



## Influence of capital structure on profitability in selected public sector banks

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### Abstract

This study aims to find the influence of the factors of capital structure and profitability of top five public sector banks during the period from 2012 to 2016. The study was based on secondary data. These data were taken from "Performance Highlights of Public Sector Banks". Regression analysis was used to find the influencing factors of capital structure and profitability. From the analysis debt-equity ratio was more influenced on the profitability of public sector banks and capital adequacy ratio has less influenced by profitability. There is no significant influencing among the factors of capital structure and profitability of public sector banks.

**Keywords:** capital structure, profitability, debt-equity ratio, capital adequacy ratio, public sector banks

### Introduction

Capital Structure is the source of financing, made up of debt and equity financing in a firm. Capital structure decision is important to the firm because the poor decision affects the firm's profitability to decrease the shareholder's value. This leads to maximise the wealth of shareholder's in the financial decision. The effects of capital structure decision have profitability and its value the firm, it increases the firm's value through the present value of tax savings from the use of debt. It implies firm to use 100% debt to maximize the firm's value. The firm's profitability is directly affected by the capital structure decision. So, therefore while making the capital structure decision proper care and attention should be considering.

### Review of Literature

Albert Amponsah Addae & *Et al.*, (2013) <sup>[1]</sup> examined the effects of capital structure on profitability of listed firms in Ghana during the period of 2005 to 2009. The study analyzed regression analysis was used to identify the relationship between capital structure and profitability. From this study, it was found to be the significant positive relationship between short-term debt and profitability. The result shows there was a statistically negative relationship between profitability and long-term debt and a significant positive relationship between short-term debt and profitability.

Khalid Ashraf & Khurshad Ali (2013) <sup>[3]</sup> examines the impact of capital structure on profitability of 10 listed companies in India during the period of 2008 – 2012. The objective of the study is to identify the relationship between capital structure and profitability. Debt to Equity ratio is negatively correlated with profitability which implies that if the debt content is increased aggressively it will adversely impact the profitability. Debt to Asset Ratio and Interest Coverage ratio are positively and significantly correlated with the profitability

ratio. The result of the study shows analyzing the correlation between capital structure ratios: Debt to Assets and Interest Coverage ratios are negatively correlated with Debt to Equity ratio. But Debt to Asset ratio is significantly and positively associated with Interest Coverage Ratio.

Mehdi & *et al.*, (2013) <sup>[5]</sup> examined the relationship between the capital structure and the profitability of Pharmaceutical companies in Iran. For this purpose, top 30 Iranian Pharmaceutical companies were gathered for the period of 2001 to 2010. In this study, the net margin profit and debts to assets ratio were used as indicators of profitability and capital structure respectively and sales growth was used as a control variable. From the study the result was found to be the significant negative relationship between the profitability and the capital structure

Rafiu Oyesola Salawv (2009) <sup>[6]</sup> investigates the influence of the capital structure on profitability of quoted companies in Nigerian Stock Exchange during the period 1990 to 2004 collected from the selected Annual report of 50 non – financial quoted companies. The Pooled Ordinary Least Squares model, Fixed Effect Model, and Random Effect Model were used in the analysis. The impact of capital structure on profitability is not significant, but there is a positive relationship between profitability and Short-term debt. The result suggests that firms in Nigeria depend on external financing. In that case, a high proportion (60%) of the debt is represented in Short-term Debt. The participation of equity in the capital structure is positively correlated with profitability.

### Scope of the study

This research is aiming to find out the influencing factors of capital structure on profitability of public sector banks. In order to identify this influencing, the top 5 banks in public sector banks will be focused and the data of these banks

during the period of 2012 to 2016 will be analysed. Afterwards, though the regression analysis how the factors of capital structure will be influencing profitability will be observed.

### Objectives of the study

To find out the influencing factors of capital structure on profitability of public sector banks.

### Research Methodology

The present study was based on secondary data. These data is taken from "Performance Highlights of Public Sector Banks". The study sample consists of selected top five public sector banks ranking based on market capitalisation. The following five selected public sector banks are as follows:

1. State Bank of India
2. Bank of Baroda
3. Punjab National Bank
4. Central Bank of India
5. Canara Bank

### Dependent Variables

Return on Equity, Return on Assets, Investment Deposit Ratio, Credit Deposit Ratio, Spread Ratio, Operating Profit, Profit per Employee, Interest Income and Non-Interest Income.

### Independent Variables

Debt-Equity Ratio and Capital Adequacy Ratio.

### Period of Study

The study period for 5 years from 2011-12 to 2015-16 have been collected for analysis.

### Data Analysis and Interpretation

#### Regression Analysis

**H<sub>0</sub>:** There is no significant influence among the factors of capital structure and profitability of public sector banks.

**H<sub>1</sub>:** There is significant influence among the factors of capital structure and profitability of public sector banks.

**Table 1:** Influencing factors of Capital Structure and Profitability of Public Sector Banks

Banks	R Square	F value	Debt-Equity Ratio			Capital Adequacy Ratio		
			Beta	t value	P value	Beta	t value	P value
State Bank of India	.198	.247	-.676	-.696	.559	.573	.590	.615
Bank of Baroda	.081	.088	.304	.408	.723	.061	.082	.942
Punjab National Bank	.756	3.103	-1.081	-1.910	.196	-.292	-.516	.657
Central Bank of India	.517	1.071	-.184	-.350	.760	.765	1.451	.284
Canara Bank	.409	.693	-1.501	-1.050	.404	-1.099	-.768	.523

### Interpretation

From the above table indicates influencing factors of capital structure and profitability of public sector banks. The above table is clear that the beta value of Debt-Equity Ratio in State Bank of India (-.676), Bank of Baroda (.408), Punjab National Bank (-1.910) and Canara Bank (-1.501) has more influenced on profitability. And the beta value of Capital Adequacy Ratio in Central Bank of India (.765) is more influenced on profitability and found to be non-significant level respectively. But there is no significant influencing factors of capital structure and profitability of public sector banks. Here null hypothesis were accepted and alternative hypothesis were rejected.

### Findings

- The R Square for State Bank of India is .198, Bank of Baroda .081, Punjab National Bank .756, Central Bank of India .517 and Canara Bank .409.
- F-Statistics of State Bank of India is .247, Bank of Baroda .088, Punjab National Bank 3.103, Central Bank of India 1.071 and Canara Bank .693.
- Regression model of Punjab National Banks gives highest value of R Square .756 as compared to other banks and F Statistics is 3.103.
- Debt-Equity Ratio is found to have more influenced on profitability in State bank of India, Bank of Baroda, Punjab National Bank and Canara Bank.

- The outcome of regression analysis there is no significant influencing factors among the capital structure and profitability of public sector banks. So null hypothesis was accepted.

### Suggestion

It is suggested that the above Public Sector Banks debt-equity ratio has influenced more on profitability. Capital Adequacy Ratio was influenced by profitability only in Central Bank of India. The Capital Adequacy Ratio measures how much capital a bank has. While this falls, the bank has to borrow money. It is very costlier than the banks' own capital. If the banks to do the maintain sufficient capital it could unexpected losses and will improve the profitability of banks.

### Conclusion

This study aims to investigate the influencing factors among the capital structure and profitability of public sector banks. The study covered top 5 public sector banks over the period of 2012-2016. From this study it would be concluded that there is no significant influencing factors among the capital structure and profitability of top five public sector banks.

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