



A Study of Capital Structure of Public Sector Banks in India

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Abstract:

Financing decision is one of the important areas in financial management to increase shareholders' wealth. Firms can use either debt or equity capital to finance their assets. The purpose of the study is to find out the determinants of capital structure and its impact on financial performance. Capital structure is one of the important areas of financial decision making. This study has been undertaken to examine the impact of Capital structure on profitability of public and private sector banks in India listed in National Stock Exchange during 2015-2020.

Keywords: Financial Management, Shareholder's Wealth, Equity Capital, Debt, Capital Structure, Financial Performance

Introduction:

Banking sector is considered to be a backbone of Indian financial system. No economy can develop without the development of a sound banking sector. The Indian banking sector provides over 90% of commercial credit. The banks thrive to achieve growth by focussing on reducing its financing cost. The cost of raising funds can be reduced only if proper emphasis is made to mix optimally the internal finance i.e. equity and external finance i.e. debt. The board of directors' ultimate responsibility lie towards the shareholders acting as the owners. Capital structure refers to the mode of finance which a firm uses to finance, usually a blend of debt including preference stock and equity capital; this is known as long-term financing mix of a firm. Capital structure decision is very important for any firm to maximise their return and increase the firm's ability for functioning in a competitive environment. It is generally believed that value of a firm can be maximised when the cost of capital is minimum. The optimal capital structure is the appropriate combination of debt-equity mix that minimises the firm's cost of capital and which in turn maximises firms' profitability and market value. Determining capital structure is subject to both the managers and fund suppliers of the firm. An incorrect combination of the debt-equity mix can have a negative impact on the firm's performance.

Considering that debt is a necessary factor, which creates differences in the goals of shareholders with managers, Jensen and Meckling (1976) developed the agency cost theory [Source: Theory of Firms: Managerial Behaviour, Agency Costs and Ownership Structure]. The theory explains that the cash flow of a firm relies on its ownership formation. The



authors suggested that there should be the best combination of debt and equity capital that could shrink total agency costs. In other words, prevailing agency cost determines how much debt should be introduced into the capital structure.

Review of Literature:

1. Dr.D. Mahila Vasanthi Thangam M.com, 2016: This paper is aimed at examining the profitability and productivity of Indian banks in relation to each other. The objective is to study the profitability and to evaluate the productivity of commercial banks with special reference to selected five banks in India during the period 2010-2011 to 2014-2015. The samples are selected through random sampling technique and data collected from secondary sources. The tools are Correlation and t test. This study examines the relationship among the profitability and productivity of Indian commercial banks both public and private sector banks. Analysing the banks overall profitability and productivity indices reveal that both public and private sector banks are profitable. With the increasing competition in the banking sector, profitability and productivity has become a greatest challenge to Indian commercial banks. Banks should explore every possibility for improvement and increase the profitability.

2. Mittal, 2017: The growth of the economy depends upon the efficiency and stability of the banking sector. The most important factor which measures the health of the banking industry is the size of NPAs. Non-Performing assets have direct impact on the financial performance of banks i.e. their profitability. It denotes the efficiency with which a bank is optimizing its total resources and therefore, serving an index to the degree of asset utilization and managerial effectiveness' affects the profitability of the banks in terms of rising cost of capital, increasing risk perception thereby affecting liquidity position of banks. This paper attempts to first examine the level of NPAs in the banking sector in India and then analyse the causes for increasing NPAs. In the final part of the paper, measures which banks can take to reduce their NPAs have been suggested. The study also compares the performance of the public sector banks with the private sector banks. The secondary data collected from different sources has been used in the study. The study shows that the magnitude of NPAs is increasing in public sector banks as compared to the private sector banks. Therefore, banks need to effectively control their NPAs in order to increase their profitability and efficiency.

3. Mehrotra, 2018: An analysis was carried out to empirically evaluate the determinants of profitability in the public and private sector commercial banks in India. A combination of statistical tools such as the correlation analysis, multiple regression analysis and factor analysis was used to estimate the contribution of select bank specific variables towards profitability which was measured by using Return on Assets (ROA). The study revealed that the cost of borrowing and NPA has a significant negative correlation with profitability for public sector banks. Return on investments, return on advances and operating profit had a significant positive correlation with profitability for both public and private sector banks. The multiple regression analysis highlighted that the return on investments and return on advances has a significant influence on the profitability of private sector banks. The factor analysis has



also shown that the NPA has a strong negative influence on the profitability for both public and private sector banks.

4. Agarwal, mar 2019: Profitability is the main goal of all business ventures. The financial health of any business can be measured through its profitability positions and business organizations cannot survive without profits. In view of the significance of improving profitability of the banking sector in recent years, the present study is aimed at examining the profitability of public and private sector banks of India using four ratios as return on assets, return on equity, net interest margin and operating profits. The result of the analysis carried out for the period 2005-2017 shows that private sector banks are in better profitable positions than the public sector banks. Public sector banks with increasing non-performing assets are experiencing negative return on their assets in recent years which is deteriorating their profits.

5. Jain Mathew, 2020: Banking sector reforms in the last 25 years has made the Indian banking sector vibrant and strong. Banking reforms rationalized banking system by opening new private sector banks, prudential norms for quality of asset, deregulation of interest rates and digital banking. Major players in Indian banking sector are the public sector banks. Study explores fundamental profitability determinants of public and private sector banks in India. The study selected eight banks each from public and private sector banks in India for eighteen years, from year 2000- 2001 to 2017- 2018. The Global banking benchmark on profitability, ROA is considered as the dependent variable. Bank specific, Industry level and Macro level independent variables were analysed to find out the fundamental variables significant to the profitability of banks in public and private sector. Study uses fixed effect and Pooled OLS model to explore fundamental variables determining the profitability.

6. Mahapatra, 2021: Appraising the Monetary effectiveness is one of the authoritative barometers to gauge the performance of private banks and it supports to conquer over the fierce & cut throat competition which in turn helps for sustainability in the long run. Through this study attempt has been made to evaluate the influence of Overseas Investment Strategy on the Financial Efficiency of Indian Banks (Private) and bring to light whether Foreign Participation has notable impact on it or not. The existing study is analytical and explanatory in nature and used both primary as well as secondary data from different sources like Govt. Body report, RBI annual report, Different Journals and online data base. The collected data were analysed through inferential statistical techniques like correlation, Multiple regression f test, t-test and Analysis of Variance (ANOVA) with the help of SPSS (18.0 versions). The study winded-up with remarks that there is no significant association among FDI and overall financial efficiency of private sector banks including all the sub parameters like ROA, ROE, NII & NP This Study will helpful to the Authority.

Research Methodology:

Need of Research Study

A need of research is to understand capital structure of selected public sector banks. How much proportion of owner capital and borrowed fund in selected public sector and private sector banks are the main need of the research study.



The present research study is need for- A comparative study of Capital Structure ratio of selected public sector banks.

Objective of study:

The proposed research study will be based on the following objectives:

1. To study components of capital structure of selected public sector banks.
2. To study of Capital Structure ratio of selected public sector banks.

Sampling Plan

There are many public and private sector banks operating in India. So, with a view to complete the research study within specific time limits the researcher has selected only four public sectors banks by convenient random sampling method namely-

List of selected public sector banks:

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

Hypotheses of the study

The proposed research study will be based on the following hypothesis:

H₀₁ : There is no significant difference between proprietor ratio of selected public and private sector banks during the period of 2015-16 to 2020-21.

H₀₂ : There is no significant difference between debt-equity ratio of selected public and private sector banks during the period of 2015-16 to 2020-21.

H₀₃ : There is no significant difference between capital gearing ratio of selected public and private sector banks during the period of 2015-16 to 2020-21.

Analysis and Interpretation of The Data

Table 1

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
SBI	10	62.63	6.26	0.14		
PNB	10	63.31	6.33	0.49		
Canara Bank	10	56.93	5.69	0.12		
BOB	10	59.58	5.96	0.12		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F-critical value



Between Groups	2.512	3	0.837	3.85	0.0173	2.87
Within Groups	7.83	36	0.2175			
Total	10.34	39				

Above table show the ANOVA results reveal that the calculated F-value (3.85) exceeds the critical value (2.87) at the 5% level of significance, and the p-value is less than 0.05. Hence, the null hypothesis is rejected, indicating a significant difference in the mean performance of selected public sector banks during the study period. The calculated F-value (3.85) is greater than the critical F-value (2.87). The p-value (0.0173) is less than 0.05. H_0 is not accept. Means there is significant difference between proprietor ratio of selected public sector banks from year 2011-12 to 2020-21.

Table 2

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
SBI	10	142.28	14.23	1.05		
PNB	10	145.75	14.58	2.75		
Canara Bank	10	161.47	16.15	1.14		
BOB	10	152.86	15.29	0.92		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F-critical value
Between Groups	21.60	3	7.20	4.9	0.006	2.87
Within Groups	52.74	36	1.47			
Total	74.34	39				

Above table show the ANOVA results reveal that the calculated F-value (4.9) exceeds the critical value (2.87) at the 5% level of significance, and the p-value is less than 0.05. Hence, the null hypothesis is rejected, indicating a significant difference in the mean performance of selected public sector banks during the study period. The calculated F-value (4.9) is greater than the critical F-value (2.87). The p-value (0.006) is less than 0.05. H_0 is not accept. Means there is significant difference between debt-equity ratio of selected public sector banks from year 2011-12 to 2020-21.



Table 3

Anova: Single Factor							
SUMMARY							
Groups	Count	Sum	Average	Variance			
SBI	10	295.88	29.58	89.38			
PNB	10	115.78	11.57	15.19			
Canara Bank	10	83.84	8.38	1.7			
BOB	10	124.21	12.42	2.7			
ANOVA							
Source	of	SS	df	MS	F	P-value	F-critical value
Between Groups		2738.71	3	912.90	0.797	2.62572E-19	2.87
Within Groups		921.36	36	27.26			
Total		3720.07	39				

Above table show the ANOVA results reveal that the calculated F-value (0.797) exceeds the critical value (2.87) at the 5% level of significance, and the p-value is less than 0.05. Hence, the null hypothesis is rejected, indicating a significant difference in the mean performance of selected public sector banks during the study period. The calculated F-value (0.0797) is greater than the critical F-value (2.87). The p-value (0.0002) is less than 0.05. H_0 is not accept. Means there is significant difference between capital gearing ratio of selected public sector banks from year 2011-12 to 2020-21.

Conclusion:

The study concludes that the capital structure of public sector banks plays a vital role in ensuring financial stability and regulatory compliance. Public sector banks generally maintain a strong equity base, supported by government ownership and periodic capital infusions, which enhances depositor confidence and systemic stability. The findings indicate that while public sector banks emphasize capital adequacy and risk mitigation, their profitability is often constrained due to higher operating costs, social banking obligations, and legacy issues such as non-performing assets. Despite these challenges, improvements in capital planning, asset



quality, and regulatory reforms have significantly strengthened their capital position in recent years. Moreover, the capital structure of public sector banks reflects a conservative approach, with greater reliance on equity and retained earnings rather than excessive leverage. This approach reduces financial risk and supports long-term sustainability, though it may limit aggressive growth compared to private sector banks.

Overall, the study highlights that a balanced and well-regulated capital structure is essential for public sector banks to improve efficiency, enhance profitability, and maintain financial resilience. Continuous government support, effective risk management, and prudent capital allocation remain key factors for strengthening the capital structure of public sector banks in the future.

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