

The impact of capital structure on financial performance: Empirical study from banking sector of Oman



Original Research Article

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ABSTRACT

This study aims to investigate the relationship between capital structure and financial performance in the banking sector of Sultanate of Oman. Data were collected from financial statements of four banks out of six listed in Oman Stock Exchange during 2010 to 2016. In this study, descriptive research design was adopted and multiple regression technique was used. The study involves financial performance ROE as dependent variables and short term debts to total assets, long term debt to total assets, total debt to total assets as independent variables. The findings of the study reveal that there is a positive significant impact of capital structure on financial performance in banking sector in Oman. Moreover, the results indicate that there is a positive significant relationship between total debts to total assets and financial performance of Omani banks while, the short term debts to total assets and long term debts to total assets were statistical not significant.

KEYWORD: Capital structure, Financial performance, ROE, Banking sector, Oman

I. INTRODUCTION

The banking sector is considered to be an important source of financing for most businesses. The common assumption, which is generally accepted in many of the financial performance research and discussions, is that increasing financial performance will lead to improved functions and activities of the organizations. (Brealey & Myers, 2003) reported that “The capital structure selection is an important approach to the firm's financial decision makers; from that affects the interest and tax revenue and leads to changes in the price of the firm and market Value”. The capital structure plays a vital role in the financial performance of any firm since the cost of debt is to be considered and this cost will influence the profit or loss of the firm. As explained by (Brounen & Eichholtz, 2001) there are many stakeholders who are interested to know the impact of capital structure on firm performance that because it's very essential for the future and development of any organization.

Abor (2005) pointed out that “the capital structure can be considered as a powerful tool that helps any bank firm to streamline its financial performance and helps the bank to assume the complex tasks of providing suitable services in a profitable mode”. The total capital is the mixture of debt and equity which make capital structure of firms.

All firms struggle to assess the relationship between capital structure and financial performance to see whether this relationship has a positive or negative impact on planning of the future. This also, to determine whether the liabilities are impact on the profitability of the business which is essential for the managers to build their lending policies.

Many studies have been done on the association of capital structure and financial performance at international level, but few of these studies examined this relationship in Oman, even these few studies are not belong to banking sector. To fill the literature gap, this research aims to examine the impact between the capital structure and financial performance to help investors to make strong investment structure decisions. Furthermore, results of the study can be useful for the authors, academics, and the managers to formulate optimal capital structure. The main objective of this study is to investigate the effect of capital structure on the financial performance in banking sector of Oman.

This study tries to achieve the following objectives:

1. To examine the impact of the capital structure on financial performance of commercial banks in Oman.
2. To explore to which extent capital structure can affect the financial performance of commercial banks in Oman

To achieve the above objectives, data was collected from secondary source (financial statements) of four Omani banks during 2010 up to 2016 in detail which are available on their website and central bank of Oman.

II. LITERATURE REVIEW

This literature presents theoretical background of capital structure, firms financial performance and some previous studies that are examined the relationship between capital structure and firm's performance to build up a clear picture related to this important issue.

2.1 Definition of Capital Structure

The capital structure is continued as very interested issues for academicians, researchers, investors, managers and all stakeholders. The term has been defined by different authors. According to (Abor, 2005) capital structure is defined as “the mix of debt and equity that the firm uses in its operation”. In addition, capital structure has been defined by Taylor and Venhorn (1996) as: “a total sum of outstanding long-term securities of both debt and equity.”

2.2 Financial Performance Measurement

As defined Frouhoui (2014), Bank performance is the capacity to generate sustainable profitability.

Marcellina (2011) examined credit scoring and risk assessment, and was able to confirm that “financial ratios are good predictor variables of bank's performance”. Additionally, he mentioned that the following ratios were adopted widely in the literature as a measurement of financial performance:

ROA: to measures bank's profitability relative to its assets and thus the bank's overall performance;

ROE: to measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested;

(ROA): to measure the ability of a bank's management to generate profits from the bank's assets; and

NIM (Net interest Margins): to measures the gap between what the bank pays savers and what the bank receives from borrowers.

2.3 Empirical previous Studies on Capital Structure and Firms Performance

Numerous studies have been carried out in different part of the world to investigate the relationship between capital structure and firm performance. The empirical findings of the effect of capital structure on financial performance have shown 'different pictures, the result of some research indicated a positive significant relationship between capital structure and profitability, while others research found negative significant association with profitability. Furthermore, some results had shown mixed results.

In their study on 35 companies listed at Hong Cong Stock Exchange, (Chiang et al., 2002) found that "capital structure and profitability are related with each other". In addition, (Raheman et al., 2007) on their study for non-financial firms listed on Islamabad Stock Exchange, found a significant capital structure effect on the profitability. (Miller & Modigliani, 1966) argued of appositive relationship between capital structure and firm performance as result of efficient market and a debt tax shield effect.

Gill, et al., (2011) examined the effect of capital structure on profitability by of for 272 American firms listed on New York Stock Exchange for a period from 2005 – 2007. Empirical results show a positive relationship between short-term debt to total assets and profitability and between total debt to total assets and profitability in the service industry. The findings of this paper show also a positive relationship between short-term debt to total assets and profitability, long-term debt to total assets and profitability, and between total debt to total assets and profitability in the manufacturing industry.

On the other view, several other studies found negative relationship between capital structure and firms performance. For Example, Chisti et al. (2013) in their study on capital structure and profitability found that debt and equity ratio

are negatively associated with profitability, on other hand debt to assets ratio and interest coverage ratio is significantly associated with the profitability of companies. In addition, (Singh&Singh, 2016) examined the impact of capital structure on firm's profitability through selected cement companies in India. Based on correlation coefficient, study found a significant negative relationship between debt and profitability meaning that companies with higher proportion of debt tend to have low profitability. Another research conducted by Huang and Song (2006) on Chinese firms found negative relation between capital structure and firm performance.

Khalaf, (2013) concluded a study on relationship among capital structure and performance by using data from 2005-2009 of 45 manufacturing firms selected as a sample. He found that there is negatively insignificant link among short term debt and return on assets by using multiple regressions. Another study conducted by (Niresh, 2012) to examine the association between liability ratio to assets with the return on equity in banking sector of Sri Lanka. The result of the study shows that there is a negative association between capital structures and ROE. Another study done by, (Ashraf et al.,2107) carried out research to examine the impact of capital structure on firm's profitability of cement industry of Pakistan during 2006-2015. The results demonstrate that debt ratio and long term debt ratio have significantly negative relationship with return on asset (ROA) and return on equity (ROE), while short term debt have significantly positive link with ROA and ROE. Another research conducted by (Yegon et al., 2014) in banking industry listed on Nairobi Stock Exchange, Kenya during 2004-2012, to examine the relationship among capital structure and the firm's profitability. The results indicate that there is negative association between long-term debt and profitability, while the there is a positive relationship between short-term debt and profitability are positive. In addition, Aymen 2014 investigated the impact of ownership structure on financial performance of 19 banks in Tunisia over the period 2000-2010. The results showed that there was no impact of ownership structure to the financial performance of banks in the Tunisian context.

(Bilbasto&Saalih,2017) conducted research to determine the impact of the capital structure the firm profitability and identify the combination of company's capital structure in the Kurdistan region in Iraq .The study includes a sample of 81 invested companies in the housing sector in the Kurdistan Region for the period 2007-2016 . The key results of the study show that there is a non-significant negative relationship between the dependent variable (ROA) with the Independent Variable Financial Leverage (F.L) and a significant positive relationship with the Independent variables viz. Tangible Asset (T.A), Firm Size (F.S), and Duration (D).

From the above discussion it is obvious that, the previous literature review reported that the relationship between capital structure and firm performance showed positive, negative and mixed results. This research is an attempt to contribute to the literature review in terms of shedding light on the association between capital structure and financial performance in banking sector in Oman, this study adopts ROE as financial measure.

III. HYPOTHESES DEVELOPMENT

Most of literature reviewed on the relationship between capital structure and firm's performance show descipency mixed results. For example (Nimalathasan & Brabete ,2010) pointed out that "capital debt-equity ratio is positively and strongly associated to all profitability ratios (Gross profit, operating profit and net profit ratios) of listed companies in Sri Lanka",while (Zeitun & Tian ,2007) find out that firm's capital structure have a significant and negative impact on the firm's performance measures in both the accounting and market measures.

In the context of Oman few studies have been conducted to examine the relationship between capital structure and firm's performance, while as knowledge of the researchers there is no research has been conducted banking sector: This study is an attempt to investigate the relationship between capital structure and bank's performance. This study involves financial performance ROE as dependent variables and short term debts to total assets

long term debt to total assets, total debt to total assets as independent variables. To achieve the objective of the study the following hypotheses have been set as follows.

H0; there is a positive relationship between capital structure and bank performance in Oman.

H1; there is a positive significant relationship between short term debts to total assets and bank performance in Oman.

H2 there is a positive significant relationship between long term debt to total assets amd bank performance in Oman.

H3 there is a positive significant relationship between total debts to total assets and bank performance in Oman.

IV. DATA AND METHODOLOGY

The main purpose of this study is to check whether there is any relationship between capital structure and bank performance in Oman. In this study, data was collected from financial statements of four banks out of six listed in Oman Stock Exchange during 2010 to 2016 ,namely Bank Muscat, Bank Dhofar, Sohar Bank and National Bank of Oman. For this study, expofactor descriptive research design was used and both a simple and multiple regression analysis were implemented to analyze the data. This research adopts the following formula;

1. $ROE_{it} = \beta^{\circ} + \beta_2SDA_{it} + \beta_3Size_{it} + \beta_3SG_{it} + e_{1t}$.
2. $ROE_{it} = \alpha^{\circ} + \alpha_2LDA_{it} + \alpha_3Size_{it} + \alpha_3SG_{it} + e_{2t}$.
3. $ROE_{it} = \lambda^{\circ} + \lambda_2LDA_{it} + \lambda_3Size_{it} + \lambda_3SG_{it} + e_{3t}$.

Where:

ROE_{it} = Return on equity = Net Income/Shareholder's Equity

β° , α° and λ° are the intercept of the equations.

β , α and λ are the coefficients for the independent variables.

SDA: Short-term debt/total assets.

LDA: Long-term debt/total assets.

DA: Total debt/total assets

V. THE FINDINGS

In this section the researchers used multiple regression method to analyse the data to find out whether there is a significant relationship between capital structure and financial performance in Omani banking sector. Stepwise multiple regression was used to obtain accurate results.

Table 1: Descriptive Analysis

	Minimum	Maximum	Mean	Std. Deviation
Short Term Debt to Assets Ratio	.034	.873	.658	.286
Long Term Debt to Assets Ratio	.0186	.822	.808	.259
Liabilities to Assets Ratio	.239	.918	.808	.178
Return on Equity	-.10	.39	.217	.115

Table 1 present a summary of descriptive of the and independent and dependent variables, the mean value of short term debts to assets ratio is .658 and Std is .286, long term debt to assets ratio has a mean of .167and Std is .259, Total debts to assets ratio show mean of .808 and Std is .178, while return on equity which used to measure financial performance has a mean of .217 and Std is .115.

Table 2: Summary of Correlation between independent variables and ROE for Omani baking sector

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.575	.331	.305	.044954489

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The above table shows that the R is .575 which indicates that the relationship between capital structure and financial performance is significantly correlated. The results also present that R square was .331. This means that all independent variables namely, short term debt to assets ratio, long term debt to assets ratio and liabilities to assets ratio collectively account for about 31% of the variation in return on equity, and the rest are due to other factors. This ratio is good and supports the results of the research.

Table 3: One Way ANOVA Analysis for Relationship between Independent and Dependent Variables

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.026	1	.026	12.854	.001b
Residual	.053	26	.002		
Total	.079	27			

Table 3 shown that, the value of the regression model (F) was 12.854 and the statistical significance is 0.001, this means it is less than the statistical significance level (0.01). Therefore, the results confirm that there is a positive significant effect of capital structure on financial performance in banking sector in Oman.

Table 4: Analysis of the Relationship between Total Debts to Total Assets Ratios

Model	Unstandardized Coefficients		standardized Coefficients	t	Significant	Correlation		
	B	Std. Error	Beta			Zero-Order	Partial	Part
(Constant)	-.867	.313		-2.769	.010			
Total debts to total assets ratios	1.285	.358	.575	3.585	.001	.575	.575	.575

Table 4 presents that the standardized Coefficients B was .575 and the statistical significance is .001. This means it is less than the statistical significance level (0.01). Therefore, the results confirm that there is a statistically significant relationship between total debt to total asset ratios and return on equity in the banking sector in Oman, and the level of statistical significance (0.01). This results show that the model is significant and total debt to total assets ratio is expected to improve the financial performance in the banking sector in Oman. As a result, the decision is to accept the hypothesis of the research (H3) that there is a positive significant relationship between total debt to total assets and bank performance in Oman.

Table 5: Excluded Variables

Model	Beta In	t	Sig	Partial Correlation	Collinearity Statistic Tolerance
Short Term Debt to Assets Ratio	-.122b	-617	.543	-.123	.674
Long Term Debt to Assets Ratio	-.122b	1.167	.254	.227	.798

As shown in table 5 above the Beta for short term debt to assets ratio and long term debt to assets ratio was -.122b and the statistical significance is .543 for short term debt to assets ratio and 254 for long term debt to assets ratio This indicates that it is higher than the statistical significance level (0.01) and (0.05) . Therefore, the results confirm that there is insignificant relationship between short term debt to assets ratio, long term debt to assets ratio and return on equity in the banking sector in Oman.\

VI. RESULTS

There is no agreement among researches about the impact of capital structure on firm performance., still remains debated topic in the area of corporate finance. Many studies have been conducted to assess the relationship between capital structure and firm performance, the results show different picture. Limited research have been conducted in Oman context, this research is an attempt to fill the gap in the literature by examining the relationship between capital structure and financial performance in four Oman banks out of six. The study has tried to achieve the objectives of the study by using secondary data that was collected from financial statements of these banks listed in Oman Stock Exchange during 2010 to 2016.the data were analyzed using multiple regression method.

After examining the relationship between capital structure and firm performance, the results confirm that there is a positive significant effect of capital structure on financial performance in banking sector in Oman. The results were statistically significant at 1%. Level of significance.

More specifically, the results indicate that there is a positive significant relationship between total debt to total assets and financial performance of Omani banks while, the short term debt to assets and long term debt to assets were statistical not significant. These results are consistent with (Nimalathasan & Brabete ,2010); (Gill, et al., 2011)) and Raheman et al., (2007) .

VII. DISCUSSION

The results are also in constant with (Miller & Modigliani theory, this can be attributed to the low cost of borrowing, devolvement of debt market in Oman and tax advantages that bank received when they are using debt with low interest rate.

This research is an attempt too, to make contributions on the relationship between capital structure and financial performance in Omani banking sector based on the recent data 2010-2016. The researchers identified some limitations of this research. These can serve as a basis for future research. In this research ROE has been used as the sole measure for financial performance and in future research attempts should be made to include more dependent variables such as ROA, ROI, ect. In addition, other sectors could be included in future research.

VIII. CONCLUSION

This paper confirms that there is a positive significant effect of capital structure on financial performance in banking sector in Oman. The results were statistically significant at 1%. Level of significance. In details, there is a positive significant relationship between total debt to total assets and financial performance of Omani banks while, the short term debt to assets and long term debt to assets were statistical not significant.

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