CHAPTER - 1

INTRODUCTION

1.1 Prologue

Credit risk is one of the oldest and most important forms of risk faced by banks as financial intermediaries (Broll, Pausch and Welzel 2002). Since this risk carries the potential of wiping out enough of a bank’s capital to force it into bankruptcy, managing this kind of risk has always been one of the predominant challenges in running a bank (Broll, Pausch and Welzel, 2002). The goal of credit risk management is to achieve the maximum risk adjusted rate of return by identifying credit risk inherent in individual bank transactions as well as portfolios and controlling the credit risk exposure to an acceptable level. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization (Basel 1999a). Until now, some work has already been made to contribute to the literature on bank credit risk management, such as that of Nishiguchi, Kawai and Sazaki (1998), Hoggarth and Pain (2002) and Arsov and Gizychi (2003). However, all such work is focusing only on a part of the credit risk management in banks, like provisioning, credit derivatives.
use or credit risk measurement, instead of taking a view of the full picture. Besides, through search of the literature, it is found that most of the work is related to the performance of the US and European banks, which may be due to the better availability of data, while the practices of the Indian banks are seldom the focus. In India, public sector banks (hereinafter referred to as PSU banks) have a dominant role in the Indian banking industry. Therefore, this research will focus on the credit risk management in PSU banks.

The performance of the PSU banks, particularly the credit risk management by such banks, has been an issue of serious concern for the past couple of years. Presently, with the entry of the private banks competition has grown exponentially and profitability of the PSU banks has been under constant pressure. The Narasimham Committee on financial reforms brought to light the alarming high and growing Non-performing Assets (NPAs) of PSU banks and highlighted the need for a proper focus on the credit risk management in PSU banks.

Due to the aims and objectives of this research, a combined methodology of both quantitative and qualitative approaches is applied. From the research aims it can be seen that the focus is on reviewing the credit risk management techniques and practices among PSU banks in India. Therefore, the quantitative part of the research is actually serving as a preliminary stage work for making the whole research more comprehensive.
Qualitative study part has also been given due attention in this research. This part of the research can actually be viewed as a collective case study where a number of cases are studied in order to investigate some general phenomenon. As to the techniques chosen for this research, textual analysis is employed and a comparison method is also adopted. It is believed that these methods are suitable for the research because through analysing the relative bank credit risk management techniques and practices access to all the available information needed in the research can be gained and assessment can be made, which provides both a separate evaluation and also generalization on the PSU banks' credit risk management practices. Although it is not the focus of this research, comparison also exists in credit management practices followed by banks abroad so that redundant explanations about the credit risk management practices of PSU banks can be avoided and additional findings may be generated.

Generally, the research attempts to map a picture of the current credit risk management practices of PSU banks in India and the focus can be divided into the following:

1. Map and analyse the credit risks and the credit risk management practices in PSU banks in India;
2. Empirically test the adequacy of credit risk management techniques and practices of PSU banks in India;
3. Test whether PSU banks’ current practices satisfy the requirements of Basel on credit risk management and disclosures;

4. To find out whether the quality of credit risk management by PSU banks changed significantly in the recent past;

5. Develop a framework for efficient credit risk management in PSU banks in India;

1.2 Objectives of the study

The primary objective of the study is to evaluate the effectiveness of the credit risk management in PSU banks in India. The specific objectives are:

To present a conceptual framework of credit risk management including credit risk measurement

To profile the PSU banks in India

To list the various risks faced by PSU banks in India

To present the risk management practices under the BASEL Accord.

To study and analyse the credit risk management in four sample PSU banks – the State Bank of India, Bank of Baroda, Allahabad Bank and Punjab & Sind Bank

To present and analyse the credit risk management practices by banks abroad

To empirically test the adequacy of credit risk management
To make recommendations for efficient credit risk management in PSU banks in India

1.3 Hypotheses

The PSU banks in India are homogenous with similarity in credit risk management
Credit risk management in PSU banks in India has improved over a period from 1996 to 2011
The adoption of Basel Accord has resulted in improvement in credit risk management in PSU banks in India
Conventional credit risk management practices in PSU Banks in India are insignificant.

1.4 Scope of the Study

The study aims to make an analysis of credit risk management in PSU banks in India. The study aims at developing and presenting a conceptual framework of credit risk management including credit risk measurement. The study focuses on the 26 PSU banks in India and analyses the credit risk management in PSU banks in India over a period from 1996 to 2011. The analysis stems from computations performed on secondary data pertaining to PSU banks in India. Credit risk management in four sample PSU banks, namely, the State Bank
of India, Bank of Baroda, Allahabad Bank and Punjab & Sind Bank has been studied and analysed in detail. For study and analysis of credit management practices in PSU banks primary data obtained from banks officials has been used.

1.5 **Period of Study**

The period of study has been confined to the period from 1st April, 1995 to 31st March, 2011. During this period the PSU banks came across three different phases namely,

1. The last decade of the 20th century exposed the PSU banks to financial sector reforms, the appearance of new private sector banks, prudential norms and increasing competition.
2. The first half of the first decade of the 21st century exposed PSU banks to a wave of RBI led reforms which included reorganization measures, human capital development, shedding of excess manpower, technological upgradation etc. to help PSU banks to achieve universal benchmarks. This phase also saw the focus of PSU banks shifting from social banking to more efficient and profit oriented industry in a growing economy.
3. The second half of the first decade of the 21st century exposed PSU banks to growing competition, particularly from private sector banks. World wide there was depression coupled with the sovereign crisis in Europe. PSU banks also had to face a difficult situation with rising
inflation and interest rates coupled with mounting non performing assets and large scale restructuring of advances.

For the purpose of easy reference the year 1995-96 is referred to as 1996 and so on throughout the study.

1.6 Research Sample and Data Description

There are 26 PSU banks in India.

The PSU banks can be broadly divided into three groups
Group1. State Bank of India and its subsidiaries
Group2. Other large PSU banks
Group3. Other small PSU banks

The 26 PSU banks ranked according to the assets held as on 31st March, 2011 and classified under each group as above, are as under:
Table 1.1: PSU Banks Ranked According to Assets

<table>
<thead>
<tr>
<th>PSU BANKS</th>
<th>TOTAL ASSETS</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>31.3.2011</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>1</td>
<td>12,24,693.81</td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>2</td>
<td>3,78,354.12</td>
</tr>
<tr>
<td>Bank of Baroda</td>
<td>3</td>
<td>3,58,397.18</td>
</tr>
<tr>
<td>Bank of India</td>
<td>4</td>
<td>3,51,172.55</td>
</tr>
<tr>
<td>Canara Bank</td>
<td>5</td>
<td>3,36,368.77</td>
</tr>
<tr>
<td>IDBI Bank</td>
<td>6</td>
<td>2,53,613.81</td>
</tr>
<tr>
<td>Union Bank of India</td>
<td>7</td>
<td>2,36,351.15</td>
</tr>
<tr>
<td>Central Bank of India</td>
<td>8</td>
<td>2,10,130.61</td>
</tr>
<tr>
<td>Indian Overseas Bank</td>
<td>9</td>
<td>1,78,784.27</td>
</tr>
<tr>
<td>UCO Bank</td>
<td>10</td>
<td>1,63,889.61</td>
</tr>
<tr>
<td>Oriental Bank of Commerce</td>
<td>11</td>
<td>1,61,762.37</td>
</tr>
<tr>
<td>Syndicate Bank</td>
<td>12</td>
<td>1,56,538.78</td>
</tr>
<tr>
<td>Allahabad Bank</td>
<td>13</td>
<td>1,51,291.05</td>
</tr>
<tr>
<td>Corporation Bank</td>
<td>14</td>
<td>1,43,542.26</td>
</tr>
<tr>
<td>Indian Bank</td>
<td>15</td>
<td>1,21,718.30</td>
</tr>
<tr>
<td>Andhra Bank</td>
<td>16</td>
<td>1,09,109.24</td>
</tr>
<tr>
<td>State Bank of Hyderabad</td>
<td>17</td>
<td>1,06,698.03</td>
</tr>
<tr>
<td>United Bank of India</td>
<td>18</td>
<td>90,042.68</td>
</tr>
<tr>
<td>Vijaya Bank</td>
<td>19</td>
<td>81,690.66</td>
</tr>
<tr>
<td>State Bank of Patiala</td>
<td>20</td>
<td>81,338.41</td>
</tr>
<tr>
<td>Bank of Maharashtra</td>
<td>21</td>
<td>76,464.16</td>
</tr>
<tr>
<td>State Bank of Trivandrum</td>
<td>22</td>
<td>70,985.25</td>
</tr>
<tr>
<td>Dena Bank</td>
<td>23</td>
<td>70,838.72</td>
</tr>
<tr>
<td>Punjab &amp; Sind Bank</td>
<td>24</td>
<td>68,550.14</td>
</tr>
<tr>
<td>State Bank of Bikaner &amp; Jaipur</td>
<td>25</td>
<td>63,054.69</td>
</tr>
<tr>
<td>State Bank of Mysore</td>
<td>26</td>
<td>52,127.07</td>
</tr>
</tbody>
</table>
Table 1.2: Number of PSU Banks in each Group

<table>
<thead>
<tr>
<th>Group No.</th>
<th>Group Description</th>
<th>Number of PSU Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State Bank of India and its subsidiaries</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Other large PSU banks</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Other Small PSU banks</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>26</td>
</tr>
</tbody>
</table>

It is felt that banks in each group do not differ much in the credit risk management practices and the study of a PSU bank in a particular group can present somewhat a fairly reliable picture on the standard common practices within the group, which indicates the possibility and reasonableness of conducting the qualitative research only on part of the Indian PSU banks with the sample drawn from each group as above. The sample comprises of the State Bank of India from the first group, Bank of Baroda and Allahabad Bank from large PSU banks and Punjab and Sind Bank from small PSU banks.

**Qualitative Data**

The qualitative data needed in the research mainly comes from the four sample banks’ annual reports and other published results. These annual reports have independent review sections on credit risk management.
Besides, the consultative papers issued by Basel (Basel 1999a, 2000) also play an important role due to their updated and detailed requirements on bank credit risk management, which serve as the benchmarks in achieving the research objectives.

**Quantitative Data**

The quantitative data needed for the study are the following data and ratios relating to credit risk management in PSU banks in India:

1. Gross Non Performing Assets Percentage – The percentage gives an idea of the efficacy of a banks’ credit risk management as it measures the ratio of gross non performing advances to total advances. The credit risk management performance of a bank moves adversely with this ratio.

2. Total assets of each of the 26 PSU banks in India as on 31st March, 2011. This has been used for grouping of PSU banks for sampling purposes for qualitative analysis.

3. Net Non Performing Assets Percentage – This ratio gives the percentage of advances of a bank held as unprovided for/unrecovered NPAs.
4. Lending rates – The average lending rates of PSU banks in India from 1996 to 2011.

5. Ratio of restructured standard advances to gross advances across bank groups from 2009 to 2012

6. Ratio of restructured standard advances to gross advances across borrower groups from 2009 to 2012.


9. Credit deposit ratio of PSU banks in India from 1996 to 2011.

10. Collateral ratio of PSU banks in India from 1996 to 2011 obtained by dividing secured loans by total loans

The quantitative data has been obtained mainly from the Reserve Bank of India and PSU banks' online database. Annual reports of PSU banks have also been referred to.
1.7 **Rationale of the Study**

Credit risk is always treated as the major risk inherent in a bank’s lending activities. If not well managed, this kind of risk may drag a bank into great trouble or even bankruptcy, which has been proved by various bank failure cases. For banks, managing credit risk is not a simple task since comprehensive considerations and practices are needed for identifying, measuring, controlling and minimizing credit risk.

In this research, the credit risk management practices of Indian PSU banks, which occupy a dominant position in the Indian banking industry, are examined through the quantitative research on Indian PSU banking group members and qualitative analysis on four representative sample PSU banks. The key areas in the generalization and comparison of techniques and practices of sample banks in credit risk management are chosen according to the Basel requirements, which are also adopted as benchmarks in the evaluation of banks' credit risk management. The robustness and weakness of larger and smaller major Indian PSU banks in managing credit risk are identified and the areas for further improvement have been indicated.
The present study has academic and practical significance. It helps academicians and researchers to develop deeper and new insights into the conceptual framework of credit risk management in the banking industry and the credit risk management in PSU banks in India. The study focuses on specific credit management practices followed by PSU banks which may be of interest not only to various PSU banks but also to others interested in the process of development of credit risk management practices and procedures and the changes and reforms over the last two decades.

This study will be useful to the policy makers and professional bankers in taking credit risk management decisions and monitoring critical factors effecting successful credit risk management in PSU banks which in turn has special significance with respect to profitability and performance of PSU banks. The study will facilitate identification of critical areas in credit risk management in PSU banks which in turn can also serve as the basis of evaluation of credit risk management performance of PSU banks in India.

The Indian PSU banks’ context can also provide crucial insights about the credit risk management by banks in other developing countries and the study may be found useful by academicians, policy makers and bankers in other developing countries also.
1.8 Limitations of the Study

Sampling in qualitative research can be a hard issue and it represents the major limitation in this research. Due to the time and information availability restrictions only four PSU banks are chosen despite the fact that the focus of this research is on PSU banks in India. It is though reasonable that choosing some of the PSU banks can help to draw a general picture of Indian PSU banks’ credit risk management practices. However, the representativeness of the samples is unavoidably a problem.

Besides, the grouping strategy of the banks also suffers from flaws. The groupings have been done according to size differences based on latest balance sheets. If another criteria, say, total capitalization on share market was taken a different grouping could have been obtained. Therefore, the size consideration cannot be treated as totally convincing which also weakens the representativeness of the sample.

The ratios selected for the quantitative research are widely accepted as related to banks’ credit risk exposure and credit risk management. However, the representativeness cannot be guaranteed. After all, it is difficult to find out as to how many ratios will be enough for providing a comprehensive measure or whether the ratios chosen in
this research are the most important ones related to the management of credit risk. Moreover, not all the ratios are available for the target banks, which is also a problem of insufficient data.

The financial data used for the purpose of analysis has mostly been extracted from the financial statements of PSU banks which are historical and quantitative in nature. The study, in the process, therefore, incorporates all the limitations that are inherent in the financial statements.

The effect of inflation has not been considered in the study.

While computing the data for the purpose of analysis, some adjustments have been made in the financial information collected. Some ratios and percentages have also been approximated. Therefore, minor variations are bound to exist in the study.

Various accounting, statistical tools used for the present study have their own limitations. Further, proper significance tests could not be made to generalize the findings of the study for the entire Indian PSU banking sector.

Thus the findings of the present study should be used judiciously and carefully taking into account the above limitations.
1.9 **Organisation of the Study**

The study has been organized as follows:

**Chapter 1**
Deals with the introduction, objectives, scope of the study, hypotheses, framework of analysis and limitations of the study

**Chapter 2**
Discusses the detailed methodology adopted for the present study.

**Chapter 3**
Describes credit risk and deals with the conceptual framework of credit risk management including identification of credit risk, credit risk mitigation and transfer and banks' other defences against credit risk and general principles of sound credit risk management in banking.

**Chapter 4**
Traces the background of banking industry in India and the current scenario and the policy implications for PSU banks in India
Chapter 5
Describes the various risks faced by PSU banks in India

Chapter 6
Deals with the fundamentals of credit risk measurement

Chapter 7
Deals with and critically analyses the Basel Accord and the implications for PSU banks in India

Chapter 8
Describes in detail and analyses the credit risk management in four sample PSU banks in India and gives a comparative study of the credit risk management practices.

Chapter 9
Describes credit risk management by banks abroad and analyses some other relevant international developments

Chapter 10
Deals with data analysis using statistical analysis on various aspects of credit risk management in PSU banks in India
Chapter 11
Outlines some recommendations for improvement in credit risk management in PSU banks in India

Chapter 12
Presents the major observations and findings and provides suggestions for further research.