
The Financial performance of Selected Public Sector and Private Sector Banks in India - A comparative study using CAMEL model.

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Abstract

In today's scenario, the banking sector is one of the fastest growing sectors and banking sector plays a major role in economic development by channelizing savings into investment. Also, today's banking system is becoming more complex. So, I thought of evaluating the performance of some selected public sector and private sector banks in India. There are so many models of evaluating the performance of the banks. Out of these CAMEL model has been considered as one of the widely used tools for judging Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, and Liquidity of the financial institutions including commercial banks.

This paper examines the comparative performance of leading public and private sector banks, i.e. HDFC Bank and ICICI Bank from Private Sector and State Bank of India and Punjab National Bank from the public sector. Data have been collected through annual reports of the consecutive five years i.e. from 2012-03 to 2016-17 of all the banks. Then CAMEL ratios are calculated ratios and interpreted. Ranking of the banks are done by calculating the average of the five years ratios. From the analysis it is found that the private sector banks' performance is better than the public sector banks. And an interesting result is found that the overall performance of both the private sector bank is equal as well as the overall performance of both the public sector bank is also equal.

Key words:Asset Quality,Capital Adequacy, Earnings Quality, Liquidity, Management Efficiency andPerformance evaluation.

Introduction

Banks have always played an important position in the country's economy. They play a decisive role in the development of the industry and trade. They are acting not only as the custodian of the wealth of the country but also as resources of the country, which are necessary for the economic development of a nation.

Banks play an important role in capital formation, which is essential for the economic development of a country. They mobilize the small savings of the people scattered over a wide area through their network of branches all over the country and make it available for productive purposes.

Besides institutionalizing savings, the banking sector has contributed to the process of economic development by serving as a major source of credit to households, government, business and weaker sectors of the economy like village and small scale industries and agriculture.

As banking sector performs a major role in Indian Economic development, the present study is to analyse the financial performance as well as the growth of the banking sector in India.

Objective of the Study:

- To evaluate the financial performance of the selected Public and Private sector banks using CAMEL model.
- To study the growth rate of the representative banks.

Limitations of the Study:

Limitations are always a part of any kind of research work. As the report is mainly based on secondary data; proper care has been taken in knowing the limitations of the required study.

- The financial performance of the selected banks is shown just for the last five years. Hence, any uneven trend before or beyond the set period is the limitations of the study.
- This analysis is based on only monetary information. Hence, analysis of the non-monetary factors has not been studied.

Literature Review:

Maheshwari, P (2012) in her study of 5 public and 5 private sector banks found that the Capital adequacy ratio is greater in private sector banks than public sector banks. The debt equity ratio is greater in public sector banks than private sector banks. The net NPAs to net advances ratio is greater in public sector banks than private sector banks. The total investments to total assets ratio is greater in private sector banks than public sector banks. The total advances to total deposits ratio is greater in private sector banks than public sector banks. The business per employee ratio is greater in private sector banks than public sector banks. The profit per employee ratio is greater in private sector banks than public sector banks.

Trivedi, A, Rehman, A & Elahi, Y.A(2015) in their study of 2 public sector and 2 private sector banks found that on the basis of capital adequacy, BOB is in rank 1 whereas KMB is in rank 4. On the basis of asset quality, Axis Bank is in rank 1 whereas SBI is in rank 4. On the basis of management efficiency, KMB is in rank 1 whereas Axis Bank is in rank 4. On the basis of earning quality, SBI is in rank 1 where as KMB is in rank 4. On the basis of liquidity position, KMB is in rank 1 whereas Axis bank is in rank 4.

Prasad, R.S & Shreenath, R (2016) in their study of 3 public sector banks found that the capital adequacy Bank of Maharashtra is at the top position with group average 1.75, followed by Vijaya Bank (2) and United bank of India (2.25) which stood at the last position due to its poor performance in CAR and Advances to Asset ratio. The Liquidity ratio of all the representative banks is not quite good. In Vijaya bank, debt equity ratio is continuously rising over the years which are not good.

Varshney, N & Chawla, C (2016) in their study of 3 public sector banks found that the average Credit Deposit Ratio in SBI is higher (6.568%) than in PNB (5.054%). And the Compound Growth Rate in PNB is lower (-4.64%) than in SBI (-0.24%).The ratio of other income to total income is relatively higher in SBI (12.65%) as compared to PNB (10.59%).The net profit margin is higher in SBI (9.082%) as compared to PNB (6.138%). The PNB has shown comparatively lower operational efficiency than SBI.The CGR of current ratio is higher in PNB (8.45%) as compared to SBI (6.96%). It means the SBI is comparatively more efficient to pay its current debt payments than PNB.The quick ratio of PNB (24.74%) is more than of SBI (11.94%). Thus, the PNB is comparatively more efficient to pay its current debt payments with quick assets than SBI.

Kumar, K.A & Murty, A.V.N (2017)in their study of 2 public sector and 2 private sector banks found that in terms of CAR, ICICI bank is at the top position followed by BOB, SBI & Axis bank. In terms of asset quality, Axis bank is at the top position followed by SBI, BOB, & ICICI bank. In terms of Management efficiency, ICICI bank is at the top position followed by BOB, SBI & Axis bank. In terms of Earning quality, BOB is at the top position followed by Axis bank, SBI, & ICICI bank. In terms of asset quality, ICICI bank is at the top position followed by SBI, BOB, & Axis bank.

Research Methodology:

For the purpose of the present study, the research instrument used is the CAMEL Model which is the recent innovation in the area of financial performance evaluation of banks. The model is explained as under:

CAMEL parameters:

This system was adopted in India since 1995 at the suggestion of Mr. Padmanabhan, Governor RBI. Under this system the rating of individual banks is done along five key parameters. CAMEL is basically ratio based model for evaluating the performance of banks. It is a management tool that measures Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity of financial institutions. The present study adopts analytical and descriptive research design. The data of the sample banks for a period of 2012-13 to 2016-17 have been collected from the annual reports published by the banks. The study is based on five ratios of the variables relating to Capital Adequacy, Assets Quality, Management Efficiency, Earnings Quality and Liquidity.

Conceptual Study of the ratios:**A) Capital Adequacy:**

CAR is a ratio of Capital Fund to Risk Weighted Assets. This ratio is developed to ensure that banks can absorb a reasonable level of losses occurred due to operational losses and determine the capacity of the bank in meeting the losses. Reserve Bank of India prescribes Banks to maintain a minimum Capital Assets Ratio (CAR) of 9 % with regard to credit risk, market risk and operational risk on an ongoing basis.

$$\text{CAR} = (\text{Total Capital} / \text{Risk weighted Assets}) * 100$$

B) Asset Quality:

Asset quality depends on the Non-Performing Assets of a bank. Advances are categorized into performing and non-performing advances (NPAs) as per RBI guidelines. NPAs are extended into sub-standard, doubtful and loss assets based on the principle predetermined by RBI. An asset, consist of a leased asset, becomes nonperforming when it ceases to generate income for the Bank.

$$\text{Net NPA to Net Advances Ratio} = \text{Net NPA} / \text{Net Advances}$$

C) Management Efficiency:

The ratio in this segment involves subjective analysis to measure the efficiency and effectiveness of management. The ratio used to evaluate management efficiency is:

$$\text{Business per Employee ratio} = \text{Total Business} / \text{Total Number of Employees}$$

D) Earning Quality:

The quality of earnings is a very important criterion which determines the ability of a bank to earn consistently. It basically determines the profitability of bank and explains its sustainability and growth in earnings in future. The ratio used to analyse the earning quality is:

$$\text{Return on Average Asset Ratio} = (\text{Net profit} / \text{Average assets}) * 100$$

E) Liquidity:

A sufficient liquidity position refers to a situation, where financial organization can obtain adequate funds, either by increasing liabilities or by exchanging its assets rapidly at a reasonable cost. It is, consequently, generally assessed in terms of overall assets and liability management, as mismatching gives rise to liquidity risk. The ratio used to analyse the liquidity position is:

$$\text{Liquid asset to Total Asset Ratio} = \text{Liquid assets} / \text{Total assets}$$

Sample of the study:

The present study seeks to evaluate the financial performance of the two Public sector banks and two private sector banks. The selection of banks is done on the basis of Total asset ranking. Top two public sector banks having highest Total Asset as on March 2017 are:

- State Bank of India
- Punjab National Bank

And Top Two Private sector banks having highest Total Asset are:

- HDFC Bank
- ICICI Bank

Data collection method:

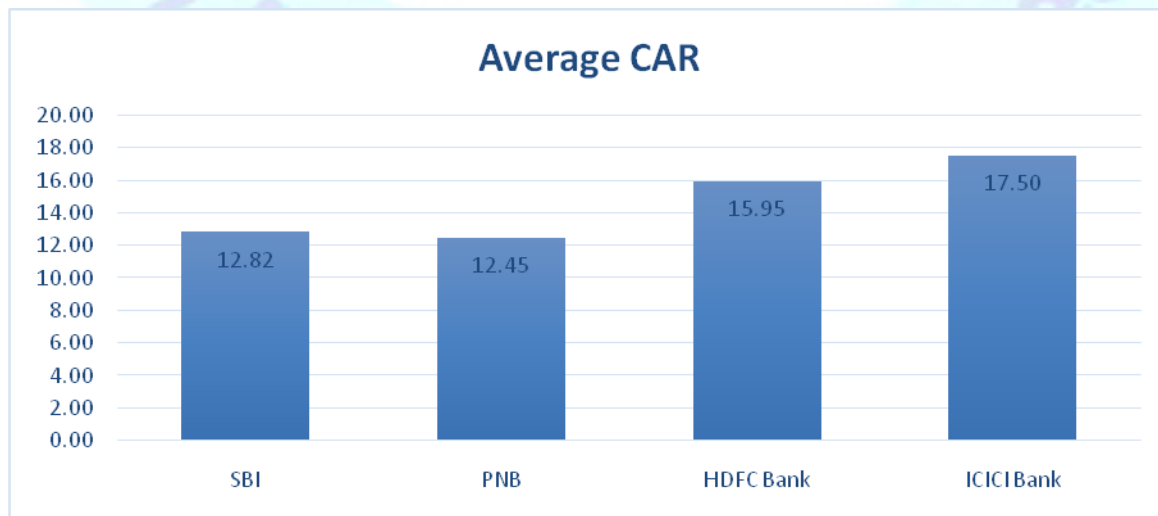
The study is mainly based on secondary data drawn from the annual reports of the respective banks. This data collected for a period of last 5 years (2012-13 to 2016-17). For analysis of the data, one important statistical tools viz. Mean or Average has been used to arrive at conclusions in a scientific way.

Data Analysis:

A) Capital Adequacy Ratio:

Table No: 1		Capital Adequacy Ratio					
							<i>All figures are in %</i>
Bank Name/Year	2016-17	2015-16	2014-15	2013-14	2012-13	Average	Rank
SBI	13.11	13.12	12.00	12.96	12.92	12.82	3
PNB	11.98	13.15	12.90	11.52	12.72	12.45	4
HDFC Bank	14.55	15.53	16.79	16.07	16.80	15.95	2
ICICI Bank	17.39	16.64	17.02	17.70	18.74	17.50	1

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016 - 17).



Interpretation:

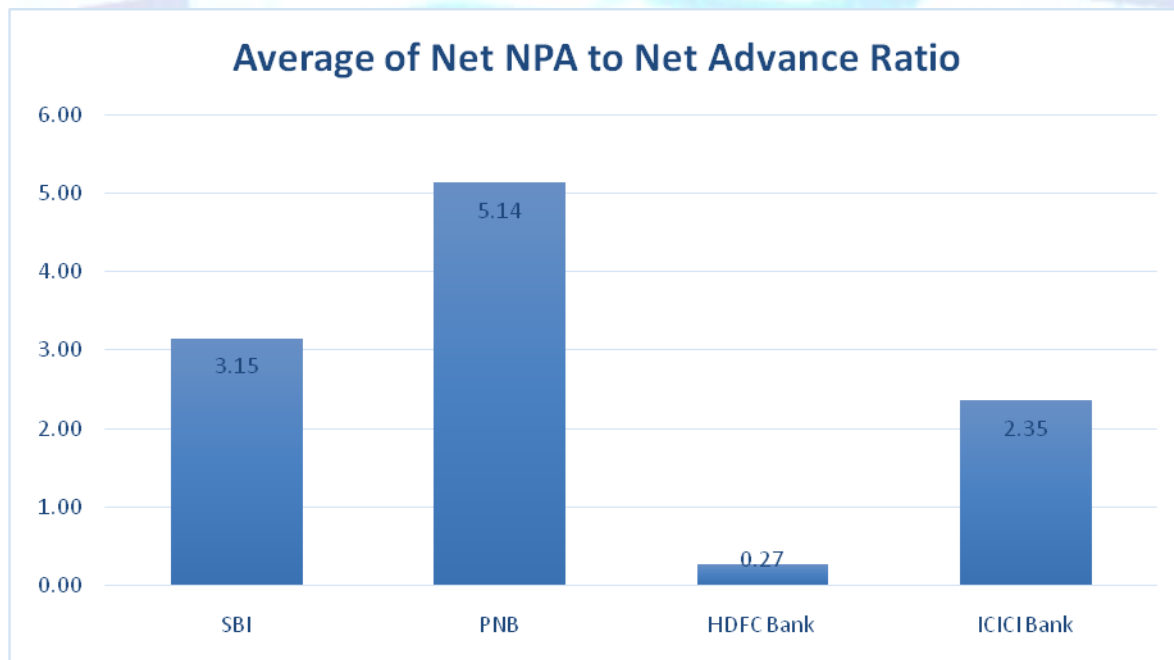
It is clear from Table No:1, among the public sector banks, the average Capital Adequacy ratio of the SBI (12.82) is more than PNB (12.45). Among the private sector banks, the average Capital Adequacy ratio of the ICICI bank (17.50) is more than HDFC bank (15.95). When we analyse all the banks (both public and private), ICICI bank stood in the first position followed by HDFC bank, SBI and PNB. Therefore, we conclude that higher the ratio, higher is the risk taking capacity of bank due to unexpected loss in banking portfolio. With respect to RBI norms of 9%, every bank analysed is in favourable position.

The growth rate in the CAR of PNB and HDFC bank, ICICI bank has decreased and the growth rate of CAR of SBI has increase from 2012-13 to 2016-17.

B) Asset Quality

TableNo: 2 Net NPA to Net Advances Ratio							
<i>All figures are in %</i>							
Bank Name/Year	2016-17	2015-16	2014-15	2013-14	2012-13	Average	Rank
SBI	5.15	3.81	2.12	2.57	2.10	3.15	3
PNB	7.81	8.61	4.06	2.85	2.35	5.14	4
HDFC Bank	0.33	0.28	0.25	0.27	0.20	0.27	1
ICICI Bank	5.43	2.98	1.61	0.97	0.77	2.35	2

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016-17).



Interpretation:

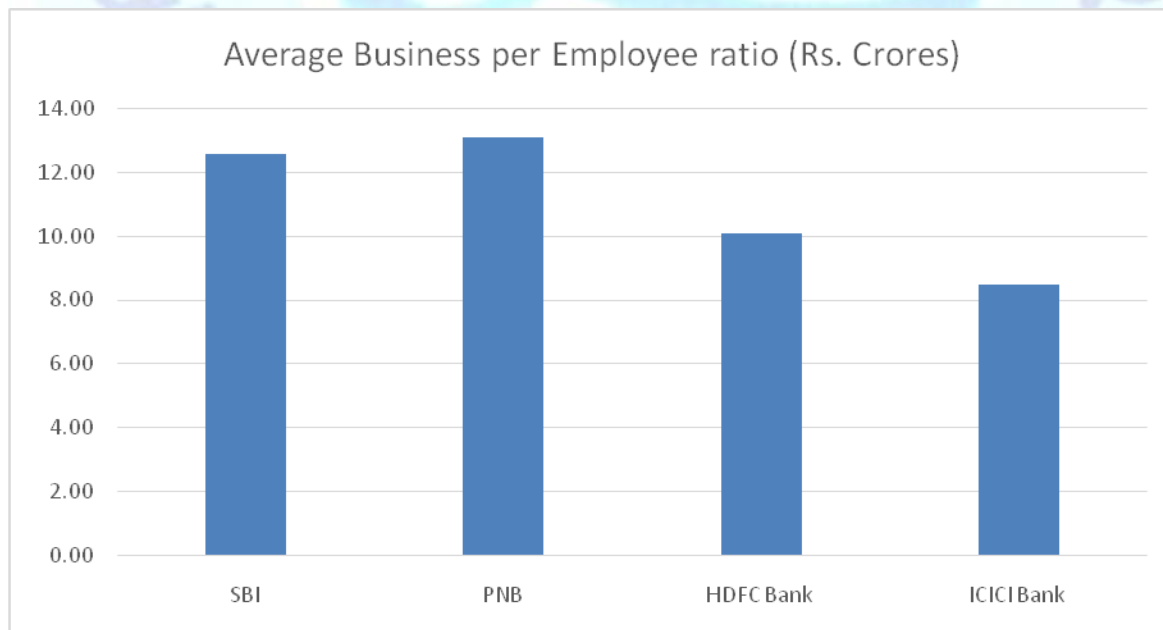
Net NPAs reflects the performance of banks. A high level of NPAs reflects high probability of a large number of credit defaults that affect the profitability and net-worth of banks and wear down the value of the asset. It is clear from Table No:2, among the public sector banks, the average Net NPA to Net Advances ratio of the SBI (3.15) is less than PNB (5.14). Among the private sector banks, the average Net NPA to Net Advances ratio of the HDFC bank (0.27) is less than ICICI bank (2.35). When we analyse all the banks (both public and private), HDFC bank stood in the first position followed by ICICI bank, SBI and PNB. Therefore, we conclude that higher the ratio, the higher the credits risk. The ratio for HDFC bank is the lowest and so it is the best performer among the four banks.

The NPAs of all the banks has increases from 2012-13 to 2016-17

C) Management Efficiency:

Table No: 3 Business per Employee ratio							
<i>All figures are in Rs. Crores</i>							
Bank Name/Year	2016-17	2015-16	2014-15	2013-14	2012-13	Average	Rank
SBI	16.24	14.11	12.34	10.64	9.43	12.55	2
PNB	14.17	13.59	13.19	12.83	11.65	13.09	1
HDFC Bank	12.36	11.39	10.10	8.90	7.50	10.05	3
ICICI Bank	9.84	9.40	8.30	7.40	7.30	8.45	4

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016 - 17).



Interpretation:

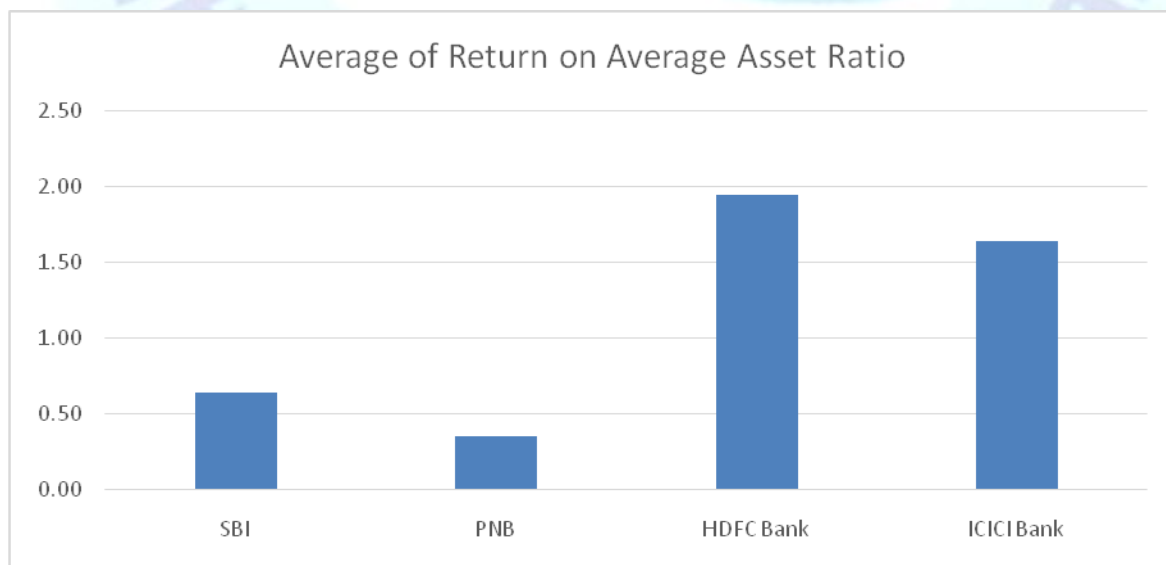
Business per employee (both deposits and advances) is a measure of how efficiently a particular bank is utilizing its employees. Ideally, a bank wants the highest business per employee possible, as it denotes higher productivity. In general, rising revenue per employee is a positive sign that suggests the bank is finding ways to squeeze more sales/revenues out of each of its employee. It is clear from Table No:3, among the public sector banks, the average business per employee of the PNB(13.09 crores) is more than SBI(12.55 crores). Among the private sector banks, the average business per employee of the HDFC bank (10.05 crores) is more than ICICI bank (8.45 crores). When we analyse all the banks (both public and private), PNB stood in the first position followed by SBI, HDFC bank and ICICI bank.

The management efficiency of all the banks has increases from 2012-13 to 2016-17.

D) Earning Quality:

Table No: 4 Return on Average Asset Ratio							
<i>All figures are in %</i>							
Bank Name/Year	2016-17	2015-16	2014-15	2013-14	2012-13	Average	Rank
SBI	0.41	0.46	0.68	0.65	0.97	0.63	3
PNB	0.19	-0.61	0.53	0.64	1.00	0.35	4
HDFC Bank	1.88	1.89	2.02	2.00	1.90	1.94	1
ICICI Bank	1.35	1.49	1.86	1.78	1.70	1.64	2

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016 - 17).



Interpretation:

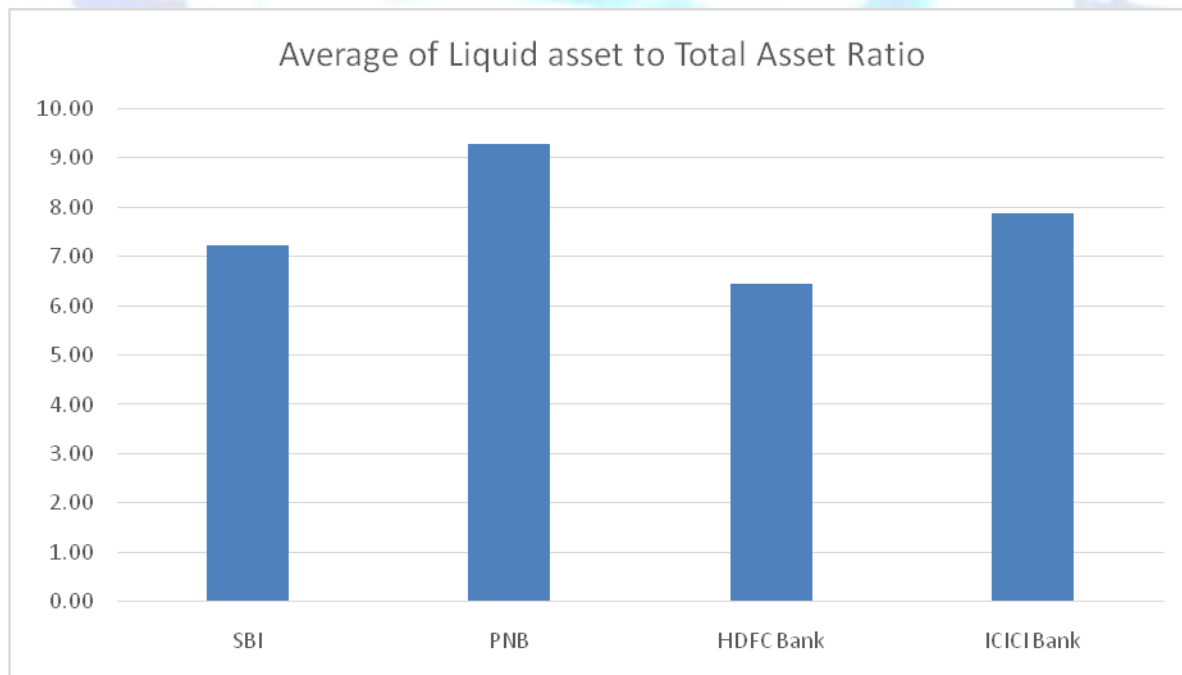
Return on Asset Ratio shows that how much return bank can get from their total asset. Higher the ratio is good for the bank. It is clear from Table No:4, among the public sector banks, the average return on asset of the SBI (0.63) is more than PNB (0.35). Among the private sector banks, the average return on asset of the HDFC bank (1.94) is more than ICICI bank (1.64). When we analyse all the banks (both public and private), HDFC stood in the first position followed by ICICI bank, SBI and PNB.

The Earning quality of all the banks has decreased from 2012-13 to 2016-17.

E) Liquidity:

Table No: 5 Liquid asset to Total Asset Ratio							
<i>All figures are in %</i>							
Bank Name/Year	2016-17	2015-16	2014-15	2013-14	2012-13	Average	Rank
SBI	6.36	7.41	7.56	7.40	7.33	7.21	3
PNB	12.26	11.03	9.22	8.22	5.67	9.28	1
HDFC Bank	5.67	5.49	6.15	8.05	6.81	6.43	4
ICICI Bank	9.81	8.31	6.55	6.98	7.72	7.87	2

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016 - 17).



Interpretation:

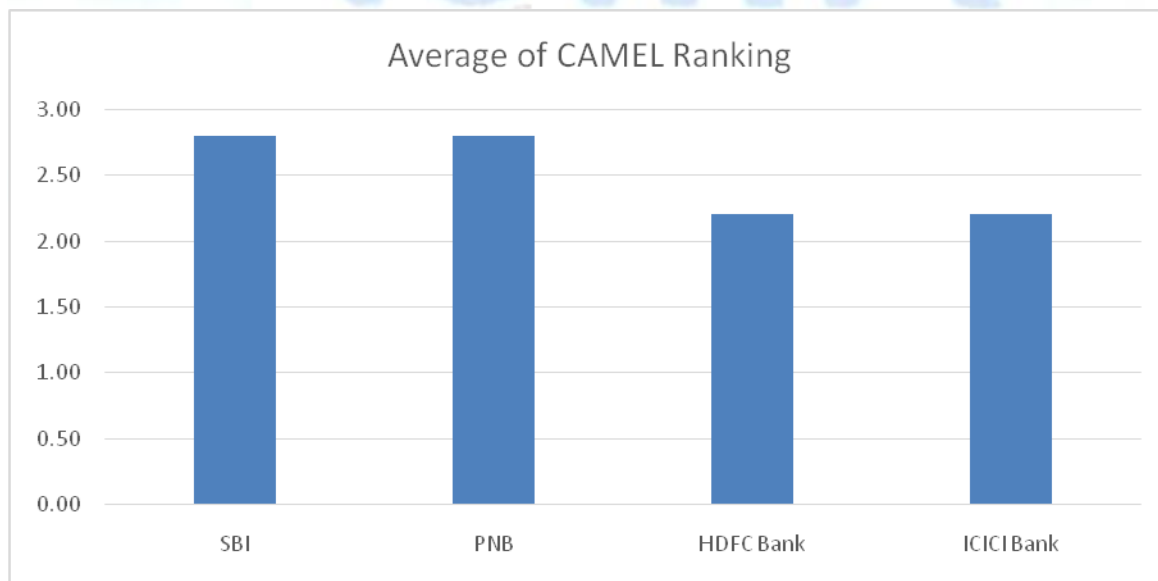
Liquidity for a bank means the ability to meet its financial obligations as they come. It is clear from Table No:5, among the public sector banks, the average liquid assets to total assets of the PNB(9.28) is more than SBI(7.21). Among the private sector banks, the average liquid assets to total assets of the ICICI bank(7.87) is more than HDFC bank (6.43). When we analyse all the banks (both public and private), PNB stood in the first position followed by ICICI bank, SBI and HDFC bank.

The liquidity position of PNB and ICICI bank has increased whereas the liquidity position of SBI and HDFC bank has decreased from 2012-13 to 2016-17

Composite Ranking:

Bank Name	C	A	M	E	L	Average	Rank
SBI	3	3	2	3	3	2.80	2
PNB	4	4	1	4	1	2.80	2
HDFC Bank	2	1	3	1	4	2.20	1
ICICI Bank	1	2	4	2	2	2.20	1

Source: Compiled from the annual reports of the respective banks. (From 2012-13 to 2016 - 17).



Interpretation:

It is clear from the table No: 6 that both the private banks are ranked at top position with composite average (2.20), followed by both the public sector banks with composite average (2.80) which stands at the bottom most position.

Summary of findings:

- On the basis of capital adequacy, ICICI bank is in the top position whereas PNB is in bottom position. It means ICICI bank has higher risk taking capacity than other three banks.
- On the basis of asset quality, HDFC bank is in the top position whereas PNB is in bottom position. It means HDFC bank has the lowest NPAs as compared to other banks and so it is the best performer among the four banks.
- On the basis of management efficiency, PNB is in the top position whereas ICICI bank is in bottom position. It means PNB is utilizing its employees efficiently than other banks.
- On the basis of earning quality, HDFC is in the top position whereas PNB is in bottom position. It means HDFC bank is earning highest return on its assets than other banks.
- On the basis of liquidity position, of PNB is in the top position whereas HDFC bank is in bottom position. It means the PNB has the highest ability to meet its financial obligations as they come.
- Finally, there is an interesting result found in the analysis of the overall performance of the banks. Both the private sector banks have same average rank and both the public sector banks have same average rank. And private sector banks perform better than the public sector banks.

Policy Suggestion:

- PNB needs improvement in the areas of capital adequacy, efficient management of NPAs and return on assets.
- SBI also needs improvement in the areas of capital adequacy, efficient management of NPAs, return on assets and liquidity position.
- HDFC bank also needs improvement in the areas of management efficiency and liquidity position
- ICICI bank also needs improvement in the areas of management efficiency.

Conclusions:

At the end it is concluded that on an average all the four selected bankshave efficient in some aspect as well as need some improvement in some other aspects. It is found that the performance of private sector bank is better than the public sector banks.

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