Profitability Performance of HDFC Bank and ICICI Bank: An Analytical and Comparative Study

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Abstract

The article is an attempt to analyze and examine the profitability performance of two selected private banks in India; HDFC bank and ICICI bank. The article also aims to draw a comparison between the profitability performances of these two banks in order to come up with clear understanding of new banking strategies. Mathematical and statistical tools and techniques such as Ratio, Trends, Simple multiple correlations are used to analyze data.

Index terms— profitability analysis, deposits, sectors, channels, investments, advances

1 Introduction

he Indian economy is emerging as one of the strongest economy of the world with the GDP growth of more than 8% every year. This has helped in shaping the current banking system all over the country. In addition, globalization contributed to the evolution of banking industry by increasing the competition among domestic banks and opening opportunities for further development. Banks in the country whether private or public have a potential to enhance economic growth by increasing their market shares and serving the growing upper and middle class categories. Given all this, the consumer is in a comfortable position with multiple choices and better services since banks are continuously trying to offer better service in order to increase market share and sustain their growth.

Before independence, there were three banks established under charters from the British East India Company. For many years, these Presidency banks functioned as quasi-central banks, and some similar banks continued in the same tradition. It was later in 1925 that the three banks were merged; forming what came to be known as 'the Imperial Bank of India'. The imperial bank was also named state bank of India after independence. In 1839, a group of Indian merchants in Calcutta formed a new bank named 'Union Bank. Nevertheless, this bank failed due to the economic crisis of 1848. Few years later, another bank was stabled under the name Allahabad Bank. This bank is considered as one of the oldest in the country and it is still functioning. The trade of cotton also promoted the establishment of banks in India. After the end of the civil war in the United States, the Indian cotton was on demand and this pushed the traders to establish new banks to ease their business deal and transactions.

Obviously, finance is undoubtedly the life blood of trade, commerce, and industry, and it plays an active role in sustaining economic activities. Nowadays, banking sector is considered as an essential component of modern business and it evolves continually to meet the expectations of economists. Therefore, it can be firmly stated that the development of any nation is largely dependent on the efficacy of its banking system. In the beginning of the human civilisations, money was not in existence and the requirements of the commodities and services were fulfilled through barter system. In this system, services and goods were simply exchanged for other different on-demand services and goods in return. But the modern invention of 'currency' transformed people's exchange and trade of goods, and subsequently banking was developed to a great extent. The invention of money and the establishment of banks solved almost all the problems related to age-old barter system which definitely suffered from many shortcomings.

HDFC and ICICI are two important banks in India today. They emerged as successful banks in the last few years, securing slots in the ten top banks in the country. Hence, this study aims at analyzing the profitability performances of these two banks and finding out how they adopted and followed effective banking methods for sustaining considerable profit. The secondary data that was obtained is analyzed using ratio method and the results are compared in order to reflect the differences and similarities between the two selected banks.

2 II.

3 Literature Review

Given the continual evolution banking system in India, competition between banks is ignited resulting in better services, innovation, and upgrade. Subsequently, banks in India are under the pressure to develop, differentiate, and innovate in order to attract more clients in a competitive market. To seize a market share, banks have to actively engage in product development and micro-planning. Moreover, prudent pricing and relevant customization of services should be adopted to meet the needs of the customers. In addition to the frequent technology up-gradation, banks in India are obliged to consider cost reduction and also adapt their lending strategies. In her work profitability of commercial banks, Amandeep (1993) has made an attempt to explore the different trends in profitability of twenty banks in India. She used trend analysis ratio analysis and concentration indices of the selected parameters. She also used multi variant analysis. Amandeep concluded that to have excellent profitability performance, banks need to have excellent performance in managing burden (p.17). In the same vein, Ashok Kumar (2013) in his study "Opportunities and challenges in the Indian retail banking industry" concludes that for the development of retail banking in India, a paradigm shift is required in bank financing through innovative products and mechanisms involving constant up-gradation of the banks internal systems and processes (p.14). He point out that retail banking has more scope for generating profit than any other traditional methods. Cheema and Agarwal (2002) analyzed the productivity of commercial banks in India and compared the performance of public sector banks, private sector banks and foreign banks in India. In her analysis, public sector banks were divided into two categories, i.e., State bank group and nationalized banks (p.66). The input variables like owned funds, deposits, borrowings and wage bills were used. The output variables like spread, non-interest income were used. Among public sector banks, State Bank of Patiala and Allahabad Bank were found to be most efficient banks in their bank groups, and Jammu & Kashmir Bank in private sector bank group (p.73). ING Bank was on the top among foreign banks group. The study revealed that the inefficiency among public sector banks was found due to excessive amount of owned funds, and inefficiency among foreign banks was due to excessive borrowings (p.76).

Similarly, Delvin James (1995) carried out a case study that aimed at examining the retail banking services offered in UK, using First Direct, a subsidiary of Midland Bank. His analysis reveals that banks can increase their market share through proper communication and prompt delivery of their products (p.44). In India, Goyal and Kaur (2008) studied the performance of a group of private banks (seven in number), analyzing their data from 2001 to 2007. The various statistical tools like mean, standard deviation, annual compound growth rate and one-way ANOVA have been applied. The researchers calculated various ratios relating to capital adequacy, asset quality, employee productivity, earning quality and liquidity of banks. The study concluded that the capital adequacy ratio of all the banks of the study is calculated above 9 per cent. Moreover, the study reveals that the average debt/equity ratio is registered higher in Axis Bank. On the other hand, Kotak Mahindra Bank received maximum percentage increase with regard to NPAs. The study witnessed significant differences among the mean ratios of all parameters except for liquid assets to total assets, liquid assets to total deposits, net profit to average assets and percentage change in NPAs.

According to Goel and Chitwan Bhutani Rekhi (2013), efficiency and profitability of the banking sector in India is regarded of a prime importance for several reasons among which are the intense competition (p.30). Moreover, it is realized that the greater customer demands today add more pressure on banking sector to customize its services. More recently, certain indicators are used to measure the productivity of banks and evaluate their performance. Meanwhile, it is recognized that the public sector banks cannot be compared to private banks in terms of profit. As a result, they are under less competition and, since efficiency and profitability are interrelated, it means that their performance is too cannot be compared to private banks. Mahalakshmi Krishnan (2012) found out that in Retail Banking development shows in Urban-centric and in rural area the concept is beyond the thinking of people. So attempt is made to strengthen the Indian Banking system (p. 19).

In 2007, Mittal, R. K. and Dhingra, S. conducted a research study that assessed the impact of computerization on productivity and profitability of Indian Banks. The study covered the period from 2003-2004 and 2004-05. The results of the study demonstrated the efficacy of ICICI Bank in all indicators (p.102). Nevertheless, it has been so long since that study was conducted, which means new changes might have created new situations. In connection to the previous studies, this study aims to measure and evaluate the relative profitability performance of HDFC bank and ICICI bank in India. The analysis will add value to existing knowledge about banking and profitability performance of banks in India. The data of five years will be analyzed using statistical tools like arithmetic mean, one-way ANOVA, Tukey HSD Test. The profitability of these banks will be evaluated by using various parameters like Operating Profit Margin, Gross Profit Margin, Net Profit Margin, and Earning per Share, Return on Equity, Return on Assets, Price Earnings Ratio and Dividend Payout Ratio. The sample of the study only includes two banks; HDFC Bank and ICICI Bank. Simple random sampling was used to select the sample from top five banks which are functioning in the stock market based on the current situation. The study relies largely on secondary data that was obtained from the annual reports of the selected banks. To supplement the data IBA Bulletin, RBI publication, different publications, Bank Quest, various books, periodicals, journals and relating banking industry etc. have also been used for better reliability. Opinions expressed in Business Standard, News Papers, accounting literature, Annual report and different publications have also been used in this study.

4 III.

5 Aims and Methodology

The collected data is duly edited, classifies, tabulated according to the needs of the objectives and hypothesis. Mathematical and statistical tools and techniques like Ratio, Trends, Simple & multiple correlations have been used. The most appropriate Parametric & Non parametric test have been used by the researcher. The data has been presented through different graphs and tables. Data has been converted in to relative measure such as ratios, percentages, indices rather than the absolute data.

The data has been analyzed and hypotheses have been tested by the researcher at 5% level of significance, by employing t -test, ANOVA technique, chi-square (X2) test, Karl Pearson's simple correlation, multiple correlations, multiple regressions etc. according to the need of the study. In this study, the used tools for data analysis are Ratio Analysis as an Accounting Tool and T-test as Statistical Tool.

IV.

6 Hypothesis of the Study

Some hypotheses have been formulated in line with the stated aims of this study. These hypotheses are stated below: H 0 = There is no significance difference of gross profit ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of gross profit ratio in selected HDFC Bank and ICICI Bank. H 0 = There is no significance difference of Net profit ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of Net profit ratio in selected HDFC Bank and ICICI Bank. H 0 = There is no significance difference of Return on assets ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of Return on assets ratio in selected HDFC Bank and ICICI Bank. H 0 = There is no significance difference of Return on capital employed ratio in selected HDFC Bank and ICICI Bank.

H 1 = There is a significance difference of Return on capital employed ratio in selected HDFC Bank and ICICI Bank.

V.

7 Research Problem

There are a considerable number of private banks all over Indian offering banking services to millions of clients. However, most of them do not enjoy much popularity and most importantly derive lower annual profit. This can be attributed to several factors either related to marketing, professional service offered, or added value services. Profitability of banks determines the success of strategies being implemented and approached adopted for expanding customer base and increase profit. HDFC and ICICI are two notable private banks that more often feature as leading in the banking sector in the country. To get a closer examination of the profitability performance of these banks, this study analyzes the secondary data released by these banks in five consecutive years.

VI.

8 Data Analysis

To analyze the data, various statistical techniques are used, including average, range, 'F' test and't' test. The analysis is limited to Gross Profit Ratio, Net Profit Ratio, Return on Asset, and Return on Capital Employed. All the data related to these aspects are presented and discussed below.

9 a) Gross Profit Margin Ratio

The gross profit margin is calculated as follows:

Gross Profit Ratio = Sales ? Cost of Good Sold Sales $\times$ 100

The ratio measures the gross profit margin on the total net sales made by the company. The gross profit represent the excess of sales proceeds during the period under observation over their cost, before taking into account administration, selling and distribution and financing charges.

10 Significance

? This ratio shows the relationship between gross profit and net sales. ? Higher ratio means lower cost of goods sold. Hence the performance of HDFC bank is good than ICICI Bank. Hypothesis H 0 = There is no significance difference of gross profit ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of gross profit ratio in selected HDFC Bank and ICICI Bank.

11 Net Profit Margin Ratio

This is the ratio of net profit to net sales. The concept of net profit is different from net operating profit. In calculating the net profit, all Non-operating expenses and losses are also deducted and all non-operating income is added. The net profit ratio is the overall measure of a firm's ability to turn each rupee of business income into profit. It indicates the efficiency with which a business is managed. A firm with a high net profit ratio is in an advantageous position to survive in the face of cost of firm .where the net profit is low, the firm will find it difficult to withstand these types of adverse conditions. Hypothesis H 0 = There is no significance difference of Net profit ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of Net profit ratio in selected HDFC Bank and ICICI Bank.

12 It's computed as,

13 Net profit margin = Net Profit Business Income

14 Where, Net profit = Net operating Profit + Non-operating Incomes-Non-operating Expenses Business Income = Interest earned

15 Return on Total Assets Ratio

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage.

Businesses (at least the ones that survive) are ultimately about efficiency: squeezing the most out of limited resources. Comparing profits to revenue is a useful operational metric, but comparing them to the resources a company used to earn them cuts to the very feasibility of that company's' existence. Return on assets (ROA) is the simplest of such corporate bang-for-thebuck measures. ROA is calculated by dividing a company's net income by total assets. As a formula, it would be expressed as: The above table 5.1 indicates the Return on Assets Ratio of the HDFC and ICICI Banks during the period of the study from 2015-16 to 2019-20. In HDFC Bank the Ratio shows fluctuated trend. The average Profit Ratio of the HDFC Bank was 1.69 during the study period. The ratio was the higher of 1.73 during 2016-17, where as it was the lower of 1.643 during 2018-19. In case of ICICI Bank the Ratio shows decreasing trend during the study period. It was 1.735 in 2015-16 which decrease to 0.272 in 2019-20 it was lowest. In HDFC Bank the Ratio was higher during the study period, Hence the performance of HDFC bank is good than ICICI Bank in the year. Return

16 Return on Assets

17 Year

18 Return on Assets

HDFC Bank

19 ICICI Bank

Hypothesis H 0 = There is no significance difference of Return on assets ratio in selected HDFC Bank and ICICI Bank.

H 1 = There is a significance difference of Return on assets ratio in selected HDFC Bank and ICICI Bank.

20 Return on Capital Employed

The term investment may refer to total assets or net assets. The funds employed in net assets are known as capital employed. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loan. Alternatively, capital employed is equal to net worth plus total debt .

21 Return on Capital Employed

22 =

Net Profit Before Interest and Tax Capital Employed

Significance:

? The success of enterprise is judge with the help of this ratio. ? It is perhaps the most important ratio from the viewpoint of management. The above table 5.1 indicates the Capital Employed Ratio of the HDFC and ICICI Banks during the period of the study from 2015-16 to 2019-20. In HDFC Bank the Ratio shows fluctuated trend. The average Profit Ratio of the HDFC Bank was 1.788 during the study period. The ratio was the higher of 1.83 during 2015-16, where as it was the lower of 1.72 during 2018-19. In case of ICICI Bank the Ratio shows fluctuated trend during the study period. It was 0.171 in 2015-16 which decrease to 0.289 in 2019-20 it was lowest. In HDFC Bank the Ratio was higher during the study period, Hence the performance of HDFC bank is good than ICICI Bank in the year.

23 Hypothesis:

H 0 = There is no significance difference of Return on capital employed ratio in selected HDFC Bank and ICICI Bank. H 1 = There is a significance difference of Return on capital employed ratio in selected HDFC Bank and ICICI Bank.

24 Findings

The findings of the study reveal that the gross profit ratio is found to be higher in HDFC Bank. This indicates that HDFC Bank has better profit earning capacity. Nonetheless, the net profit ratio in both the bank is found to be similar. This denotes both the banks have the same profit margin. Moreover, the results of the study demonstrate that the return on assets ratio is higher in HDFC bank. This indicates the return on assets earned by the bank is higher. Notably, the Net profit ratio is similar in both the banks. This indicates the banks have same earning capacity.

In terms of the return on capital employed, the study reveals that it is higher in HDFC bank. This indicates that the bank has better earning capacity of return on capital employed than ICICI bank. Overall, the profitability performance of HDFC bank is higher in terms of profit ration, and the bank possesses better earning capacity than ICICI bank. When compared to ICICI bank, HDFC bank stands better in almost all aspects of profitability performance. Nevertheless, ICICI bank can multiply return on assets by increasing assets or by increasing profitability of the bank. Profitability may be increased by granting more loans, earning higher interest on loans and passing the same to depositors.

25 XI.

26 Conclusion

The study aimed at analyzing and measuring the profitability performance of HDFC bank and ICICI bank. The results of the study reveal that HDFC bank profitability performance is better and higher than ICICI bank. Overall, the HDFC Bank is generating more profitability in this comparison. The similar steps can be adopted by ICICI Bank in order to earn profit capacity. In ICICI Bank, average gross profit ratio is lower than HDFC Bank. To increase the gross profit, the bank should control the costs and expenses associated with bank operations. In comparison to ICICI bank, performance of the HDFC bank during the study period can be described as dynamic and flexible in attracting profit; ICICI bank can take suggestion from HDFC bank also. Average Net Profit Margin ratio is lowest in ICICI Bank. The net profit ratio indicates the efficiency and advantageous position to cover the cost. So it is suggested that ICICI Bank should increase its income and reduce its expenses to maximize the profit.

Net profit ratio of the HDFC bank is continuous in increasing trends and ICICI bank should examine the strategies employed by HDFC bank. ICICI bank should reduce variable cost and improve the customer loyalty and improve services offered to customers. According to return on total assets, total assets of both banks are nearby the same but earning capacity of the ICICI bank is lower. Therefore, ICICI bank has to invest its cash in order to give maximum benefits to ICICI bank and charge more interest from the beneficiary companies. [1]

1

Figure 1: Table 1 :

2

Gross Profit Ratio

Ratio 20 25
Gross 0 5 10 15 HDFC Bank
Profit ICICI Bank
2015-16 2016-17 2017-18 2018-19 2019-20
Year
Profit Ratio
Two-Sample Assuming Equal Variances
t-Test: Two-Sample Assuming Equal Variances

Particulars	HDFC GP Ratio (%)	ICICI GP Ratio (%)
Mean	19.678	14.368
Variance	5.23287	1.92382
Observations	5	5
df	8	

Figure 2: Table 2 :

3

		HDFC Bank			ICICI Bank	
Year	NP	Business Income	Ratio (%)	NP	Business Income	Ratio (%)
2015-16	10215.92	48469.90	21.07	33375.35	49091.14	22.76
2016-17	12296.21	60221.45	20.41	9726.29	52739.43	18.44
2017-18	14549.04	69305.96	20.99	9801.09	54156.28	18.09
2018-19	17486.73	80241.36	21.79	6777.42	54966.89	12.33
2019-20	21078.17	98972.05	21.29	3363.30	63401.19	5.304
Maximum	21078.17	98972.1	21.79	33375.4	63401.2	22.76
Minimum	10215.92	48469.9	20.41	3363.3	49091.1	5.304
Mean	15125.21	71442.1	21.11	12608.7	54871	15.3848

(Sources: Compute from Annual Report of HDFC Bank and ICICI Bank.)

Figure 3: Table 3 :

4

Particulars	Profit Ratio Two-Sample Assuming Equal Variances Two-Sample Assuming Equal Variances HDFC NP Ratio (%)	ICICI NP Ratio (%)
Mean	21.11	15.3848
Variance	0.2502	45.50007
Observations	5	5
df	8	
t Stat	1.892687	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.095032	
t Critical two-tail	2.306004	

(At 0.05 % level of Significance)

Above table number 2 shows the result of t-test according to that calculated value of 't' is 1.8926, while table value of 't' is 2.306 which is less than the calculated value. So, null hypothesis is accepted and alternative hypothesis is rejected at 5% level of significant. It shows that there is no significance difference in Net Profit Ratio of HDFC Bank and ICICI Bank.

VIII.

Figure 4: Table 4 :

5

Year	HDFC Bank			ICICI Bank		
	Return on Assets	Total Assets	Ratio	Return on Assets	Total Assets	Ratio (%)
2015-16	10215.92	590503.07	1.730	11175.35	826079.18	1.353
2016-17	12296.21	708845.57	1.734	9726.29	915938.73	1.062
2017-18	14549.04	863840.20	1.683	9803.09	982659.54	0.997
2018-19	17486.73	1063934.31	1.643	6777.42	1121253.40	0.604
2019-20	21078.17	1244540.59	1.694	3363.30	1235723.90	0.272
Maximum	21078.17	1244540.6	1.734	11175.4	1235724	1.353
Minimum	10215.92	590503.07	1.643	3363.3	826079	0.272
Mean	15125.21	894332.75	1.6968	8169.09	1016331	0.857

[Note: (Sources: Compute from Annual Report of HDFC Bank and ICICI Bank.)]

Figure 5: Table 5 :

6

t-Test: Two-Sample Assuming Equal Variances

Particular	HDFC Return on Assets Ratio (%)	ICICI Return on Assets Ratio (%)
Mean	1.6968	0.8576
Variance	0.001395	0.178468
Observations	5	5
df	8	
t Stat	4.424657	
P(T<=t) one-tail	0.001106	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.002213	
t Critical two-tail	2.306004	
(At 0.05 % level of Significance)		
IX.		

Figure 6: Table 6 :

7

		HDFC Bank			ICICI Bank	
Year	Return on Capital Employed	Capital Employed	Ratio	Return on Capital Employed	Capital Employed	Ratio (%)
2015-16	10215.92	558018.61	1.83	11175.35	684417.62	0.171
2016-17	12296.21	672120.44	1.82	9726.29	766103.94	1.269
2017-18	14549.04	807130.88	1.80	9803.09	807306.22	1.214
2018-19	17486.73	1018170.59	1.72	6777.42	928808.18	0.729
2019-20	21078.17	1189432.3	1.77	3363.30	1161783.76	0.289
Maximum	21078.17	1189432.3	1.83	11175.4	1161784	1.269
Minimum	10215.92	763860.13	1.72	3363.3	684418	0.171
Mean	15125.21	848974.56	1.788	8169.09	869684	0.7344

[Note: (Sources: Compute from Annual Report of HDFC Bank and ICICI Bank.)]

Figure 7: Table 7 :

8

Two-Sample Assuming Equal Variances
t-Test: Two-Sample Equal Variances

Particulars	HDFC Return On Capital Employed Ratio (%)	ICICI Return On Capital Employed Ratio (%)
Mean	1.788	0.7344
Variance	0.00197	0.257911
Observations	5	5
df	8	
t Stat	4.621401	
P(T<=t) one-tail	0.000854	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.001707	
t Critical two-tail	2.306004	

(At 0.05 % level of Significance)

Above table number 8 shows the result of t-test according to that calculated value of 't' is 4.621, while table value of 't' is 2.306 which is greater than the calculated value. So, null hypothesis is rejected and alternative hypothesis is accepted at 5% level of significant. It shows that there is a significance

Figure 8: Table 8 :

X.
HDFC Bank
ICICI Bank

Figure 9: on Capital Employed Year Return on Capital Employed

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