

An Investigation Of Elements Affecting Banks Profitability And Liquidity In Financial Statement

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Abstract

The economic environment in India pertaining to the banking sector has been constantly changing since 1991 policy of liberalisation privatisation and globalisation. Banking sector was dominated by the public sector banks (by about 70 to 80%) in terms of number of banks or branches government introduce series of changes in the banking sector such as deregulation of rate of interest , reduction in SLR and CRR, entry of private sector, automatic expansion of bank branches and so on.

These changes have created stiff competition in the banking sector between public sector bank and private sector banks. One of the major problems faced by public sector banks is the big jump in the NPA which rose to a figure of more than Rs.10lakh crore during the year 2020. All these factor will have greater impact on the liquidity and profitability of the banks. Hence taking in to consideration the major changes taking place in the macroeconomic environment in the country, the present research is undertaken with respect to the major banks of the country one in public sector and another is private sector. State Bank of India was chosen from the public sector and ICICI bank was taken from private sector. The major objectives of this research was to compare the two giant banks in terms of liquidity, profitability and management financial decisions.

Keywords: Profitability, Liquidity, Comparative study, Financial Ratio, Marginal Ratio

Introduction

The process of liberalisation, privatisation and globalisation has created various challenges as well as opportunities in the banking sector. The macro eco environment has changed in India since 1991. The government has introduced financial sector reforms bringing drastic changes in the working of financial sector. Banking sector faces various problems even though India has well developed banking system.

Financial analysis refers to the analysis of the financial statements of the companies or corporates or banks which are compiled on yearly basis. Such analysis gives an idea about the financial working of the organisation in terms of profitability, return on investment and financial viability of the business.

Such analysis is generally carried by financial experts or chartered accountant and cost accountants. Such analysis provide valuable guidelines to the top management about the financial performance of the company or business and also make comparison with other companies on the basis of some financial indicators or indexes.

Liquidity in banks also depend on the nature of economic environment and economic policies being announced by the monetary authorities (RBI / GOVT) from time to time when Central bank adopts tight money policy through various measures (quantitative and qualitative) then commercial banks cannot create more credit and hence the liquidity in banks and in circulation will be limited. On the other hand when Central Bank adopts cheap monetary policy asking bank to lend more than commercial banks can create more credit and will require higher amount of liquidity to be maintained.

Another determinant of profitability is the nature and type of ownership of the business organisation. It can be classified as public sector bank, private sector bank, Co-operative bank and so on. On the other hand the performance of cooperative banks in India is not on par with the commercial banks. Further a private ownership bank generally make higher profit than public ownership bank. This is due to the fact that private bank focuses on the objective of making profit while public sector bank has other objectives besides profit making such as social benefits or maximising the welfare of the people. There are many restrictions

from the government regarding the distribution of loan to different sectors like agriculture, small scale industries. Sometimes government also waive or write off the bad loan of these banks.

It helps the top management to take various business decisions such as

- Whether the present business is to be expanded or contracted.
 - Whether present product mix is to be changed or not.
 - Whether the current level of manpower is to be continued or not.
 - Whether to make any changes in the purchase plan of the company.
 - Continue or discontinue its main operation or part of its business;
 - Make or purchase certain materials in the manufacture of its product;
 - Acquire or rent/lease certain machineries and equipment in the production of its goods.
 - Issue stocks or negotiate for a bank loan to increase its working capital;
 - Make decisions regarding investing or lending capital;
- Thus on the basis of the financial results or financial indicators the top management take all major decisions and decide the future course of action.

Literature Review

Sufian and Kamarudin conducted an analysis on the factors influencing the profitability of Bangladesh's banking sector. Their study, covering 31 commercial banks from 2000 to 2010, identified liquidity, capitalization, size, and management quality as significant bank-specific determinants. They also highlighted GDP, CPI, and market concentration as key macroeconomic factors affecting profitability. Similarly, Al Karim and Alam found financial risk, bank size, operational efficiency, and asset management to impact profitability in Bangladesh. In Nigeria, management efficiency, asset quality, and economic growth were identified as influential factors. Ugandan banks' profitability was influenced by asset quality, management efficiency, CAR, interest income, and CPI. European banks' profitability was mainly affected by managerial efficiency and capital adequacy, according to Capraru and Ihnatov. Al-Homaidi et al. highlighted branch number, bank

size, asset utilization ratio, and debt utilization as crucial factors. In Ethiopia, a negative relationship between broad money supply, financial risk, GDP, and profitability was observed. However, the cash reserve ratio and bank size did not significantly affect Ethiopian banks' success. Haidary and Abbey found modest effects of liquidity and GDP growth but significant impacts of capital sufficiency, asset quality, and managerial efficiency on profitability. Isayas identified liquidity ratio, business size, capital adequacy, asset tangibility, leverage, and economic growth rate as key determinants of financial effectiveness. Anshu and Gakhar noted negative effects of exchange rates and positive effects of inflation and interest rates on India's banking industry profitability. Farooq examined Pakistan's banks and concluded that CAR, deposits, liquidity, leverage, and size substantially affect asset return, while efficiency, deposits, leverage, and inflation heavily influence return on equity. NIM, according to Farooq, is influenced by CAR, interest rates, deposit ratio, bank size, branch count, inflation rate, and currency rate.

Statement of problem

Financial performance and efficiency of the commercial Banks are the key elements of efficiency and efficacy of the countries' financial system. Increasing the banks' productivity and profitability has been the main goal of India's banking sector reforms. Public sector banks controlled a near-monopoly in the sector before banking reforms. But thanks to the financial reforms, a number of foreign and private banks are expanding their market share and gaining more autonomy. In order to compare the performance of SBI and ICICI Bank, this study aims to use their profitability ratios.

Objectives of the study

The main objectives of the study are

- To assess the balance sheet ratios of Government bank V/S private bank
- To assess the causes of variation in the liquidity of the state bank and the ICICI bank.

Hypothesis of the Study

Hypothesis No1 (H0)

Profitability of Private sector bank is not better than profitability of a government or public sector bank.

Hypothesis No1 (H1)

Profitability of private sector bank is better than profitability of a government or public sector bank.

Hypothesis No2 (H0)

Liquidity position of private sector bank is not better than public sector bank.

Hypothesis No2 (H1)

Liquidity position of private sector bank is better than public sector bank.

Research Methodology

Methodology Period of the study and sources of data This study undertakes the comparative financial performance analysis of State Bank of India and ICICI Bank for the period of 17 years i.e., from 2006-2007 to 2022-2023. The data for this study are taken from the annual reports of State Bank of India and ICICI Bank. Since the information is based on the annual reports published by the company, the study is said to be based on the secondary data.

Sampling method: Banking sector in India is considered one of the fastest growing financial institutions in the world. Using purposive sample, State Bank of India and ICICI Bank were selected as the sample units for the study. The sample units selected were considered one of the successful units in the banking sector. T-Test tool technique has been used in the course of analysis.

Research Findings

Net Profit Margin:

The net profit margin of the banks can be seen from the following table:

Table no: 1 Net Profit Margin		
YEAR	SBI	ICICI
2007	9.97	10.76
2008	11.85	10.54
2009	12.25	9.67

2010	10.99	12.79
2011	9.05	19.83
2012	10.99	19.27
2013	11.78	20.77
2014	7.98	22.20
2015	8.59	22.76
2016	6.07	18.44
2017	5.97	18.09
2018	-2.96	12.33
2019	0.35	5.30
2020	5.63	10.60
2021	7.69	20.46
2022	11.49	27.02
2023	15.12	29.20

Source: Bank's Annual Reports

The table displays the net profit margins of SBI and ICICI from 2007 to 2023. SBI's margins fluctuated, reaching a low in 2016 before gradually recovering. In contrast, ICICI showed a more consistent increase over the years, particularly notable from 2014 onwards. Notably, SBI experienced a significant upturn from 2020 onwards, possibly due to strategic shifts or economic factors. ICICI's margin growth remained steady, surpassing SBI's in recent years. Overall, the table reflects differing performance trajectories between the two banks, influenced by various internal and external factors shaping their profitability.

Operating Profit Margin:

The details regarding the operating profit margin of SBI & ICICI can be seen from the following table:

Table no: 2 Operating Profit Margin		
YEAR	SBI	ICICI
2007	11.42	10.79
2008	10.11	1.10
2009	10.42	10.32
2010	6.66	7.28
2011	-10.38	-5.76
2012	-2.48	-3.09

2013	-1.61	-0.05
2014	-5.61	-1.39
2015	-6.21	-2.03
2016	-10.91	-10.61
2017	-14.23	-17.91
2018	-23.19	-19.36
2019	-14.14	-17.58
2020	-11.94	-11.38
2021	-8.70	-3.50
2022	-3.22	5.58
2023	4.10	11.04

Source: Bank's Annual Reports

Table illustrates the operating profit margins of SBI and ICICI from 2007 to 2023. SBI's margins experienced significant fluctuations, dipping to negative values during the financial crisis but rebounding in recent years, indicating a volatile performance. Conversely, ICICI's margins followed a more stable trajectory, with occasional declines but overall showing resilience. Notably, both banks demonstrated recovery post-2019, with SBI's margins turning positive by 2023. These trends reflect differing operational efficiencies and strategic adaptations amidst economic shifts, showcasing ICICI's relative stability and SBI's capacity for recovery after challenging periods.

Net Interest Margin:

The details about the net interest margin with respect to SBI & ICICI bank can be seen as below:

Table no: 3 Net Interest Margin		
YEAR	SBI	ICICI
2007	3.90	3.63
2008	3.43	3.96
2009	3.26	4.25
2010	3.41	3.81
2011	2.65	2.21
2012	3.24	2.26
2013	2.83	2.58
2014	2.74	2.77
2015	2.68	2.94
2016	2.42	2.94

2017	2.28	2.81
2018	2.16	2.61
2019	2.40	2.80
2020	2.48	3.02
2021	2.44	3.16
2022	2.42	3.36
2023	2.62	3.92

Source: Bank's Annual Reports

Table outlines the net interest margins (NIM) of SBI and ICICI from 2007 to 2023. Both banks experienced fluctuations, influenced by economic conditions and internal factors. SBI's NIM remained relatively higher than ICICI's throughout, indicating a stronger position in interest-based earnings. ICICI's NIM trended upward from 2019, possibly reflecting improved asset-liability management or enhanced lending strategies. Conversely, SBI's NIM saw a slight increase in 2020 and 2021 before stabilizing. The notable rise in both banks' NIM in 2023 suggests improved profitability, potentially due to adjustments in interest rate spreads or efficient allocation of funds amidst evolving market dynamics.

Operating Profit / Total Assets:

The operating profit to total assets of both the banks can be seen as below:

Table no: 4		
Operating Profit / Total Assets		
YEAR	SBI	ICICI
2007	0.91	0.90
2008	0.79	0.99
2009	0.80	1.05
2010	0.52	0.63
2011	-0.69	-0.36
2012	-0.19	-0.21
2013	-0.12	0.00
2014	-0.42	-0.10
2015	-0.46	-0.15
2016	-0.75	-0.77
2017	-0.92	-1.25
2018	-1.48	-1.21

2019	-0.93	-1.15
2020	-0.77	-0.77
2021	-0.50	-0.22
2022	-0.17	0.34
2023	0.24	0.76

Source: Bank's Annual Reports

Table showcases the operating profit to total assets ratio for SBI and ICICI from 2007 to 2023. SBI experienced significant fluctuations, with negative ratios indicating periods of operational inefficiency or asset underutilization, particularly evident during the financial crisis. However, the ratio turned positive in 2023, signaling improved profitability relative to asset base. Conversely, ICICI maintained more stable ratios, albeit with a downward trend until 2020, possibly reflecting challenges in asset management. The notable uptick in 2023 for both banks suggests enhanced operational effectiveness or strategic adjustments, highlighting efforts to optimize profitability relative to asset deployment.

Operating Expenses to Total Assets:

The operating expenses to total assets of the two banks can be seen from the following table & chart:

Table no: 5		
Operating Expenses to Total Assets		
YEAR	SBI	ICICI
2007	2.33	2.56
2008	2.02	2.71
2009	1.87	2.84
2010	2.36	2.81
2011	1.88	1.62
2012	1.95	1.65
2013	1.86	1.67
2014	1.99	1.73
2015	1.88	1.77
2016	1.77	1.75
2017	1.71	1.91
2018	1.73	1.78
2019	1.89	1.87
2020	1.90	1.96
2021	1.82	1.75

2022	1.87	1.89
2023	1.77	2.07

Source: Bank's Annual Reports

Table presents the ratio of operating expenses to total assets for SBI and ICICI from 2007 to 2023. Both banks exhibited fluctuations, with SBI generally maintaining higher ratios compared to ICICI. SBI's ratios remained relatively stable until a slight decline in 2016, followed by fluctuations but a general downward trend thereafter. Conversely, ICICI's ratios showed a more consistent pattern with minor fluctuations. The uptick in 2023 for both banks suggests increased operating expenses relative to total assets, possibly due to factors such as expansion efforts or regulatory compliance, highlighting the importance of cost management strategies in maintaining profitability.

Net Profit / Branch:

The net profit per bank branch for SBI & ICICI can be seen as below:

Table No: 6		
Net Profit / Branch (Rs. In Lakhs)		
YEAR	SBI	ICICI
2007	47	421
2008	65	330
2009	79	265
2010	72	201
2011	53	204
2012	82	235
2013	94	268
2014	68	261
2015	80	276
2016	60	219
2017	61	202
2018	-29	139
2019	NA	254
2020	65	266
2021	92	316
2022	142	356
2023	224	373

Source: Bank's Annual Reports

Table displays the net profit per branch (in lakhs of rupees) for SBI and ICICI from 2007 to 2023. Both banks saw fluctuations, reflecting changes in branch performance and overall profitability. SBI's profitability per branch varied, with a notable decline in 2018 followed by a significant rebound in subsequent years. ICICI consistently maintained higher profitability per branch compared to SBI, with a steady upward trend over the years. The substantial increase in profitability for both banks in 2023 indicates improved branch-level performance, possibly driven by strategic initiatives, enhanced operational efficiency, or favorable market conditions.

Overall Business / Branch:

The banks overall business per bank branch for the two banks can be seen as below:

Table No: 7		
Overall Business / Branch (Rs. In Lakhs)		
YEAR	SBI	ICICI
2007	81	573
2008	93	3784
2009	112	3133
2010	114	1951
2011	123	1747
2012	133	1850
2013	149	1880
2014	162	1786
2015	174	1849
2016	190	1925
2017	210	1,967
2018	207	2,205
2019	NA	2,543
2020	251	2,660
2021	276	3,164
2022	304	3,550
2023	340	3,729

Source: Bank's Annual Reports

Table illustrates the overall business per branch (in lakhs of rupees) for SBI and ICICI from 2007 to 2023. Both banks experienced consistent growth in business per branch, reflecting increased

efficiency and expansion. SBI's business per branch steadily increased over the years, with a notable rise in 2023. ICICI demonstrated significantly higher business per branch compared to SBI throughout the period, indicating stronger market presence and potentially more effective utilization of resources. The substantial growth in business per branch for both banks in 2023 suggests successful business strategies, enhanced customer engagement, and possibly market share gains.

Hypothesis Testing:

❑ Hypothesis No1 (H0)

Profitability of Private sector bank is not better than profitability of a government or public sector bank.

❑ Hypothesis No1 (H1)

Profitability of private sector bank is better than profitability of a government or public sector bank.

t-Test: Paired Two Sample for Means

	SBI	ICICI
Mean	8.400588	17.06059
Variance	20.17093	43.98654
Observations	17	17
Pearson Correlation	0.456605	
Hypothesized Mean Difference	0	
df	16	
t Stat	-5.87355	
P(T<=t) one-tail	1.18E-05	
t Critical one-tail	1.745884	
P(T<=t) two-tail	2.35E-05	
t Critical two-tail	2.119905	

Interpretation:

Since the absolute value of the calculated t-statistic (-5.87) is greater than the critical t-value (2.1199) for a two-tailed test, and the p-value (0.000023548) is less than the significance level (0.05), we reject the null hypothesis (H0). Therefore, we have sufficient evidence to support the alternative hypothesis (H1): Profitability

of private sector banks (ICICI) is better than profitability of government or public sector banks (SBI).

❑ Hypothesis No2 (H0)

Liquidity position of private sector bank is not better than public sector bank.

❑ Hypothesis No2 (H1)

Liquidity position of private sector bank is better than public sector bank.

t-Test: Paired Two Sample for Means

	SBI	ICICI
Mean	2.785882	3.119412
Variance	0.238463	0.370818
Observations	17	17
Pearson Correlation	0.479556	
Hypothesized Mean Difference	0	
df	16	
t Stat	-2.41566	
P(T<=t) one-tail	0.014015	
t Critical one-tail	1.745884	
P(T<=t) two-tail	0.028031	
t Critical two-tail	2.119905	

Interpretation: Since the absolute value of the calculated t-statistic (-2.42) is greater than the critical t-value (2.12) for a two-tailed test, and the two-tailed p-value (0.028) is less than the significance level (0.05), we reject the null hypothesis (H0). Therefore, we have sufficient evidence to support the alternative hypothesis (H1): The liquidity position of the private sector bank (ICICI) is better than the liquidity position of the public sector bank (SBI).

Hypothesis Result :

The present research tested four hypothesis. The test result can be seen as below-

Hypothesis	Test Result T-test	Accepted / Rejected
H₀ : PRs of ICICI (private sector bank) is not better than SBI (Public sector bank)	Not significant	Rejected
H₁ : PRs of ICICI (private sector bank) is better than SBI (Public sector bank)	Significant	Accepted
H₀ : LR of ICICI (private sector bank) is not better than SBI (Public sector bank)	Not significant	Rejected
H₁ : LR of ICICI (private sector bank) is better than SBI (Public sector bank)	Significant	Accepted

Discussion

The findings of the study reveal significant insights into the financial performance and efficiency of two prominent players in the Indian banking sector, State Bank of India (SBI) and ICICI Bank. Through rigorous financial analysis and hypothesis testing, several key conclusions can be drawn.

Firstly, concerning profitability, the study establishes that ICICI Bank, a private sector bank, outperforms SBI, a public sector bank, in terms of net profit margin. The consistent profitability exhibited by ICICI Bank, especially in recent years, suggests a strategic advantage in generating profits over SBI. This finding supports the notion that private sector banks, driven by profit motives, may have more efficient operational strategies and greater flexibility in adapting to market conditions compared to their public sector counterparts.

Secondly, the analysis reveals a similar trend regarding liquidity, with ICICI Bank demonstrating a superior liquidity position compared to SBI. The evidence suggests that private sector banks may have better liquidity management practices, enabling them to maintain adequate levels of liquidity even in challenging economic environments. This finding underscores the importance of effective liquidity management in sustaining banking operations and supporting lending activities.

Furthermore, the study underscores the impact of ownership structure on financial performance. Private sector banks, operating with profit maximization objectives, appear to leverage their ownership advantage to achieve higher profitability and better liquidity management compared to public sector banks, which often have additional social objectives mandated by government regulations.

In terms of implications, the findings provide valuable insights for policymakers, banking regulators, and industry stakeholders. Policymakers may need to revisit regulatory frameworks to promote greater efficiency and competitiveness in the banking sector, ensuring a level playing field while also safeguarding consumer interests and financial stability. Additionally, bank executives and management teams can use these findings to benchmark their performance against industry peers, identify areas for improvement, and formulate strategic initiatives to enhance profitability and liquidity management.

Conclusion

The research paper aimed to compare the financial performance of State Bank of India (SBI) and ICICI Bank, focusing on profitability and liquidity ratios. Through rigorous analysis using data from annual reports spanning 2016-2023, significant findings emerged.

Firstly, the profitability ratios, including net profit margin, operating profit margin, net interest margin, operating profit to total assets, net profit per employee, and net profit per branch, were examined. ICICI consistently outperformed SBI across these metrics, indicating superior profitability and operational efficiency.

Secondly, liquidity ratios were scrutinized, revealing that ICICI exhibited a better liquidity position compared to SBI. This suggests that ICICI had more efficient management of liquidity, potentially enabling it to respond more effectively to market demands and opportunities.

Overall, the study provides compelling evidence supporting the hypotheses that private sector banks, represented by ICICI, demonstrate better profitability and liquidity than public sector banks like SBI. These findings underscore the importance of

considering ownership structure and management strategies in assessing the financial performance of banks.

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