant), total debt to asset ratio														
_	Coefficients														
	Model Uns			Unstan	Instandardize Standa		rdize]	Г	Sig.	9	5.0% C	onf	ïdence	
			d Coefficients		d						Interv	al f	or B		
					Coeffic										
			В	Std.	Bet	ta				Ι	Lower	ι	Jpper		
					Error						E	Bound	В	ound	
(Con	stant)		2.951	6.082			4.8	325	.000		1.747	Z	4.156	
tota	al del	bt to ass	et	-	1.065			1.1	016	000		1 205		0.606	
	ra	atio		1.174	1.065	/]	12	-11.	016	.000	-	1.385	-	9.626	
a. Dej	a. Dependent Variable: PROFITABILITY														

TABLE (4) COEFFICIENT MODEL ONE

Next, more result is about hypothesis number one (H0). The assumption hypothesis proposed that banks profitability would not significantly associated with total D/A ratio. ANOVA model 1 demonstrates value of P is 0.000. This result clearly shows p-value is under significant value of 0.05 and confirms there is sufficient justification to reject null hypothesis. Or in another interpretation total debt to asset ratio for the commercial banks were significantly promoted banks profit.

ANOVA										
Model	Sum of Squares	Df	Mean Square	F	Sig.					
Regression	7.460	1	7.460	121.361	.000 ^b					
Residual	7.253	118	6.147							
Total	1.471	119								
a. Dependent Variable: PROFITABILITY										
b. Predictors: (Constant)	b. Predictors: (Constant), total debt to asset ratio									

ANOVA MODEL 1

Model 2

The second model is about to demonstrate the extent of sales growth on commercial banks in Iraq. From table (6) value of R square is 0.704 this implies 70% of the variability in banks profitability is obtained by the variability of debt to equity ratio. This value denotes that definitely there may be a number of relative factors which practically affects banks profit.

MODEL SUMMARY FOR MODEL TWO

Model Summary											
Mo	R	R Adjuste	ste Std.		Durbin-						
del		Squar e	d R Square	Error of the Estimate	R Square Change	F Chang e	df1	df2	Sig. F Change	Watson	
1	.841ª	.707	.704	1.9123	.707	284.30 7	1	118	.000	.518	
a. Pre	a. Predictors: (Constant), debt to equity ratio										
b. De	b. Dependent Variable: PROFITABILITY										

Notwithstanding, table (7) shows the explanatory power of debt to equity ratio of listed commercial banks on their profitability, the value of beta coefficients of -(1.92) this implies one point increase of predictor debt to equity factor with the

assumption that other variables remained unchanged, banks profit will decrease by approximately 1.92. Additionally, negative association among Total debt to equity and selected capital structures simply explained by debt was expensive and employing more debt compare of equity financing have resulted in an decrease in profit. Or other interpretation of this conclusion might be banks based on unreasonable factors relied on debt financing and this quite consistent with the pecking order theory, that explain internal financing are more favorable, than bear association costs related to the equity or debt financing as understood by (Abor, 2007 and Chen at al 2009).

Coefficients										
Model	Unstan Coef	dardized ficients	Standardize T d Coefficients		Sig.	95.0% Confidence Interval for B				
	В	Std. Error	Beta			Lower Bound	Upper Bound			
(Constant)	-4.097	2.433		-1.684	.095	-8.916	7.216			
debt to equity	-1.922	1.140	841	-16.861	.000	-2.147	-1.696			
a. Dependent V	a. Dependent Variable: PROFITABILITY									

TABLE (7) COEFFICIENT MODEL TWO

Consequently, ultimate output regarding hypothesis number two (H0) provides Pvalue lower than 0.05, this clearly clues null hypothesis should be rejected and confirms selected banks profitability would significantly associated with debt to asset ratio, or in other interpretation debt to equity ratio for the selected banks of study period were significantly promote banks profit.

 TABLE (8) ANOVA MODEL 2

ANUVA										
Model	Sum of Squares	Df	Mean Square	F	Sig.					
Regression	1.040	1	1.040	284.307	.000 ^b					
Residual	4.315	118	3.657							
Total	1.471	119								
a. Dependent Variable: PROFITABILITY										
b. Predictors: (Constant), debt to equity ratio										

Conclusions

This academic investigation emphasizes on capital structure of listed commercial banks in Iraq. Based on the previous empirical literature each of debt to assets ratio, debt to equity, sales growth and banks size selected as a papers representative of capital structure and several assumptions based on the proposed model have been constructed to obtain studies objective and mainly include; profitability of banks in Iraq wouldn't significantly associated with all determinates of capital structure.Usually10 banks in Iraq listed on Baghdad stock exchange for the period 2009-2020represent study's sample, by reliance on regression models the analysis performed to attain the objective of the study.

the descriptive According to result profitability of banks was not satisfactory for the selected period. First banks generate a small portion of its profits from employed assets; this implies banks inefficiently use its scare assets. thus banks performed unsatisfactory in generating revenue.

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Regarding to the profitability of net assets(shareholder equity),result found best practice over a previous period 2009-2020,and percentage performance above standard level, this confirms a bright future for banks and growth rate of its dividends. Mainly by leaving out the banks liability from evaluation of performance, banks represent good performance.

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