APPRAISAL OF NON PERFORMING ASSETS IN BANKING SECTOR:
AN INDIAN PERSPECTIVE

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ABSTRACT

The reforms in the financial sector have resulted in numerous changes in the banking sector. In order to improve the financial health of the banks, various norms have been introduced at regular intervals. As the banking sector constitutes a major component of the financial service sector, the soundness of the banking sector is necessary for a dynamic and healthy economy. The establishment of a productive, efficient and stable economy is possible only when a country is having a sound and healthy banking sector. Through this paper an attempt has been made to compare the performances of nationalized, private and foreign banks operating in India. The study has been undertaken by taking the performances of the nationalized, private and foreign banks in terms of the Non-Performing assets as the base, since it is quite clear that generally the good health of a bank is reflected in good return on assets. The Non-Performing assets not only reduce the profitability of the banks by writing off the principal amount as well as, the amount of interest on advances, it is also a threat to the stability of the bank. The study reveals that the foreign and nationalized banks are facing more problems of NPAs in comparison to the private sector banks.

Keywords: *Non Performing Assets, Management Efficiency, Banking Sector, Financial Sector.*

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Introduction

The main function of a bank is to accept deposits from the public, lending or investing the accepted deposits, facilitating withdrawal of the deposits through cheques, drafts, order or otherwise and lending or advancing of money either upon or without security. The amount of the returns a bank gets from its assets actually reflects the financial stability loans to their customers because of increasing risk of non-performing assets, since NPAs does not generate interest income for the banks and strongly affect the performance of the banks. The increasing NPAs not only degrade the banks credit rating but they also affect the bank's ability to raise further capital. High NPAs reflect the possibilities of large number of credit defaults which ultimately affect the profitability and credit worthiness of the bank. There are many factors which are responsible for increasing the NPAs in the banks, like recessionary conditions, shortages of resources, inefficient management affecting the health of the businesses and forcing them to default on their loan repayments. On the other hand, bank by delaying the loan disbursements can drag a project off the track causing a cascading effect on its feasibility and ability to repay and ends up in increasing the NPAs of the banks.

Justification of the Study

The profitability and financial efficiency of any bank is affected by the Non-performing assets it has. A high level of NPAs suggests a high probability of a large number of credit defaults that affects the profitability and net worth of banks and also diminishes the value of the asset. All these reasons make it essential to measure the asset quality of the banking sector by comparing the performances of the nationalized, private and foreign banks operating in India taking their performances in terms of Non-Performing Assets.

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Review of Literature

Siddiqi, Roa & Thakur (1999) found that the redirection of store like development, enhancement, modernization or advancing sister concerns, and so on,was the most conspicuous purpose behind the development of NPAs. They additionally inspected the effect of need progresses on NPAs and inferred that "the higher NPAs in need area advances have pushed up the general extent of NPAs of these banks by around 3% to 4%." Baiju and Thattil (2000) highlighted the issue of NPAs in the business saving money segment of Indian taking the present position of planned business banks. With the end goal of investigation and quantity of Banks with gross N PA rate of 5 or underneath (International Standard) has been sorted as "great". Bhattacharya (2001) rightly indicates the way that in an expanding rate administration, quality borrowers would change over to different roads, for example, capital markets, inward accumulations for their prerequisite of trusts. Under such circumstances, banks would have no alternative yet to weaken the nature of borrowers, in this manner expanding the likelihood of era of NPAs. The issue of NPAs is identified with a few inward and outer variables going up against the borrowers (Muniapan, 2002). The inward elements are redirection of stores for extension/broadening/modernization, taking up new activities, helping/advancing partner concerns, time/expense overwhelms amid the venture execution state, business (item, promoting and so on). Disappointment, wasteful administration, strained work relations, improper innovation/specialized issues, item out of date quality, and so on., while outside variables are retreat, non-installment in different nations, inputs/power deficiency, value heightening, mishaps and regular disasters. Mohan (2003) conceptualized 'languid keeping money' while basically considering banks' speculation portfolio and giving strategy. The Indian perspective insinuating the ideas of 'credit society' attributable to Reddy (2004) and 'languid saving money' inferable from Mohan (2005) has a universal point of view following a few studies in the managing an account writing concur that banks' loaning arrangements is noteworthy driver of non-performing advances (McGoven, 1993, Sergio, 1996, Bloem and Gorters, 2001). Bank with gross NPA rate of 16 (national normal) or less, yet over 5 were ordered as "great", Vallabh, investigation of Non-performing Assets (NPAs) of open, private, and remote part banks in India. The NPAs are considered as a critical parameter to judge the execution and budgetary strength of banks. The level of NPAs is one of the drivers of budgetary solidness and development of the keeping money division.

Period of the Study

The present study covers a period of five years from 2007-08 to 2011-12. To judge the degree of financial strength based on the quality of its assets, a period of 5 years is considered to be long enough to study the sector-wise growth of Non-Performing Assets of the nationalized banks, private and foreign banks if India.

Objective of the Study

This study has the following objectives:
- To study the concept of Non-Performing Assets.
- To examine the Assets Quality of nationalized banks, private and foreign banks in India.
- To analyze the growth of Non-performing Assets of the nationalized banks, private and foreign banks in India.

Hypothesis of the Study

H_o: There is no significant difference in the growth of Non-Performing Assets of the nationalized banks, private and foreign banks in India.

Methodology

For the study, statistical data has been collected from various annual reports published periodically by the Nationalized, Private, Foreign banks in India as well as from the RBI Published bulletin. The present study includes inter and intra comparison often nationalized, ten private and ten foreign banks based on their years of existence, popularity and business generation, particularly for the purpose for which loans were sanctioned. The statistical techniques like percentage, average, coefficient of variation, one way ANOVA have also been applied. For proper analysis and evaluation of operational performance and financial strength, the individual items of profit and loss accounts and balance sheet have also been regrouped.

The least NNPAR was of Bank of Baroda, with was 1.28 in the year 2013-14 the highest NNPAR was of Allahabad Bank which was 4.15 followed by Central Bank of India which was 3.75. The third highest NNPAR was of Bank of India, which was 2.85. The least NNPAR in this year was of Bank of Baroda which was 1.52. The average of net non-performing asset ratio was highest Central Bank of India with 1.97 followed by UCO Bank with 1.95 followed by State Bank of India with 1.92. The least average

was of Bank of Baroda with 0.69. The standard deviation was highest of Allahabad Bank with 1.33 followed by Central Bank of India with 1.16. The bank with the third highest standard deviation was of State Bank of India with 0.30. The coefficient of variation of net non performing asset ratio was the highest of Allahabad bank with 82.41%, followed by Bank of Baroda with 67.15%. The least coefficient of variation of net non-performing asset ratio was 15.60% of the State Bank of India. While studying the growth of Net NPAs, it was observed that there was a tremendous increase in the volume of NPAs particularly of Union Bank of India, which then showed an average annual increase of 1.79, followed by Bank of India, which then showed an increase of 0.64.

Appraisal of Non Performing Assets of Ten Private Banks

For judging the financial strength and financial efficiency of private banks, an effort has been make to study their non performing assets for least seven years. An attempt has also been made to identify the growth of nonperforming assets of all ten private sector banks, namely Axis Bank, Catholic Syrian Bank, Federal Bank, HDFC Bank, ICICI Bank, IndusInd Bank, ING Vysya Bank, Kotak Mahindra Bank, South Indian Bank and Yes Bank.

Table No 1: Showing the Non Performing Assets of Private Banks

Years							Average	Standard Deviation	C.V. (%)	Growth
2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14				
0.42	0.4	0.4	0.29	0.27	0.26	0.4	0.36	0.06	15.22	0.05
1.61	2.39	1.58	1.74	1.1	1.12	2.22	1.68	0.46	27.22	0.38
0.23	0.3	0.48	0.6	0.53	0.98	0.74	0.55	0.24	43.01	2.22
0.47	0.63	0.31	0.19	0.18	0.2	0.27	0.32	0.16	48.78	-0.47
1.55	2.09	2.12	1.11	0.73	0.77	0.82	1.31	0.56	42.99	-0.85
2.27	1.14	0.5	0.28	0.27	0.31	0.33	0.73	0.69	94.85	-0.6
0.7	1.2	1.2	0.39	0.18	0.03	0.28	0.57	0.44	77.83	-0.49
1.78	2.39	1.73	0.72	0.61	0.64	0.9	1.25	0.65	52.22	1.36
0.33	1.13	0.39	0.29	0.28	0.78	0.78	0.57	0.31	53.77	-0.44
0.09	0.33	0.06	0.03	0.05	0.701	0.05	0.09	0.1	114.3	0.06
Overall Average of Ten Private Banks							0.74	0.37	57.02	0.06

Source: A profile of Banks 2011-12-RBI and Annual Reports of respective banks

Interpretation

Table 1 shows the NNPAR of private banks. In the year 2007-08 the bank with the highest NNPAR was IndusInd Bank with ratio of 2.27. The bank with second highest NNPAR was Kotak Mahindra Bank with the ratio of 1.78 followed by Catholic Syrian Bank with the ratio of 1.61. The least NNPAR was of Yes Bank with ratio of 0.09. In the year 2008-09 the highest NNPAR was of Catholic Syrian Bank and Kotak Mahindra Bank with the ratio of 2.39 followed by ICICI Bank with the ratio of 2.09. The third highest NNPAR was of 1.14 of IndusInd Bank. The least NNPAr was of Federal Bank and Yes Bank with 0.3. In year year 2009-10 the highest NNPAR was of ICICI Bank with 2.12. The second highest NNPAR was of Kotak Mahindra Bank with 1.73 followed by Catholic Syrian Bank with 1.58. The least NNPAR was of Yes Bank 0.06. In the year 2010-11 the highest NNPAR was of Catholic Syrian Bank with 1.74 ratio followed by ICICI Bank with 1.11. The bank with the third highest NNPAR was of Kotak Mahindra Bank with 0.72. The least NNAR in this year was of Yes bank with 0.03 ratio. In the year 2011-12 the highest NNPAR was of Catholic by Kotak Mahindra Bank with 0.61. The least NNPAR was again of Yes Bank with 0.05. In the year 2012-13, the highest net nonperforming assets ratio was of Catholic Syrian Bank with 1.12. The next was of Federal Bank with 0.98. The private bank with the third highest nonperforming assets ratio was Yes Bank with the ratio of 0.01. In the year 2013-14 the highest net nonperforming assets was again of Catholic Syrian Bank with 2.22 ratio, followed by ICICI Bank with 0.82. The third number was of South Indian bank average of NNPAR was highest of Catholic Syrian Bank with 1.68. The second highest NNPAR Bank with 1.25. The least average of NNPAr was of Yes Bank with 0.09. The standard Bank with 0.65 and the third highest standard deviation was of ICICI Bank with 0.56. The NNPAR was highest of Yes Bank with 114.25%, followed by IndusInd Bank with 94.85%. The third highest coefficient of variation of NNPAR was of ING Vyasya Bank with 77.83%. The least coefficient of variation was of Axis Bank, which was 15.22%. The study reveals that the majority of the private bank has taken initiative to control the growth of NPAs and are having proper leading policy. About seven out of ten private banks under the study period have shown negative growth in their NPA, which shows how well they are managing their lendings and the level of control they have on credit defaults.

Appraisal of Non Performing Assets of Ten Foreign Banks

All banks are governed by both internal factors as well as external factors, so is the case of foreign banks that is facing problems of diversion of funds for expansion and diversifications.

Limitations of the Study

Limitation are always a part of any kind of research work, as the report is mainly based on secondary data; proper care must be taken knowing the limitations of the required study.

- The performances of the banks are shown just for the last seven year, ending 2014.
- This analysis is based on only monetary information, analysis of the non monetary factors are ignored.
- As per the requirement of the study some data have been grouped and sub grouped.

Appraisal of Non Performing Assets

Nonperforming Assets is an important tool to judge the degree of financial strength of any bank because it directly affects the profitability and financial efficiency of the banks. Gross NPA represents the outstanding amount in the borrower's account of the bank and is other than the interest which has been recorded and not debited to the borrower's account. Net NPA is the balance which is left out after deducting the interest debited to a borrower's account and not recovered and not recognized as income and is kept in interest suspense account, amount of provisions held in respect of NPAs and the amount of claims received and no appropriated. It determines the component of non-performing assets as a percentage of Net advances. It is calculated as follows:

$$\text{Net NPA to Net Advance Ratio} = \frac{NetNPA}{NetAdvances}$$

Where Net NPA as per Reserve bank of India = Gross NPA - (Balance in the Interest Suspense account + Deposit Insurance and Credit Guarantee Corporation (DICGC) / Export Credit Guarantee Corporation (ECGC) claims received and held pending adjustment part payment received and kept in suspense account + total provisions held). On the other hand, principal amount outstanding from the borrowers represent Gross Advances and the principal amount together with outstanding interest represents Net Advances.

Appraisal of Non Performing Assets of Ten Nationalized Banks

In this part of the study, an attempt has been made to study the growth of NPAs amongst then ten nationalized banks, namely Allahabad Bank, Bank of Baroda, Bank of India, Canara Bank, Central Bank of India, Dena Bank, Indian Overseas Bank, State Bank of India, UCO Bank and Union Bank of India in order to identify the amount of credit defaults these banks are suffering.

Table 2: Statement Showing Net Non Performing Assets Ratios of Ten Nationalized Banks

Bank	Years							Average	Standard Deviation	CV (%)	Growth	Average Annual Growth
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14					
Allahabad Bank	0.8	0.72	0.66	0.79	0.98	3.19	4.15	1.61	1.33	82.4	4.19	0.6
Bank of Baroda	0.47	0.31	0.34	0.35	0.54	1.28	1.52	0.46	0.46	67.2	2.23	0.32
Bank of India	0.52	0.44	1.31	0.91	1.47	2.06	2.85	1.37	0.8	58.6	4.48	0.64
Canara bank	0.84	1.09	1.06	1.1	1.46	2.18	1.98	1.39	0.47	34.1	1.36	0.19
Central Bank of India	1.45	1.24	0.69	0.65	3.09	2.9	3.75	1.97	1.16	59.1	1.59	0.23
Dena Bank	0.94	1.09	1.21	1.22	1.01	1.39	2.35	1.32	0.44	33.8	1.5	0.21
Indian Overseas Bank	0.6	1.33	2.52	1.19	1.35	2.5	3.2	1.81	0.86	47.6	4.33	0.62
State Bank of India	1.78	1.79	1.72	1.63	1.82	2.1	2.57	1.92	0.3	15.6	0.44	0.06
UCO Bank	1.98	1.18	1.17	1.84	1.96	3.17	2.38	1.95	0.64	32.9	0.2	0.03
Union Bank of India	0.17	0.34	0.81	1.19	1.7	1.61	2.3	1.16	0.71	61.6	12.5	1.79
Overall Average of Ten Nationalized Banks								1.52	0.72	49.3	3.29	0.47

Source: A profile of Banks 2011-12-RBI and Annual Reports of respective banks

Interpretation

Table 2, shows the net non-performing assets ratios of 10 Nationalised Banks in India. In the year 2007-08 the highest nonperforming assets ratio was of UCO Bank with 1.98. The next was of State Bank of India with 1.78. The nationalized bank with the third highest nonperforming assets ratio was 1.45 of Central Bank of India. The bank with the least nonperforming assets ratio was Union Bank of India with the ratio 0.17. In the year 2008-09 the highest net nonperforming assets ratio was of State Bank of India

with 1.79 followed by Indian Overseas Bank with 1.33. The third number was CBI with 1.24. The least net nonperforming ratio in this year was 0.31 of Bank of Baroda. In the year 2009-10 the nationalized bank with the highest net nonperforming asset ratio was of Indian Overseas Bank with 2.52 which was followed by State Bank of India with 1.72. The least net nonperforming asset ratio was 1.84 of UCO Bank. The second highest was of State Bank of India, which was 1.63. The third highest was of Dena Bank, which was 1.22. The least nonperforming asset ratio was Bank of Baroda with 0.35. In the year 2011-12 the highest net non performing asset ratio was 1.84 of UCO Bank. The second highest was of State Bank of India, which was 1.63. The third highest was of Dena Bank, which was 1.22. The least net non performing asset ratio was of Bank of Board with 0.35. In the year 2011-12 the highest net non performing asset ratio was of Central Bank of India with 3.09 followed by UCO Bank with 1.90. The Bank with the third highest net non-performing asset ratio was of Bank of Baroda with 0.54. In the year 2012-13 the highest NNPAR was of Allahabad Bank with the ratio of 3.19 followed by 3.17 of UCO Bank. The third highest was of Canara Bank with cost overruns during the project implementation stage on one hand and recession, non-payment in other countries, price escalation, etc. on the other hand. Therefore, it is imperative to study the growth of NPAs of these Foreign Banks.

Table 3: Statement Showing Net Non Performing Assets Ratios of Ten Foreign Banks

Bank	Years							Average	Standard Deviation	CV (%)	Growth	Average Annual Growth
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14					
Antwerp Diamond Bank	0.01	3.35	14.3	3.04	1.96	0	3.78	3.78	4.53	120	377	53.86
Bank of Barbarian and Kuwait	1.51	0.09	1.95	0.52	2.52	3.16	1.63	1.63	0.99	60.9	0.1	0.01
Barclays bank	0.42	4.59	5.15	1.46	1.45	1.74	2.47	2.47	1.62	65.8	4.9	0.7
Citi Bank	1.23	2.63	2.14	1.21	0.9	1.47	1.59	1.6	0.55	34.7	0.3	0.04
DBS Bank	0.05	0.55	1	0.31	0.6	2.37	10.2	2.15	3.35	156	203	28.97
Deutsche Bank	0.22	0.88	0.79	0.23	0.09	0.13	0.09	0.35	0.31	90.6	0.6	-0.09
Hongkong and Shanghai Banking Corporation (HSBC)	0.58	1.42	2.31	0.91	0.62	0.33	0.92	0.92	0.75	81.8	0.6	0.08
J.P. Morgan Chase Bank	2.12	1.27	2.88	0	0	0	0	0.9	1.12	125	-1	-0.14
Royal Bank of Scotland	0.85	2.2	1.95	1.65	0.74	0.29	0.05	1.09	0.79	72.8	-1.1	-0.15
Standard Chartered Bank	1.04	1.37	1.4	0.27	0.7	1.63	0.45	0.98	0.48	49.1	-0.6	-0.08
Overall Average of Ten Foreign Banks								1.59	1.45	85.6	58	8.32

Source: A profile of Banks 2011-12-RBI and Annual Reports of respective banks

Interpretation

Table 3, shows the NNPAR of 10 foreign Banks. In the year 2007-08 the highest NNPAR was of J.P. Morgan Chase Bank with the ratio of 2.12 followed by 1.51 of Bank of Baharain and Kuwait. The third highest was Citi Bank with 1.23. The last NNPAR was of Antwerp Diamond Bank, which was 0.01. In the year 2008-09 the highest NNPAR was of Barclays Bank, which was 4.59 followed by Antwerp Diamond Bank which was 3.35. The third highest NNPAR was of Citi Bank, which was 2.63. The least NNPAR in this year was of Bank of Bahrain and Kuwait which was 0.09. In the year 2009-10 the highest NNPAR was on Antwerp Diamond Bank, which was 14.32 followed by Barclays bank which was 5.15. The third highest NNPAR was of J.P. Morgan Chase Bank which was 2.88. The least NNPAR was of 0.79 of Deutsche Bank. In the year 2010-11 the highest NNPAR was of Antwerp Diamond Bank with the ratio of 3.04 followed by Royal Bank of Scotland, which was 1.65 and the third highest was of Barclays Bank with the ratio of 1.46. The least NNPAR was of JP Morgan Chase Bank which was 0. In the year 2011-12 the highest NNPAR was of Bank of Bahrain and Kuwait by 2.52 followed by Antwerp Diamond Bank, which was 1.96 followed by Barclays Bank which was 1.45. The least NNPAR was of JP Morgan Chase Bank 0. In the year 2012-13, the highest net non-performing assets ratio was of Bank of Bahrain and Kuwait with 3.16, the next was of DBS Bank with 2.37. The foreign private bank with the third highest nonperforming assets ratio was HSBC Bank with the ratio of -0.33. In the year 2013-14 the highest net nonperforming assets ratio was of DBS bank with 10.19 ratio, followed by Antwerp Diamond Bank with 3.78. The third number was of Barclays Bank with 2.47 ratio. The least net nonperforming ratio in this year was -0.05 of Royal Bank of Scotland. The average of NNPAR was highest of Antwerp Diamond Bank which was 4.53 followed by DBS Bank with 3.35 and the third highest was of Barclays bank with 1.62. The least standard deviation was of Deutsche bank, which was 0.35. The coefficient of variation was highest of DBS Bank which was 155.82%, followed by JP Morgan Chase Bank with was 125.07%

and third highest was of Antwerp Diamond Bank which was 119.84%. The least coefficient of variation of NNPAR was of 34.72% of Citi Bank. The study shows that four cut of ten foreign banks under study are having proper control over their nonperforming assets, particularly Deutsche Bank, Standard Chartered Bank, J.P Morgan and Royal Bank of Scotland since their NPA growth under study period shows negative.

Testing of Hypotheses

Null Hypothesis (Ho): There is no significant difference in the growth of Non-Performing Assets of the nationalized banks, private banks in India.

Table 4: Analysis of Variance (ANOVA) Table : One Way Classification Model

Source of Variation	Sum of Squares (SS)	Degree of Freedom (V)	Mean Square (MS)
Between Samples	27003.64	2	13501.8
Within Samples	149489.9	27	5536.66
Total	176493.54	29	

Interpretation of Anova $F = 2.4386$ & $F_{0.05} = 3.3541$

$F < F_{0.05}$

The critical value of F for $V_1 = 2$ and $V_2 = 27$ at 5% level of significance is 3.3541 whereas the calculated value of F is 2.4386. Since the calculated value of F is less than the table value, we conclude that there is no significant difference in the growth of Nonperforming Assets, of the nationalized banks, private and foreign banks in India during the study period. Hence, null hypothesis is accepted.

Findings

The present study reveals that State bank of India, UCO Bank and Central bank of India are performing poorly in terms of their NPA management. The overall average of NPA of Central bank of India during the Seven years of study was 1.97, that of UCO Bank was 1.95 and of State Bank of India was 1.92 which are much higher than the overall average of ten nationalized banks under study, which then stood at 1.52. When analyzing the performances of private banks in terms of NPA management, it was noticed that Catholic Syrian Bank, ICICI Bank and Kotak Mahindra Bank performed badly. The overall average of ten private banks under study stood at 0.74. On comparing the NPAs of Foreign Banks, it was found that Antwerp Diamond Bank, Barclays and DBS Bank were the worst performers in terms of NPA management. The overall average of ten Foreign banks under study stood at .59. The study reveals that the Foreign and nationalized banks are facing more problem of NPA's than the private sector banks.

Suggestions

The following suggestions could be laid down in the light of the findings:

- A purposeful strategy or policy needs to be initiated for income recognition. This means incomes need to be recognized only when they are actually received. Similarly needs to de-recognize transactions wherein actual payments have not been made.

- A coherent reimbursement or settlement schedules need to be fixed by banks based on actual cash flow of the borrowers at the time when the loan was sanctioned to them.

- There is an urgent need to establish internal system within the banks to recognize NPA predominantly in the case of defaults of high value.

- A suitable credit appraisal and risk management device need to be established by the banks in order to ensure appropriate measurement of credit before sanctioning the loans.

- There is a need to diversify revenue of banks, particularly on incomes based on fees.

- It is essential for banks to scrutinize loans properly and closely monitor loan accounts so that necessary corrective actions can be taken to prevent them from turning aberrant.

- In order to release locked up funds because of NPAs, it is essential for banks to maximize recovery from NPAs.

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