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ASSET QUALITY OF INDIAN COMMERCIAL BANKS

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Abstract

Introduction of banking sector reforms qualitatively revolutionalized the Indian banking industry. The entry of new banks results the introduction of new technology, quality service, competition, greater efficiency and higher profitability in the banking sector. Asset quality is an important indicator which influences the financial soundness of banks. It is found from the study that the performance of new generation private sector banks are better in the various asset quality indicators used when compared with that of Public sector banks . But the performance of Public sector banks is also remarkable. They achieved better progress in reducing the NPA every year and stand first in percentage change in NPA. The asset quality performance of Indian commercial banks is excellent and reveals the financial soundness and strength of our banking industry. The asset classification and provisioning norms and its disclosure in the balance sheet positively impacted Indian banks.

Key words- Banking sector reforms-Asset quality-Non Performing Assets-Performance of banks

Financial system is the most important institutional and functional vehicle for economic transformation and is essential for a healthy and vibrant economy of any country. The Indian financial sector underwent a radical change during the last two decades. Banking sector is one of the most important pillars of the economy, acts as an accelerator and facilitator for the economic growth of our country. Commercial banks form the most important part of the Indian financial land space in terms of their role in channelling credit to the commercial sector and facilitating the process of financial inclusion. With the onset of economic reforms, the commercial banking sector, which has retained its predominantly public character, has undergone a number of changes in terms of size, efficiency of operation and financial soundness.

The Indian banking sector which remained concentrated in public sector and was highly regulated has undergone significant transformation in the nineties consequent to banking sector reforms in terms of performance, size, customer orientation**,** organisation, functions, entry bars, resource mobilisation, socio economic role, accounting and provisioning norms, capital adequacy rules, proper risk management measures, entry regulations, technology up gradation, products and services, global standards, technology in banking, resource productivity, quality of assets, quality of services and income recognition**.** With all social objectives continue to be important even today; profitability of banks has assumed significant influence in the financial sector reforms which aimed at making the system more efficient, competitive and profitable.

In order to achieve better efficiency and profitability, the quality of assets of the bank is very important. Since the bank lends more money without considering the quality of its borrowers, this will adversely affect the overall performance of the bank.

The reforms resulted 1.The reduction of CRR and SLR 2. Interest rate deregulation 3.Reforms in priority sector lending 4.Entry deregulation and 5.Prudential regulations on income recognition and provisioning norms and 6.The restructuring of public sector banks. Accounting practices and procedures of international standards were introduced to improve transparency in banks balance sheet. This made the NPAs in the banking sector more explicit and required banks to provide for the impacting banks profitability.

Many new players were entered in to the sector with new mantras, which eased the customer in his dealings with banks. The new generation banks and foreign banks put much pressure on the existing players namely the public sector banks and old private sector banks in the areas of competition, operating, managerial and technical efficiency, customer services, productivity, profitability, capital adequacy etc. The public sector banks that controlled about 90% of the banking business became more conscious of the need for greater efficiency after the entry of the new generation private sector banks with greater efficiency, technology and customer centred services with greater speed and friendly relationship. So this forced the old players to wake up from their deep sleep and trying best for their survival.

An Overview of Indian Banking Sector

Indian banking sector consists of the Reserve Bank of India (RBI), which is the central bank, commercial banks and co-operative banks. Commercial banks are of two types –scheduled and non-scheduled. Scheduled banks can be further classified into public sector banks [comprising of the State Bank of India, its six associates, Other Nationalised Banks (19)

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Regional Rural Banks (RRBs)] and Private Sector Banks both domestic and foreign. The domestic private sector banks include old private banks (15) and new techno savy banks known as new generation private banks (7). An overview of commercial banking in India is given in Table No.1.

Table No. 1 Overview of banking in India
(As on 31st March 2015)

Sl.No.	Items	Type of bank	No./Amount
1	**No. of commercial banks**		**167**
	Scheduled commercial banks	163	
	Of which RRBs	82	
	Non Scheduled commercial banks	4	
2	**Bank Offices**: Rural	32528	
	Semi-Urban	20771	
	Urban	18171	
	Metropolitan	16298	
	Total		**87768**
3	Population per office		14000
4	Aggregate deposits (in crores)		4492826
5	Bank credit (in crores)		3244788
6	Deposit/bank office (lakhs)		5479
7	Credit/bank office (lakhs)		3983
8	Advances to priority sectors(in crores)		1091574
9	Share of Priority sector in total advances (in %ge)		31.20
10	Credit Deposit ratio (in %ge)		73.60

Source: RBI Report on Trends and progress of Banking in India 2015

Two decades after the liberalisation, the public sector banks have major control over the banking sector in India by operating 18114 (85.14%) of the total bank offices in India as on 31st March 2015 excluding that of RRBs and non -scheduled commercial banks. OPBs have 5174(7.18%) and NGPBs have 5213 (7.24%) of bank offices in the country. In terms of major indicators of performance such as deposits, investments advances and total assets major share was occupied by PSBs. The New generation banks with shorter period of presence in the industry and very few both in number (7) and bank offices slowly increases their business and market share and capturing the business of public sector banks. The new generation banks are a real threat to the public sector banks in the recent future because their operations compared to their counterpart, the old private sector banks with long tradition and high number of branches and banks (at present 15) are very poor. The share of different bank groups is depicted in Table No.3.

Table No. 2 Percentage Share of different bank groups in various performance Indicators as on 31.3.2015 (excluding RRBs)

Sl. No.	Items	Bank Groups							
		SBG	ONB	**PSB (total)**	OPB	NGPB	**Private banks (total)**	Foreign banks	**All Scheduled commercial banks**
1	Capital	2.43	25.57	**27.85**	2.62	6.73	**9.35**	62.80	100.00
2	Deposits	23.32	54.37	**77.69**	4.84	12.47	**17.31**	5.00	100.00
3	Investments	21.97	48.17	**70.14**	4.86	15.74	**20.60**	9.26	100.00
4	Advances	24.55	52.70	**77.25**	4.41	13.67	**18.08**	4.67	100.00
5	Total Assets	23.45	50.28	**73.72**	4.46	14.63	**19.09**	7.19	100.00

Source: compiled and computed from RBI Statistical Tables relating to Banking in India 2015

The share of different sample banks is given in Table No. 3.

Table No. 3 Share of selected banks among their groups in various performance indicators as on 31.3.2015

Sl.No.	Items	Sample banks							
		SBI	SBT	PNB	BOB	BOI	Canara Bank	ICICI Bank ltd	HDFC Bank Ltd.
1	Capital	55.30	4.22	2.53	2.93	4.23	3.29	34.03	13.97
2	Deposits	72.56	4.59	9.65	9.33	8.89	9.08	34.07	28.23
3	Investments	75.67	4.24	9.38	7.39	8.10	8.40	44.67	21.65
4	Advances	73.63	4.48	10.12	9.40	9.14	9.18	37.88	26.30
5	Total Assets	74.57	4.21	9.79	9.19	9.08	8.74	41.21	25.23

Source: RBI Statistical Tables Relating to Banking in India 2015

The banks assets mainly consist of loans and advances and the investments. These two are the main income earning source of commercial banks and so much effort is needed to mobilise deposits converting them in to income generating assets.

In this paper, an attempt is made to analyse the asset quality performance of the selected public sector banks and new generation private sector banks in the post liberalised era bank wise, bank group wise and bank sector wise.

Data Base, Objective of the Study and Methodology

Objective of the Study

The **objective** of this paper is to focus on the A (Asset Quality) of CAMEL model of rating of banking institutions so as to make a comparative analysis of the performance of public sector banks and new generation private sector banks in India in the post liberalised era.

Data Base and Selection of Sample Banks

The public sector banks include the state bank group (SBI and its Associates) and the other nationalised banks. The new generation banks include the seven banks which are functioning in India as on 31st march 2009. Banks with larger asset size and business in each group were selected i.e., Two banks from SBG viz., SBI and SBT, four banks from ONB viz., PNB, BOB, BOI and CB and two from NGPB viz., ICICI bank Ltd and HDFC bank Ltd.

The sample banks selected enjoyed prominent position in their groups in terms of capital, deposits, investments, advances and total assets. SBI and SBT enjoyed around 80% of deposits, investments, advances and total assets of their group, PNB, BOB, BOI AND CB around 40% and ICICI Bank Ltd. And HDFC Bank Ltd. enjoyed around 65% of deposits, investments, advances and total assets of their group. So we get a clear picture about the performance of each bank group from the performance of the sample banks. The study is based on Secondary data was collected from the publications of RBI and the Annual reports published by respective banks.

Period of Study

Data for the ten year period from 2005-06 to 2004-15 were collected and analysed.

Tools For Analysis of Data

The analysis is made on the following way to assess the differences in the performances of banks both group wise and sector wise. The significance of each ratio and the significance of the difference in various ratios between different banks, bank groups and bank categories is calculated after controlling for possible trends over period of study by using the **multivariate analysis of co- variance (MANCOVA**).The degree of variations in each ratio among various bank groups/categories of banks are also ascertained on the basis of the value of the **associated partial eta squared**. The inter group and inter category comparison is made by using the **MANCOVA** technique. The bank wise, bank group wise and bank sector wise mean of various ratios examining the asset quality for the study period have been computed and the comparison is made on the basis of Average Annual Ratios. Banks, bank groups are given ranks based on the size obtained by various ratios. The system of lower the ratio higher rank is applicable to the ratios of NNPA to NA, NNPA to TA, Percentage change in Net Non Performing Assets (PC in NNPA) and Provisions and Contingencies to Total Assets (PR and C to TA)and higher the ratio higher the rank is applicable in the ratio of TI to TA.

Theoretical Approach

Asset quality refers to the degree of financial strength and risk in a bank's asset typically loans and investments. Asset quality impacts in varying degrees, all components of a banks financial performance viz., profitability, productivity, efficiency,

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liquidity inherent in the loan portfolio and have a negative impact on the adequacy of bank capital. Spread, operating efficiency and asset quality is found to significantly influence public as well as private sector banks profitability (Shilpa Baid, What drives profitability of Indian commercial banks?). A comprehensive evaluation of asset quality is vital to asses the current condition and future viability of the bank. It also reflects the management's competence. High levels of classified assets can have a negative impact on earnings through lower interest income, higher provisions to the loan reserve and increased administrative costs for managing and collecting these assets. The asset quality of a bank is mainly determined through the levels of NPA. Non performing assets are those assets that cease to generate income for banks. NPA levels also reflect credit risk and efficiency in the allocation of credit to productive sectors. RBI issued clear cut guidelines for the NPA classification and provisioning. The assets are classified in to four groups namely; 1.Standard assets
2. Sub standard assets 3.Doubtful assets and 4.Loss assets.

The asset quality performance of various banks is studied through the following ratios.

Net Non Performing Assets to Total Assets (NNPA to TA)

It is a measure which clearly shows percentage of net NPA on total assets of the bank. Lower the ratio the better the quality of assets.

NNPA to TA=NET NPA/Total Assets

b. Net Non Performing Assets to Net Advances (NNPA to NA)

It is the most standard measure of the quality of advances. Net NPAs are Gross NPAs net of provisions on NPAs and interest in suspense account.

NNPA to TA=NET NPA/Net Advances

c. Total Investments to Total Assets (TI to TA)

This ratio is used to measure the percentage of total investments locked up in investments, which by conventional definition which does not form part of the core income of the bank.

TI to TA =Total investments/total assets

d. Percentage change in Net Non Performing Assets (PC in NNPA)-

This measure gives the movement in Net NPAs in relation to Net NPAs in the previous year. The higher the reduction in Net NPA levels the better it is for the bank.

Percentage change in Net Non Performing Assets= (Net NPAs at the end of the year - Net NPAs at the beginning of the year) / Net NPAs at the beginning of the year.

e. Provisions and Contingencies to Total Assets (PR and C to TA)

This ratio shows the total amount of provision for various purposes and anticipated losses to total assets of the bank. How much percentage of total assets is provided for various contingencies is known. Lower the ratio the better the goodness of the assets.

Results and Discussions

The quality of assets is important measure to assess the financial soundness of a bank. A bank lends money mainly to three sectors viz., priority sector (more risky area), non-priority sector and public sector. From the Composition of NPA of all public sector banks for the year 2005-16, it can be seen that the share of priority sector, non-priority sector and public sector were 53.83%, 45.25 and 0.91 respectively. Compared to the degree of credit risk involved in the priority sector, the %ge share of NPA in this sector is not too much .and shows gradually decreasing from the year 2011-02 onwards. The result of the study is presented in three parts viz., 1.bank-wise, Bank group wise, bank sector wise.

Part I- Analysis based on Average Asset Quality Ratios

Bank wise analysis

Considering the average asset quality ratios of banks individually for the period under study, it shows that the average ratio of ICICI Bank Ltd., a new generation private sector bank has the lowest NNPA to TA ratio and placed in the first rank followed by HDFC bank Ltd. SBT has the highest average ratio of NNPA to total assets and the worst performer in this ratio among the banks under study. In terms of NNPA to net assets ratio, HDFC bank shows better performance followed by PNB. SBI occupies the last position. HDFC bank ltd. again occupies prim e position in the ratio of total investments to total assets followed by SBI and SBT respectively. Considering the mean of the percentage change in NNPA for the ten year period SBT has achieved tremendous progress in reducing NNPA and showed a negative change followed by BOB. It is surprising to see that the mean of the percentage change in NNPA is very high in the case of HDFC bank ltd. and PNB even though their ratio of NNPA to net assets is lower. Regarding the ratio of provisions and contingencies to total assets, it is seen that the

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difference in the mean ratio of banks is too small .the mean ratio of ICICI bank ltd. is less followed by SBI. Table No. 5 shows the annual average asset quality ratios bank-wise, bank group-wise and bank sector wise.

Table No.4 Average Asset Quality Ratios

Sl.No.	Average asset quality ratios					
	BANK	NNPA to TA	NNPA to NET Advances	TI to TA	%ge change in NNPA	Provisions. And contingencies to total assets
1	SBI	1.33	3.09	35.70	6.71	1.09
2	SBT	1.48	2.47	34.90	- 187.36	1.20
	SBG (AV.)	**1.41**	**2.78**	**35.3**	**-90.33**	**1.145**
3	PNB	0.91	1.94	33.4	36.64	1.19
4	BOB	1.27	2.26	31.20	-6.28	1.14
5	BOI	1.67	3.01	28.00	14.82	1.13
6	CB	1.11	2.21	30.60	6.08	1.09
	ONB (AV.)	**1.24**	**2.355**	**30.8**	**12.82**	**1.14**
	PSB (AV.)	**1.29**	**2.40**	**32.25**	**-27.97**	**1.143**
7	ICICI	0.18	2.42	31.00	9.88	0.87
8	HDFC	0.86	0.40	39.00	43.35	1.36
	NGPB(AV.)	**0.52**	**1.41**	**35.00**	**26.62**	**1.12**

Source: Compiled and computed from the Annual Reports of Banks.

From the bank wise analysis of the asset quality ratios considered for the study we can see that new generation banks namely ICICI Bank Ltd. and HDFC Bank Ltd. shows outstanding performance except the mean of the percentage change in NNPA. The mean of percentage change in NNPA clearly indicates the efforts taken by the public sector banks to reduce their volume of NNPA.

Table No.5 Bank wise, Bank group wise and Bank sector wise performance of banks under various Asset quality ratios

Sl.No.	Details	**NNPA to TA**	**NNPA to NET Advances**	**TI toTA**	**%ge change inNNPA**	**PROV. AND CONT. toTA**
1	Bank wise	ICICI Bank Ltd	HDFC Bank Ltd	HDFC Bank Ltd	SBT.	ICICI Bank Ltd
2	Bank group wise	NGPB	NGPB	SBG	SBG	NGPB
3	Bank sector wise	NGPB (private sector)	NGPB (private sector	NGPB (private sector)	PSB	NGPB (private sector

Bank group wise analysis

The performance of various bank groups shows that in terms of the mean ratios of NNPA to TA, NNPA to net assets and Provisions and Contingencies to Total Assets, the new generation private sector banks performance is excellent compared to its competitors. Where as in the mean ratios of TI to TA and Percentage change in NNPA state bank group comes at the top.

Bank sector wise analysis

From the bank category wise analysis it is obvious that the performance of new generation private sector banks is better compared to the public sector banks except in the percentage change in NNPA. The public sector banks outscored over NGPBs only in percentage growth in NNPA and showed negative growth.

Hypothesis I

HO: There is no difference in the means of asset quality ratios among banks after controlling for possible trends over the period of study.

HI: There is difference in the means of asset quality ratios among banks after controlling for possible trends over the period of study.
The results are interpreted in the following way. This is a multivariate analysis of co-variance with time being considered as a covariate. This is done to eliminate possible changes which are natural to the concept being measured, i.e. asset quality ratios among banks after controlling possible trends over the period of study.

Considering five ratios for possible differences due to time, the multivariate analysis of covariance **(MANCOVA**) results show that there is difference in the asset quality related ratios due to time as Polloi's Trace F value of 60.102 is highly significant at 5% level of significance i.e. P value 0.000 which is <0.05 and the associated partial Eta squared is 0.818 which is very high and hence we may say that there is difference among the asset quality ratios of banks over time. So the null hypothesis is rejected and alternate hypothesis is accepted.

However individually considering the asset quality ratios, it may be seen that each ratio is significant with P < 0.05.

Table No. 6 Multivariate tests showing the degree of variation in various ratios after controlling for possible trends over time.

Sl. No.	Ratios	F value	Sig.value	Partial Eta Squared
1	NNPA to total assets	48.948	.000	.408
2	NNPA to Net advances	109.227	.000	.606
3	Total investments to total assets	121.061	.000	.630
4	Percentage change in NNPA	4.884	.030	.064
5	Provisions and contingencies to total assets	.990	.323	.014

Source: Data Analysis

Among them, total investments to total assets ratio seems to vary more as the associated partial Eta Square is 0.630 which is higher than that of other ratios and the variation is little in the ratio of provisions and contingencies to total assets. The result of Multivariate analysis of co-variance (MANCOVA) is important as the analysis is done after controlling for the possible variations due to time. Looking at the overall multivariate tests it is seen that Pillai's Trace is 2.419 which are significant at 5% level of significance as P< 0.05. Considering each ratio separately among banks, it is seen that all ratios are significant. Further looking at the associated Partial Eta Squared, the importance in terms of differences of ratios among banks is in the order of Total investments to total assets, Provisions and contingencies to total assets, NNPA to total assets, NNPA to Net assets and the Percentage change in NNPA.

Table No.7 Tests of Between-Subjects Effects Multivariate tests showing the degree of variation in various ratios among banks after controlling for possible trends over time

Sl.No.	Ratios	F	Sig.	Partial EtaSquared
1	NNPA2TASSET	22.787	.000	.720
2	NNPA2NA	36.423	.000	.804
3	TI2TA	637.600	.000	.986
4	PCINNNPA	12.250	.000	.580
5	PRCON2TA	113.191	.000	.927

Source: Data Analysis

Part Ii- Bank Group Wise Analysis

Asset quality ratios and variations among the three bank groups namely state bank group, other nationalised banks and new generation private sector **banks.**

Hypothesis -II
Ho: There is no difference in the means of asset quality ratios of three bank groups under study after controlling for possible trends over period of study.
H1: There is difference in the means of asset quality ratios of three bank groups under study after controlling for possible trends over period of study.
The banks under study are classified in to three groups comprising of SBG, ONB and NGPB. As the ratio of five asset quality ratios are concerned for possible differences over time the MANCOVA results shows that there is significant difference

among groups of banks as Pillais Trace F value is 61.843 which is highly significant at 5 % level of significance as the P value is 0.000 which is <0.05. The associated eta squared is also high i.e. 0.811 and we can reject the null hypothesis and accept the alternate hypothesis.

Table No.8 variation in asset quality ratios among banks after controlling for possible differences over time.

Sl.No.	Ratios	F value	Significance value	Partial Eta Squared
1	NNPA to TA	46.487	0.000	0.380
2	NNPA to NA	92.456	0.000	0.549
3	TI to TA	93.538	0.000	0.552
4	Percentage change in NNPA	3.030	0.086	0.038
5	Provisions and contingencies to total assets	0.915	0.342	0.012

Source: Data Analysis

However individually considering the ratios, it is seen that only three ratios viz., NNPA to TA, NNPA to NA and TI to TA are significant with P value <0.05. The other ratios such as percentage change in NNPA and Provisions and contingencies to total assets are not significant as P value >0.05.

Regarding the variation among bank groups in asset quality ratios for possible differences over time, the variation is in the following order. As the partial eta squared is high the variation is more.

1. TI to TA 2. NNPA to NA 3.NNPA to TA 4.Percentage change in NNPA and 5. Provisions and contingencies to total assets More difference is found in the ratio of total investments to total assets ratio as the partial eta squared is high i.e.0.552 and the variation is found least and insignificant in the ratio of provisions and contingencies to total assets.

Inter Group Comparison
Hypothesis-III
Ho: There is no difference in the means of asset quality ratios of three bank groups under study.
H1: There is difference in the means of asset quality ratios of three bank groups under study
The differences in the five asset quality ratios of the public sector banks viz, state bank group and other nationalised banks were compared with new generation private sector banks. While comparing the performance of state bank group with new generation private sector banks, Significant difference can be found in the ratios of NNPA to total assets, NNPA to net assets and percentage change in NNPA between state bank group and new generation private sector banks as P value is less than 0.05. There is no difference in the ratios of total investments to total assets and provisions and contingencies to total assets.

In comparison between other nationalised banks and new generation private sector banks , it is clear that the difference is significant in the first three asset quality ratios viz;NNPA to TA, NNPA to net assets and TI to TA as the P value is <0.05. There is no difference in the asset quality ratios viz; PCINNNPA and PRCON2TA.

Table No. 9 Multivariate Test Results

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.658	7.163	10.000	146.000	**.000**	.329
Wilks' lambda	.444	7.221[a]	10.000	144.000	**.000**	.334
Hotelling's trace	1.025	7.276	10.000	142.000	**.000**	.339
Roy's largest root	.694	10.133[b]	5.000	73.000	**.000**	.410

Source: Data Analysis

The multivariate test results showed that the variation in the asset quality ratios between different bank groups is highly significant with significance value 0.000 at 5% level of significance. The Pillais Trace F value is 7.163 wit df 10.00 and the corresponding partial eta squared is 0.329. Hence the null hypothesis is rejected and the research hypothesis is accepted and we can say that the difference is significant.

Part III – Inter Sector Comparison

The banks under study are divided in to two categories viz; 1. Public Sector Banks comprising of SBI, SBT, PNB, BOB, BOI and CB. 2. New Generation Private Sector Banks namely ICICI Bank Ltd. and HDFC Bank Ltd..

Hypothesis IV

H0: There is no difference in the means of asset quality ratios Public sector banks and new generation private sector banks after controlling for possible trends over period of study.

HI: There is difference in the means of asset quality ratios of public sector banks and new generation private sector banks after controlling for possible trends over period of study.

Considering the five asset quality ratios of the two categories of banks under study the public sector banks and new generation private sector banks after controlling for possible differences over time the MANCOVA results show that there is difference in asset quality ratios due to time as Pillai's Trace F Value 47.143 which is highly significant at 5% significance level (i.e. P Value with df 5 is 0.000 which is <0.05. The associated partial Eta Square is 0 .764 which is very high and we may say that there is significant difference in the asset quality ratios of public sector banks and new generation private sector banks after controlling for possible variations over time. Hence the null hypothesis is rejected and alternate hypothesis is accepted. However individually considering the asset quality ratios of PSBs and NGPBs, it may be seen that the variation is found significant in only three ratios namely NNPA to Total asset, NNPA to Net Asset and Total Investments to Total Assets with P value less than 0.05. There is no difference in the other two ratios between the two categories of banks.

Table No. 10 Variations among the means of asset quality ratios of banks with possible variations over time

Sl. No.	Ratio	F value	Significance value	PartialEta Squared
1	NNPA to Total asset	46.762	.000	.378
2	NNPA to net asset	92.037	.000	.544
3	TI to TA	81.740	.000	.515
4	PCINNNPA	2.374	.127	.030
5	PRCON to TA	0.927	.339	.012

Source: Data Analysis

While taking each ratio separately among banks NNPA to net asset seems to differ more as the associated Partial Eta Squared is high i.e.0.544 followed by TI to TA and NNPA to TA respectively.

Further looking at the associated Partial Eta Square, the importance in terms of difference of ratios among public sector banks and new generation banks is in the order of NNPA to net asset, TI to TA, NNPA to TA, PCINNNPA and PRCON to TA.

Hypothesis V

H 0: There is no significant variation in the asset quality ratios of public sector banks and new generation private sector banks over the period of study.

H I: There is significant variation in the asset quality ratios of public sector banks and new generation private sector banks over the period of study.

Considering explanations regarding differences among public sector banks and new generation banks, public sector banks being taken as level 1 and the new generation banks is taken as level 2. It is seen from the contrast results K Matrix that there is significant variation in the asset quality ratios except provisions and contingencies to total assets of public sector banks and new generation banks as the P value is > 0.05 at 5% significance level. There is no significant difference in the ratio of provisions and contingencies to total assets between PSBs and NGPB.

Table No.11 Multivariate Test Results

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.258	5.069[a]	5.000	73.000	.000	.258
Wilks' lambda	.742	5.069[a]	5.000	73.000	.000	.258
Hotelling's trace	.347	5.069[a]	5.000	73.000	.000	.258
Roy's largest root	.347	5.069[a]	5.000	73.000	.000	.258

Source: Data Analysis

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Further looking at the MANCOVA results, we may say that the variations in the asset quality ratios of public sector banks and new generation banks differ from each other as the concerned Pillais Trace F value is 5.069 with df 5.000 which is highly significant at 5 % significance level as P value 0.000 which is less than 0.05 and the related Partial Eta Squared is 0.258. Hence the null hypothesis is rejected and we can say that there is difference in the performance in asset quality of public sector banks and new generation private sector banks.

Conclusion

The post liberalised era in India witnessed for drastic changes in all the aspects relating to the banking sector such as entry of new banks, technology changes, profitability, efficiency, income recognition, reduction of SLR and CRR , changes in interest rates, gearing of Indian banks into global standards, customer orientation, service quality , financial soundness etc. The quality of assets of is the key factor which influences the profitability and overall performance of a bank of a bank. From this study it is found that the public sector banks are continuing to dominate in the banking sector and the new generation private sector banks even though limited in number will be a real threat to the government supported banks in the future. Both the priority sector and non priority sector has almost equal share in the composition of NPA of commercial banks in India. The public sector banks showed remarkable achievement in reducing the level of NPA after liberalisation. The bank-wise analysis shows that ICICI Bank Ltd .ranks first in NNPA to TA and provisions and contingencies to total assets, HDFC Bank Ltd is the best bank in terms of NNPA to Net advances and TI to TA and SBT in the percentage change in NPA. Bank group wise performance shows that NGPB is first in NNPA to TA, NNPA to Net advances and provisions and contingencies to total assets and SBG in TI to TA and the percentage change in NPA. Inter Sector performance reveals that NGPB is first in all ratios except percentage change in NPA.

While looking in to the significance of the difference in asset quality ratios of banks after controlling for possible trends over time group wise and sector wise it can be seen that the difference is highly significant. Again significant difference is found in the asset quality performance of public sector banks and new generation banks during the study period bank wise, group-wise and sector wise.

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