International Journal of Advanced Research in Commerce, Management & Social Science (IJARCMSS)
ISSN : 2581-7930, Impact Factor : 5.880 , Volume 04, No. 01, January - March, 2021, pp 313-318

ANALYSIS OF PROFITABILITY PERFORMANCE OF PUNJAB NATIONAL BANK AND HDFC BANK IN INDIA

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ABSTRACT

Banks are the arteries of any financial system. Their ability to make a positive contribution in igniting the process of growth depends on the effective banking system. It plays a major role in mobilizing the nation's savings and channelizing them into high investment priorities and better utilization of available resources. Thus, the development of a country is associated with the development of banking. In recent years, there have been considerable pressures on the profitability of banks. Profitability is considered to be an index of financial strength. A business that is not profitable cannot survive. It has become very mandatory to study and make a comparative analysis of public sector bank and private sector bank. This study tries to analyze the profitability performance of Punjab national bank and HDFC Bank for the period 2005-2020. The Profitability performance of a bank is measured by a number of key indicators with reference to Net Interest Margin, Net profit Margin, Return on Assets etc.

Keywords: *Profitability, Net Interest Margin, Net Profit Margin, Return on Assets, PNB, HDFC Bank.*

Introduction

Banks are a fundamental element of the financial system, and are also play a major role in financing the economic needs of the nation. It plays a major role in mobilizing the nation's savings and channelizing them into high investment priorities and better utilization of available resources. Thus, the development of a country is associated with the development of banking. The banking system in India should not only be hassle free but it should be able to meet new challenges posed by technology and any other external and internal factors. Major changes took place in the functioning of Banks in India only after liberalization, globalization and privatization. All these translates into a strong growth for banking sector too, as rapidly growing business turn to banks for their credit needs, thus helping them grow very fast. Also, with the advancements in technology, mobile and internet banking service have come to the fore. The efficient working of banking system leads to survival of any country. The banking system of India is featured by a large network of bank branches, serving many kinds of financial needs of the people. Public and private sector banks are such financial entities in our country. Both banks responsible for the overall banking needs of the people around the country. Banks make the productive utilization of ideal funds, thus assists the society to produce wealth. It has become very mandatory to study and make a comparative analysis of public sector bank and private sector bank. This study tries to analyze the profitability performance of Punjab national bank and HDFC Bank for the period 2005-2020.

Review of Literature

Srinivas Kolluru (2013) mainly focused that on the estimation of 19 PSBs and PSFIs returns for the period of 1999-2010 using the CAPM frame work. Further this paper compares the CAPM (Capital Asset Pricing Mode) returns with that of the Annual Market Returns (AMR). He stated that most of the PSBs (Public Sector Banks) and PSFIs (Public Sector Financial Institutions) scrip's are undervalued and have not satisfied the investors properly.

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Dr. Mukund Sharma (2014) studied the performance of public sector banks and their private sector counterparts based CAMEL (Capital adequacy, Asset quality, Management soundness, Earnings, liquidity and sensitivity to market risk) framework. They selected sixteen public sector and same number of private sector banks for the study. The period of study taken is from the year 2007-08 to 2012-13. The paper concluded that performance of public sector banks is substantially better than their private sector banks.

Balaji Chintalal, (2017) The study examines the financial performance of Indian banks based on the CAMEL variables and compares the performance of new private sector and public sector banks for the period of study i.e. 2011-12 to 2015-16. Three leading private sector banks – HDFC Bank, ICICI Bank, Kotak Mahindra Bank and three public sector banks – State Bank of India (SBI), Bank of Baroda, and Punjab National Bank have been taken as sample. It is concluded that selected private sector banks are having more capital adequacy ratio, profit per employee, return on assets and current ratio and less of net NPA/NA and business per employee compared to the selected public sector banks.

Dr. S.Hajeema Rabiath Beevi, (2018), In this paper CAMEL rating approach is used to analyze the comparative performance of public and private sector banks in India for the period of 2010-12. CAMEL is an acronym for six measures capital adequacy, assets quality, management soundness, earnings, liquidity and sensitivity to market risk. In this analysis the six indicators which reflect the soundness of the institution framework are considered for evaluating the performance and financial soundness of the activities of public and private sector banks. Soundness of the banking sector is synonymous with efficiency, productivity, profitability, stability and a shock free environment. It is concluded that the financial performance of public sector banks are better when compared to private sector banks. NPA is higher in Public sector banks due to compulsory allocation of funds to Priority sector. Private sector banks have low NPA because of its scrutiny mechanism in lending operations.

Objectives of the Study

- To analysis the profitability performance of Punjab National Bank and HDFC Bank.
- To study and calculate the specified key parameters of profitability of selected banks.

Research Methodology

The present study is secondary data based collected from various journals, reports of RBI and annual reports of banks, websites of the banks etc. Data is presented with the help of graphs, charts and tables etc. The study period is limited, from 2005-06 to 2019-20. In this study various statistical tools are used (i.e.) Mean and ANOVA test have been used for data analysis.

- MEAN = sum of variable/N
- Standard deviation = √ΣX2/N-(ΣX/N)
- Coefficient of Variation= SD/MEAN*100

Hypothesis

H_0: There is no significant difference in Return on Assets Ratios of PNB and HDFC bank during the study period.

H_a: There is significant difference in Return on Assets Ratios of PNB and HDFC bank during the study period.

H_0: There is no significant difference in Return on Equity Ratios of PNB and HDFC bank during the study period.

H_a: There is significant difference in Return on Equity Ratios of PNB and HDFC bank during the study period.

H_0: There is no significant difference in Net Interest Margin Ratios of PNB and HDFC bank during the study period.

H_a: There is significant difference in Net Interest Margin Ratios of PNB and HDFC bank during the study period.

Overview of Profitability

The primary objective of each business enterprise is to earn profit. In facts profit earning is considered essential not only for the survival of business but is also required for its expansion and diversification. Profitability is measured with income and expenses. The ability to earn a profit, In fact, efficiency of business is measured in terms of profits. Profitability ratios are calculated to measure the efficiency of a business. The following profitability ratios are.

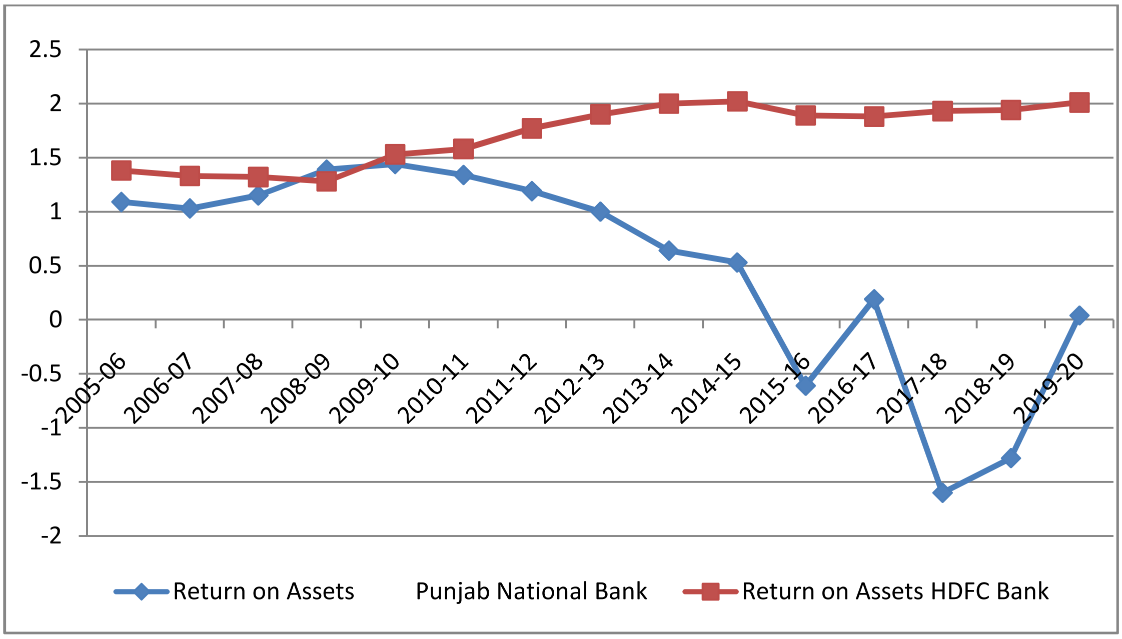
Return on Assets

Following table represents Return on Assets in PNB and HDFC bank during the period of 2005-06 to 2019-20.

Table 1(a): Analysis of Mean, Standard Deviation & Coefficient of Variation

Return on Assets (In %)		
Year	**Punjab National Bank**	**HDFC Bank**
2005-06	1.09	1.38
2006-07	1.03	1.33
2007-08	1.15	1.32
2008-09	1.39	1.28
2009-10	1.44	1.53
2010-11	1.34	1.58
2011-12	1.19	1.77
2012-13	1.00	1.90
2013-14	0.64	2.00
2014-15	0.53	2.02
2015-16	-0.61	1.89
2016-17	0.19	1.88
2017-18	-1.60	1.93
2018-19	-1.28	1.94
2019-20	0.04	2.01
Mean	**0.50**	**1.71**
S.D	**0.97**	**0.28**
C.V (%)	**193.87**	**16.41**

Graph 1: Return on Assets of Punjab National Bank and HDFC Bank



Interpretation: Mean return on assets in PNB and HDFC bank was found 0.50 and 1.71 respectively. HDFC bank as a sample private sector bank has got better position as far as return on assets is concerned as compared to PNB. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Return on assets reveals what earnings were created from invested capital or assets. The graph indicates ROA of PNB and HDFC Bank and both banks ROA are far away from each other. While the HDFC bank are showing growth over the years but the Punjab National bank is not able to earn returns out of it assets.

Table 1(b): Analysis of ANOVA

ANOVA: Single Factor						
Summary						
Groups	*Count*		*Sum*		*Average*	*Variance*
PNB	15		7.78		0.518667	0.892541
HDFC Bank	15		25.89		1.726	0.08464
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	10.9324	1	10.9324	22.375392	5.798E-05	4.195972
Within Groups	13.68053	28	0.48859			
Total	24.61294	29				

Inferences: "F" test indicates that the Calculated value of F =22.375392 and tabular value of F = 4.195972 at 5 % level of significance. The Calculated value of F is more than table value of F. So, the null hypothesis has been rejected and alternative hypothesis has been accepted. It means there is significant difference in ROA Ratios of Punjab National Bank and HDFC Banks during the study period.

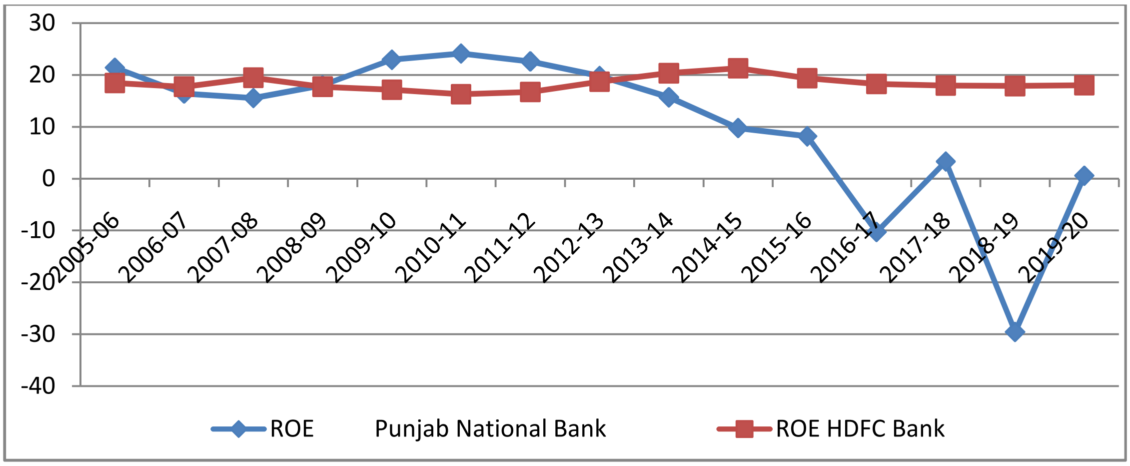
Return on Equity Ratio

Following table represents Return on Equity ratio in PNB and HDFC bank during the period of 2005-06 to 2019-20.

Table 2(a): Analysis of Mean, Standard Deviation & Coefficient of Variation

ROE(In %)		
Year	**Punjab National Bank**	**HDFC Bank**
2005-06	21.41	18.45
2006-07	16.41	17.74
2007-08	15.55	19.46
2008-09	18.01	17.74
2009-10	22.92	17.17
2010-11	24.12	16.30
2011-12	22.60	16.74
2012-13	19.80	18.69
2013-14	15.70	20.34
2014-15	9.75	21.28
2015-16	8.17	19.37
2016-17	-10.27	18.26
2017-18	3.30	17.95
2018-19	-29.54	17.87
2019-20	0.58	18.01
Mean	**10.57**	**18.36**
S.D	**14.70**	**1.31**
C.V (%)	**139.13**	**7.19**

Graph 2: Return on Equity of Punjab National Bank and HDFC Bank



Interpretation: Mean Return on Equity in PNB and HDFC bank during 2005-06 to 2019-20 was found Rs. 10.57 and Rs.18.36 respectively. A higher return on equity indicates that a Bank is effectively using the contributions of equity investors to generate additional profits and return the profits to investors at an attractive level. HDFC bank has got better position as far as return on equity is concerned as compared to PNB bank. Punjab National Bankhas a huge downfall with in their returns which is also depicted in the graph 2.

Table 2(b): Analysis of ANOVA

ANOVA: Single Factor						
Summary						
Groups	Count		Sum		Average	Variance
PNB	15		158.51		10.5673	216.166
HDFC Bank	15		275.37		18.358	1.74196
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	455.209	1	455.209	4.17799	0.05046	4.19597
Within Groups	3050.71	28	108.954			
Total	3505.92	29				

Inferences: "F" test indicates that the Calculated value of F =4.17799 and tabular value of F = 4.19597 at 5 % level of significance. The Calculated value of F is less than table value of F. So, the null hypothesis has been accepted and alternative hypothesis has been rejected. It means there is no significant difference in ROE Ratios of Punjab National Bank and HDFC Banks during the study period.

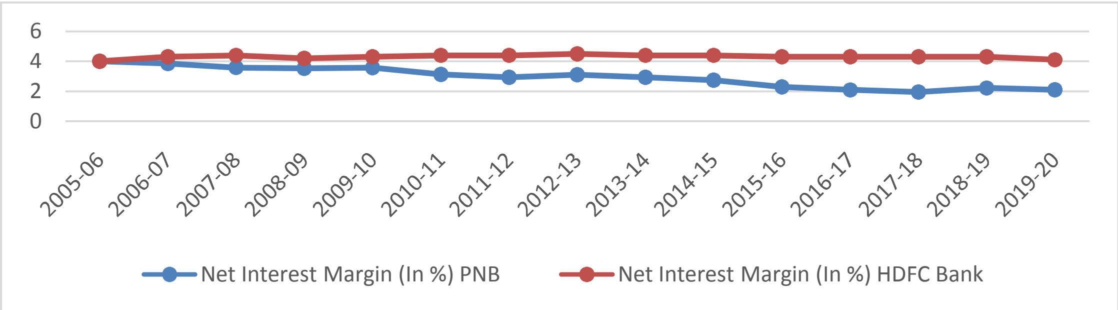
Net Interest Margin

Following table represents Net Interest Margin in PNB and HDFC bank during the period of 2005-06 to 2019-20.

Table 3(a): Analysis of Mean, Standard Deviation & Coefficient of Variation

Net Interest Margin (In %)		
Year	**PNB**	**HDFC Bank**
2005-06	4	4
2006-07	3.85	4.3
2007-08	3.58	4.4
2008-09	3.52	4.2
2009-10	3.57	4.3
2010-11	3.12	4.4
2011-12	2.92	4.4
2012-13	3.1	4.5
2013-14	2.93	4.4
2014-15	2.74	4.4
2015-16	2.29	4.3
2016-17	2.08	4.3
2017-18	1.94	4.3
2018-19	2.21	4.3
2019-20	2.09	4.1
Mean	**2.93**	**4.31**
SD	**0.69**	**0.13**
CV	**23.46**	**2.97**

Graph 3: Net Interest Margin of Punjab National Bank and HDFC Bank



Interpretation: Mean Net Interest Margin in PNB and HDFC bank during 2005-06 to 2019-20 was found Rs. 2.93 and Rs.4.31 respectively. A higher Net Interest Margin indicates that a Bank is effectively utilizes its assets to produce profit for banks. HDFC bank as a sample private sector bank has got better position as far as Net Interest Margin is concerned as compared to PNB as a sample public sector bank.The graph 3 indicates HDFC banks with increasing margins over the years while the same for Punjab National Banks is on a declining trend.

Table 3(b): Analysis of ANOVA

Anova: Single Factor						
Summary						
Groups	**Count**		**Sum**		**Average**	**Variance**
PNB	15		43.94		2.92933	0.47206
HDFC Bank	15		64.6		4.30667	0.01638
ANOVA						
Source of Variation	***SS***	***Df***	***MS***	***F***	***P-value***	***F crit***
Between Groups	14.2279	1	14.2279	58.2578	2.5824	4.19597
Within Groups	6.83823	28	0.24422			
Total	**21.0661**	**29**				

Inferences: "F" test indicates that the Calculated value of F =58.2578 and tabular value of F = 4.19597 at 5 % level of significance. The Calculated value of F is more than table value of F. So, the null hypothesis has been rejected and alternative hypothesis has been accepted. It means there is significant difference in Net Interest Margin Ratios of Punjab National Bank and HDFC Banks during the study period.

Conclusion

The profitability of Indian public and private sector banks are clearly reflected in the aforesaid analysis. HDFC bank was in more profitable position than the Punjab National Bank. PNB with increasing non-performing assets are experiencing negative return on their assets in recent years which are deteriorating their profits. HDFC bank is more efficiently managing their assets and equities. Also the business operations HDFC bank efficient than the PNB which enable them to earn more profits.

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