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Performance Evaluation of Public And Private Sector Banks In India: A Comparative Study

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ABSTRACT

The banking sector is the backbone of any modern economy. It is one of the major financial pillars of the financial sector, which plays a vital role in the functioning of an economy. It is very significant for development of an economic; because it meets the financial requirements of trade, industry and agriculture to accomplish the high level of obligation and accountability. Thus, the development of a country is associated with the development of banking. In a modern economy, banks play the role of leaders of development. They play an important role in the mobilization of deposits and expense of credit to different sectors of the economy. The effectiveness and efficiency of banking system leads to an increase of economic efficiency by mobilizing savings and allocating them to high return investment. The study confirms that economy with a well-developed banking system grow up faster than those with a weaker one. The banking system indicates the economic strength of the country. The strength of a nation depends on the strength and efficiency of the financial system of that nation, which in turn depends on a sound and solvent banking system. This makes banks capable of meets their obligation to the depositors.

KEYWORDS

Introduction

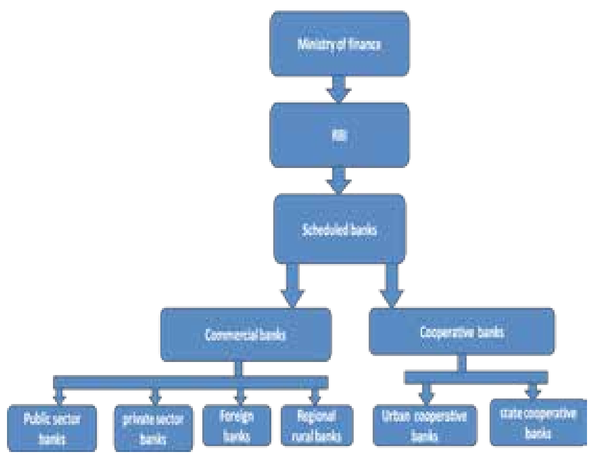
The banking sector is the backbone of any modern economy. It is one of the major financial pillars of the financial sector, which plays a vital role in the functioning of an economy. It is very significant for development of an economic; because it meets the financial requirements of trade, industry and agriculture to accomplish the high level of obligation and accountability. Thus, the development of a country is associated with the development of banking. In a modern economy, banks play the role of leaders of development. They play an important role in the mobilization of deposits and expense of credit to different sectors of the economy. The effectiveness and efficiency of banking system leads to an increase of economic efficiency by mobilizing savings and allocating them to high return investment. The study confirms that economy with a well-developed banking system grow up faster than those with a weaker one. The banking system indicates the economic strength of the country. The strength of a nation depends on the strength and efficiency of the financial system of that nation, which in turn depends on a sound and solvent banking system. This makes banks capable of meets their obligation to the depositors.

In India, banks are also playing a critical role in socioeconomic progress of the country after independence. The banking sector is governing sector in India as it accounts for more than half the assets of the entire financial sector. Indian banks have been going through a fascinating phase through hasty changes brought about by financial sector reforms, which are being implemented in a phased behavior.

the term bank is either derived from Old Italian word banca or from a French word banque both mean a Bench or money exchange table. In olden days, European money lenders or money changers used to display (show) coins of different countries in big eaps (quantity) on benches or tables for the purpose of lending or exchanging.

A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it.

Structure of banking and types of banks in India:



RBI

The RBI is India's central bank of India. The Reserve Bank of India was established on the April 1, 1935 in harmony with the provisions of the Reserve Bank of India Act, 1934. RBI works as a banker to the Government and Banks. The Central Bank keeps the record of Government revenue and expenditure under various heads. It keeps up deposit accounts of all other banks and advances money to other banks, when required. Another important function of the Central Bank is the issuance of currency notes; regulating their circulation and controlling of money supply in the country.RBI also play a main important function that is credit creation in the economy.

Scheduled Bank

All banks which are included in the Second Schedule to the Reserve Bank of India Act, 1934 are known as scheduled banks. These banks consist of Scheduled Commercial Banks and Scheduled Cooperative Banks. The type of banks comes under these Scheduled Commercial Banks and Scheduled Co-operative Banks can be seen by the above figure. All most all banks are Scheduled banks in India.

(A)Commercial Banks
Commercial banks may be defined or known as, any banking organization that deals with the deposits and loans of business organizations known as commercial bank. Commercial banks issue bank checks and bank drafts, as well as accept money on term deposits. Commercial banks also act as moneylenders, by way of installment loans and overdrafts. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These institutions are run to make a profit and owned by a group of individuals.

1 Public Sector Banks
These are banks where majority stake is held by the Government of India (above 50%). Examples of public sector banks are: SBI, PNB, Bank of India, Canara Bank, etc.

2 Private Sector Banks
These are banks majority of share capital of the bank is held by private sector. These banks are registered as companies with the limited liability. Examples of private sector banks are: ICICI Bank, Axis bank, HDFC, yes bank etc.

3.Foreign Banks
These banks are registered and have their headquarters in a foreign country but operate their branches in our country. Examples of foreign banks in India are: HSBC, Citibank, Standard Chartered Bank, etc.

4 Regional Rural Banks
Regional Rural Banks were established under the provisions of an Ordinance promulgated on the 26th September 1975 and the RRB Act, 1976 with an objective to guarantee sufficient institutional credit for agriculture and other rural sectors in the economy. The area of operation of RRBs is limited to the area as notified by government of India covering one or more districts in the State. RRBs are jointly owned by GoI, the concerned State Government and Sponsor Banks which include (27 scheduled commercial banks and one State Cooperative Bank); the issued capital of a RRB is shared by the owners in the proportion of 50%, 15% and 35% respectively. Prathama bank was the first Regional Rural Bank in India located in the city Moradabad in Uttar Pradesh.

(B) Cooperative Banks
A co-operative bank is a financial body which belongs to its members, who are at the same time the owners and the customers of their bank. Co-operative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Co-operative banks generally provide their members with a wide range of banking and financial services like (loans, deposits, banking accounts, etc). They provide limited banking products and they are specialists in agriculture-related products. Cooperative banks are the primary financiers of agricultural activities, some small-scale industries and self-employed workers. Co-operative banks function on the basis of "no-profit no-loss". Anyonya Co-operative Bank Limited (ACBL) was the first co-operative bank in India located in the city of Vadodara in Gujarat.

Review of Literature
The present paper is devoted to review the vast literature which has been carried out to measure the performance of banking sector in India

Prasad K and Ravinder. G (2012) explored a study on performance evaluation of 20 nationalized banks with the help of CAMEL model. The study was mainly based on secondary data covered the period of five year (2005-2010). Results showed that Andhra bank was at the top most position followed by bank of Baroda and Punjab & Sind Bank. It was also observed that Central Bank of India was at the bottom most position.

Kumar S and Gulati R (2010) explored a study on" Dynamics of Cost Efficiency and issue of cost convergence in Indian Public Sector Banks: A Post-deregulation Experience" over the period of (1992-2008), with the help of technical and allocative efficiencies levels of Indian PSBs. It was founded that deregulation had a positive impact on the cost efficiency levels of Indian public sector banking industry over the period of study. Further, technical efficiency of Indian public sector banking industry followed an upward trend, while allocative efficiency followed a path of deceleration. It was noted that, in Indian public sector banking industry, the cost inefficiency is mainly driven by technical inefficiency rather than allocative inefficiency. The convergence analysis revealed that the inefficient PSBs were not only catching-up but also moving ahead than the efficient ones, i.e., the banks with low level of cost efficiency at the beginning of the period were growing more rapidly than the highly cost efficient banks. In sum, the study confirms a strong presence of s - and b - convergence in cost efficiency levels of Indian public sector banking industry.

Rajan S. , Reddy K,Pand others (2011) an attempt has been made to find out the "Efficiency And Productivity Growth In Indian Banking for the period 1979-2008 with the help of semi parametric estimation methods based on secondary data source The endogenity of multiple outputs is addressed by semi parametric estimates in part by introducing multivariate kernel estimators for the joint distribution of the multiple outputs and correlated random effects. Output is measured as the rupee value of total loans and total investments at the end of the year. After analyzed the result it was founded that in bench marking related to frontier banks the nationalize banks were most technically efficient with the efficiency score of of 100% from 1979 through 2008 as compared to domestic private sector banks and foreign banks..The estimates provide robust inferences of the productivity and efficiency gains due to economic reforms.

Choudhary.V, Aand Tandon .S (2010) analyzed the " financial Performance Of public Sector Banks In India" covered the period from 1997-2007 with the help of Compound Annual Growth rate and Coefficient of Variation of advances, deposits, total assets, return on assets, and return on equity. It was concluded that CAGR of various variables have shown variations from bank to bank. State Bank of Indore showed maximum CAGR in case of total advances, total deposits and total assets. Punjab & Sind Bank has shown least growth of deposits and advances and State Bank of India has least growth of deposits. CAGR of return on equity and return on assets was at peak of United Bank of India whereas Dena Bank, Punjab& Sind Bank and Indian Bank have shown negative trend in these ratios. Decline of NPA's ratio was highest in case of State Bank of Hyderabad and least in case of Dena banks. It was also suggested that government should formulate bank specific policies and should implement these policies through Reserve Bank of India for upliftment of Public Sector Banks .Public sector banks should try to upgrade technology and should formulate customer friendly policies to face competition at national and international level.

Dhanabhakyam M, Kavitha M (2011) explored the study on "financial performance of selected public sector and private sector banks in India Covered the period from 2001 to 2010 with the help of Ratio Analysis, Correlation, and Regression methods. It was founded that in concerning the ratio of advances to assets Bank of India at the top position among the other public sector banks. Concerning with the ratio of capital to deposit there was increasing trend in the capital of the selected public sector banks. This ratio enables the banks' ability to meet the contingencies of repayment of deposits. And with other ratio like capital to working fund It was concluded that, overall efficiency of the selected public sector banks was good. Ratio of demand to deposit was at highest during the beginning of the study period, which thereafter had declined considerably. Hence, this declaration in the ratio indicates a better liquidity enjoyed by the bank.

Research methodology
Methodology describes the research route to be followed, the instruments to be used, universe and sample of the study for the data to be collected, the tools and techniques of analysis used and pattern of deducing conclusion.

Research is a diligent and careful search for a new knowledge through systematic, scientific and analytical approach in any branch of knowledge also helps to accept, reject or modify the existing facts or knowledge. The main aim is to eliminate vague, superstitions and dogmatic idea by reasoned, objective and scientific ideas. Methodology deals with selecting specific technical tools and techniques for collecting the data and analyzing them. It refers to various methods used by the researcher right from data collection and techniques used for the same for interpretation and inferences.

This research study can be explained under following heading
(1) Statement of the problem:
To defining the problem is more essential than its solution; which may be merely a matter of mathematical or experimental skills. Defining the problem means half of the work has completed. To raise new question, new possibilities, to regards old problem from a new angle require creative imagination and marks a real advance in science

The present study mainly related to banking sector and is entirely focused on 'performance evaluation of public and private banks in India: a comparative study'. it also explore and compares the financial performance of public and private sector banks and suggest different avenues of banks to improve their performance and profitability.

(2) Rationale of the study:
In recent years, there has been a considerable widening and deepening of the Indian financial system, of which banking is a significant component. With greater Liberalization, the financial system has come to play a much larger role in the allocation of resources than in the past and its role in future can be expected to much larger than at present. To enhance the role of banking sector in the Indian economy, the increasing levels of deregulation and the increasing levels of competition have placed numerous demands on banks. Operating in the demanding environment has exposed banks to various challenges like Competition, Customer Service, Technology, Basel-II implication, improving Risk Management Systems, implementation of new Accounting Standards, Transparency and Disclosure and Corporate Governance. It is rightly said that anything which can be measured can be controlled. In the light of above developments and apparent challenges in the Indian banking industry, it is interesting to see how the banks have performed and what their parameters of the performance measurement are? True performance can be measured only by using financial and non-financial key performance indicators (KPIs) or key result indicators (KRIs). There is a need to evaluate the development of Indian banking sector with the rationality of "performance evaluation of Indian public and private sector banks.

(3) Objective of the study:
- To analyze the financial performance of public and private sector banks on the bases of selected parameters
- To determine compound growth of various performance indicator of public and private sector banks in India
- To give suitable recommendation for improvement of performance of selected banks.

(4) Data collection and analysis:
Research Design
This present study is descriptive and analytical study based on secondary data source.

Sample of the study
This paper is an attempt to evaluate the performance of public and private sector banks on the bases of some parameters like(operating expenses, business per employee, investment deposit ratio, credit deposit ratio, provision and contingencies, ,investment ,advances, deposits, non- performing assets) .For that purpose ten leading public and 10 private sector banks has been taken to compare the performance

- Public sector banks
- State bank of India
- Punjab national bank
- Bank of Baroda
- Allahabad bank
- Bank of India
- Syndicate bank
- Canera bank
- Union bank of India
- Bank of Maharashtra
- Private sector banks
- ICICI Bank
- HDFC
- The Karnataka bank ltd
- Indusind bank ltd
- City Union bank ltd
- The Jammu and Kashmir bank ltd
- The federal bank ltd
- Dhanlaxmi bank ltd
- ING Vysya bank ltd
- The Karur Vysya bank ltd

Time period of study
The study covered fourteen year (2001-2014) analysis of banking sector in India for the purpose of evaluate the financial performance of banking sector.

Tools for statistical analysis
There are number of tools for measuring the performance of banks but in the present study the most popular tools have been used. Statistical analysis was performed with these instruments like CAGR, S. D, Mean and C.V.

$$\overline{X} = \frac{\sum X}{N}$$

$$s = \sqrt{\frac{\sum (x - \overline{x})^2}{n - 1}}$$

$$Coefficient\ of\ Variation = \frac{Standard\ Deviation}{Mean} \times 100$$

$$Coefficient\ of\ Variation = \frac{\sigma}{\mu} \times 100$$

CAGR = ((end value /beginning value) ^ (1/time period-1)

Source of data

The present study is mainly based on the secondary data source for that data has been collected from the RBI annual reports, profile of banking sector in India, statistical table relating to banking sector in India ,RBI bulletins Indian banks association and from other web sites.

(5)Data Analysis and Interpretation
Operating Expenses

An expense incurred in carrying out an organization's day to day activities, but not directly associated with production operating, expenses include such things as payroll, sales and pension contribution, transportation and travel, amortization and depreciation, rents, repairs and taxes. These expenses are usually subdivided into selling expenses and administrative and general expenses also called non manufacturing expenses.

Table no 5.1 Operating expenses of public sector banks in lakhs

year/bank name	SBI	PNB	BOB	Allahabad	Andhra bank	BOI	Syndicate	Canara	UBI	BOM
2001	829882	187164	160760	65779	45639	174373	107727	166958	101933	54072
2002	721090	179920	156334	70740	45399	153089	102834	159261	96655	47924
2003	794242	205673	164844	91831	60178	164858	108602	174771	101832	51620
2004	924531	237074	180530	95932	65846	175154	115136	189654	108461	56046
2005	1007418	327798	198219	107014	82948	193231	126422	210897	125749	72043
2006	1172509	302314	238475	115999	85795	211513	143482	234712	140240	65871
2007	1182351	332623	254429	102722	93320	260843	138598	256531	147591	74606
2008	1260861	352546	303430	115758	94427	264499	149454	279130	159299	83635
2009	1564871	420620	357605	139945	110426	309397	171596	306526	221411	96302
2010	2031868	476192	381058	161783	134954	366781	203357	347762	250785	107295
2011	2301543	636422	462983	233830	170486	506824	254810	441932	395000	164422
2012	2606899	700280	515872	269139	180425	494066	281412	467374	398752	164252
2013	2928440	816510	594670	295810	203720	533150	317880	514200	451220	179660
2014	3572585	933823	713707	345664	230994	669947	330175	608101	548276	239675
total	18565679	4996345	3838874.29	1816332.87	1299116.92	3604119.81	2093317.78	3568115.34	2601418.73	1185705.51
mean	1326120	356881.79	274205.3064	129738.062	92794.06571	257437.129	149522.6986	254865.3814	185815.6236	84693.25071
S.D	909753.2	245868.81	180727.3476	91246.8236	59813.85272	163861.263	81077.22619	143954.0047	150772.7217	59113.34148
c.v	68.60263	68.893629	65.90950044	70.3315759	64.45870462	63.6509829	54.22402549	56.48236882	81.14103581	69.79699206
CAGR	0.118837	0.1316068	0.121490282	0.13613051	0.132854668	0.10908861	0.089975896	0.10454189	0.138168324	0.121352953

(Source: statistical table related to banking sector)

Interpretation table no. 5.1

Average operating expenses of SBI among selected public sector banks is very high during the time period of study .and it is very less in the case of bank of Maharashtra .if we see the result of C.V it is very less of syndicate bank which shows that syndicate bank is more stable and there is more consistency of operating expenses of syndicate bank. C, V of bank of India is very high it indicates that there is more variability in the operating expenses of this bank. CAGR result showing that expense of UBI has been increasing year by year and it is very low in the case of syndicate bank. It means that among these public sector banks syndicate bank is performing well in the respect of operating expenses.

Tables no 5.2 Operating expenses of private sector banks in Lakhs

year/bank name	ICICI	HDFC	karnatka bank	Indusind	City Union Bank	J&K Bank	Feedral bank	Dhanlaxmi Bank	ING vysya	Karur Vysya
2001	33429	30959	10541	10307	3305	16487	17504	4861	18279	9876
2002	62258	41795	13062	9472	3755	23423	19126	5064	25906	10753
2003	201169	59183	14072	11792	3993	25988	22212	5990	33339	10410
2004	257123	81000	15416	21713	4495	29317	28290	6061	34556	15690
2005	329914	108540	19732	26503	6261	32280	31386	6936	38010	17062
2006	447951	169109	20450	31662	7500	34526	36457	8181	51879	19736
2007	669056	242080	23755	34395	9010	37244	40608	8776	50500	19248
2008	815417	374562	30558	40220	10991	40360	46862	9654	60950	21623
2009	704509	553282	34652	54702	13952	47086	57145	11306	77247	25759
2010	585983	593980	38605	73600	16585	57737	67689	19286	80810	34865
2011	661725	715291	54895	100848	21640	75893	83614	34447	102602	43060
2012	785044	927760	56819	134300	27983	80215	97927	48900	111021	54156
2013	901290	1123610	66600	175640	37420	98900	117950	33930	127280	76220
2014	1030886	1204220	87460	218528	47961	117499	144207	34749	149273	101036
total	6238046	4916099.8	393116.66	769233.84	176626.68	583325.45	659674.39	184407.85	778240.19	381569.54
mean	445574.7	351149.99	28079.76143	54945.2743	12616.19143	41666.1036	47119.59929	13171.98929	55588.585	27254.96714
s.d	326410.7	420074.24	23555.95302	68089.803	14251.1178	30941.5418	40232.80507	14291.759	40841.3264	28236.58758
c.v	73.25611	119.62815	83.88943431	123.922947	112.9589534	74.2607039	85.38443807	108.5011435	73.47070698	103.6016203
CAGR	0.301803	0.3252611	0.176756975	0.26482044	0.228466001	0.16307358	0.176115421	0.163345815	0.175320048	0.195870874

(Source: statistical table related to banking sector)

Interpretation table no 5.2

Average operating expenses of ICICI among private sector banks is very high during the time period of study and it is very less in case of city union bank .if we see the result of C.V it is very less of ICICI bank which shows that ICICI bank is more stable and there is more consistency of operating expenses of ICICI bank. C, V of Indusind bank is very high it indicates that there is more variability in the operating expenses of this bank. CAGR result showing that expense of HDFC is increasing year by year and it is very low in the case of Dhanlaxmi bank. It means that among these private sector banks ICICI bank is performing well in respect of operating expenses.

Investment Deposit Ratio

Investment Deposit Ratio represents total investment from out of total deposit to earn interest rate to increase revenues.

Table no 5.3 Investment deposit ratio of public sector banks in Crore

year/bank name	SBI	PNB	BOB	Allahabad	Andhra bank	BOI	Syndicate	Canara	UBI	BOM
2001	50.6	44.77	36.78	43.37	54.04	35.27	42.04	36.31	39.19	51.93
2002	53.65	43.99	38.56	45.7	45.53	36.98	41.72	36.26	38.72	51.8
2003	58.2	44.89	45.47	48.59	49.94	37.91	45.08	42.25	43.29	53.22
2004	58.28	47.92	52.1	49.42	44.97	38.26	42.07	41.45	44.39	52.72
2005	53.7	49.12	45.58	46.58	38.64	36.39	44	39.31	36.86	50.2
2006	42.77	34.3	37.49	37.08	33.74	33.83	32.2	31.66	34.98	42.2
2007	34.25	32.31	27.97	31.48	34.50	29.61	32.09	31.76	32.85	33.31
2008	35.26	32.44	28.86	32.67	30.14	27.87	29.50	32.33	32.57	29.41
2009	37.19	30.22	27.26	34.90	28.47	27.73	26.35	30.91	31.00	35.18
2010	36.78	31.17	25.36	36.23	26.88	29.20	28.21	29.69	31.99	33.68
2011	31.65	30.41	23.33	32.79	26.26	28.73	25.86	28.47	28.84	33.65
2012	29.91	32.33	21.62	34.01	27.99	27.26	25.84	31.21	27.98	34.02
2013	29.17	33.17	25.62	32.62	30.40	24.78	24.63	34.04	30.65	33.32
2014	28.56	31.85	20.41	33.51	31.98	23.93	26.16	30.15	31.49	31.89
total	579.98	518.89	456.4016945	538.95822	503.4768579	437.75033	465.746356	475.7947639	484.78774	566.5253897
mean	41.427	37.063	32.60012103	38.497016	35.96263271	31.2678807	33.2675969	33.98534028	34.627695	40.46609926
s .d	10.771	6.9389	9.67884838	6.422258	8.807948592	4.81044642	7.58750331	4.283129852	4.9565051	8.986244624
c.v	25.999	18.722	29.68960873	16.682483	24.49194602	15.3846257	22.8074884	12.6028747	14.313702	22.20684669
CAGR	-0.043	-0.026	-0.044290592	-0.019634	-0.039560368	-0.0293895	-0.03584701	-0.014210633	-0.016698	-0.03681116

(Source: statistical table related to banking sector)

Interpretation of table no 5.3

Average of investment deposit ratio of SBI is very high among the public sector bank and it is very less of Bank of India. It means state bank of India is investing more and more out of its deposits and taking the benefits of investment opportunity. It was depicted from the above table that bank of Baroda's performance is fluctuating during the time period of study and it is constant and there is no variability in the performance of Canara bank this result was taken from the analysis of C.V. if we see the result of CAGR than its showing that performance of Canara bank is performing the best and bank of Baroda is performing the worst among other public sector banks in respect of investment deposit ratio.

Table no 5.4 Investment deposit ratio of private sector bank in Crore

year/bank name	ICICI	HDFC	karnatka bank	Indusind	City Union Bank	J&K Bank	Feedral bank	Dhanlaxmi Bank	ING vysya	Karur Vysya
2001	49.99	61.29	45.87	34.7	40.35	48.58	39.6	37.5	33.1	34.14
2002	111.86	68	49.52	29.58	46.17	44.55	42.37	39.3	44.58	36.82
2003	73.62	59.83	53.46	29.48	47.43	45.91	41.58	36.73	39.63	36.12
2004	62.76	63.33	51.87	35.46	44.93	45.29	40.87	41.51	38.99	36.76
2005	50.58	53.23	42.04	31.03	35.61	41.73	38.17	30.27	33.38	33.26
2006	43.34	50.89	41.9	36.05	30.06	38.33	35.08	28.02	32.79	30.33
2007	39.59	44.75	35.96	33.39	27.81	29.34	32.58	28.02	29.37	30.77
2008	45.60	49.02	37.18	34.82	26.74	30.63	38.69	29.79	30.76	28.10
2009	47.20	41.19	44.07	36.56	29.21	32.53	37.64	31.54	42.17	31.23
2010	59.84	35.01	42.11	38.94	31.22	37.48	36.20	28.57	40.49	34.26
2011	59.70	34	42.09	39.43	28.00	44.09	33.80	29.05	36.50	31.28
2012	62.45	39.51	40.63	34.40	28.07	40.54	35.56	36.94	36.13	32.72
2013	58.57	37.68	37.25	36.32	25.94	40.08	36.72	40.26	44.22	35.80
2014	53.33	32.93	37.52	35.64	27.04	37.78	40.38	36.94	40.57	30.27
total	818.43	670.648	601.4730427	485.801	468.5782046	556.856204	529.236912	474.4417286	522.6775438	461.8567878
mean	58.46	47.9034	42.96236019	34.700071	33.46987175	39.7754431	37.8026366	33.8886949	37.33411027	32.98977055
s .d	17.23	11.3884	5.317332741	2.9089016	7.600495064	5.65600915	2.86397588	4.807630358	4.741115371	2.659051225
c.v	29.474	23.7737	12.37672399	8.3829846	22.70846784	14.219852	7.57612733	14.18653144	12.69915189	8.06022952
CAGR	0.005	-0.0467	-0.015337356	0.002058	-0.030318745	-0.0191551	0.00149631	-0.001151702	0.015772536	-0.00920318

(source statistical table related to banking sector in India)

Interpretation of table no 5.4

Average of investment deposit ratio of ICICI bank is very among the other private sector bank and it is very less of karur vysya bank it means ICICI investing more and more out of its deposits and taking the benefits of investment opportunity. It was depicted from the above table that performance of ICICI is fluctuating during the time period of study and it is constant and there is no variability in the performance of federal bank this result was taken from the analysis of C.V. if we see the result of CAGR than its showing that performance of ICICI bank is performing the best and Dhanlaxmi bank is performing the worst among other private sector banks in respect of investment deposit ratio.

Credit Deposit Ratio
It is ratio how much a bank lends out of the deposit it has mobilized. It indicates how much of a bank core funds are being used for lending, the main banking activity. A higher ratio indicates more reliance on Deposit for lending and vice versa.

Table no 5.5 Credit deposit ratio of public sector banks in Crore

year/bank name	SBI	PNB	BOB	Allahabad	Andhra bank	BOI	Syndicate	Canara	UBI	BOM
2001	46.78	49.93	50.79	47.66	40.58	61.58	52.27	47.12	50.18	39.19
2002	44.65	53.6	54.47	48.5	52.34	64.16	52.14	51.74	53.74	43.15
2003	46.52	53.06	53.26	49.26	54.66	66.15	53.18	56.14	57.02	42.88
2004	49.57	53.72	48.79	48.74	56.17	64.58	48.48	55.17	58.2	44.36
2005	55.14	58.56	53.36	51.89	63.58	70.45	57.74	62.42	64.86	45.28
2006	68.84	62.35	63.97	60.1	65.15	69.38	68	68	72.04	61.21
2007	77.46	69.07	66.94	69.34	67.28	71.00	65.71	69.18	73.24	67.57
2008	77.55	71.79	70.18	69.43	69.26	75.64	67.30	69.60	71.51	70.13
2009	73.11	73.75	74.84	69.20	74.32	75.33	70.36	73.96	69.60	65.62
2010	78.58	74.84	72.55	67.52	72.23	73.33	77.25	72.16	70.17	63.68
2011	81.03	77.38	74.87	70.99	77.52	71.30	78.75	72.27	74.58	70.13
2012	83.13	77.39	74.67	69.64	78.62	78.20	78.27	71.09	79.81	73.25
2013	86.94	78.86	69.25	72.45	79.46	75.78	79.61	68.05	78.90	80.00
2014	86.76	77.38	69.79	72.31	75.89	77.73	81.90	71.56	76.96	76.13
total	956.06	931.68	897.728899	867.02984	927.0636526	994.61078	930.96221	908.4593734	950.813	842.586871
mean	68.29	66.549	64.12349279	61.930703	66.21883233	71.043627	66.4973007	64.88995524	67.9152	60.1847765
s .d	15.56	10.454	9.469870242	9.9205715	11.19730832	5.1333116	11.3995517	8.44533272	9.22966	13.6693094
c.v	22.785	15.709	14.76817595	16.018826	16.90955265	7.2255765	17.1428788	13.01485367	13.59	22.7122375
CAGR	0.0487	0.0343	0.024741641	0.0325913	0.049331307	0.0180733	0.03514934	0.032663088	0.03345	0.05240389

(Source statistical table related to banking sector in India)

Interpretation of table 5.5
Is was depicted from the above table that average of credit deposit ratio of Bank of India is very high and its very bad in the case of bank of Maharashtra among the other public sector bank it means Bank of India is lending more out of its deposit and earning more interest and increasing the profit .it was also depicted from the above table that performance of State bank of India is fluctuating during the time period of the study and the performance of bank of India in respect to this ratio is best because c. v of this bank is very low means there is less fluctuation in the performance of this bank. If we see the result of CAGR than its showing that growth rate of bank of Maharashtra is satisfactory among other public sector bank and it is very bad in the case of bank of India in respect of this ratio. If we see the integrated result than bank of India is performing good.

Table no 5.6 Credit deposit ratio of private sector banks in Crore

year/bank name	ICICI	HDFC	karnatka bank	Indusind	City Union Bank	J&K Bank	Feedral bank	Dhanlaxmi Bank	ING vysya	Karur Vysya
2001	42.93	39.77	46.55	58.95	54.38	42.65	63.32	58.9	53.02	62.35
2002	146.59	38.6	48.81	66.36	51.23	49.75	58.53	55.38	54.76	58.85
2003	110.61	52.53	47.03	62.2	52.41	54.59	56.79	58.79	61.08	65.3
2004	91.17	58.35	49.62	69.75	54.34	49.75	57.14	52.82	67.25	68.06
2005	91.57	70.33	58.02	68.63	65.03	53.21	58.07	60.29	72.24	69.24
2006	88.54	62.84	58.83	62.04	72.48	61.67	65.64	62.95	76.73	73.32
2007	84.97	68.74	68.05	62.82	70.84	67.79	69.03	59.49	77.67	75.38
2008	92.30	62.94	63.72	67.21	70.62	66.04	72.95	58.25	71.61	75.07
2009	99.98	69.24	58.08	71.33	68.79	63.42	69.54	64.32	67.30	68.93
2010	89.7	75.17	60.83	76.94	66.44	61.92	74.74	70.53	71.55	69.78
2011	95.91	76.7	63.46	76.14	71.67	58.63	74.28	72.35	78.17	72.06
2012	99.31	79.21	65.55	82.77	74.28	62.00	77.15	74.19	81.61	74.58
2013	99.19	80.92	69.91	81.90	75.09	61.04	76.54	69.42	76.87	76.27
2014	102.05	82.49	69.85	91.07	73.11	66.90	72.72	65.41	86.93	77.68
total	1334.82	917.83	828.3106254	998.113826	920.6998745	819.359343	946.4455467	883.1007867	996.7794181	986.877788
mean	95.3442	65.5593	59.16504467	71.2938447	65.76427675	58.5256674	67.60325333	63.07862762	71.19852986	70.49127057
s .d	20.5815	13.6266	8.011630891	8.99936987	8.461979808	7.20098528	7.313958107	6.305141692	9.427001209	5.320618904
c.v	21.5865	20.7852	13.54115582	12.6229269	12.86713734	12.3039781	10.81894398	9.995686226	13.24044363	7.547911764
CAGR	0.06887	0.05772	0.031704999	0.03402628	0.023029374	0.03523327	0.010703337	0.00809312	0.03876393	0.017056789

(source: statistical table related to banking sector in India)

Interpretation of table 5.6
Is was depicted from the above table that average of credit deposit ratio of ICICI bank is very high and its very bad in the case of J&K bank among the other private sector bank it means ICICI is lending more out of its deposit and earning more interest and increasing the profit .it was also depicted from the above table that performance of ICICI is fluctuating more during the time period of the study and the performance of Karur vysya is good because c. v of this bank is very low means there is less fluctuation in the performance of this bank. If we see the result of CAGR than its showing that growth rate of ICICI is satisfactory among other private sector bank and it is very bad in the case of Dhanlaxmi in respect of this ratio. If we see the integrated result than ICICI bank is performing good.

Investment
The purchase of a financial product or item of value with an expectation of favorable future return

Table no. 5.7 Investment of public sector banks in lakhs

year/bank name	SBI	PNB	BOB	Allahabad	Andhra bank	BOI	Syndicate	Canara	UBI	BOM
2001	12287649	2512842	1985712	871913	988552	1822487	1055009	2144546	1367160	884087
2002	14514203	2820717	2383313	1035803	841926	2208353	1191060	2144546	1540969	990919
2003	17234791	3403005	3017938	1237172	1051765	2443484	1382325	3045824	1937079	1180153
2004	18567649	4212547	3801879	1555482	1031735	2716286	1791660	3579298	2244203	1394301
2005	19709791	5067283	3707445	1898827	1064629	2820262	2037074	3805388	2279280	1447955
2006	16253424	4105532	3511423	1798466	1144416	3178174	1726900	3697417	2591800	1135426
2007	14914888	4518983	3494364	1874606	1430073	3549275	2523402	4522553	2798178	1129840
2008	18950127	5399170	4387006	2340026	1489824	4180288	2807593	4981157	3382265	1228295
2009	27595400	6338518	5244588	2965105	1691111	5260718	3053723	5777690	4299696	1838214
2010	29578520	7772447	6118238	3842862	2088100	6708018	3301093	6967695	5440353	2132385
2011	29560057	9516235	7126063	4324706	2420400	8587242	3506762	8369992	5839914	2249108
2012	31219761	12270300	8320940	5428324	2962890	8675359	4081506	10205743	6236356	2603140
2013	35092730	12989620	12139370	5830590	3763240	9461340	4564770	12113280	8083040	3143030
2014	39830819	14378550	11611266	6396053	4535662	11415243	5553900	12682825	9372318	3724958.39
total	266171232	71678549	58360656.01	30267261.6	20304712.41	52470551	28715199.1	62922576.82	41832647.8	18862104.4
mean	19012230.9	5119896.36	4168618.286	2161947.26	1450336.601	3747896	2051085.65	4494469.773	2988046.27	1347293.17
s .d	8601846.82	4206715.02	3470756.593	1970293.87	1228353.321	3225937	1427518.72	3772083.624	2649087.14	927270.002
c.v	45.2437533	82.1640659	83.25916058	91.1351497	84.6943613	86.07327	69.5982014	83.927222	88.6561617	68.8246643
CAGR	0.09468331	0.14359716	0.145505498	0.16566088	0.124334337	0.151579	0.13628648	0.146503628	0.15960431	0.11698717

(Source: statistical table related to banking sector in India)

Interpretation of table 5.7
Average investment of SBI bank is very high among other public sector bank during the time period of the study and it is very low in the case of bank of Maharashtra .it was depicted from the above table that the performance of Allahabad bank is fluctuating at very high rate during the time period of the study and in the performance of SBI there is less fluctuation in the performance of this bank. Result of CAGR is showing that growth rate of Allahabad bank is high and it is less on the case of SBI bank but if we see the aggregate result than SBI is performing best out of these entire public sector banks.

Table no 5.8 Investment of private sector banks in lakhs

year/bank name	ICICI	HDFC	karnatka bank	Indusind	City Union Bank	J&K Bank	Feedral bank	Dhanlaxmi Bank	ING vysya	Karur Vysya
2001	818686	714514	278701	249426	65029	542495	303550	56045	269511	123439
2002	3589108	1200402	346715	248489	91120	575254	375583	65131	359720	153891
2003	3546230	1338808	443261	253507	109920	673782	455168	67506	364054	185017
2004	4274287	1925679	487891	448276	127900	845110	552100	89500	408524	217301
2005	5048735	1934981	455571	406917	110223	908923	579916	70799	408517	221903
2006	7154740	2839396	554900	540990	105747	900200	627237	70960	437234	229800
2007	9125783	3056480	504816	589166	130700	739218	703266	86519	452780	287395
2008	11145433	4939354	632652	662969	171795	875767	1002659	107506	629332	352633
2009	10305831	5881755	896149	808341	239746	1073633	1211897	156736	1049554	471598
2010	12089280	5860762	999205	1040184	321043	1395625	1305465	202779	1047292	660216
2011	13468596	7092937	1150634	1355081	361623	1969577	1453768	363968	110583	773176
2012	15956004.3	9748291	1284123	1457195	458619	2162432	1740249	436016	1271550	1050610
2013	17139360	11161360	1343250	1965420	526680	2574110	2115460	468450	1827820	1383730
2014	17702181.6	12095107	1522678	2156295	595356	2619507	2411785	448230	1672076	1324700
total	75229331.9	42958538	6717090.37	7726514.91	2190593.98	11801813	9161047.77	1772636.72	7129588.69	4890390.96
mean	5373523.71	3068467	479792.1693	551893.922	156470.9986	842986.63	654360.555	126616.9086	509256.335	349313.64
s .d	6271347.33	4473462.09	460247.3027	734098.418	203657.3257	824487.57	779621.892	179915.2826	595168.045	509729.2401
c.v	116.708284	145.788177	95.92638901	133.014405	130.1565961	97.805533	119.1425562	142.0941995	116.870033	145.9230851
CAGR	0.26673375	0.24310443	0.139536989	0.18048089	0.18569933	0.1287606	0.172840904	0.173434284	0.15073507	0.200278273

(Source: statistical table related to banking sector in India)

Interpretation of table 5.8 Investment of ICICI bank is very high among other private sector bank during the time period of the study and it is very less in the case of Dhanlaxmi bank. It was depicted from the above table that the performance of karur vysya bank is fluctuating at very high rate during the time period of the study and in the performance of Karnataka bank there is less fluctuation in the performance of this bank. Result of CAGR is showing that growth rate of ICICI bank very is high and it is less on the case of J&K bank but if we see the aggregate result than ICICI is performing best out of these entire private sector banks.

Non -performing Assets
All those assets which don't generate periodical income in given specific time period are called as Non Performing Assets.

Table no. 5.9 NPA of public sector banks in percentage

year/bank name	SBI	PNB	BOB	Allahabad	Andhra bank	BOI	Syndicate	Canara	UBI	BOM
2001	6.03	6.69	6.77	11.23	2.95	6.72	4.05	4.84	6.87	7.41
2002	5.63	5.32	4.98	11.09	2.45	6.02	4.63	3.89	6.26	5.81
2003	4.50	3.86	3.72	7.08	1.79	5.37	4.29	3.59	4.91	4.82
2004	3.48	0.98	2.99	2.37	0.93	4.50	2.58	2.89	2.87	2.46
2005	2.65	0.20	1.45	1.28	0.28	2.77	1.59	1.88	2.64	2.15
2006	1.88	0.29	0.87	0.84	0.24	1.49	0.86	1.12	1.56	2.03
2007	1.56	0.76	0.60	1.07	0.17	0.95	0.76	0.94	0.96	1.21
2008	1.78	0.64	0.47	0.80	0.15	0.52	0.97	0.84	0.17	0.87
2009	1.79	0.17	0.31	0.72	0.18	0.44	0.77	1.09	0.34	0.79
2010	1.72	0.53	0.34	0.66	0.17	1.31	1.07	1.06	0.81	1.64
2011	1.63	0.85	0.35	0.79	0.38	0.91	0.97	1.10	1.19	1.32
2012	1.82	1.52	0.54	0.98	0.91	1.47	0.96	1.46	1.70	0.84
2013	2.10	2.34	1.28	3.19	2.45	2.06	0.76	2.18	1.61	0.52
2014	2.57	2.84	1.52	4.15	3.11	2.00	1.56	1.98	2.33	2.03
total	39.14014662	26.992812	26.18739991	46.24298	16.15412742	36.5259695	25.8265538	28.86086623	34.2223	33.903153
mean	2.795724759	1.928058	1.870528565	3.30307	1.153866244	2.60899782	1.84475384	2.061490445	2.44445	2.4216538
s .d	1.471141653	1.9799445	1.935307362	3.646076	1.101780737	2.05949126	1.38024114	1.225001595	2.04478	2.0173317
c.v	52.62111904	102.69112	103.4631279	110.3844	95.48600132	78.9380214	74.8198001	59.42310323	83.6502	83.303885
CAGR	-0.06348953	-0.0638	-0.108547851	-0.073785	0.003949604	-0.08898843	-0.0705596	-0.066392762	-0.07979	-0.094714

(Source: statistical table related to banking sector India)

Interpretation of table 5.9
Among all other public sector bank with respect to this ratio Allahabad bank in performing worst because the NPA of this bank is very high during the time period of the study it is 46%. And Andhra bank is performing best with respect to this ratio because the NPA ratio of this bank is very low among the other public sector bank that is 16 %means Andhra bank is performing very well. If we see the result of C.V than its also showing that there is fluctuation in the performance of Allahabad bank and there is less fluctuation in the performance of SBI bank .overall result of this ratio is showing that Allahabad bank is performing better than other banks and other banks are recovering.

Table no 5.10 NPA of private sector banks in percentage
(Source: statistical table related to banking sector in India)

Interpretation of table 5.10
Among all other private sector bank with respect to this ratio Dhanlaxmi bank in performing worst because the NPA of this bank is very high during the time period of the study it is 3.99 ratio to its advances And HDFC bank is performing best with respect to this ratio because the NPA ratio of this bank is very low among the other public sector bank that is .34 % to its advances means HDFC is performing very well. If we see the result of C.V than its also showing that there is fluctuation in the performance of federal bank and there is less fluctuation in the performance of HDFC bank .overall result of this ratio is showing that HDFC Bank is performing better than other banks

Conclusion

- Private sector banks are working to earn maximum profit and the responsibility of the growth and the welfare is on Public Sector banks. Public sector banks are working to provide higher loaning amount, credit facility and investment opportunities to weaker section. In the present era, government is working to give the boost to public sector banks to maintain their strong financial position. Basel I, II and III norms are necessary to strong the banking structure to focus on credit risk, capital management and adequate capital to stable any economy. Basel III is supposed to strengthen banking capital requirements by increasing bank liquidity and bank leverage. Capital requirement is the amount of capital a banks or other financial institution has to hold as required by its financial regulator.
- The following suggestions are offered to improve the performance of public and private sector banks in India.
- The banks should take efforts to reduce the operating expenses by means of improving the efficiency of the non viable branches by utilizing some expert services like professional management, private management and the like.
- Prompt measure should be taken to increase the investment deposit ratio.
- The banks should take some effective steps to increase the credit deposit ratio. Because by this bank performs the credit creation function and this is the main function of any banks .than the banks should take care of this.
- The banks should take efforts to reduce the provision and contingency.
- To overcome with the problem of NPA bank can collect these dues by providing some discount on the payment of over dues.
- The public sector banks should conduct awareness programme among the rural poor about the repayment of loans and saving habits.

Bibliography

1. Varadi V, Mavaluni P and others (2006), "Measurement of Efficiency of Banks in India", ***Online at http://mpra.ub.uni-muenchen.de/17350/ MPRA Paper No. 17350, posted 17. September 2009***
2. Tendon D (2008), "Performance variances & efficiency parameters of the Indian Public Sector Banks – A suggestive (Nonparametric) DEA Model,"
3. Singh A And Tendon P(2012), "A Study Of Financial Performance: A Comparative Analysis Of Sbi And Icici Bank ***," International Journal of Marketing, Financial Services & Management Research.***
4. Shrivastava P and kiran Rai (2012), "performance appraisal practices in Indian banks", ***Integral Review - A Journal of Management ,e-ISSN : 2278-6120, p-ISSN : 0974-8032,Volume 5, No. 2, Dec.-2012, pp 46-52.***
5. Sahoo D and Mishra P (2009), "Structure, Conduct and Performance of Indian Banking Sector", ***review of economic perspective– NÁRODOHOSPODÁŘSKÝ OBZOR, VOL. 12, ISSUE 4, 2012, pp. 235–264 , DOI: 10.2478/v10135-012-0011-9.***
6. Sagini Mohi-Ud Din (2010), "Analyzing Financial Performance of Commercial Banks in India: Application of CAMEL Model", ***Pak. J. Commer. Soc. Sci., 2010 Vol. 4 (1), 40-55.***
7. Rajan S.S, Reddy K,P and others (2011), "efficiency and productivity growth in Indian banking system", Working Paper No. 199
8. Prasad K and Ravinder. G (2012), "A Camel Model Analysis of Nationalized Banks in India", ***International Journal of Trade and Commerce-IIARTC, January-June 2012, Volume 1, No. 1, pp. 23-33 ISSN-2277-5811.***
9. Milind S (2002), "Privatization, Performance, and Efficiency: A Study of Indian Banks", ***VIKALPA , VOLUME 30 • NO 1 • JANUARY - MARCH 2005.***
10. Makkar A And Singh S (2013) , "Analysis of the Financial Performance of Indian Commercial Banks: A Comparative Study", ***Indian Journal of Finance, Volume 7, Number 5, May 2013.***