# Banking sector reforms and regional disparities in banking development: A comparative study of Bihar and Tamil Nadu (1980-2010)

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the degree of

# MASTER OF PHILOSOPHY

# **SHADAN WASIM**



Centre for Economic Studies & Planning
School of Social Sciences
Jawaharlal Nehru University
New Delhi – 110067
India
2012



Phone : 91-11-26742575, 26741557,

26742676 Ext. 4421

Direct : 26704421

Fax : 91-11-26741504, 26741586

27<sup>th</sup> July, 2012

## DECLARATION

This is to certify that the dissertation entitled "Banking Sector Reforms and Regional Disparities in Banking Development: A Comparative Study of Bihar and Tamil Nadu (1980-2010)" submitted by me is in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of Jawaharlal Nehru University. This dissertation has not been submitted for the award of any other degree in this University or any other University and is my own work.

Shadan Wasim

## **CERTIFICATE**

We recommend that this dissertation be placed before the examiners for evaluation.

Prof. C. P. Chandrasekhar

(Supervisor) Supervisor CESP/SSS/J^\*\* Prof. Arun Kumar

(Chairperson, CESP)

Prof. ARUN KUMAR
Chairperson
Centre for Economic Studies & Planning
SSS/JNU/New Delhi - 110 067

## Acknowledgements

This study is a result of the encouragement I have always received being a student of the Centre for Economic Studies and Planning, JNU. This dissertation would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of my first research project.

First and foremost I would like to express my sincere gratitude to my supervisor, Prof. C.P. Chandrasekhar for patiently guiding me and being enormously helpful in the writing process.

I would also like to thank our centre and all the faculty members. All the library and office staff have been important 'administrative' contributors to this work. I also thank the staff of NIPFP library for helping me in accessing data.

I owe immensely to my family, especially my parents who have expressed faith in me and have offered every possible support in my academic pursuit. I am grateful to my brothers, Zafar and Muzaffar, for their encouragements in this endeavour. I am also sincerely thankful to my sisters-in-law, Ambreen and Shabistan, for their love and support.

I am indebted to my friends namely Rabia, Swayam, Debolina, Simonti, Shiuli, Arpita, Suranjali for helping me to get through the difficult times, and for all the emotional support, camaraderie and entertainment they provided.

Special thanks to Sushil for helping me with working on excel and also supporting me throughout.

I am thankful to Divya who has spared all the time to entertain me and shed my momentary bouts of whiny and disillusioned behavioural patterns and has shown faith in the possibility of my successful completion of this dissertation.

## **List of Abbreviations**

AIFIs - All India Financial Institutions

CAMELS – Capital Adequacy, Asset and Management Quality, Earnings, and Liquidity and Systems of Risk Management

CDR - Credit-Deposit Ratio

CRR - Cash Reserve Ratio

DICGC - Deposit Insurance and Credit Guarantee Corporation of India

GDDP - Gross District Domestic Product

IDBI – Industrial Development Bank of India

IFCI – Industrial Finance Corporation of India

IRDP - Integrated Rural Development Programme

KVIC - Khadi and Village Industries Commission

NABARD - National Bank for Agriculture and Rural Development

NHB – National Housing Bank

NPAs - Non-Performing Assets

PCNSDP - Per Capita Net State Domestic Product

PLR - Prime Lending Rate

PSBs - Public Sector Banks

PSU - Public Sector Unit

RBI - Reserve Bank of India

RIDF - Rural Infrastructure Development Fund

RoA - Return on Assets

RRBs - Regional Rural Banks

SBI - State Bank of India

SCBs - Scheduled Commercial Banks

SDP - State Domestic Product

SFCs - State Financial Corporations

SIDCs – State Industrial Development Corporations

SLR - Statutory Liquidity Ratio

UECM - Unrestricted Error Correction Method

## **List of Figures and Tables**

- Figure 2.1: Financial repression model and the effects of financial liberalization
- Figure 4.1: Comparison of credit-deposit ratios of Bihar and Tamil Nadu (1980-2010)
- Figure 4.2: Mobilisation of deposits from and disbursal of credit to Bihar as percentages of all-India total deposits and credit (1980-2010)
- Figure 4.3: Mobilisation of deposits from and disbursal of credit to Tamil Nadu as percentages of all-India total deposits and credit (1980-2010)
- Table 2.1: Changes in SLR during 1964-65 to 1990-91
- Table 2.2: Changes in CRR during 1962-63 to 1989-90
- Table 4.1: Number of offices of scheduled commercial banks in Bihar: Population group wise (1980-2010)
- Table 4.2: Number of offices of Scheduled Commercial Banks in Tamil Nadu-Population group wise (1980-2010)
- Table 4.3: Deposits and credit per office of scheduled commercial banks in Bihar (1980-2010)
- Table 4.4: Deposits and credit per office of scheduled commercial banks in Tamil Nadu (1980-2010)
- Table 4.5: Average population per office of scheduled commercial banks-Bihar
- Table 4.6: Average population per office of scheduled commercial banks-Tamil Nadu
- Table 4.7: Population group wise credit-deposit ratios of scheduled commercial banks (1980- 2010)
- Table 4.8: Region-wise credit-deposit ratio of scheduled commercial banks (1975-2010)
- Table 4.9: Credit-deposit ratios of Bihar and Tamil Nadu (1975-2010)
- Table 4.10: Population group wise credit-deposit ratios of scheduled commercial banks in Bihar (1980-2010)

- Table 4.11: Population group wise credit-deposit ratios of scheduled commercial banks in Tamil Nadu (1980-2010)
- Table 4.12: Credit-deposit ratios (as per place of sanction) of districts of Bihar (1980-2010)
- Table 4.13: Credit-deposit ratios (as per place of sanction) of districts of Tamil Nadu (1980-2010)
- Table 4.14: Mobilisation of deposits from and disbursal of credit to Bihar as percentages of all-India total deposits and credit (1980-2010)
- Table 4.15: Mobilisation of deposits from and disbursal of credit to Tamil Nadu as percentages of all-India total deposits and credit (1980-2010)
- Table 4.16: Bank credit to GDDP ratios for the districts of Bihar (2004-05 to 2007-08)
- Table 4.17: Bank credit to GDDP ratios for the districts of Tamil Nadu (2003-04 to 2006-07)

# **CONTENTS**

Acknowledgements	i
List of Abbreviations	ii
List of figures and tables	iii
Chapter 1: Introduction	1
Chapter 2: The Banking Sector in India	6
Chapter 3: Banking and Regional Disparities in India	31
Chapter 4: Inter-State and Intra-State Analysis of Banking Development	46
Chapter 5: Conclusion	65
References	69
Annexure	76

#### **CHAPTER 1**

#### Introduction

In India, as in many developing countries, the commercial banking sector has been the dominant element in the country's financial system. Banks perform the important function of financial intermediation. Financial intermediation refers to borrowing by deficit units from financial institutions rather than from the surplus units themselves. Hence, financial intermediation is a process involving surplus units depositing funds with financial institutions who in turn lend to deficit units. The banking system mobilises savings in the form of financial liabilities like deposits and enables efficient resource allocation through screening and monitoring of entrepreneurial projects and thus plays a significant role in promoting economic growth.

Gurley and Shaw (1960) highlighted the asset transformation role of banks. The borrowers (deficit units) and lenders (surplus units) have different requirements as regards size, maturity and risk. Banks can engage in asset transformation to accommodate these differences. The capacity of lenders (in terms of quantities of funds) is more often than not less than the size of the investment. Banks can perform size transformation by collecting a number of smaller deposits and lending out a larger sum. Depositors (lenders) don't want to be short of liquidity but the borrower needs the funds over the life of the project or investment. Banks can fill this gap by maturity transformation by offering short-term deposits and offering loans for a longer period. Banks also carry out risk transformation. Lenders prefer assets with low risk whereas borrowers may use the borrowed funds to engage in risky operations. Banks diversify their portfolio of loans to reduce the impact of any one failure.

Why firms do not themselves undertake direct borrowing? The existence of uncertainties regarding failure or success of projects, indivisibilities of projects and lending, transaction costs are the reasons cited for need of a financial intermediary. Other reasons include liquidity insurance (Diamond and Dybvig, 1983), information-sharing coalitions (Leyland and Pyle, 1977) and delegated monitoring (Diamond, 1984, 1996). Thus, we see the reason behind the existence of the banking sector and the important function it plays in an economy.

Banking in India has a long history and it has evolved over the years passing through various phases. At the time of independence, the Indian banking system was weak. Colonial banking was perceived to be biased in favour of working-capital loans to trade and large capitalist enterprises. The ownership of the entire banking sector was in the private hands. The credit requirements of agriculture and other needy sectors were ignored. With a view to coordinating the banking system to the needs of planning and economic policy, the policy of social control over the banking sector began in 1967. The nationalisation of private sector banks in 1969 was a major turning point in the history of the banking sector in India. One of the major objectives of developmental credit and banking policy enunciated at the time of bank nationalisation was to seek to expand the reach of bank credit both geographically and functionally. Geographically, in the sense of covering the under-banked regions of the country and functionally, to extend credit to agriculture, small industry and selfemployed sectors which were deemed important in terms of their contribution to income growth, employment generation and poverty alleviation, but had hitherto been neglected by the banking system.

The nationalisation of banks (fourteen in 1969 and again six in 1980) had some notable achievements. There was a dramatic expansion of banks throughout the country—in regions where this form of financial organisation was either totally unknown or had but limited spread. This played a positive role in increasing financial savings. In 1990, bank deposits were almost 45 percent of GDP as against barely 13 percent in 1969, which reflects the impressive growth of the banking business in terms of deposit mobilisation. Moreover, the achievement regarding credit availability for the priority sectors was progressively raised to a level of 40 percent as against an actual figure of 14 percent at the time of bank nationalisation.

However, during this period, a major portion of banks' resources were pre-empted at below market rates by way of directed credit and directed investments. Profitability of the banking sector was extremely low in spite of the rapid growth of the deposits. Banks were also saddled with large non-performing assets. Non-performing assets had reached a high proportion of 23 percent of total assets by 1991 and represented the immobilisation of bank funds to that extent. Their capital base also became weak.

By the year 1991, the productivity, efficiency and profitability of the banking sector had suffered and it affected the inherent financial strength of the system.

With a view to overcoming several weaknesses that had crept into the system over the years and with a view to creating a strong, competitive and vibrant banking system, several measures were initiated beginning the early 1990s. Since 1991, programmes of stabilisation and structural adjustment had been started in the real sectors of the economy such as industry, agriculture and the external sector. It was believed that these reforms must be supported by reforms in the financial sector, particularly in the banking system, which has the prime responsibility for mobilising and allocating financial resources. The Government of India set up the Narasimham Committee on the Financial System, which sought to improve banks' financial performance, strengthen the qualitative character of their credit operations and restore to banks a greater degree of functional autonomy and operational flexibility. Another committee known as the Committee on Banking Sector Reforms was set up in 1998 to evaluate the working of the banking sector and suggest some policy recommendations. These committees recommended certain policy measures regarding statutory requirements, interest rate deregulation, priority sector lending, and recovery of Non Performing Assets (NPA) and also prescribed prudential norms in order to enhance transparency of the banking system. These policy measures have clearly involved a move in the direction of financial liberalisation.

The second chapter of this dissertation deals with the evolution of the banking sector in India in some detail and also with the performance of the banking sector in light of the banking sector reforms undertaken under the umbrella of financial liberalisation.

Independent India inherited a backward and regionally imbalanced economy reflecting the distorted pattern of development imposed by the colonial power to sub serve its own interests. Most of the industrial and commercial activities were concentrated in the three metropolitan centres, namely, Bombay, Calcutta and Madras and a few major cities like Ahmadabad, Kanpur and Delhi. Most of the other areas of the country remained in the backwaters of underdevelopment. There is still a considerable amount of disparity in terms of various indicators of economic development across the Indian states. Disparities in economic and social development

across the regions and intra-regional disparities among different segments of the society have been the major factors for adopting planning process in India since independence. The ranking of various regions based on development indicators would show that there are some regions like Maharashtra and Gujarat, which are highly developed, and there are the BIMARU states Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, which are poorly developed. More alarming is the fact that the gap is widening. The banking sector has aided this process to some extent by mobilising resources from the rural and backward areas and transferring them to advanced areas.

The third chapter of this study discusses some of the works which look into the aspect of regional disparities in India over time. Regional disparity in development of the banking sector is one of the important aspects of these differences in economic development but it has remained a neglected field. This study also tries to look at the existing literature dealing with the aspect of regional disparities in banking development in India.

The question which arises is how we can assess the development of banking across different regions? According to Rao (1969), there are many indicators of the development of commercial banking in a State. First, the increase in the number of offices opened and the decline in the population per office in the State. Second, the overall growth of deposits and the rise in deposits per office with per capita deposits, and the extent to which the banking system siphons off any increase in income generated by planning in the State, indicating the efficiency of the banking system in mobilising the savings of the community. Third, the participation by banks in the economic activity in the State as reflected in the expansion in bank credit. Changes in per capita credit broadly show how far banks have affected the economic life of the populace in a State. Fourth, the credit-deposit ratio reflects to what extent banks make use of the deposits mobilised in a State to meet the latter's credit demands. It can also indicate the diversion of deposit resources from one State to another.

The objective of this research is to look into the aspect of regional disparities in the development of banking and try to assess how these differences have varied over time. The time period considered is 1980-2010. This time period encompasses a phase after nationalisation when banks functioned under a strict regulatory regime

implemented with social and developmental objectives in mind and a phase when that regime was substantially liberalized. The states are taken as regions for the purpose of this study here. The two states selected for this study are Bihar and Tamil Nadu. Both these states are comparable as far as their geographical size in concerned, but in terms of development these are at two extremes. Bihar is the 12<sup>th</sup> largest state of India and Tamil Nadu is the 11<sup>th</sup>. Comparative studies in development are especially important in case of large countries with heterogeneous structure where aggregate figures relating to development do not reveal the true picture. The spatial dimension may bring to the forefront inherent problems of development in such countries that would otherwise remain undetected. A limitation of inter-regional analysis using States as units is the fact that this may not be able to capture the significant intra-State disparities in banking development which exists today. Hence, an attempt is also made to look at a more disaggregated district level picture of these two states to comprehend if there are intra-state disparities prevailing and how these have varied between the pre and post liberalization time periods.

This forms the subject matter of the fourth chapter. This chapter summarizes the findings using the indicators mentioned above and also their interpretations. The last chapter is the conclusion.

#### **CHAPTER 2**

## The Banking Sector in India

The financial sector of which the banking sector constitutes a major part plays a crucial role in the process of economic development. In order to make the banking sector more profitable, competitive and efficient, the government of India in 1991 introduced reforms in the banking sector by implementing several policy recommendations of the committee on the financial system. Before going into the regional aspects of banking development in the pre-reform and post-reform periods, one should have a clear picture of the banking sector in the pre-reform era and the weaknesses therein which necessitated reforms in this sector. This chapter is divided as follows: The first section goes into the debate regarding financial liberalization. In the next section the evolution of the banking system in India during 1947-1990 is explained in brief. The section after that examines the state of banking sector in the early 1990s focusing on the weaknesses which necessitated reforms in this sector. Then the major reforms in the banking sector are given in brief. The last section deals with a discussion of papers analyzing the performance of banks in the pre-reform and post-reform periods.

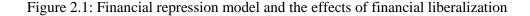
#### 2.1 The Financial Sector Liberalization Debate

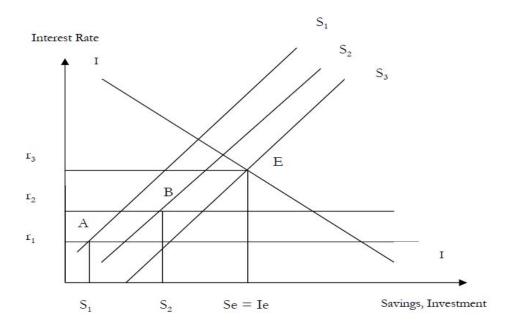
A financial system contributes to growth and development by mobilizing savings from savers and then efficiently allocating these savings to ultimate users. Financial liberalization remains one of the most controversial issues in the literature on economic reforms. With the global integration, deregulation and improvements in technology, financial systems in world economies have undergone remarkable changes in recent years. Recent financial crisis, particularly global credit turmoil has stimulated rethinking on financial liberalization.

Till the 1960s, the dominant view in literature was the neo-Keynesian perspective which argued that interest rate should be kept low, in order to promote capital formation (Sen and Vaidya, 1997). During this period several less developed

economies followed the policy of economic planning with directed credit programmes and interest rate controls. These measures were popular as a means of allocating scarce resources to 'preferred sectors' at low cost.

Later in the 1970s, following the failure of restrictive policies and the realization that 'government failure' is a pervasive feature of planned economies (Krueger, 1995), the neo-liberal view of financial markets gained importance. In 1973, the dominant theoretical position was challenged by McKinnon and Shaw. They termed developing economies as 'financially repressed'. Their central argument was that financial repression – a combination of heavy taxation, interest rate controls and government participation in the credit-allocation process—would lead to both a decrease in the depth of the financial system and a loss of efficiency, with which savings are intermediated (Sen and Vaidya, 1997). They strongly favored the neo-classical proposition of price clearing markets as the best mechanism of resource allocation in the economy. They argued that financial repression discouraged the development of a domestic financial sector and was detrimental to economic growth. The proponents of financial reform argue that financial liberalization tends to raise ratios of domestic private savings to income (Shaw, 1973). Therefore, financial liberalization will lead to significant economic benefits through a more effective domestic saving mobilization, financial deepening and efficient resource allocation. The following figure shows a financial repression model and the effects of financial liberalization.





In the McKinnon-Shaw argument savings are assumed to be positively related to the real rate of interest. In figure 2.1, the S<sub>1</sub> line represents the supply curve of loans which is positively related to interest rates and the II line represents the demand curve for loans which is negatively related to interest rate. It is also argued that an administratively determined nominal rate of interest (a characteristic situation in developing economies according to McKinnon and Shaw) holds the real interest rate below its equilibrium level. This situation is referred to as one of financial repression which is explained graphically in figure 1, where the real interest rate is very low  $(r_1)$ as it is administered rather than market determined, and so generates only relatively small savings  $S_1$  (at the intersection point A). This also represents the maximum amount of investment that can be financed by intermediation of savings through this market. As figure 1 shows, with repressed interest rate at r<sub>1</sub> there is an unsatisfied demand for investment funds (the difference being the point where r<sub>1</sub> intersects S<sub>1</sub> and II). Commercial banks, thus, cannot satisfy the total demand for investment which means that they have to ration their credit. Following the standard Neo-classical thinking, rationing demand without using the free market price-instrument must lead

to sub-optimal allocation of available resources, thus showing that financial repression policies may also lead to deterioration in the quality of total investment and, thus to lower growth. Therefore, the advocates of financial liberalization school strongly supported complete liberalization of financial markets in developing countries leading to a rise in interest rates. According to them, this would contribute positively to the process of economic growth. First, total savings and therefore, total investment would increase. With financial liberalization,  $r_1$  will be pushed up to  $r_2$ . The savings curve shifts to  $S_2$  and both savings and investment rise to the point  $S_2$  from the origin (at the intersection point B). When market is fully liberalized, the rate of interest is  $r_3$  and savings and investment are at equilibrium ( $S_e$ = $I_e$ ). Second, the quality of the investment projects financed would improve as interest rates rise. At higher interest rates, low-yielding investment projects will no longer be profitable and thus, these will be replaced by high-yielding projects, resulting in an increase of the average efficiency of investment in the economy.

Therefore, the McKinnon-Shaw paradigm of financial repression implied that the complete liberalization of the financial sector was an essential pre-condition to successful economic development. They explicitly pointed out that financial repression not only lowers investment but also that investment is far less productive. In repressed markets, non-rational criteria for credit rationing are at work to distribute resources for investment resulting in less efficient investment projects (Shaw 1973). Therefore, the neo-liberal view of financial liberalization holds the laissez-faire financial system to be a desirable goal of the public policy.

However, there has been a re-assessment of the neo-liberal view of financial markets. New theoretical developments—in particular, the application of the theories of 'asymmetric information' and 'incomplete contracts' to financial market—suggests that financial markets are different from other markets (such as commodity markets), and that 'market failures' are more pervasive in financial markets than in other markets in the economy. This indicates that there exists 'forms of government intervention' that will not only make (financial) markets function better but will also improve the performance of the economy (Stiglitz, 1993).

Two assumptions of the neo-liberal paradigm have come increasingly under scrutiny.

The first is the assumption of perfect information which implies that all relevant information is freely available to all agents in the market. However, in reality, most financial markets are characterised by asymmetries of information that exist between providers of capital and those seeking capital. Secondly, the assumption of the neoliberal approach that has been questioned in the literature is the supposition that individuals and firms may write and enforce richly detailed financial contracts with any cost. However, this "completeness" of financial markets may not be a reasonable approximation of reality if either information or the ability to enforce contracts is severely limited (Gertler and Rose, 1994). Again the initial state and level of development of the financial sector and macro-economic development plays an important role in determining the financial sector reforms in a developing country.

While there are several models that have examined the implications of asymmetric information for financial markets, perhaps the most well-known is the Stiglitz-Weiss (1981) model of credit rationing. This model assumes that there are two sets of borrowers-'good' and 'bad '. The expected return to the bank depends on the probability of repayment, so that the bank would like to be able to identify borrowers who are more likely to repay. In order to identify good borrowers, the model prescribed 'interest rate' as one of the many devices i.e. those who are willing to pay high interest rates may on an average, be investing in riskier projects which will possibly lower the bank's profit. So, the key prediction of the model is that the profit maximizing or equilibrium interest rate may be lower than the market clearing rate, that is to say, there will be potential borrowers who will be unable to obtain credit even if they indicated a willingness to pay more than market rate. This model implies that 'market failures' can be quite endemic to credit markets, which are in general characterized by imperfect information. Therefore, an important implication of the presence of asymmetric information is that there may exist government intervention that takes into account the cost of information as well as establishing of markets that can make all individuals better off (Stiglitz, 1993). Therefore, theories of asymmetric information and incomplete contracts provide a vision of the financial system that is markedly different from that of the neo-liberal model.

Apart from this, problems of adverse selection and moral hazard are acute in the financial market, and have important implications for the effects of financial

liberalization. Because adverse selection makes it more likely that loans might be made to bad credit risk, lender may decide not to make any loans even though there are good credit risks in the market place (Mishkin, 2007). On the other hand, moral hazard lowers the probability that the loan will be repaid; lenders may decide that they would rather not make a loan. It is argued that government regulation can reduce adverse selection and moral hazard problems in financial markets and increase their efficiency by increasing the amount of information available to investors. Bank supervision is an important method for reducing adverse selection and moral hazard in the banking business. Therefore, developing countries need regulatory supervision as they are facing inherent obstacles in setting up efficient financial regulation and lack of economies of scale in the banking sector (Murshed and Subagjo, 2002).

In the light of these theoretical perspectives, we can examine the financial sector reforms in the Indian economy. Before this, it is better to have a brief history of the evolution of the banking sector in the pre-reform era.

## 2.2 Evolution of the Indian Banking Sector

In the post-independence era, the evolution of the Indian banking sector can be divided into three distinct periods: the early years of independence 1947-1967; social control on banks 1968-1991; the reform phase starting from 1991.

## 2.2 (i) Banking in the pre-nationalization period: 1947 to 1967

When the country attained independence, Indian banking was entirely in the private sector dominated by domestic scheduled commercial banks having a regional character. West Bengal had the largest number of scheduled commercial banks, followed by Madras and Bombay. In 1947, 38 banks failed and normally these were the small banks that failed. In the year 1948, 45 institutions were closed down. The reasons for bank failures were: (i) opening more branches than was sustainable on the strength of their resources (ii) making large loans against property or inadequate security (iii) functioning with very low capital base. (RBI, 2008)

These failures reduced faith in the banking system and of the total household savings, 89 percent were in physical assets (land and gold) in 1948. Postal department was considered a safer avenue for financial savings due to government ownership. Planned

economic development required resources for investment and development and hence banks were required to spread geographically to promote banking habits and savings in the economy.

The Banking Companies Act, 1949 conferred on the Reserve Bank of India (RBI) extensive powers for supervision of banks. It focused on basic prudential features for protecting the interests of depositors and covered various aspects such as organisation, management, audit and liquidation of the banking companies. It granted the Reserve Bank control over opening of new banks and branch offices, powers to inspect books of accounts of the banking companies and preventing voluntary winding up of licensed banking companies (RBI, 2008). After the enactment of this Act, bank failures reduced considerably. The process of strengthening of the banking sector was also done through a policy of liquidation, compulsory amalgamation and mergers. Further the amendments to this act in the years 1950, 1953 and 1956 aimed at providing greater control in the liquidation of banks.

In the early years of independent India, the banks' borrowing from the RBI was almost negligible as they were able to meet the liquidity requirements by selling government securities to the RBI (Sen and Vaidya, 1997). To stop this practice, RBI announced an increase in the bank rate from 3 to 3.5 percent and simultaneously stopped buying government securities in November 1951. The RBI instead introduced a system of making advances to banks against government securities at the bank rate. This put an end to automatic monetization of the public debt and the banks were forced to turn to RBI for funds. At that time all scheduled banks were required by the RBI Act to maintain a minimum cash reserve of 5 percent of their demand liabilities and 2 percent of their time liabilities on a daily basis. In addition, banks had to maintain liquid assets in cash, gold or government securities amounting to not less than 20 percent of demand and time liabilities which was referred to as Statutory Liquidity Ratio (SLR).

In 1962, RBI was empowered to vary the Cash Reserve Requirement (CRR) between 3 percent and 15 percent of total demand and time liabilities. At the same time, to stop the practice of selling government securities by banks in the process of adjusting to changes in CRR, banks were required from 1962 onwards to maintain a minimum

amount of liquid assets in cash, gold and government securities that amounted to at least 25 per cent of their demand and time liabilities over and above the CRR. The RBI was also empowered to stipulate minimum lending rates and ceiling rates on various types of advances. Moreover, the RBI has directly regulated the interest payable on various types of deposits since 1964, which was earlier governed by a voluntary agreement reached among the important banks operating in India.

As regards the allocation of bank credit during the period 1951-68 is concerned, the main features can be summed up as follows (Sen and Vaidya, 1997).

- i) There was an increase in the share of credit going to industry which rose from 34 percent in 1951 to 67.5 percent in 1968. A large portion of this was cornered by the corporate sector (about 80 percent) and the small scale sector got the rest.
- ii) A distinctive feature of credit provided to the industrial sector was its excessively skewed size of distribution in favor of large borrowers.
- iii) During this period, the agricultural sector got a little over 2 percent of total bank credit.

These features however were not consistent with the goal of achieving an equitable allocation of credit and the relative priorities set out in the five year plans. To deal with this situation, a bill was introduced in parliament in December 1967 providing for extensive social control over banks and banking policy. Accordingly, the National Credit Council was established in February 1968 to assess the demand for bank credit from various sectors and to determine priorities for allocation of credit, while keeping in mind the available resources and the special needs of the priority sectors comprising of agriculture, the small scale and exports. The first meeting of the council was held in February 1968 and it recommended that commercial banks should allocate in 1968-69 an additional amount of Rs. 35 to 40 crore and Rs. 60 to 70 crore to agriculture and small scale industries respectively. These targets were in fact achieved by the commercial banks in March 1969.

#### 2.2 (ii) Developments in the Post-nationalization Period

In July 1969, 14 newly nationalized banks along with the State Bank of India (SBI) and its associate banks (i.e. 22 of the largest Indian scheduled commercial banks) accounted for 80 percent of the banks' deposits. In April 1980 six more banks were

nationalized bringing the share of public sector banks' deposit to 92 percent (Shah, Rao and Vijay Shankar, 1997). During the fourth five year plan strategy for agrarian development was adopted. The nationalized banks were asked to mobilize deposits on a massive scale by setting up branches in rural and semi-urban areas. At the same time they were required to provide adequate credit to the agricultural sector. Accordingly, by March 1979, the priority sector lending requirements (covering agriculture and allied activities, small scale industry, retail trade, transport operators, professionals, craftsmen) stipulated that 33 percent of each bank's total credit should be advanced to priority sector with not less than 16 percent going to agriculture. This was later raised to 40 percent with a further stipulation that one-half of advances to the agricultural sector should consist of loans to small and marginal farmers.

From this it is clear that in the Indian context, the policies of financial repression started with the nationalization of banks in 1969. The need for social control of the banking sector provided the initial rationale for these policies. But subsequently during the seventies and eighties the government increasingly used the banking sector for financing its own deficits, which in turn led to some basic weaknesses in the banking sector. This necessitated the banking sector reforms which the government responded by forming a committee to review the financial system, chaired by M Narasimham, in the year 1991. Before going to the details of the reform process, we should have a clear idea of the banking sector and the weaknesses which necessitated the reform during the 1990s.

#### 2.3 State of the Banking sector in the early 1990s

The operation of the scheduled commercial banks during the financial year 1990-91 was characterized by deceleration in both the growth of aggregate deposits and bank credit (RBI, 1991). Aggregate deposits increased by 15.3 percent as compared with 19.1 percent in 1989-90. Again in 1990-91, the total bank credit increased by 14.6 percent as compared with 19.8 per cent in 1989-90 which was mainly due to the deceleration in noon-food credit expansion during this period. Below, the state of the scheduled commercial banks, during 1990-91 and the weaknesses therein are discussed in detail.

During the first year 1990-91, there occurred a significant change in the composition

of incremental gross credit. The increase in bank credit to the priority sectors at 19.9 percent of incremental gross bank credit was far below 39.2 percent attained in the previous year. The outstanding priority sector credit as a percentage of net bank credit at the end of March 1991 stood at 39.2 percent and was close to the target, though below the previous year's level of 42.4 percent. The deceleration in the expansion of priority sector advances in 1990-91 was mainly owing to the deceleration in growth of advances to agriculture in 1990-91 as a result of debt write-off under agriculture and Rural Debt Relief Scheme, 1990 (RBI, 1991). Credit to small scale industries expanded by 12.8 per cent as compared with expansion of 15.3 per cent in 1989-90. Gross bank credit to medium and large scale industries expanded by Rs.6163 crores as compared with Rs. 6077 crores in the previous year.

After the nationalization of banks in 1969, the administered interest rate regime in India was characterized by cross subsidization i.e. credit to priority sector was accorded interest rate concessions and this was compensated by high interest rates on advances to non-priority sectors. The regulation of lending rates led to the regulation of deposit rates over a period of time and consequently the administered lending rates became unduly complex. The structure of interest rates on bank advances, taking into account all stipulations (sector-specific, programme specific and region specific), resulted in a number of interest rates (estimated at around 1000) (Ajit and Bangar, 1997). Besides, the system of progressively administered interest rates during the period 1960-85 resulted in many distortions of and ill-effects on our economic system. According to the report of Chakravarty Committee (1985) to review the working of the monetary system in India, the major distortions were as follows:

- i) It resulted in an unduly complex interest rates system which reduced the availability of the monetary system to promote the effective use of credit.
- ii) The low yield on treasury bills and government securities resulted in the high level of monetization of public debt and consequent monetary expansion.
- iii) The system developed inflexibility which was inimical to augmenting the pool of financial services.

As far as the profitability of the banks is concerned, change in the monetary policy instruments like SLR, CRR, etc. had a definite impact on it. Higher the SLR, CRR requirement, higher will be the idle resources or low earning assets with banks which

results in low profitability. So these requirements should be treated as prudential requirements, but not as a source of financing government deficits (Sen and Vaidya, 1997). But the picture of the economy in this regard in the pre-financial reform period was different. The ratio of fiscal deficit to GDP had increased steadily from 3.56 per cent in 1971-72 to 1975-76 to 8.2 per cent in 1986-87 to 1990-91. The government used the banking sector as a captive source of funds by means of the SLR. The SLR is the proportion of net demand and time deposits that banks have to maintain in India in cash, gold and unencumbered approved securities. The latter are mostly central and state government securities and bonds issued by term-lending institutions like IDBI, IFCI and SFCs. SLR was originally intended as an instrument of monetary policy so as to prevent banks from offsetting the effects of variable reserve requirements by liquidating their holdings of government securities over the years. But the SLR has provided an expanding captive market for government securities and has served as a means of allocating a larger share of banks' resources to government. The SLR requirement which was 28 per cent in 1970-71 was gradually increased and stood at 38.5 per cent in 1990-91. Table 2.1 shows the increasing trend of SLR requirement which ultimately raised the low earning assets with banks.

Table 2.1: Changes in SLR during 1964-65 to 1990-91

YEAR	SLR (in percent)
1964-65	25
1970-71	28
1972-73	30
1973-74	32
1974-75	33
1978-79	34
1981-82	35
1984-85	36
1985-86	37
1987-88	38
1990-91	38.5

Source: Report on Currency and Finance, RBI (various issues).

Another consequence of the ever-widening deficits of the central government in the seventies and eighties was the increasing monetization of the deficit during this period (the budget deficit to GDP ratio increased from 0.96 percent in 1971-72 to 1975-76 to 2.09 percent in 1986-87 to 1990-91). To partially neutralize the effects of the increase in monetary base brought about by deficit financing on monetary growth, the policy makers steadily increased the CRR from 7 per cent in 1973-74 to 15 per cent in 1989-90 (Table 2.2). This meant a larger proportion of bank funds were locked into non-interest bearing bank reserves.

Table 2.2: Changes in CRR during 1962-63 to 1989-90

YEAR	CRR(in percent)
1962-63	3
1973-74	7
1974-75	4
1976-77	6
1981-82	7.5
1982-83	7
1983-84	8.5
1984-85	9
1987-88	10
1988-89	11
1989-90	15

Source: Report on currency and finance, RBI (various issues)

Although in the pre-reform period the banking system witnessed progress in terms of functional and geographical coverage, the question that arose was how efficient was the banking system in India. In terms of operational efficiency and viability of the banking system, the performance of the Indian banks in general and that of public sector banks in particular, was far from impressive (Agarwal, 1991). The gross operating profit as a proportion to total assets of scheduled commercial banks in India was a meager 0.8 percent in 1970s, 0.91 per cent in 1980s and 1.5 per cent in the early 1990s. Similarly, net profit of scheduled commercial banks in India as a proportion to total assets was a meager 0.12 per cent in 1970s, 0.11 per cent in 1980s and a negative of (-) 0.007 per cent in the early 1990s. The profitability figures of Indian

banks have to be read with caution, as in the pre-reform period the banking system was suffering from the problem of lack of transparency. At that time, the balance sheets and profit and loss accounts of banks did not disclose their actual financial health. Banks were notionally applying interest on loans which had gone bad and treating it as income and paying tax on such un-realized income. Thus, the actual profitability figures would have been lower.

Along with low profitability public sector banks were saddled with a high proportion of non-performing assets (i.e. 'bad' loans on which repayments are not forth coming). Under the then prevailing RBI's Health Code System which classified loans according to quality into eight categories, non-performing assets stood at 13.59 percent of the domestic advances by the end of March, 1991 and it again increased to 4.46 per cent in March 1992 (Shajahan, 1998). India's banking system had really become unviable as its risk of default on interest payment and repayment of principal was very high at 5 per cent of total assets. The Ministry of Finance (MOF, 1993) reported the share of non-performing loans advanced by the public sector banks to be as high as 21 per cent. It was found out later that this estimate of NPAs was a serious undervaluation of the actual state of banks' assets because of loose income recognition norms under which banks were allowed to book the interest that was due but not yet paid as income. These increasing NPAs also resulted in deterioration of the capital base of the banking sector. The average return on assets in the second half of the 1980s was about 0.15 per cent which was very less. Return on equity was higher in 1990-91 (about 9.5 per cent) but that was simply a reflection of the low capitalization of Indian banks as the capital and reserves averaged about 1.5 percent of assets (Joshi and Little, 1998). In the early 1990s, three inter-related aspects such as low profitability, growing non-performing assets and relatively low capital base, resulted in an unprofitable, inefficient and financially unsound banking sector. Joshi and Little (1998) have cited certain causes such as pre-emption of bank resources, directed credit, administered interest rates, portfolio quality, lack of proper regulation and supervision, lack of competition, etc. responsible for this miserable state of the banking sector. Therefore, in order to raise the profitability and efficiency of the banking sector, the government took certain measures in order to reduce the cost of mobilization of deposit, level of non-performing assets, subsidizing lending, etc. and at the same time also to raise the return on assets.

To deal with these weaknesses of the financial sector in general and the banking sector in particular, the government prescribed financial liberalization. In other words, the government decided to put faith on the market forces to set the things right. It is contended that the financial liberalization would encourage efficient markets through 'deepening' and elimination of 'fragmentation' of market and thereby leading to improvement in both mobilization of savings and efficiency of investment. Before we go further, the banking sector reforms are given in brief in the next section.

## 2.4 Reforms in the Banking Sector

In the beginning of 1990s, the banking sector in India was facing a number of problems such as low profitability, inefficiency, low capital base, high non-performing assets and lack of transparency. In the year 1991, Indian economy also experienced structural reforms in its real sector which were to be supplemented by suitable reforms in the financial sector. For this purpose, the Government of India set up two committees, namely, Committee on the Financial System (1991) and Committee on the Banking Sector Reforms (1998), both under the chairmanship of M. Narasimham. The major steps taken in reforming the banking system based on the suggestions by these committees can be summarized under five sub-headings (Ahluwalia, 2002).

#### 1. Liberalizing Controls over Commercial Banks

- i. Reduction in the range of control over interest rates paid by banks on deposits.
- ii. Dismantling of the extensive control exercised earlier on interest rates on various types of loans, depending on size of loan and sector. The only controls on lending rates at present are:
  - a. Retention of very low interest rates on loans under the Differential Rate of Interest scheme. However, these loans account for a very small proportion of total loans.
  - b. Interest rates on export credit, where the RBI provides refinance, are at controlled rates.
  - c. Interest rates on loans up to Rs. 200,000 are limited to the prime lending rate (PLR) which is fixed by banks themselves. Since banks are allowed to lend to prime customers at below the PLR, the system in effect enables

banks to charge higher rates to small borrowers than are offered to the best borrowers.

- iii. Abolition of the credit authorization scheme under which credit limits of large borrowers required the approval of the RBI.
- iv. Reduction in cash reserve requirements (CRR) and the statutory liquidity ratio (SLR) which earlier pre-empted a large proportion of the resources of commercial banks.

#### 2. Prudential Norms and Standards

- i. Stipulation of a minimum capital to risk assets ratio, which was first fixed at 8 percent and was later raised to 9 percent.
- ii. Norms for income recognition, asset classification, and provisioning were introduced and have been progressively tightened.
- iii. Prescription of prudential exposure limits for individual borrowers and for inter-connected groups of borrowers in terms of percentages of capital of the bank.
- iv. Prescription of norms for valuing government securities by marking to market.
- v. Prescription of enhanced disclosure requirements on the maturity pattern of deposits, borrowings, investments, loans and advances, movements in nonperforming assets (NPAs), and lending to market-sensitive sectors such as real estate, commodities, and the capital market.

## 3. Strengthening Supervision

- i. Supplementing traditional on-site supervision with by a system of off-site supervision based on a regular flow of information from the banks, which will allow a closer and more continuous monitoring of asset quality, capital adequacy, large exposures, connected lending, etc.
- ii. Adoption of a CAMELS (capital adequacy, asset and management quality, earnings, and liquidity and systems of risk management) approach to assessing the financial position of a bank in on-site supervision.
- iii. Strengthening of the role of external auditors.

#### 4. Encouraging Competition

- i. Issue of new licenses to Indian private-sector banks, subject to restrictions on control of the banks by industrial houses.
- ii. More liberal licensing of foreign bank branches.

- iii. Dilution of government ownership of the public-sector banks by allowing private equity to be inducted, subject to the government retaining a majority share.
- iv. Foreign banks have been permitted to have up to 74 percent equity in Indian private-sector banks.

### 5. Legal Framework

- Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act of 2002, which enables banks to foreclose on collateral in the case of defaulting borrowers without cumbersome legal procedures.
- ii. Companies Amendment Act of 2002, which establishes a National Tribunal to which companies in default on payments due for 270 days, can be referred, triggering a process by which they must either present a restructuring plan acceptable to creditors or suffer liquidation.

In the light of this discussion, in the following section the implications of the financial sector reform measures that were started from 1991 in the India's financial sector and particularly in the banking sector will be examined. Studies evaluating banking performance in the post-reform period can be broadly classified into two—those focusing on banks' performance in regard to prudential regulations, such as the attainment of capital adequacy norms and reductions in non-performing assets and those evaluating banking performance in the tradition of development economics and emphasizing on supply-based banking development (Shetty, 2005). In the following section a discussion of the papers evaluating banking performance is presented.

#### 2.5 Review of Literature

The role of banking sector controls in the process of economic development has been a debatable issue in the literature. Demetriades and Luintel (1996) try to shed some light on the question of causality between financial development and economic growth using the Indian case. They measure banking sector controls directly by collecting information on various types of interest rate controls, reserve and liquidity requirements and directed credit programmes. Indices are constructed, following the method of principal components, which summarize different types of banking sector policies. They incorporate several direct measures of repressionist policies in a financial deepening equation and quantify their impact independently of interest rate

effects. They apply the Unrestricted Error Correction Method of estimation (UECM) which has been shown to have desirable small sample properties (Inder, I993). They finally conduct weak exogeneity tests which shed light on the question of causality between financial development and economic growth and their results suggest that banking sector controls, on the whole, had a negative influence on financial development in India.

Contrary to this, Roland (2006) focuses on the changing intensity of three policies that are commonly associated with financial repression, namely interest rate controls, statutory pre-emptions and directed credit as well as the effects these policies had. The main findings in this paper are that the degree of financial repression has steadily increased between 1960 and 1980, and then declined somewhat before rising to a new peak at the end of the 1980s. Since the start of the overall economic reforms in 1991, the level of financial repression has steadily declined. The author argues that despite the high degree of financial repression, no statistically significant negative effects on savings, capital formation and financial development could be established which is contrary to the predictions of the financial liberalization hypothesis.

Thus, the link between banking sector controls and financial development has been a debatable point. Nevertheless, banking sector reforms were undertaken in India beginning from 1991. There are a number of papers analyzing the impact of such reforms on the banking sector in India.

The RBI (1999) provides the central bank's perspective on how deregulation has impacted on bank performance. The principal findings of this review are:

- i) There has been a decline in spreads (defined as net interest income to total assets), a widely used measure of efficiency in banking, and a tendency towards their convergence across all bank-groups, except foreign banks.
- ii) Intermediation costs as a percentage of total assets have also declined, especially for PSBs and new private sector banks, due largely to a decline in their wage costs.
- iii) Capital adequacy and asset quality (measured by the net NPAs as percentage of net advances) have both improved over the period 1995-96 to 1999-2000.

- iv) Median profit per employee of PSBs witnessed a significant rise between 1996-97 and 1999-2000, due largely to a rise in the same in the case of the SBI group.
- v) Non-interest income to working funds rose modestly for the median PSB.
- vi) The ratio of wage bill to total expenses remained at a high level for PSBs.
- vii) The cost to income ratio declined both at the SBI group and the nationalized banks.

According to the RBI, in the period subsequent to 1990-96, majority of the public sector banks were able to progress considerably towards the direction of achieving competitive efficiency. They have been actively engaged in overcoming the challenges of progressively conforming to the international best practices in various areas.

TT Ram Mohan (2002) has evaluated the performance of public sector banks both in absolute terms and relative to other categories of banks. He considers five key performance indicators—interest spread, intermediation cost, non-performing assets, provisions and contingencies and net profit for the period 1991-92 to 1999-2000. According to the author, there has been an improvement in every one of these indicators. To evaluate the relative performance of PSBs, the author compares the performance of PSBs with two other categories—private sector banks (which refers to domestic banks in the private sector and include only new private sector banks that have been in operation for six years or less) and foreign banks over the period 1994-05 to 1999-2000. Four financial ratios are used—net profit/total assets, net interest income/total assets, intermediation cost/total assets and non-performing assets/total assets. When a comparison of the performance of PSBs as a whole with respect to private sector banks and foreign banks over the period 1994-95 to 1999-2000 is done, PSBs' performance comes out to be inferior. But the author then makes a comparison between PSBs and old private sector banks as the new private sector banks have been in operation for six years or less and non-performing assets tend to show up over a longer time horizon. Also for foreign banks, this is a highly disparate category in terms of operating characteristics and with wide variations in performance. Hence, after fine-tuning the comparison and comparing PSBs with old private sector banks, the gap in performance narrows down. In short, in the wake of deregulation, PSBs

have improved their performance in both absolute and relative terms. The author concluded that partly due to regulatory norms, the government owned banks have had minimal exposure to risky assets such as real estate and stock market. Another reason for survival of banks in the deregulation era was that the government wisely stayed away from the move towards full-blown capital convertibility.

The main objective of banking sector reforms was to promote a diversified, efficient and competitive financial system with the ultimate goal of improving the allocative efficiency of resources through operational flexibility, improved financial viability and institutional strengthening. Rakesh Mohan (2005) assesses that banks have experienced strong balance sheet growth in the post-reform period in an environment of operational flexibility. According to him, banking sector reform has established a competitive system driven by market forces. The process, however, has not resulted in disregard of social objectives such as maintenance of the wide reach of the banking system or channelization of credit towards disadvantaged but socially important sectors. A key achievement of the banking sector reform has been the sharp improvement in the financial health of banks, reflected in significant improvement in capital adequacy and improved asset quality. This has been achieved despite convergence of the prudential norms with the international best practices. There have also been substantial improvements in the competitiveness of the Indian banking sector reflected in the changing composition of assets and liabilities of the banking sector across bank groups. In line with increased competitiveness, there has been improvement in efficiency of the banking system reflected inter alia in the reduction in interest spread, operating expenditure and cost of intermediation in general. Contemporaneously there have been improvements in other areas as well including technological deepening and flexible human resource management.

Y.V. Reddy (2005) is also of the view that the reform measures have had major impact on the overall efficiency and stability of the banking system in India. According to him, the present capital adequacy of Indian banks is comparable to those at international level. There has been a marked improvement in the asset quality with the percentage of gross non-performing assets (NPAs) to gross advances for the banking system reduced from 14.4 per cent in 1998 to 7.2 per cent in 2004. The reform measures have also resulted in an improvement in the profitability of banks.

The Return on Assets (RoA) of the banks rose from 0.4 per cent in the year 1991-92 to 1.2 per cent in 2003-04. Considering that, globally, the RoA has been in the range 0.9 to 1.5 per cent for 2004, Indian banks were well placed.

Ahluwalia (2004), to evaluate the banking sector reforms, focuses on the ratio of nonperforming assets (NPAs) as a percentage of total loans as an indicator both of efficiency in financial intermediation and of financial health. According to him, official data on NPAs in India's commercial banks show a substantial improvement in the ratio of NPAs to total loans or assets in the pre-reform and post-reform periods. Public-sector banks, which make up the bulk of the system, were the least efficient of all four categories (public sector, old private sector, new private sector, foreign sector) at the start of the reforms, but they have improved over time to the same level as the old private-sector banks. However, they remain less efficient than the new Indian private-sector banks and much less efficient than foreign banks. The author is of the view that the substantial decline in the ratio of gross NPAs to total advances in the public-sector banks suggests that the reforms have had a significant positive effect. However, the level is still relatively high at 11.1 percent. The author argues that this indicator may be misleading since Indian banks have traditionally carried NPAs on the books for a long time instead of writing them off against provisions made, and the financial health of the banks is therefore better judged by looking at NPAs net of provisioning. On this definition, NPAs were only 5.8 percent of commercial advances at the end of March 2002.

Theories of financial liberalization postulated that financial liberalization, by raising interest rates on deposits, will lead to an increase in the rate of savings. This, in turn, will lead to an increase in the supply of credit and raise the quantity and quality of investment. Bhattacharya and Sivasubramanian (2001) in a paper examine some of the consequences of the banking sector reforms in India. According to them, the data show that, in the post-reform period, investment in government securities by banks has remained persistently high and there has been a significant reduction in the flow of credit (as a proportion of deposits) to the real sectors of the economy. There have also been significant changes in the flow of credit to various groups and sectors within the economy, some of which might be thought not to be in conformity with the stated social goals of the government. The authors note that there was a decline in the rate of growth of bank credit and an increase in the rate of growth of both bank deposits and

investments in the post-reform period. The reason would appear to lie in the persistently large budget deficits of the central and state governments and the switchover to market mechanism for issuing government securities. The interest rates on government securities have been very attractive and not far below the prime lending rate. This would appear to explain the preference of the banks for investment in government securities. Once the banks are assured of a certain amount of secured, risk-free returns, they appear to be most reluctant to take risks for additional gains. The high level of investment in government securities by banks has imparted a certain degree of downward stickiness to the movement of interest rates in the economy. There has also, at the same time, been an increasing concentration of bank credit in the upper credit ranges and significant changes in the sectoral distribution of credit, with the share of industry in the total bank credit increasing and those of agriculture and tertiary sectors declining.

Joshi (1999) is of the view that due to the banking sector reforms, the social content of Indian commercial banking has suffered. Between end-March 1992 and end-March 1996 the number of borrowal accounts declined sharply from 65.9 million to 56.7 million, i.e., by more than 9 million. The author notes that during the four preceding years, i.e., between March 1989 and March 1992 the number of borrowal accounts had increased sharply from 52.1 million to 65.9 million, i.e., by 13.8 million. The increasing trend of credit disbursal to a large number of small borrowers was contained with the introduction of banking sector reforms and the spread of banking credit facilities was not only halted but the number of small borrowers getting financial facilities sharply declined during the five-year period ending March 1996. According to the author, the decline in the number of borrowal accounts could be due to two factors:

- Neglect of small borrowers—operational costs of managing a large number of small borrowal accounts is large and rate of interest on such accounts is low. To maintain profits, bankers avoid exposure to the small sector.
- ii) Write-offs in small accounts where the Deposit Insurance and Credit Guarantee Corporation of India (DICGC) claims were received—To reduce the NPA ratio, some recovery was effected through the receipt of funds from the DICGC. In a number of accounts the DICGC reimbursed the banks at the cost of its health, to the extent of 50-60 percent of the

outstanding balances. Under the reforms package, full provisioning was needed for the remaining balance in the borrowal accounts. Instead of making full provision which necessarily has to be after tax, the banks preferred to write off the remaining balance in such accounts and therefore the number of borrowal accounts vanished from the banks' ledgers.

Shetty (2004) reviews the trends in credit distribution by scheduled commercial banks in the pre and post liberalization time periods. The share of agriculture in total bank credit had steadily increased under the impulse of bank nationalization and reached 18 percent towards the end of the 1980s, but thereafter the achievement almost completely reversed and the agriculture's credit share dipped to less than 10 per cent in the late 1990s - a ratio that had prevailed in the early 1970s. Even the number of farm loan accounts with scheduled commercials banks declined in absolute terms from 27.74 million in March 1992 to 20.84 million in March 2003. Similarly, the share of small-scale industry accounts and their loan amounts in total bank loans fell equally drastically. The number of accounts dropped from 2.18 million in March 1992 to 1.43 million in March 2003, or the amount of loan as percentage of the total slumped from 12 per cent to 5 per cent, that is, less than one-half of what it was three decades ago, that is, in the early 1970s. The neglect of agriculture, small-scale industries and other informal sectors was reflected in the sharp bias against small-size borrowers. A distinct feature of the credit delivery record in the 1990s was the persistent and drastic declines in the number and amounts of small loan accounts. The number of small borrowal accounts with credit limit of Rs 25,000 or less had reached 62.55 million in March 1992, but this was followed by a steep downward trend to reach 36.87 million - a loss of nearly 26 million accounts or 60 per cent by March 2003. Correspondingly, their credit outstanding as a proportion of total bank credit sunk from over 25 percent in the late 1980s to 5.4 percent in March 2003.

The author cites several analytical issues while reviewing this scenario of credit delivery. For example, the share of agriculture in GDP has fallen implying lower credit demand. Also, substantial diversification of the Indian economy in favour of various services sector has helped banks to expand their credit base in their favour and ignore real sectors like agriculture, manufacturing and small-scale industries. Then the author says that even if agriculture's share in GDP has come down, needs of agriculture for specialized inputs, diversification purposes have gone up.

Sahu and Rajasekhar (2005) analyze the data on the total outstanding credit provided by the scheduled commercial banks (SCBs) to the agricultural sector during the period 1981 to 2000. The credit disbursed to the agricultural sector increased at an annual growth rate of 11.86 per cent during the period 1981-2000. There were, however, distinct inter-period variations. While the annual growth rate for the pre-reform period was 14.77 per cent, it was only 10.90 per cent during the reform period. Thus, the rate at which credit was disbursed to agriculture had declined at the all-India level. They also argue that the banks have adopted both price and non-price credit rationing mechanisms to minimise lending risks by disbursing less loan amounts to borrowers in the agricultural sector as in the case of agricultural loans with credit limit of less than Rs 25,000, the proportion of accounts to total loan accounts and amounts to the total net bank credit declined during the reform period. Although the proportion of accounts for the credit limit of more than Rs 25,000 increased in the case of agricultural sector, the net credit flow declined during the reform period.

Chavan (2005) argues that social banking improved the access to banking for the rural masses in India and this is adequately supported by secondary data from official sources. Secondary data from official sources (Rural Labour Enquiry 1999-2000 conducted by NSSO and Situation Assessment Survey of Farmers conducted by NSSO in 2003) on commercial banking have indicated a reduced intensity of banking in rural India during the 1990s. The fall in the intensity of banking has been particularly sharp in the north-eastern, central and eastern regions, which have been known historically to be underdeveloped regions in terms of banking in India. Secondary data on banking also indicate a continued failure on the part of banks to allocate credit to agriculture and allied activities as per the priority sector lending norms during the 1990s. Every indicator of development of banking reflects a worsening of the regional and sectoral distribution of bank credit in the 1990s compared to the earlier period of social banking. Data available from village studies in the 1990s from various states too have shown a very low share of debt from formal sources in the total debt of surveyed households. Secondary data now available from surveys on indebtedness also bring out the reduced importance of formal sources, and the consequent rise in the importance of informal sources, in the debt profiles of rural households. The author concludes that the move towards financial liberalization in

India since the early 1990s, and the performance of rural banking during this period show that the banking system has become more restrictive through the exclusion of farmers and labourers on a large scale.

The administered allocation of credit to priority sectors at concessional interest rates was an important policy dimension of directed credit programmes. The rationale for this policy was that without government intervention through directed credit programmes, banks would not finance those activities with high social return or those categories of creditworthy people who are marginalized in the credit market [Stiglitz, 1994]. The directed credit policies in India have been used to promote agriculture and small-scale industry. Agriculture has been targeted because it is a risky activity and households are credit-rationed by the formal banking sector [Swaminathan 1991; Kochar 1997]. It has always been maintained that the availability of concessional credit would help the farmer to adopt new technology, encourage investment in machinery and irrigation and augment the use of quality inputs to increase agricultural productivity. Thus, commercial and cooperative banks were directed to expand their rural branch networks and intensify their lending to agriculture.

According to Shajahan (1998), the setting of lending targets for priority sector as a whole, and sub-targets for major sectors, had a very positive impact on the channeling of credit to hitherto neglected sectors of the economy while giving ample access for small borrowers to institutional credit. Thus, whereas in 1969 bank credit extended to priority sectors was 18.2 percent of the total net bank credit, this increased to 42.4 percent by 1989. The number of priority sector accounts also registered a quantum jump, from 7.8 lakhs in 1969 to 331 lakhs in the year 1989. The main beneficiary in the priority sector was agriculture. In 1969 credit extended to agriculture formed 7.13 per cent of the total net bank credit, and by 1989, it reached 17.4 per cent. During the two decades since 1969, the number of accounts in the agriculture sector increased from 5.68 lakh to 197.4 lakh. The reversal in the position of the priority sector in bank credit started with the banking sector reforms undertaken in 1991.

Thus, in this chapter we went through a discussion of the banking sector in India after independence and the situations which finally led to reforms in this sector. We also

tried to look at the existing literature dealing with the aspect of performance of commercial banks in the pre- and post-reform periods. Commercial banks seem to have improved their performance as regards prudential regulations such as the attainment of capital adequacy norms and reductions in non-performing assets. But as far as attaining the social objectives are concerned, they seem to have taken a back seat. In the next chapter we try to look at the aspect of regional disparities in the banking sector in India and try to see how have the commercial banks performed on this front in the pre- and post-reform periods.

## **CHAPTER 3**

## **Banking and Regional Disparities in India**

In the previous chapter we discussed about the various phases of development of the banking sector in India. Reforms were undertaken in the banking sector due to the weaknesses which had cropped up. Performance of commercial banks in the prereform and post-reform periods was discussed. But the significant aspect of regional disparities in the development of banking sector was missing in this discussion. In this chapter this issue is taken up.

The traditional role of banking, in bringing the people with surplus funds and people who need the same, together, has become complex with changes in the global financial environment. A few multinational corporations are increasingly dominating the industrial world. Moreover, one can see huge investments in information and technology resulting from the need to send immediate and accurate information. Liberalization measures taken by various countries have led to deregulation and internationalization causing entry of new players in the domestic markets, which in turn has increased competition. Further, development of capital markets has caused borrowers and lenders to bypass the banks and to try for cheaper capital, which benefits the borrowers and higher returns, which attract the lenders. So, the banks need to be global players in this changed environment and restructure its management suitably with change in the nature of markets.

Even in this changed scenario the banks in the developing countries must go on honoring their social responsibilities. The problems faced by banks in this regard when we contrast profitability with social responsibility are, complexities of servicing diverse sectors, substantial administrative and supervisory costs connected with poverty alleviation programmes, nursing sick units, personnel recruitment and training to carry out these special functions, operating on thin margins which are not adequate for maintaining viability. With suitable help from the RBI who is the lender of last resort to the scheduled commercial banks and permission to mop up funds from the capital markets would make the banks well equipped to play important roles in

championing both growth and equity.

In case of India where social obligation of banks cannot be undermined and also the concern about their profitability is important, administrative intervention is inevitable. Such intervention while taking into account the social goal must also recognize the importance of market orientation given the increasing global integration of financial markets. Thus apart from formulating appropriate policy for the banks to cope of with increasing pressures of competition with an appropriate set of regulations so that East Asian type of crisis can be avoided and giving due importance to their profitability the RBI should have a separate set of directives and required backup for the banks to fulfill their social responsibilities. The key elements in RBI's stipulation for social orientation of banking are:

- i) Stipulating targets for lending to those sectors which were hitherto neglected.
- ii) Branch licensing policy which led to rapid increases in branch network in rural and semi-urban sectors.
- iii) Indirect inducement through availability of refinance.
- iv) A scheme for guaranteeing a part of the losses sustained by the banks because of lending in unknown areas.
- Introduction of differential rates of interest rates linked to income levels and types of lending and
- vi) Preparation of credit plans for each district by the lead bank whose responsibility is to coordinate the activities of different credit institutions and local development agencies for drawing up plans and implementing them.

## 3.1 Regional disparity in availability of credit

After the nationalization of banks in 1969, the Bank Nationalization Act 1970 was enacted. The preamble to the act clearly lays down that the banking system has to function in alignment with national priorities and objectives. The banks have been conceived as active instruments of economic growth for securing a reduction in inequalities of income and wealth and in regional disparities in development. The objectives have been tried to be realized through increase in number of bank branches, mobilizing deposits and allocation of credit in such a manner as to realize an equitable

and fair distribution of credit according to the priorities of socio economic development.

Though the problem of regional disparity was mentioned in the Second Plan Document way back in 1956 both industrial and agricultural development have been fairly uneven. Thus without any clear-cut directives (before 1969) credit flowed to the better of states and also mainly to the industrial sectors within the state. Thus there are two main objectives of narrowing down regional imbalances:

- Reducing inter-state and intra-state disparities in banking facilities which will decrease the disparity in levels of development across regions.
- ii) Reducing the sectoral imbalances.

To correct the inter-state and intra-state imbalances, apart from the policies already spoken of, credit-deposit ratio was stipulated to be at least 60 percent in the rural and semi-urban branches. The data available provide further insights in this matter. Population per branch has decreased considerably from 65000 in 1969 to 23000 in 1994 in aggregate for India as a whole. But across the regions there are considerable regional disparities in this respect. Whereas there were states like Bihar with as high as 207000 people per branch, there were states like Kerala and Karnataka, figures for whom stood at 35000 and 38000 respectively in 1969. In 1994 the scenario changed in that the population per branch decreased considerably for all states though the variation amongst states remained. A state like Assam had the figure as high as 29000 and like Punjab with a figure as low as 17000, though the range of variation had decreased considerably when compared to 1969 figures. In case of per capita credit deployment the disparity is most glaring. In 1969 the figure for a state like Maharashtra stood at Rs.232 whereas for a state like Bihar it was Rs.9! Such state of affairs continued even in 1994 when the figures were Rs.5146 and Rs.487 respectively for the aforesaid states. One of the objectives of bank nationalization was to remove disparity in credit availability by achieving credit-deposit ratio of at least 60 percent in rural and semi urban areas. Even in 1994 the ratios were 50 percent for rural areas and only 39 percent for the semi-urban areas giving rise to the suspicion that resources are being transferred from less affluent to more affluent areas. Therefore considerable disparity remained in case of credit availability across states even after 25 years of bank nationalization.

The other policies which were undertaken to bring down regional disparities and sectoral imbalances in credit delivery are:

- 'Priority Sector Lending' for correcting sectoral imbalances in deployment of credit and
- ii) Branch expansion through Regional Rural Banks (RRBs) to increase the deployment of credit to rural areas and the weaker sections in rural society.

## 3.1 (i) Priority Sector Lending

The sectors which were initially accorded priority status in credit allocation by banks were agriculture, small industry and self-employment. These sectors were of crucial importance in terms of their contribution to national income and employment but had been severely neglected in terms of access to institutional credit. A more comprehensive definition of priority sector was adopted in 1972 formulated by the Informal Study Group on Statistics. The sectors that came under this category were agriculture—direct and indirect finance, small scale industries—direct and indirect finance, small business enterprises, professionals and self-employed, retail trade, transport—small road and water transport operators, export, housing, education, weaker sections, pure consumption loans under consumption credit scheme. Initially there was no specific target fixed in respect of priority sector lending. In November 1974 the banks were advised to raise the share of these sectors in their aggregate advances to the level of 33.33 per cent by March 1979.

Subsequently, on the basis of the recommendations of the Working Group on the Modalities of Implementation of Priority Sector Lending and the Twenty Point Economic Programme by Banks, all commercial banks were advised to achieve the target of priority sector lending at 40 per cent of aggregate bank advances by 1985. Sub-targets were also specified for lending to agriculture (18 percent) and the weaker sections (10 percent) within the priority sector. Since then, there have been several changes in the scope of priority sector lending and the targets and sub-targets applicable to various bank groups.

In 1969, banks provided only 14.6 per cent of their total credit to the priority sectors, with the percentage of credit disbursed to agriculture being 5.4 per cent only. In 1991, 40.9 per cent of net bank credit was advanced to priority sectors, and total credit to

agriculture was 16.4 per cent by 1991. These sectors were accorded such a status because on one hand credit to these sectors would serve as an important means in reducing income inequality and on the other hand compel commercial banks to lend according to the social goals. Thus priority sector lending worked in the direction of attaining the correction which was sought to be achieved in the imbalance existing in the sectoral distribution of bank credit.

After 1991 the targets of net bank credit to the priority sectors remained the same, but the coverage was widened. Priority sector lending (for agriculture) now includes loans for purchase of agricultural equipment, farm machinery, and short-term advances to traditional plantations irrespective of the size of the holdings. New areas were also brought under the umbrella of priority sector lending. Advances to food and agrobased processing industry are now treated as priority sector lending. Loans to software industry were also included in this category. These came under the category of 'other priority sectors', which also included funds provided to Regional Rural Banks, advances to self help groups, investments in venture capital. The ratio of 'other priority sector' lending to net bank credit rose from 7.4 per cent in 1995 to 17.4 per cent in 2005.

In 1995-96, the Rural Infrastructural Development Fund (RIDF) was set up within NABARD. It started its operation with an initial corpus of Rs. 2000 crore. Public sector banks were asked to contribute to the fund an amount equivalent to their short fall in priority sector lending. This was subject to a maximum of 1.5 per cent of their net credit. Public sector banks falling short of priority targets were asked to provide Rs. 1000 crore on a consortium basis to the Khadi and Village Industries Commission (KVIC) over and above what banks were lending to handloom co-operatives and the total amount contributed by each bank was to be treated as priority sector lending. The outcome of these new policy guidelines was that banks not meeting the priority sector sub-target of 18 per cent of net credit to agriculture would make good the deficiency by contributing to RIDF and the consortium fund of KVIC. Banks can also make investments in special bonds issued by certain specialised institutions and treat such investments as priority sector advances. In 1996, the RBI asked the banks to invest in State Financial Corporations (SFCs), State Industrial Development

Corporations (SIDCs), NABARD and the National Housing Bank (NHB). Thus banks can now move away from the responsibility of directly lending to the priority sector of the economy due to these changes in policy guidelines.

Priority sector lending as a proportion of net bank credit reached the target of 40 percent in 1991. But after that it continuously fell short of the target till 1996. Subsequently, it has been in excess of the target which can be attributed to the dilutions and widening of the category of priority sector. Advances to agriculture, on the other hand, declined from 16.4 percent in 1991 to 9.9 percent in 2000. It has gradually picked up again and reached 11.7 percent in 2010, which is still below the target of 18 percent. In sum, the policy of directed credit to the priority sector that aimed at reducing the sectoral imbalance in bank credit has suffered in the wake of the reforms.

## 3.1 (ii) Regional Rural Banks

To address the problem of the huge gap in delivery of institutional credit between rural and urban areas, the institutions of Regional Rural Banks (RRBs) were created. The cooperative banks were dominated by the rural rich, while the commercial banks had a clear urban bias. RRBs came to be established (based on recommendations of Narasimham Working Group, 1975) as an 'institution combining the local feel and familiarity with rural problems, which the co-operatives possessed and the degree of business organization, ability to mobilize deposits, access to money markets and modern outlook which commercial banks had'. RRBs were established to provide credit and other facilities for development of agriculture, trade, commerce, industry and other productive activities in the rural areas. These institutions were to mainly focus on small and marginal farmers, agricultural labourers, artisans and small entrepreneurs. Such rural banks could come into existence in three ways: (i) by conversion of primary co-operative societies into institutions offering full banking facilities; (ii) by establishing subsidiaries of commercial banks; (iii) by establishing special type of rural banks, sponsored by commercial banks and supported by local participation. RRBs were to be set up in under banked and unbanked regions of the country.

Between 1976 and 1990, there was a rapid increase in banks, bank branches and disbursements nationwide. By 1991, there were 196 RRBs with over 14,000 predominantly rural branches in 476 districts with an average coverage of three villages per branch. The bulk of the loans from RRBs went to the priority sectors, which accounted for over 70 per cent of the total in 1990. Agriculture and allied activities took up more than 50 percent of the total advance in the same year. In addition, the RRBs were instrumental in extending credit for poverty alleviation schemes (e.g., IRDP) and disadvantaged area (drought-prone regions and deserts) development programmes. By the end of the 1980s several of these banks were showing losses on their books. In 1993, 172 of the 196 RRBs were recorded unprofitable with an aggregate loan recovery performance of 40.8 percent. The RRBs were permitted to engage in all types of banking business on the recommendation of the Narasimham Committee (1991).

The reform phase focused on commercial profitability of the RRBs. The reforms of the RRBs were no different from the reforms of the commercial banks. The same set of policies was implemented, and the same set of standards set to measure their performance. The RRBs relocated to more promising areas; investments in government securities and PSU bonds and debentures increased while banks were hesitant to increase their loan portfolios; credit was extended mainly under non-priority sector heads so that the proportion of priority sector loans declined (despite the dilution of the priority sector definition as we saw above); interest rates on lending were deregulated which resulted in high interest rates charged by the RRBs; credit to deposit ratio became less than half of the pre-reform levels indicating increased net transfer of resources from the rural poor to the urban rich; regional imbalances aggravated; and the small borrowers were overwhelmingly sidelined (Bose, 2005). Thus in the post-reform phase, the objective of bringing down the gap between urban and rural banking was undermined and the main task of RRBs to provide credit to weaker sections was sidelined.

Thus, there were many policy guidelines and institutions which aimed at reducing the regional and sectoral imbalances prevailing in disbursement of credit and other services by the commercial banks. But these have taken a back seat in the post-reform period. In the next section some papers discussing the aspect of regional disparities

and commercial banks in India are discussed.

## 3.2 Banking and Regional Disparities: Review of Literature

Pai (1970) tried to analyze trends in credit-deposit ratios, the comparative rise in deposits and credit over the two-year period ending 1968 and the percentage share of deposits and credit of districts within a state. State-wise analysis of deposits and credit indicated that there was a glaring unevenness of banking facilities. Of the total bank deposits and credit outstanding at the end of 1968, Maharashtra accounted for 24.6 per cent and 31.1 per cent, West Bengal accounted for 13.5 per cent and 21.1 per cent and Tamil Nadu 6.3 per cent and 10.0 per cent, respectively. Thus the three industrially advanced States together accounted for 44.4 per cent of the deposits and 62.2 per cent of the credit. What this meant was that deposits collected in backward States were being diverted to the industrially advanced States. According to the author, it may not be possible to reduce regional imbalances among the different States and among the different regions within the state unless steps are taken to utilize 70 per cent of deposits collected in the region and/or in the district in the same territory. The credit-deposit ratio of all commercial banks at the all-India level increased from 68 percent in 1966 to 70 percent in 1968. The credit-deposit ratio in respect of four States, namely, Maharashtra, West Bengal, Tamil Nadu and Andhra Pradesh was above 70 percent. Credit-deposit ratio in respect of the remaining states was below 70. Growth rate of deposits in respect of industrially advanced States such as Maharashtra, West Bengal, and Tamil Nadu, was less than the overall growth rate of 23.7 per cent. Growth rate of credit in six States and the Union Territories, taken together, was higher than the all-India growth rate of credit at 28.6 per cent. Also, credit increased faster than deposits in these States and Union Territories. In industrially backward States like Bihar, Orissa, and UP deposits increased faster as compared to credit. Even within a State, there was a high degree of concentration of credit in cities having more than one lakh of population.

Kurian (2000) assesses disparities in terms of demographic indicators, female literacy, state domestic product and poverty, development and non-development expenditure by state government, shares in plan outlay, investments, banking activities and infrastructure development. The scope of this study is restricted to a comparative analysis of the emerging trends in 15 major states in respect of a few key parameters

which have an intrinsic bearing on social and economic development. The 15 states taken up for the detailed study have been grouped into two - a forward group and a backward group. The forward group consists of Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab and Tamil Nadu. The backward group comprises of Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. The author argues that there are considerable disparities in socioeconomic development across the Indian states. According to the author, the planning process partially succeeded in reducing regional disparities during the first three decades of the Indian republic. The author is of the view that the economic reforms since 1991 with stabilization and deregulation policies as their prime instruments and a very significant role for the private sector seem to have further aggravated the interstate disparities. The author assesses disparities in terms of banking activities across the states. The bank branches were fairly distributed across the States without any major bias towards the group of forward States as seen in 2000. The author attributes this to the banking sector policies pursued after nationalization of the major commercial banks in the country in 1969. The inter-State and regional disparities come to the fore when shares of different states in bank deposits are considered. The group of forward States accounted for over 54 per cent of the bank deposits while the group of backward States accounted for only about 31 per cent of the bank deposits. Bank credit distribution was even more skewed than bank deposit distribution. This implies that a part of the deposits mobilized in the backward States is getting transferred to the advanced States. While the first group of States accounted for about 65 per cent of the bank credit, the second group of States could receive only about 21 per cent of the bank credit. Maharashtra alone accounted for more bank credit than all the seven States in the second group put together. The author also looks at credit-Credit-deposit ratio captures the discrepancy in credit absorption in relation to deposit mobilization. Credit-deposit ratios were much more favorable to the group of forward States as compared to the backward States.

A paper by Narayana (2000) seeks to analyze the trends in credit deployment by banks in India after the implementation of the banking sector reforms. The argument of the paper is that serious regional and sectoral inequalities are developing in the deployment of commercial credit in this country after the reforms were undertaken. According to the author, till the end of the 1960s banking was largely an urban/semi

urban phenomenon. The nationalisation of commercial banking changed this scenario and banking was brought to the rural stretches as well. The regional distribution also shifted away from Maharashtra, Gujarat, and South India, which accounted for close to 60 percent of the total branch offices in the late 1960s, to the rest of the country. The share of South India, Maharashtra and Gujarat came down to about 40 percent by the late 1980s and the share of Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan increased from less than 25 percent to close to 35 percent during this period. The credit deposit ratio also began showing less variation across the states of India during this period. After the reforms of 1991, banks focused on some selected regions of the country, especially south and north-west parts. The share of Punjab, Haryana, Delhi, South India and Maharashtra in total number of branch offices opened during 1990-91 to 1996-97 was two-third. The author notes that in the 1980s Maharashtra, Delhi, Gujarat, Kerala, and West Bengal were losing their shares in total commercial credit. The rest of the states were improving their position steadily. Some notable gainers were Assam, Madhya Pradesh, Orissa and Uttar Pradesh. The period beyond 1991 witnessed a reversal of this process. Those who improved their shares in 1980s were all losing steadily in the 1990s. The losers were Assam, Bihar, Madhya Pradesh, Orissa, Uttar Pradesh, and West Bengal. The numbers clearly show that all the states which had improved their shares in the 1980s were pushed back to the situation prevailing before 1980. The gainers were just three, Delhi, Maharashtra, and Tamil Nadu. The author concludes by saying that in the post-reform period branch expansion into rural and non-banked areas has stopped and banks are increasingly withdrawing from lending to agriculture, small enterprise and such activities. The new private banks and the already existing ones are competing to expand in south and north-west India. Thus, banks are not investing in the long-term development of banking habits.

Shetty (2005) brings to light the growing rural-urban divide in banking activities in the post-reform period. Expansion of banking infrastructure in rural areas was halted in the post-reform period. This, according to the author, will hurt the process of providing institutional credit to the rural sector in particular and to underdeveloped regions in general. The author notes that the proportion of bank deposits mobilized by scheduled commercial banks in rural areas declined from about 15.5 percent in March 1990 to 14.5 percent in September 2001. But the decline was much sharper in the

share of rural branches in total bank credit. This fell from over 15 percent to 10.4 percent. The credit-deposit ratios in rural branches declined from over 64 percent to around 40 percent during the same period. The credit-deposit ratios in the eastern, central and north-eastern region have steeply declined post-1991 after some improvement taking place during the 1980s. The author argues that the number of regions experiencing reductions in credit delivery in relation to the deposits they generate has been growing. In March 1990, there were only about 20-28 districts (out of 401-478) that had credit-deposit ratios of less than 20 percent. This number increased to 108 (out of 567) districts. On the other hand, the number of districts having credit-deposit ratios of 60 percent and above came down from 209 in March 1985 to 101 in March 2000. The author warns that that this duality and discrimination in bank credit delivery will reach crisis proportions if it isn't reversed decisively.

Chavan (2005) analyses the growth and regional distribution of rural banking in India between 1975 and 2002. The author draws some significant conclusions from her analysis. First, liberalization of the banking sector in the 1990s has weakened the link between commercial banks and rural areas. The growth of bank credit to rural areas in 1990s was slowest as compared to earlier decades and it was not commensurate with the deposits mobilized from these areas. Second, there was a decline in rural banking in all the states considered but this decline was even more pronounced for states from the north-eastern, eastern and central regions. These three regions had a low intensity of banking historically but under the policy of social and development banking the rural banking structure had improved in these regions which have been reversed postreforms. Third, there is a widening disparity in the distribution of rural credit across regions and states. The shares of the states in the eastern, central and north-eastern regions in total credit advanced by rural branches and in total priority sector advances were on a steady rise till 1990. But during the 1990s there was a growing tendency among commercial banks to direct a larger proportion of rural credit to specific states from the western and northern regions. Thus, after 1990 the policy of commercial banks has been to limit their operations in rural areas in general and rural areas of underdeveloped states in particular. Banking sector liberalization has thus resulted in a reversal of the process of balanced regional development of the rural banking infrastructure.

It is clear from the above discussion that there are considerable regional disparities in banking development across the country. The question which arises is what are the factors to which these differences can be attributed? During the colonial rule the banking infrastructure was highly concentrated in certain regions (Calcutta, Bombay, and Madras) to serve the interests of the colonial power and hence independent India inherited a much skewed banking infrastructure. Also, the entire banking sector was in the private hands and profit maximization was their primary objective. Hence, they preferred expanding the banking services in areas which already had developed banking habits. The rural areas of the country were completely neglected. The level of disbursement of credit to rural areas remained very low mainly due the concentration of area of operation of commercial banks in urban areas. Also the amounts required by agriculturists were small, and period of repayment and security offered did not suit to requirements of these banks. It is well known that privately held commercial banks largely avoid lending in rural areas. Rural population has mostly depended on local moneylenders who provide credit at usurious rates. Private sector banks guided by profit maximisation avoid lending to the rural population as they believe that credit is borrowed mostly to finance consumption needs as they lack resources needed to invest their borrowings to the most productive use. Even if loans could be set aside for investment purposes, commercial banks would find it difficult to lend: Lack of credit histories and documented records on small entrepreneurs or farmers make it difficult for the bank to assess the creditworthiness of the borrower. Also, there is the inability of the poor to post collateral on the loans. This reduces the bank's recourse to a saleable asset once the borrower defaults on the loan. Therefore, commercial banks have avoided lending in the rural areas.

As seen above, there is a clear urban bias in the activities of the commercial banks. To address these problems 14 major banks were nationalised in 1969 to bring them under social control. Also, priority sectors were defined and Regional Rural Banks were established as discussed above. But as seen in the literature, these regional and sectoral imbalances are still present and more so after the banking sector reforms were undertaken. After the neo-liberal reforms, the social control over the banks weakened and the commercial banks expanded their activities based on the objective of profit maximisation. Hence, once again the divide between urban and rural areas widened.

In this context, the paper by Banerjee and Ghosh in Chatterjee et al (1997) attempts an empirical analysis of credit deployment to backward regions. The paper examines the inter-state distribution of institutional credit of the All India Financial Institutions (AIFIs). The analysis is carried on the basis of both total assistance and also on assistance to the backward areas. In the first part they consider the role of AIFIs in industrial development and then try to find out the reason for the observed disparities in this respect. According to them, the skewness in financial assistance of AIFIs in the past was a result rather than cause of regional disparities. The deployment of credit followed the imbalances already caused by uneven regional development of industries. They also found considerable differences in deployment of credit to backward areas across states and regions.

Banks have always played a very significant role in economic development of any region. Chawla and Kumar (1986) in their article titled 'Banks for Balanced Regional Development' were of the view that the objective of balanced regional development can be achieved only if the trend in flow of funds is reverted to rural and backward areas from urban and advanced regions. According to them just by increasing the CDR of rural and semi-urban branches wouldn't bring any significant change in the pattern of development. This is because CDR as an index has certain limitations:

- Higher CDR doesn't necessarily mean higher credit. CDR is high even when both deposits and credit are very low and even if credit is very high it may be low due to much higher deposits.
- ii) The magnitude of deposits needs to be raised to a certain level in order to make CDR meaningful or else credit disbursement will be very low in certain areas and wouldn't help promoting regional balances.
- iii) CDR wouldn't consider the cases where credit is sanctioned somewhere and utilized elsewhere.
- iv) CDR is based solely on credit and it doesn't take into account investment.

They concluded by prescribing a flow of funds much higher than the stipulated CDR to the backward regions in order to increase local deployment of funds. Further if CDR is to be considered as an index then emphasis should be to raise the level of deposit per branch to a certain minimum level. Thus, banks can play an instrumental role in bringing about a balanced regional development. The question which then

arises is what could be the consequences of lack of access to banking facilities?

Binswanger, Khandker and Rosenzweig (1989) use district level time series data from India (between 1960-61 and 1981-82) to look into the effect of the expansion of financial intermediation on agricultural investment and output. The authors argue that the expansion of the commercial banks into rural areas had a large effect on fertilizer consumption and on fixed private investment. It also affected output. The authors estimate that over the decade 1971-1981 the rapid bank expansion increased fertilizer demand by about 23 percent, investment levels in tractors by 13 percent, investment in pumps by 41 percent, milk animals by 46 percent, and in draft animals by about 38 percent. They also increased the aggregate crop output by nearly 3 percent. Thus the authors find that rural branch expansion had a large impact on investment and fertiliser use but the impact on agricultural output appeared to be fairly small but positive.

In the same context, Burgess and Pande (2003) take up the issue of whether lack of access to finance is the key reason why poor people remain poor. The authors use data on the Indian rural branch expansion programme (1977 to 1990). Between 1977 and 1990, the Reserve Bank of India prescribed that a commercial bank can open a branch in a location with one or more bank branches only if it opens four in locations with no bank branches. Between 1977 and 1990 this rule caused banks to open relatively more rural branches in Indian states with lower initial financial development. The authors try to identify the impact of opening a rural bank on poverty and output. They use a panel data-set for the sixteen major Indian states over the period 1961-2000. Over their sample period aggregate poverty in India peaked in 1967 when 61 percent of the population was beneath the poverty line. This number fell to 31 percent by 2000. They run a fixed effects regression model and estimate that rural branch expansion can explain roughly half of the fall in rural poverty between 1967 and 2000. Hence, the authors argue that lack of access to finance may be an important reason why poor people stay poor. Their estimates suggest that the Indian rural branch expansion program significantly lowered rural poverty, and increased non-agricultural output. The authors find that rural branch expansion was associated with increases in secondary and tertiary sector output (unregistered or informal manufacturing and service sector were the key beneficiaries of rural branch expansion). They also

contend that the programme was also successful in displacing the traditional moneylenders. Throughout this period moneylender interest rates exceeded those charged by commercial banks. Rural banks thus provided the rural populations access to cheaper credit than was previously available. The authors are of the view that branch licensing rule succeeded in coercing commercial banks to open branches in backward rural locations. Without state coercion it is unlikely that the vast majority of India's rural poor would have been reached by banking services. These findings suggest that regulation of the Indian banking sector played a key role in directing bank credit towards the poor, and that easier access to bank credit and saving opportunities was associated with a significant decline in rural poverty.

As seen from the above discussion, access to banking facilities could be instrumental in bringing down the level of poverty and also increasing the level of agricultural and non-agricultural output. An even development of the banking infrastructure could assist in attaining the objective of a balanced regional development. But as we saw considerable differences in banking activities across the regions in India have been prevalent over time and the situation has worsened in the post-reform period. In the next chapter we try to look at these differences in the two states of Bihar and Tamil Nadu in the pre-liberalization and post-liberalization phases and try to ascertain if there are any perceptible differences in the development of banking in the two states during these phases.

## **CHAPTER 4**

## Inter-state and intra-state analysis of banking development

## 4.1 Significance of the banking sector in a developing economy

The primary role of banks is to provide credit to investors by mobilising resources from savers in an efficient manner and allocating them among competing uses in the economy, thereby contributing to growth, both through increased investment and through enhanced efficiency in resource use. Credit is a very important requirement for economic development. It helps in asset formation. New asset formation helps in increased production and increased economic activity. Credit for productive purposes, where asset formation is not taking place, also helps in increasing production. Increased economic activity, production and consequently value addition contributes to development of the village, district, state and in turn the whole country. Thus credit is indispensible for increase in wealth of nations and its constituents. Firms in developing countries generally tend to rely more on debt finance, including bank credit. The emphasis on credit rather than equity arises due to various reasons. The cost of equity in developing economies is often much higher than the cost of debt due to the existence of higher perceived risk premia than in developed countries. The other reasons for the heavy reliance on debt in developing countries include the fragility of their equity markets, lack of suitable accounting practices and the absence of adequate corporate governance practices. Given the high dependence on bank credit and lack of substitutes for external finance, firms in developing economies are generally highly sensitive to changes in the cost and flow of credit.

The global financial environment has become very complex. Development of capital markets has caused borrowers and lenders to bypass the banks and try for cheaper capital, which benefits the borrowers, and higher returns, which attract the lenders. Even in this changed scenario the role of banks, especially in a developing country like India, cannot be undermined. Commercial banks form the bedrock of the Indian financial system accounting for around three fourths of the total assets of all financial institutions at end-March 2007. Commercial banks, given their preeminent position in the regulated financial sector, dominate the credit market. The quantity of loans

created by the banking system is generally a function of both the willingness and ability of banks to lend.

Credit markets in developing countries, in particular, play an important role, where apart from industry, agriculture is also an important segment of the economy. Besides, there are also a large number of small and medium enterprises in the industrial and service sectors, which are not able to access the capital market and have to depend on the credit market for their funding requirements. Thus, the importance of banks and other lending institutions in developing countries can hardly be overemphasized.

As we discussed in Chapter 2 of this dissertation, the banking sector in India after independence was entirely in the private hands and it also had a regional character with highest concentration in West Bengal, Madras and Bombay due to the colonial legacy. Also, credit flowed mainly to large borrowers in the industrial sector and the agricultural sector was completely neglected. To address these issues, banks were nationalised in 1969 and banks were required to spread geographically and functionally to promote banking habits and savings in the economy. We also saw the weaknesses which gradually cropped up in the banking sector and which finally led to the adoption of liberalisation policies in this sector.

The existing literature on regional disparities in banking activities, as seen in Chapter 3, indicate towards a growing disparity in banking development especially after the banking sector reforms were undertaken in 1991. Banking activities have been skewed in favour of the forward states (Kurian, 2000) and also there is a growing inequality between the urban and rural areas. In this chapter we try to analyse how the banking sector development has varied across the states of Bihar and Tamil Nadu between 1980 and 2010.

## 4.2 Branch expansion in the pre- and post-reform periods

A major component of the banking policy before the reform was the spread of the branch network in rural areas to improve the access to banking facilities for the rural masses. The central bank adopted an aggressive supply-led approach to financial development, an integral part of which was to locate branches in 'unbanked' (mainly rural and semi-urban) areas. Under the Banking Regulation Act of 1949 commercial

banks had to obtain a license from the central bank in order to open a new branch. On January 1, 1977 the Indian central bank announced that to qualify to open a branch in an already banked location a commercial bank must open four in unbanked locations. This was motivated by social benefit considerations. The policy objectives of the public sector banks have been redefined with banking sector reforms. The earlier role of social banking where banks were one of the instruments of the state in the development process, is now oriented towards profit maximisation. The Committee on the Financial System (1991) criticised the branch licensing policy on several grounds. According to the Committee the branch licensing policy placed restrictions on commercial banks to open offices on purely profitable considerations and also directed banks to open offices in the rural and semi-urban areas where such branches are likely to be unremunerative. The Narasimham Committee (1998) cited the large number of unremunerative branches and directed credit as proximate causes for the high level of non-performing assets (NPAs) and low profitability of the banking industry. Thus review of the pre-reform branch licensing policy explicitly argues that

- i) Quantitative expansion in banking has been at the expense of quality and
- ii) Rural branching has been inefficient and eroded the profitability of the banking system.

Thus both these committees suggested abandonment of the system of branch licensing and asked for giving full freedom to commercial banks to open or close branches (other than rural branches for the present) or swap their rural branches with those of other banks on the basis of their commercial judgement. The branch expansion programme expired in 1995 and banks were allowed to convert their non-viable rural branches into satellite offices, or to close branches at rural centres served by two commercial banks. Regional rural banks were allowed to relocate their loss-making branches to new places, even outside rural areas.

The impact of this policy change has been quite dramatic. In Bihar the number of offices of scheduled commercial banks in rural areas was around 60% of the total offices operating in the state in 1980. This increased to about 75% of the total offices in 1993-1994. In 2010 it was around 58% of the total offices. In the case of Tamil Nadu, 35% of the total offices of scheduled commercial banks were operating in rural areas, which increased to 43% of the total offices by 1993. This has declined to 27%

of the total offices in 2010. In addition there has been an absolute decline in the number of rural bank offices. The Reserve Bank of India (RBI) classifies the population groups into rural, semi-urban, urban and metropolitan based on the census figures. This base has been revised from time to time and hence the population-group wise data are not strictly comparable over the years. But the decline in absolute number of bank offices in rural areas can still be seen. In the case of Bihar<sup>1</sup>, between 2001 and 2005 (based on 1991 census) the number of rural offices came down from 2509 to 2481. Also between 2006 and 2007, it came down from 2353 to 2321 (based on 2001 census). In the case of Tamil Nadu, the number of rural offices in 1995 was 1846 which came down to 1715 in 2005 (based on 1991 census). Thus, after the branch licensing policy expired in 1995 as part of the banking sector reforms, there has actually been a decline in absolute number of offices of scheduled commercial banks operating in rural areas of both the states (Tables 4.1 and 4.2).

Rural households need credit for a variety of reasons. They need credit to meet short-term requirements of working capital and for long-term investment in agriculture and other income-bearing activities. Agricultural and non-agricultural activities in rural areas typically are seasonal, and households need credit to smoothen out seasonal fluctuations in earnings and expenditure. Rural households need credit as an insurance against risk. Rural households need credit for different types of consumption. These include expenditure on food, housing, health and education. In the Indian context, another important purpose of borrowing is to meet expenses on a variety of social obligations and rituals (Ramachandran and Swaminathan, 2004).

If these credit needs of the poor are to be met, rural households need access to credit institutions that provide them a range of financial services. Such institutions should provide credit at reasonable rates of interest and provide loans that are not constrained by extra-economic provisions and obligations.

The declared objectives of public policy with regard to rural credit in the post-Independence period were to make sufficient and timely credit (at reasonable rates of interest) available to as large a segment of the rural population as possible. The policy

\_

<sup>&</sup>lt;sup>1</sup> In the case of Bihar, data prior to formation of Jharkhand are not comparable.

instruments to achieve these objectives were—expansion of the institutional structure of formal-sector lending institutions; directed lending and concessional or subsidized credit. Public policy was thus aimed not only at meeting rural credit needs but also at pushing out the informal sector and the exploitation to which it subjected borrowers. The need for continuing with the expansion of banking infrastructure was recognised even by the Committee on Financial System (1991) as is clear from its recommendation that 'each public sector bank should set up one or more rural banking subsidiaries to take over all its rural branches', and that the operations of the regional rural banks should be expanded to cover all types of banking business. But this aspect of the policy was discarded in the process of implementing financial sector reforms. Such an institutional gap could hurt the process of credit delivery to the rural and the underdeveloped regions within the states.

The inter-state disparities in terms of opening of bank offices by scheduled commercial banks are revealed by the following. Between 1980 and 1985 the total number of offices of scheduled commercial banks increased at a rate of 111% in Bihar and 42% in Tamil Nadu. This huge difference might be explained by the fact that Bihar has always been underexposed to banking and the hence the under banked regions in the state must have been in excess of that in Tamil Nadu. This rapid expansion slowed down between 1985 and 1990 with the rate of increase coming down to 18% and 11% for the two states respectively. The bias against opening of offices in a backward state like Bihar can be seen from the fact that between 2001 and 2005<sup>2</sup> the total number of offices of scheduled commercial banks increased at a rate of 0.7% percent only. On the other hand, between 2000 and 2005 they grew at the rate of over 2% for Tamil Nadu. Again between 2005 and 2010 the pace of opening offices picked up, but differentially for the two states and it was 14% for Bihar and 30% for Tamil Nadu. The average population per branch<sup>3</sup> (of scheduled commercial banks) in 2001 for Bihar was 20,000 which instead of declining increased to 25,000 in 2009. Whereas the comparable figures for Tamil Nadu are 13,000 and 11,000 respectively.

The increase in the pace of opening branches between 2005 and 2010 may be explained by the Reserve Bank's circular that for each branch proposed to be opened

<sup>&</sup>lt;sup>2</sup> In 2000 Jharkand was formed, hence for Bihar the year 2001 is considered.

<sup>&</sup>lt;sup>3</sup> Number of branches excludes administrative offices.

in Tier 3 (population of 20,000 to 49,999 as per 2001 census) to Tier 6 (population of less than 5000 as per 2001 census) centres of under-banked districts of under-banked States, a bank will get authorisation to open a branch in a Tier 1 (population of 100000 or above as per 2001 census) or Tier 2 (population of 50000 to 99999 as per 2001 census) centre. The continuing need for opening more branches in underbanked States for ensuring more uniform spatial distribution is accepted by the central bank. Further, the RBI requires banks to now open at least 25 per cent of the branches under the annual branch expansion plan in un-banked rural centres.

The regional difference in banking expansion in the post-liberalisation period might be related to the privatisation of banking. Significant increases in the number of branch offices were reported by the foreign banks (22.67 percent) and other scheduled commercial banks (17.24 percent); while the overall increase remained at just 5.49 percent between 1990-91 and 1996-97 (Narayana, 2000). As per the Branch Banking Statistics of the Reserve Bank, in March 2002, the number of branches of foreign banks in Bihar was nil. The number of branches of foreign banks in Tamil Nadu, on the other hand, was 24. Also, in March 2002, there were only 7 branches of private sector banks operating in Bihar whereas the corresponding figure for Tamil Nadu was 1058. One of the reasons for private sector banks focusing on some regions and neglecting others could be the location of origin of these banks. Hence, the private sector banks are basically concentrated in South India and Maharashtra where they have originated (Narayana, 2000).

According to Narayana (2000), banks are basically attracted by the growing credit business, in a milieu where banking habit has already developed and the cash outflow is minimised. Also, the attraction of deposits could take banks to particular states to the neglect of others. The average deposits per office of scheduled commercial banks in Bihar in the years 2001 and 2010 were Rs.740 lakhs and Rs.2423 lakhs respectively. For Tamil Nadu, these figures were Rs.1278 lakhs and Rs.4381 respectively. Thus, the attraction of deposits could be one of the reasons for banks to prefer expanding their activities in Tamil Nadu. As far as average credit per office of scheduled commercial banks is concerned, it was Rs.153 lakhs in 2001 and Rs.703 lakhs in 2010 for Bihar. The corresponding figures for Tamil Nadu were Rs.1158 lakhs and Rs.4987 lakhs in 2010 (Tables 4.3 and 4.4). Here again, the difference

between the two states is huge and Tamil Nadu must be finding preference by banks on this account as well.

The average population per office of scheduled commercial banks for Bihar in 1981 was 28500. This came down to 17500 in 1991 but again increased to 23000 in 2001. The aggregate figures for the state don't give us the prevailing intra-state disparities. The average population per office<sup>4</sup> of scheduled commercial banks was as high as 68000 in Gopalganj and it was 16000 in Patna in 1981. The branch licensing policy of the central bank helped to bring down the average population to 19500 in Gopalganj by 1991. In the case of Patna this came down to 12000 in 1991. The districts of Siwan and Saharsa in 1981 also had a very high average population per office of SCBs of 48000 and 43000 respectively. Leaving aside Patna, some other districts recording a relatively better figure in 1981 were Darbhanga (22500), Muzaffarpur (24000), Madhubani (24500). The intra-state disparities in terms of average population per branch reduced gradually and in 1991 the difference between the worst served and the best served region was not so glaring. Purnia with an average population per office of 22000 was at one end and Muzaffarpur with a figure of 16000 was at the other (leaving aside Patna which had average population of 12000 per office). After the reforms were undertaken in the banking sector and the branch licensing policy expired in 1995, the average population served by each office of scheduled commercial banks increased for all the districts of Bihar (with Munger being the only exception). The intra-state disparities also increased and Munger and Patna were the only two districts having an average population per office of below 15000. All other districts had an above 20000 figure with Purnia (29500), Sitamarhi (27500), Saharsa (26500) at the extremes (Refer to Table 4.5).

In the case of Tamil Nadu, the average population per office of scheduled commercial banks has always been better than that of Bihar. In 1981 it was around 16000 and this came down to 12500 by 1991 and has remained around that level in 2001. But the intra-state differences are present in this state as well. In 1981 at one extreme were Dharmapuri (26500) and South Arcot (25000) and at the other were Chennai (6500), Nilgiris (12000) and Coimbatore (13000). Apart from Dharmapuri and South Arcot,

<sup>&</sup>lt;sup>4</sup> The data for number of branches of SCBs is not available at the district level; hence number of offices of SCBs is used.

Chengalpattu (later Chengai), Pudukottai, North Arcot and Erode (Periyar) had an average population per office of scheduled commercial banks that was greater than 20000. The figures calculated for the year 1991 show that there was an improvement in this dimension in all the districts. At one extreme were Chengai (18000), Dharmapuri (16500) and North Arcot (16500) and at the other were Chennai (4500), Nilgiris (10000) and Coimbatore (11000). Unlike the case of Bihar, the figures calculated for the year 2001 for the districts of Tamil Nadu show that most of the districts improved or remained stable on this front. The districts whose average population per branch increased between this period were Dharmapuri (16500 to 18000), Pudukottai (15000 to 17000). Surprisingly Chennai also saw an increase in average population per office of SCBs from 4500 in 1991 to 5200 in 2001. But as we can see the increase is not to the same extent as was the case in the districts of Bihar (Refer to Table 4.6).

Decline in population served by each office of scheduled commercial bank is an indicator of development of commercial banking in any region. As seen from the data above, after bank nationalisation took place this parameter improved for the state of Bihar. The intra-state differences also declined. But after the post-liberalisation period, there was a reversal in the trend and the situation worsened across the state of Bihar. For the state of Tamil Nadu, if decline in population served by each office of scheduled commercial bank is any indication of development of banking, this has improved over the years.

# 4.3 Supply of credit and mobilisation of deposits by SCBs in the pre- and post-reform periods

The period after bank nationalisation witnessed an increase in both deposits mobilised and credit supplied by scheduled commercial banks with respect to rural areas. The proportion of bank deposits mobilised by scheduled commercial banks in rural areas increased from 3.1 per cent in 1969 to 15.3 per cent in 1990 at the all India level. Then it declined from a proportion of 15.5 per cent in 1991 to 14.7 per cent in 2001. This decline continued in the post-reform period and the proportion of bank deposits mobilised by scheduled commercial banks in rural areas was 9.2 per cent in 2010.

If we look at the share of rural areas in total bank credit of scheduled commercial

banks, the decline is much sharper. After bank nationalisation the proportion of rural branches in total credit disbursed increased from 1.5 per cent in 1969 to 15.4 per cent in 1990. This declined to 10.1 per cent in 2001 and further to 7.5 per cent in 2010. Some part of the decline might be explained by changes in classification of population groups based on Censuses 1981, 1991 and 2001.

The credit-deposit ratio for rural offices underwent a clear-cut increase in the postnationalisation phase. It increased from 54.5 per cent in 1980 to 61.2 per cent in 1990.

After the banking reforms were undertaken, the credit-deposit ratio declined steadily
and the lowest credit-deposit ratio during the period covered by this research was 39
per cent in 2001. Thereafter, it has increased gradually and reached 59.3 per cent in
2010. Among the semi-urban branches also, the credit-deposit ratio declined from
about 49 per cent in 1991 to 33.2 per cent in 2001. This has improved to 52.1 per cent
in 2010. Thus, credit disbursal by scheduled commercial banks markedly became low
for rural and semi-urban areas after the banking reforms were undertaken; but they are
improving on this front gradually. The credit-deposit ratio for all bank offices taken
together also declined between 1990 and 2001 from 60.7 per cent to 56.7 per cent<sup>5</sup>. It
has improved to 73.3 per cent in 2010. The metropolitan offices show an increase in
the credit deposit ratio between 1990 and 2001 and thereafter also. Thus, the deposits
mobilised at rural branches were being channelled to other regions (Table 4.7).

Regional disparity in credit deployment arising out of uneven banking development is an important aspect that has affected regional development. A striking aspect of banking development in India has been the inter-state and inter-regional disparities. Credit-deposit ratio (CDR) can be used as an indicator to capture this aspect. CDR refers to the proportion of loan assets funded by banks from deposits mobilised. RBI has advised public sector banks to achieve a CDR of 60% in their rural and semi-urban branches. This was done in order to encourage the reduction of inter-regional imbalances in credit delivery and to persuade banks to lend in the same areas where they mobilised deposits. CDR is seen and often quoted as a yardstick to assess the commitment of PSBs to the rural and semi-urban areas. The all-India CDR in 1976

<sup>&</sup>lt;sup>5</sup> The decline in the credit-deposit ratio reflects a reduction in the flow of credit. During this period there was a growth in investment in government securities by banks due to the attractive interest rates and risk-free nature (Bhattacharya and Sivasubramanian, 2001).

But the aggregate figure doesn't reflect the prevailing regional disparities. There are wide differences in CDR in different regions of the country. The north-eastern, eastern and central regions have always almost lagged behind the national average during the time period considered (1980-2010). On the other hand, the western and southern regions have fared much better (Table 4.8). To look at the inter-state disparities, the states of Bihar (eastern region) and Tamil Nadu (southern region) were selected as they are at two extremes when CDR is considered. A disaggregated district level analysis is attempted to look at intra-state disparities in terms of credit deployment by Scheduled Commercial Banks. Most statistical and other data are available at the district level and not usually at lower levels.

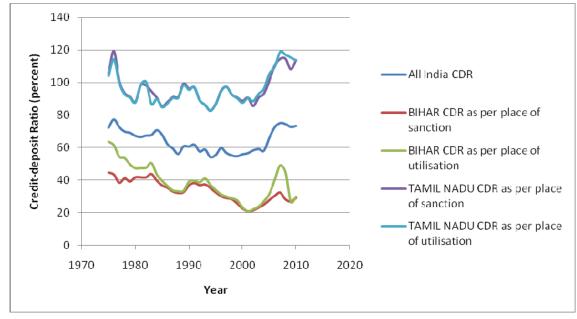


Figure 4.1: Comparison of credit-deposit ratios of Bihar and Tamil Nadu (1980-2010)

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years.

As we can see from figure 4.1, CDR for the states of Bihar and Tamil Nadu, both as per place of sanction and as per place of utilisation, differ substantially and the gap has widened post 1990s. In 1980, the credit-deposit ratio for Bihar was 42 per cent (as per sanction) and that for Tamil Nadu it was 88 per cent. This gap widened by 1990; CDR for Bihar was 36.8 per cent and for Tamil Nadu was 96.2 per cent. Between

1990 and 2000 it declined for both the states but the decline was much more pronounced in the case of Bihar. It came down to 20.7 per cent in Bihar and 90.6 per cent in Tamil Nadu in 2001. The gap has further widened in 2010. If we look at credit-deposit ratio as per place of utilisation the ratio improves for Bihar for some years, but for Tamil Nadu both match throughout the period as is seen from the graph. The low CDR in the state of Bihar indicates that the deposits mobilised within this state are being diverted to other regions (Table 4.9).

After nationalisation of banks, there was an increase in credit supplied to rural areas. For the state of Bihar, the credit-deposit ratio of scheduled commercial banks for rural areas was 60.3 per cent in 1980. It came down to 47.6 per cent in 1991; thereafter the decline continued and CDR reached a level of 21.2 per cent in 2001 after which it slowly picked up and it was 37.4 per cent in 2010. For semi-urban areas also CDR declined from 31.2 per cent in 1990 to 17.7 per cent in 2001. In the case of Bihar, CDR for urban areas also declined in the 1990s and it was only 21.4 per cent in 2002. It increased to 27.2 per cent in 2010 which still is quite less than the 40.3 per cent recorded in 1980. Thus in the case of Bihar we see that the credit-deposit ratio declined for rural, semi-urban and urban areas<sup>6</sup> after the financial sector reforms were undertaken and these are improving gradually only recently but still haven't reached the level attained in the wake of nationalisation (Table 4.10).

The credit-deposit ratio based on population group for the state of Tamil Nadu shows that the semi-urban branches have had lower credit-deposit ratios than the other population groups. Tamil Nadu has always had a credit-deposit ratio higher than the national average. The high credit-deposit ratio of the urban and metropolitan offices has contributed to this over the years (Table 4.11).

Why aren't the banks willing to lend in rural areas? The gist of financial liberalisation, according to Patnaik (2005), comprises of three components: opening up the economy to the free flow of international finance, removing controls and restrictions on the functioning of domestic banks and other financial institutions and

-

<sup>&</sup>lt;sup>6</sup> As per the classification by RBI based on Census data, some areas of Bihar were classified as metropolitan only in 2006 and even the metropolitan branches show a credit-deposit ratio of below 30 per cent between 2006-2010.

providing autonomy to the central bank. According to the author, the financial system in the financial repression regime in the post-independent India was to function to achieve the perceived needs of economic development. The author argues that financial liberalisation leads to an increase in real interest rates in a third world economy impacting investment decisions leading to cut backs, particularly in sectors that were the earlier recipients of subsidised finance (for example, agriculture). This leads to a reduction in the proportion of credit available to the agricultural sector. The reason for banks lending below the norm to the agricultural sector in the financial liberalisation regime, according to the author, is not that the demand for credit from this sector is low but that this sector is no longer considered a 'worthwhile' sector to lend to. The reasons cited for this are: the peasantry and landlords constitute an 'alien class' for the financial sector and they are not as easily accessible; their operation is on an average on a smaller-scale and it is an operation that the average executive in the financial sector doesn't understand too well. Thus, banks will be less willing to lend in the rural sector unless compelled to do so (as under bank nationalisation). The data analysed above seems to validate this argument.

Credit-deposit ratios across the districts also show wide variations. In 1980 creditdeposit ratio (as per place of sanction) of scheduled commercial banks for the state of Bihar was 41.8 per cent. But if we look at district level data, there were districts having credit-deposit ratio less than 25 per cent (Aurangabad, Bhojpur) and also some districts having CDR above 80 per cent (Purnia, Saharsa). The disparities in terms of credit-deposit ratio were still prevalent in 1990. At one extreme were the districts of Bhojpur (25.8 per cent) and Munger (25.7 per cent) and at the other were Katihar (75 per cent) and Purnia (67.2 per cent). These disparities seem to have reduced by 2010 but the depressing aspect is that in 2010 none of the districts had a credit-deposit ratio of 60 per cent or above. At one end were districts like Siwan and Munger having a CDR of 18.7 per cent and 20.5 per cent respectively; at the other end were Purnia (46.3 per cent) and Muzaffarpur (46.1 per cent). If credit-deposit ratio is to be taken as an indicator of credit disbursed out of the deposits mobilised, the situation has deteriorated for the districts of Bihar. If we classify the districts of Bihar by their size of credit-deposit ratio we see a phenomenon of a growing number of regions experiencing reductions in credit delivery in relation to the deposits that they generate. In March 1990 there were no districts having credit-deposit ratios of less

than 20 per cent, in March 2010 Siwan district was within this lowest range of credit-deposit ratio. In the next lowest size group (of credit-deposit ratios of 20-30 per cent) the number of districts shot up from 4 in 1990 to 12 in 2010 (Table 4.12).

The scheduled commercial banks for the state of Tamil Nadu in 1980 had credit-deposit ratio of 88 per cent (as per place of sanction); it was as low as 45.6 per cent in Thanjavur district and as high as 118.8 per cent in The Nilgiris. Kanyakumari, Pudukottai and Tirunelveli were the other districts having credit-deposit ratios of below 60 per cent. But the rural branches in all these districts had credit-deposit ratios above 60 per cent. Thus, wide variations were there at the district level. These district level differences were still there in 1990. The districts of Kanyakumari and Thanjavur had below 60 per cent credit deposit ratios; Coimbatore, Chennai, Dharmapuri, Madurai, North Arcot<sup>7</sup> had above 100 per cent credit-deposit ratios. By 2010 credit deposit ratios has improved for all the districts and Chengai<sup>8</sup> forms the exception to this trend as for this district CDR declined from 81.4 per cent in 1990 to 42 per cent in 2000 and then improved slightly to 48.6 per cent in 2010. All the districts of Tamil Nadu have fared well on this front with some of them having more than 100 per cent credit-deposit ratios throughout the period considered (Table 4.13).

Deterioration has also occurred in the sectoral distribution of bank credit mostly in contravention of declared public policies. The share of agriculture in total bank credit (both direct and indirect) increased from 14.8 percent to 15.9 percent in 1990. Since then it declined steadily touching a low of 9.9 percent in 2000. It has gradually picked up again and reached 11.7 percent in 2010. Earlier a target of 18 percent of net bank credit to agriculture in the form of direct advances was set. Subsequently this target was allowed to be achieved by including not more than 25 percent in the form of indirect credit. Another provision was made to allow contribution for the National Bank for Agriculture and Rural Development's (NABARD) Rural Infrastructure Development Fund (RIDF) to the extent of 1.5 percent of net bank credit to be part of the priority sector target. These changes have been responsible for reduction in the effective share of agricultural credit. In 1993, the RBI asked banks to prepare special

\_

<sup>&</sup>lt;sup>7</sup> North Arcot was split into Tiruvannamalai and Vellore. We have considered the combined figures of these two districts to arrive at a figure for North Arcot.

<sup>&</sup>lt;sup>8</sup> Chengai district was split into Kancheepuram and Thiruvallur. To arrive at an aggregate figure for Chengai, the figures for these two districts were added up.

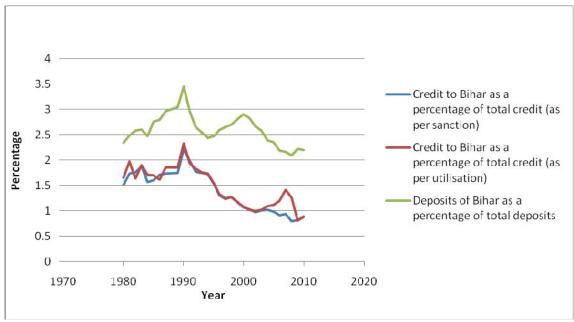
agricultural credit plans and to increase their credit disbursals to agriculture by 20 percent annually, so that the effective target of 18 percent of net bank credit could be met. Even so the target remains unfulfilled. Out of the total outstanding credit of scheduled commercial banks in Bihar, 22.2 percent went to agriculture (both direct and indirect) in 1980. This increased to 24.6 percent in 1990 but declined to 16.4 percent by 2000. Thus in the state of Bihar, which has a significant agricultural base, after the banking sector reforms, credit to agricultural sector by scheduled commercial banks declined to a large extent. But a positive development to note is that in recent times credit to this sector in Bihar has picked up and it was 34.4 percent of the total in 2010. In Tamil Nadu, share of agriculture in total outstanding credit of scheduled commercial banks was above 15 percent till 1990 (15.6 percent in 1980; 16.4 percent in 1990); thereafter it declined drastically and was 8.9 percent in 2000. It increased to 13.6 percent by 2010. Hence, for both the states we see a decline in the share of agriculture in total credit disbursed in the decade after reforms were undertaken.

Another aspect which we can look at is the mobilisation of deposits from and disbursal of credit to these two states as a proportion of the total deposits mobilised and credit disbursed by the scheduled commercial banks to get a sense of the interstate differences in banking development. The deposits mobilised by scheduled commercial banks in the state of Bihar<sup>9</sup> as a percentage of the total deposits mobilised at the all-India level has always been quite low as compared to that in Tamil Nadu. In 1980, 2.33 percent of the total deposits were mobilised in Bihar whereas in Tamil Nadu the figure was 6.90 percent. The proportion of total deposits accounted for by Bihar gradually increased and it reached a peak of 3.44 per cent in 1990. On the other hand, the share of Tamil Nadu in the total deposits mobilised by scheduled commercial banks has lied in the range of 6.11 percent to 6.9 percent throughout the period of study. After 1990, we can see a slowdown in deposit mobilisation in Bihar and its share in the total came down to 2.2 percent by 2010. Thus, deposit mobilisation gained some pace in the state of Bihar in the wake of nationalisation of banks but it has slowed down in the post-1991 period. In the case of Tamil Nadu, however, we don't come across any such variations.

\_

<sup>&</sup>lt;sup>9</sup> Since Jharkhand was separated from Bihar in 2000, to arrive at a comparable data set, the deposit and credit figures of the districts of Jharkhand were deducted from the total for the state of Bihar up to 2000.

Figure 4.2: Mobilisation of deposits from and disbursal of credit to Bihar as percentages of all-India total deposits and credit (1980-2010)



Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years.

The wide difference between these two states comes to the fore when we look at credit disbursal to these two states by the scheduled commercial banks over the years. The share of Bihar in the total credit disbursed by scheduled commercial banks reached 2.2 percent in 1990 from 1.5 percent in 1980. Thereafter, it declined and reached a level of 1.1 percent by 2000. It has declined further and reached 0.89 percent in 2010. Between 1980 and 1990 share of Tamil Nadu in the total credit disbursed by scheduled commercial banks increased from 9.04 percent to 10.46 percent. Unlike the case of Bihar, Tamil Nadu didn't experience a decline in its share and this reached 11.4 percent by 1997. Till 2004 its share was above 10 percent after which it declined slightly to 9.65 percent in 2010 (Tables 4.14 and 4.15).

12.00 Deposits of Tamil Nadu as a 10.00 percentage of total deposits 8.00 Percentage Credit to Tamil Nadu as a 6.00 percentage of total credit (as per sanction) 4.00 Credit to Tamil Nadu as a percentage of total credit (as 2.00 per utilisation) 0.00 1970 1980 1990 2000 2010 2020

Figure 4.3: Mobilisation of deposits from and disbursal of credit to Tamil Nadu as percentages of all-India total deposits and credit (1980-2010)

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years.

Year

Within these states also there are wide variations in the districts' share of deposits mobilised and credit disbursed. In the state of Bihar the districts of Bhagalpur, Gaya, Purnia, Munger, Muzaffarpur, Patna and Rohtas<sup>10</sup> accounted for 65.1 per cent of the total credit sanctioned in the state in 1980. Patna alone accounted for 36.5 percent. By 1990 the share of these districts had come down to 46.7 percent implying a more equitable distribution of credit by scheduled commercial banks. But their share increased again and was 55.4 percent and 55.3 percent in 2000 and 2010 respectively. As far as mobilisation of deposits is concerned, these districts have alone accounted for over 50 percent of the total deposits mobilised by scheduled commercial banks: 65.5 percent in 1980, 50.5 percent in 1990, 53.3 percent in 2000 and 56.2 percent in 2010. Another point to note is that the above mentioned districts made up around 39 percent of the total population of Bihar (as per 2001 census). This shows the concentration of banking in a few regions within the state.

\_

<sup>&</sup>lt;sup>10</sup> Districts have been reorganised from time to time. Banka was split from Bhagalpur; Arwal and Jehanabad were split from Gaya; Lakhisarai, Jamui, Khagaria and Sheikhpura were carved out from Munger; Araria and Kishanganj were split from Purnia; Kaimur (Bhabhua) was carved out from Rohtas. To arrive at comparable figures, data for all these districts have been added with the parent district.

The situation is no different in the state of Tamil Nadu. The districts of Chennai, Coimbatore and Madurai<sup>11</sup> alone accounted for 67.4 percent of the total credit disbursed by the scheduled commercial banks within the state. This declined slightly to 65.7 percent in 1990 but further increased to 73.5 percent in 2000. In 2009<sup>12</sup> it was 72.5 percent. These districts also account for a major chunk of the total deposits mobilised within the state: 59.01 percent in 1980, 57.8 percent in 1990, 57.3 percent in 2000, and 62.7 percent in 2009. The concentration of banking activities becomes even clearer when we see that these districts accounted for only 22.7 percent of the total population of the state (as per 2001 census)<sup>13</sup>.

Some crude relationships between gross domestic product (state and district wise) and bank credit can provide some useful leads to the issue of whether supply of bank credit has been commensurate with demand. But due to constraint of data, comparison between pre-reform and post-reform periods is difficult to make. Hence, an inter-state comparison is done.

Bihar has always had a very low level of credit to State Domestic Product (SDP) ratios. It was 10.8 percent in 1980-81. This improved to 13.2 percent by 1990-91 but again declined to 12.4 percent by 2000-01. On the other hand, for Tamil Nadu bank credit to SDP ratio was 30.7 percent in 1980-81 which increased to 38.3 percent by 1990-91. Unlike other regions, which saw a declining credit to SDP ratios, Tamil Nadu didn't experience any setbacks and it had a credit to SDP ratio of 38.4 percent in 2000-01.

Data for gross district domestic product for the two states was available only for some recent years. Looking at this aspect can provide an insight to intra-state difference in credit to Gross District Domestic Product (GDDP) ratios. In 2007-08, this ratio was 15.6 percent for the state of Bihar. The district of Munger has one of the highest credit

<sup>11</sup> Dindigal and Theni districts were carved out from Madurai. The figures used in this research are the combined figures of Dindigal, Theni and Madurai from the year they were formed.

<sup>&</sup>lt;sup>12</sup> In the year 2008, Tiruppur district was split from Coimbatore and Erode districts. So, the year 2009 is considered to keep the figures comparable.

<sup>&</sup>lt;sup>13</sup> The figures arrived at to show the concentration of banking activities within these two states have been computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI (various years). A detailed table could not be provided due to its messy nature.

to GDDP ratio within the state, whereas Sheohar has one of the lowest. For Munger it was 22.9 percent in 2007-08 and for Sheohar it was 9.1 percent for the corresponding year. The highest credit to GDDP ratio for the state of Tamil Nadu was enjoyed by Chennai and it was as high as 365.4 percent in 2006-07. The disparity in this regard can be gauged by the fact that Coimbatore had the second highest credit to GDDP and it was 73.8 percent. All the other districts had less than 30 percent credit to GDDP ratios (except for Madurai) (Tables 4.16 and 4.17).

The state of Bihar has always been underexposed to banking. Bihar figures in the list of under-banked states prepared by RBI. Out of a total of 38, the name of 36 districts appears in the RBI's list of under-banked districts in under-banked states (as per 2001 census). On the other hand, Tamil Nadu is one of the leading states in the financial service sector. The banking statistics for Tamil Nadu show that it is ahead in its financial achievements than the all India achievements. Nationalisation of banks sought to reduce such inter-regional disparities and as seen from the above discussion, the banking activities had improved in Bihar in the pre-reform period.

The state of Bihar has historically been a low income state with weak infrastructure. It lags behind the other states in human and economic development terms. Tamil Nadu, on the contrary, is one of the most industrialised and urbanised states in the country and is one of the highest contributor to the country's GDP. Per capita net state domestic product (PCNSDP) is often used as an indicator for measuring regional disparities. The PCNSDP at factor cost (at constant prices with base 2004-05) for Tamil Nadu (Rs.46692) in the year 2009-10 was almost 4 times that of Bihar (Rs.12012).

The relationship between banks and economic development is indeed complex. Historically, economists accorded great importance to the role of banks in the development of new markets and industries. The works of Gerschenkron (1962) and Schumpeter (1934, 1939) placed banks at the centre of economic growth. However, the modern theories of banking emphasize the role of banks in screening and monitoring firms. In the modern view, the impetus for economic growth is generated in the real economy, and the banking system provides some important, but ancillary, services.

Nonetheless, the significance of banks in economic growth and development is well recognised. In the Indian context, Kannan (1987) recognized banks as an important part of financial intermediation, which reduces regional imbalances by their monetary or credit policy. The analysis was concerned with how regional disparities could be removed by even development of banking. The author concentrated on developing an index of banking development, considering population per branch, per capita deposits and per capita credit as variables. The states were then ranked on the basis of scores obtained from the index for the years 1969 and 1975. The industrially advanced states secured high ranks in both the years.

Why does not Bihar find preference with expansion in banking activities? Is it because it is one of the most backward states in India? What role does the differential treatment by the banking sector play in the underdevelopment of the state? The direction of causality is very difficult to establish but these are some important questions which need to be investigated.

## **CHAPTER 5**

## **Conclusion**

The nationalisation of banks was intended to allow the state to target financial backwardness as a means of realising social objectives. A central aim was to reduce and equalize the average population per bank branch across Indian states. To achieve this, the Indian central bank adopted an area approach whereby unbanked locations were targeted. Financially less developed states were assigned priority status and more unbanked locations were targeted in financially backward states. In every Indian district a commercial bank was designated as the Lead Bank and made responsible for identifying unbanked locations (based on the criteria set by the central bank). The Lead Bank was responsible for coordinating branch expansion into these locations with other commercial banks working in the district.

This policy of social and development banking brought about a phenomenal expansion in the network of commercial bank branches across the nation. Both the states of Bihar and Tamil Nadu recorded an increased pace of expansion of bank branches, but Bihar was doing better in this regard as compared to Tamil Nadu. There was a decline in average population served by each office of scheduled commercial banks between 1981 and 1991 for both the states. A positive aspect was that this decline took place for all the districts and the intra-state differences came down.

After 1990, however, there were clear signs of decline in the activity of commercial banks in the state of Bihar. The pace of opening new offices declined. There was a decline in absolute number of bank offices in rural areas. Not only did the average population served by each office of scheduled commercial banks increase between 1991 and 2001 for Bihar, but the intra-state differences also widened. But for Tamil Nadu, between 1991 and 2001, the average population per office remained stable. Thus, when left to themselves, banks increased their activities in regions which already had developed banking habits.

There was also a sharp increase in the both deposits mobilised from and credit

advanced by commercial banks to rural areas during the period after bank nationalisation. There was an increase in the credit-deposit ratio for rural offices implying that a greater proportion of resources mobilised from rural areas were being utilised within such areas. But after 1990, there were clear signs of decline in the activities of commercial banks in rural areas. Credit-deposit ratios for rural offices in the state of Bihar show a similar trend—improvement in the period of bank nationalisation but decline after reforms. But in the case of Tamil Nadu, the rural offices have recorded high credit-deposit ratios even after the reforms were implemented.

There was a considerable growth of agricultural credit under the regime of social and development banking. This was in line with the objective to promote productive activities in rural areas through provision of institutional credit. For both the states of Bihar and Tamil Nadu, share of agriculture in total outstanding credit of scheduled commercial banks declined drastically in the period after reforms. A positive development to note is that in recent years this share has improved and for the state of Bihar this has reached around 35 percent of the total outstanding credit in 2010, which is even higher than that recorded in the post-nationalisation period.

According to Kohli (1997), the theoretical justification for directed credit programmes is based upon both efficiency and equity considerations. The efficiency argument for reallocation of resources is based upon a divergence between social and private returns in certain types of investments. A market-based allocation would be driven by expected private profits leading to underinvestment in areas with high social returns but low private returns. Arguments for government intervention then exist to channel credit into sectors where there are considerable social benefits in order to improve upon an existing resource allocation. The equity argument is based upon a redistribution of existing resources between individuals: inequalities in an economy arise from an unequal distribution of initial endowments and intervention to redistribute these initial endowments through measures such as provision of affordable credit, enables exploitation of existing economic opportunities by otherwise disadvantaged groups. Thus the purpose of directed credit programmes was to channel credit to priority sectors, groups or regions. This programme was for supporting activities that are either considered to be socially beneficial, or inherently

riskier, and also borrower groups that are likely to be marginalised in the credit markets. It was argued that provision of credit to these targets will enable exploitation of investment opportunities, contributing not only to the economy's GDP but meet other welfare objectives such as employment, income re-distribution, etc. Another objective has been to reduce the dependency of a certain class of borrowers on the informal credit market with its high rates of interest. This is true of India where replacing informal intermediaries with organized credit has been one of the aims of financial policy.

To reduce inter-regional imbalances, the Reserve Bank had advised banks to maintain a credit-deposit ratio of at least 60 percent in rural and semi-urban areas. But the aggregate credit-deposit ratio for Bihar as a whole has been quite low (below 60 percent between 1980 and 2010), which further declined in the aftermath of banking sector reforms, whereas Tamil Nadu has always recorded a credit-deposit ratio above the all-India average (above 100 percent between 2005 and 2010). There is a phenomenon of a growing number of regions of Bihar experiencing reductions in credit delivery in relation to the deposits that they generate. There has been an increase in the number of districts of Bihar recording a credit-deposit ratio in the range of 20-30 percent from 4 in 1990 to 12 in 2010. Thus, the resources mobilised from Bihar are being diverted to other regions and this diversion has increased in the post-reform period whereas Tamil Nadu has increasingly been attracting more and more credit.

There are considerable intra-state disparities present in both the states as well. In the state of Bihar the districts of Bhagalpur, Gaya, Purnia, Munger, Muzaffarpur, Patna and Rohtas accounted for over 50 per cent of the total credit sanctioned in the state in 2010. The degree of concentration of banking is even higher in Tamil Nadu. The districts of Chennai, Coimbatore and Madurai alone accounted for over 70 percent of the total credit disbursed by scheduled commercial banks within the state in 2010.

As discussed earlier the proponents of financial liberalisation assumed that there was perfect information available in the market. This assumption came under scrutiny as most financial markets are characterised by asymmetries in information and these markets are imperfect. In an imperfect market leaving the decision to allocate

resources to banks will aggravate the imperfections. The monetary authorities always considered it necessary and desirable to fix both the amount of bank credit to be advanced and the rate of interest as if left to themselves banks are averse to making long term investments (e.g. infrastructure) and always seek to maximise their profits. This is in conflict with the larger economic and social considerations which should govern the distribution of investible resources in the economy. Thus the commercial banks in the country were nationalised and were used in achieving a more optimal distribution of finance in the economy. This step had recognised the problems introduced by market imperfections in the allocation of resources.

The very basis of profit making in banking activity is the development of the habit of depositing money. The profits of commercial banks depend on the proportion of their earning assets to the idle cash reserves they have to hold. The higher this proportion, the higher will be their profits. Therefore, commercial banks show a natural bias towards advancing credit to segments of population which have already developed banking habits. They are interested in others only to the extent that they offer deposits on a more permanent basis (such as through savings deposits) which would bring cash into the banking system without causing large outflows of cash from it. But in the long run this natural bias would not help banks, as banking habits cannot be inculcated without setting up bank offices in non banked areas and advancing credit to segments of population lacking banking habits (Narayana, 2000).

In India, growth with equity has been the central objective right from the inception of the planning process. Banks were viewed as one of the instruments in achieving this objective and hence an even development of banking infrastructure was one of the underlying objectives of the policy of bank nationalisation adopted in 1969. But after 1990, the policy of commercial banks has been to limit their operations in underdeveloped states. Banking sector liberalisation has thus resulted in a reversal of the process of balanced regional development of the banking infrastructure, which was the declared objective of the regime of social and development banking.

## **Bibliography**

Agarwal, R.N. (1991) "Productivity and Economies of Scale in Public Sector Banks", 32(2).

Ahluwalia, S. Montek (1993), "India's Economic Reforms", Lecture delivered in June 1993 at Merton College, Oxford University: London.

Ahluwalia, S. Montek (2000), "Reforming India's Financial Sector: An Overview", New Delhi, 6 July 2000.

Ahluwalia, S. Montek (2000), "State Level Performance Under Economic Reforms in India", Paper presented on May 2000 at the Centre for Research on Economic Development and Policy Reform, Stanford University.

Ahluwalia, S. Montek (2002), "Economic Reforms in India since 1991: Has Gradualism Worked?" *The Journal of Economic Perspectives*, 16(03):67-88. [Online: Web] Accessed 15/05/2012. URL: <a href="http://www.jstor.org/stable/3216951">http://www.jstor.org/stable/3216951</a>.

Ajit, D. and Bangar, R.D. (1997) "Banks in Financial Intermediation: Performance and Issues", Reserve Bank of India Occasional Papers, 18 (2 & 3):303-349.

Basic Statistical Returns of Scheduled Commercial Banks in India, Reserve Bank of India, Mumbai, Various Issues.

Bhattacharya, Prabir C. and Sivasubramanian, M. N. (2001), "Aspects of banking Sector Reforms in India" *Economic and Political Weekly*, Vol. 36, No. 43, (Oct. 27-Nov. 2, 2001), pp. 4151-4156, URL: <a href="http://www.jstor.org/stable/4411305">http://www.jstor.org/stable/4411305</a>.

Bhide, M. G., Prasad, A and Ghosh Saibal, "Banking Sector Reforms: A critical Overview" *Economic and Political Weekly*, 37(5):399-401+403-408. [Online: Web] Accessed 13/10/2011. URL: http://www.jstor.org/stable/4411685.

Binswanger, Hans P., Khandker, Shahidur, R. and Rosenzweig, Mark R. "How Infrastructure and Financial Institutions Affect Agricultural Output and Investment in India", *Working Papers*-Agriculture, Latin America and Caribbean Country Department II, The World Bank, March 1989, WPS 163.

Bose, Sukanya (2005), "Regional Rural Banks: The Past and the Present Debate", *Macroscan*, [Online: Web] Accessed URL: <a href="http://www.macroscan.com/fet/jul05/pdf/RRB">http://www.macroscan.com/fet/jul05/pdf/RRB</a> Debate.pdf

Branch Banking Statistics, Reserve Bank of India, Mumbai, Various Issues.

Burgess, R. and Pande, R. (2003) "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment", Discussion Paper No. DEDPS/40, August 2003, The Suntory Centre, Suntory and Toyota International Centres for Economics and Related Disciplines, London School of Economics and Political Science, London.

Burgess, R., Pande, R., and Wong, G. (2004), "Banking for the Poor: Evidence from India", *Journal of Economic Literature*, 22 September 2004.

Chandrasekhar, C.P., and Ray, Sujit Kumar (2005), "Financial Sector Reform and the Transformation of Banking", New Delhi: Tulika Books.

Chatterjee, B. and Sur, H. (edited) "Regional Dimensions of the Indian Economy", *Centre for Regional Economic Studies*, Department of Economics, Jadavpur University, India.

Chavan, Pallavi (2005), "Banking Sector Liberalization and the Growth and Regional Distribution of Rural Banking", in Ramachandran and Swaminathan edited *Financial Liberalization and Rural Credit in India*, Tulika Books, New Delhi.

Chavan, Pallavi (2005), "How 'Inclusive' Are Banks under Financial Liberalisation?" *Economic and Political Weekly*, New Delhi, 22 October 2005.

Chavan, Pallavi (2007), "Access to Bank Credit: Implications for Dalit Rural Households" *Economic and Political Weekly*, New Delhi, 4 August 2007.

Chawla, A.S. and Kumar, P. (1986) "Banks for Balanced Regional Development", Lok Udyog, February, pp. 29-35.

Dasgupta, Rajaram (2002), "Priority Sector Lending: Yesterday, Today and Tomorrow" *Economic and Political Weekly*, 37(41):4239-4245. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4412722">http://www.jstor.org/stable/4412722</a>.

Datta, Bhabatosh (1978), "Regional Rural Banks", *Economic and Political Weekly*, 13(36):1553-1556, [Online: Web] Accessed 27/04/2012. URL: <a href="http://www.jstor.org/stable/4366937">http://www.jstor.org/stable/4366937</a>.

Demetriades, Panicos O. and Luintel, Kul B. (1996), "Financial Development, Economic Growth and Banking Sector Controls: Evidence from India" *The Economic Journal*, 106(435):359-374. [Online: Web] Accessed 13/10/2012. URL:

http://www.jstor.org/stable/2235252.

Desai, V. Ashok (2001), "A Decade of Reforms", *Economic and Political Weekly*, Vol. 36, No. 50 (Dec. 15-21, 2001), pp. 4627-4630, URL: http://www.jstor.org/stable/4411471.

EPW Research Foundation (2000), "Bank Credit and the Economy" *Economic and Political Weekly*, Vol. 35, No. 39 (Sep. 23-29, 2000), pp. 3459-3465, URL: http://www.jstor.org/stable/4409763.

EPW Research Foundation (2004), "Critical Neglect of Social Banking" *Economic and Political Weekly*, 39(21):2072-2078. [Online: Web] Accessed 13/10/2011. URL: http://www.jstor.org/stable/4415044.

EPW Research Foundation "What Has Gone Wrong with the Economic Reforms?" *Economic and Political Weekly*, 29(18):1049-1053. [Online: Web] Accessed 13/10/2011. URL: http://www.jstor.org/stable/4401122.

EPW Research Foundation, "Banks' Performance: Limited Achievements" *Economic and Political Weekly*, 39(3):218-224. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4414515">http://www.jstor.org/stable/4414515</a>.

Hanson, James A. (2001), "Indian Banking: Market Liberalization and the Pressures for Institutional and Market Reform", *Working Paper* no. 104, Center for Research on Economic Development and Policy Reform, Stanford University, August 2001.

Joshi, P. N., "Banking Sector Reforms: The Other Side of the Coin" *Economic and Political Weekly*, 34(14):797-798. [Online: Web] Accessed 13/10/2011. URL: <a href="http://www.jstor.org/stable/4407813">http://www.jstor.org/stable/4407813</a>.

Joshi, V and Little, I.M.D. (1998), "India's Economic Reforms 1991-2001", New Delhi: Oxford University Press.

Kannan, R. (1987), "Banking Development and Regional Disparities", *The Indian Economic Journal*, 35(2), pp. 58-76.

Kohli, Renu (1997), "Directed Credit and Financial Reform" *Economic and Political Weekly*, 32(42):2667-2676. [Online: Web] Accessed 18/02/2012. URL: <a href="http://www.jstor.org/stable/4405977">http://www.jstor.org/stable/4405977</a>.

Kohli, Renu (1999), "Rural Bank Branches and Financial Reform", *Economic and Political Weekly*, 34(3/4):169-174, [Online: Web] Accessed URL: http://www.jstor.org/stable/4407578.

Kohli, Renu and Eastwood, Robert (1999), "Directed credit and investment in small scale industry in india: Evidence from firm level data 1965-78" *Journal of Development Studies*, [Online: Web] Accessed 17/02/2012. URL: <a href="http://www.tandfonline.com/loi/fjds20">http://www.tandfonline.com/loi/fjds20</a>.

Kumar, Chandan and Mishra, Srijit (2011), *Banking Outreach and Household level Access: Analyzing Financial Inclusion in India*, M.Phil Dissertation, Mumbai: Indira Gandhi Institute of Development Research (IGIDR).

Kumar, Nagesh (2000), "Economic Reforms and Their Macro Economic Impact" *Economic and Political Weekly*, 35(10):803-812. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4408992">http://www.jstor.org/stable/4408992</a>.

Kurian, N. J. (2000), "Widening Regional Disparities in India: Some Indicators" *Economic and Political Weekly*, 35(7):538-550. [Online: Web] Accessed 07/08/2011. URL: <a href="http://www.jstor.org/stable/4408933">http://www.jstor.org/stable/4408933</a>.

Mohan, Rakesh (2005), "Financial Sector Reform in India: Policies and Performance Analysis", *Economic and Political Weekly*, March, 2005.

Mujumdar, N. A. (1996), "Financial Sector Reforms: An Exercise in Introspection" *Economic and Political Weekly*, 31(12):727-730. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4403938">http://www.jstor.org/stable/4403938</a>.

Nair, Tara S. (2000), "Rural Financial Intermediation and Commercial Banks: Review of Recent Trends", *Economic and Political Weekly*, 35(5): 299-306, [Online: Web] Accessed, URL: http://www.jstor.org/stable/4408877

Narayana D., (2000), "Banking Sector Reforms and the Emerging Inequalities in Commercial Credit Deployment in India" *Working Paper*, 300: 1-44, Centre for Development Studies, Thiruvananthapuram.

Narayana D., (2003), "Why Is the Credit- Deposit Ratio Low In Kerala?" Working Paper 342, Journal of Economic Literature.

Narayana, D., (1992), "Directed Credit Programmes: A Critique of Narasimham Committee Report" *Economic and Political Weekly*, 27(06):255-258. [Online: Web] Accessed 27/04/2012. URL: http://www.jstor.org/stable/4397556.

Narayana, D., (2000), "Banking Sector Reforms and the Emerging Inequalities in Commercial Credit Deployment in India" Working Paper.

Pai, G. A. (1970), "Regional Distribution of Bank Credit: A Critical View" *Economic and Political Weekly*, 5(41):1691-1699. [Online: Web] Accessed 07/08/2011. URL: <a href="http://www.jstor.org/stable/4360589">http://www.jstor.org/stable/4360589</a>.

Patnaik, Prabhat (2005), "Financial Liberalization and Credit Policy", in Ramachandran and Swaminathan edited 'Financial Liberalization and Rural Credit in India', New Delhi: Tulika Books.

Public Sector Commercial Banks and Financial Sector Reform: Rebuilding for a Better Future, Discussion Paper, Ministry of Finance, Government of India, New Delhi, 1993

Rajasekhar, D and Sahu Bihari Gagan (2004) "The Growth Rural Urban Disparity: Some Issues" *Institute for Social and Economic Change*, Working Paper.

Raju, B. Yerram (2005), "Banking: Issues for Debate" *Economic and Political Weekly*, Vol. 40, No. 15 (Apr 9-15, 2005), pp. 1478-1564, URL: <a href="http://www.jstor.org/stable/4416441">http://www.jstor.org/stable/4416441</a>.

Ram Mohan, T.T. (2002), "Deregulation and Performance of Public Sector Banks" *Economic and Political Weekly*, New Delhi, February 2, 2002.

Ram Mohan, T.T. (2007), "Banking Reforms in India Charting a Unique Course" *Economic and Political Weekly*, New Delhi, March 31, 2007.

Ram Mohan, T.T. (2008), "Reforming the Banking Sector", Economic and Political Weekly, August 9, 2008.

Ramachandran, K.V and Swaminathan, Madhura (2005), "Financial Liberalization and Rural Credit in India", New Delhi: Tulika Books.

Rao, S. R. K. (1969), "Regional Disparities, 1961-67" *Economic and Political Weekly*, 4(37):1493-1495. [Online: Web] Accessed 07/08/2011. URL: <a href="http://www.jstor.org/stable/40737931">http://www.jstor.org/stable/40737931</a>.

Reddy, Y. V. (2002) "Monetary and financial sector reforms in India: a Practitioner's Perspective", Paper presented on 19-20 April 2002 at the Cornell University, New York.

Reddy, Y. V., (2005), "Banking Sector Reforms in India: An Overview", Lecture delivered on 18 May 2005 at the Institute of Bankers of Pakistan, Karachi: Pakistan.

Report of the Committee on Banking Sector Reforms, Executive Summary, Ministry of Finance, Government of India, 1998, New Delhi.

Report of the Committee on the Financial System, Ministry of Finance, Government of India, New Delhi, 1991.

Report on Currency and Finance, Reserve Bank of India, Mumbai, Various Issues.

Report on Trend and Progress of Banking in India, Reserve Bank of India, Mumbai, Various Issues.

Roland, Christian (2006), "Banking Sector Liberalization in India", Paper prepared for 9<sup>th</sup> Capital Markets Conference at the Indian Institute of Capital Markets.

Sahu, Gagan Bihari and Rajasekhar, D. (2005), "Banking Sector Reform and Credit Flow to Indian Agriculture" *Economic and Political Weekly*, 40(53):5550-5559. [Online: Web] Accessed 13/10/2011. URL: <a href="http://www.jstor.org/stable/4417608">http://www.jstor.org/stable/4417608</a>.

Sen, K. and Vaidya, R. Rajendra (1997) "The Process of Financial Liberalisation in India", New Delhi: Oxford University Press.

Sengupta, Arjun (1995), "Financial Sector and Economic Reforms in India" *Economic and Political Weekly*, 30(01):39-44. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4402230">http://www.jstor.org/stable/4402230</a>.

Shah, M., Rao, R. and Vijay Shankar, P.S. (2007), "Rural Credit in 20<sup>th</sup> Century India: Overview of History and Perspectives", *Economic and Political Weekly*, 42 (15):1351-1364, [Online:Web] Accessed URL: <a href="http://www.jstor.org/stable/4419471">http://www.jstor.org/stable/4419471</a>

Shajahan, K. M. (1998), "Priority Sector Bank Lending: Some Important Issues" *Economic and Political Weekly*, 35(14):1209-1211. [Online: Web] Accessed 02/06/2012. URL: <a href="http://www.jstor.org/stable/4409117">http://www.jstor.org/stable/4409117</a>.

Shajahan, K. M. (1999), "Priority Sector Bank Lending: How Useful?" *Economic and Political Weekly*, 34(51):3572-3574. [Online: Web] Accessed 13/10/2011. URL: <a href="http://www.jstor.org/stable/4408730">http://www.jstor.org/stable/4408730</a>.

Shajahan, K.M. (1998) "NPA of Banks: Have They Really Declined? And on Whose Account?", *Economic and Political Weekly*, 33(12):671-674, 21-27 March.

Shetty, S. L. (2005), "Regional, Sectoral and Functional Distribution of Bank Credit"

(2005), in Ramachandran and Swaminathan edited 'Financial Liberalization and Rural Credit in India', New Delhi: Tulika Books.

Shetty, S. L. (1976), "Deployment of Commercial Bank and Other Institutional Credit: A Note on Structural Changes" *Economic and Political Weekly*, 11(19):696-705. [Online: Web] Accessed 15/05/2012. URL: <a href="http://www.jstor.org/stable/4364602">http://www.jstor.org/stable/4364602</a>.

Shetty, S. L. (1978), "Performance of Commercial Banks since Nationalization of Major Banks: Promise and Reality" *Economic and Political Weekly*, 13(31/33):1407-1451. [Online: Web] Accessed 07/08/2012. URL: <a href="http://www.jstor.org/stable/4366871">http://www.jstor.org/stable/4366871</a>.

Shetty, S. L. (2004), "Distributional Issues in Bank Credit: Multi Pronged Strategy for Correcting past Neglect" *Economic and Political Weekly*, 39(29):3265-3269. [Online: Web] Accessed 27/01/2012. URL: <a href="http://www.jstor.org/stable/4415289">http://www.jstor.org/stable/4415289</a>.

Shirai, Sayuri (2001) "Assessment of India's Banking Sector Reforms from the Perspective of the Governance of the Banking System", Paper presented on 22-23 November 2001 at the ESCAP-ADB, Bangkok.

Statistical Tables Relating to Banks in India, Reserve Bank of India, Mumbai, Various Issues.

Swaminathan, Madhura and Ramachandran, V. K. (2004) "Financial Liberalisation and Rural Banking in India", Paper presented on 17-19 December 2004 at the International Development Economics Associates (IDEAs), Addis Abada.

Thyagarajan, Meenakshi (1975), "Expansion of Commercial Banking: An Assessment" *Economic and Political Weekly*, 10(47):1819-1824. [Online: Web] Accessed 27/04/2012. URL: <a href="http://www.jstor.org/stable/40738371">http://www.jstor.org/stable/40738371</a>.

Velayudham, K.T (1989), "Banking and Economic Development", *Economic and Political Weekly*, September 23, pp. 2127-2131.

## **Annexure**

Table 4.1: Number of offices of scheduled commercial banks in Bihar: Population group wise (1980-2010)

Year		%tage	Semi-	%tage		%tage		%tage	
1 Cai	Rural	to total	Urban	to total	Urban	to total	Metropolitan	to total	Total
1980	1128	59.46	482	25.41	287	15.13	-	1	1897
1981	1604	65.26	538	21.89	316	12.86	-	ı	2458
1982	1996	69.26	554	19.22	332	11.52	-	-	2882
1983	2143	69.13	601	19.39	356	11.48	-	-	3100
1984	2261	70.24	561	17.43	397	12.33	-	-	3219
1985	2922	72.96	616	15.38	467	11.66	-	-	4005
1986	3179	74.33	621	14.52	477	11.15	-	-	4277
1987	3185	74.17	623	14.51	486	11.32	-	-	4294
1989	3328	73.24	697	15.34	519	11.42	-	-	4544
1990	3499	74.32	696	14.78	513	10.90	-	-	4708
1991	3685	75.11	697	14.21	524	10.68	-	-	4906
1992	3703	75.13	698	14.16	528	10.71	-	-	4929
1993	3709	74.79	699	14.10	551	11.11	-	-	4959
1994	3711	74.58	708	14.23	557	11.19	-	-	4976
1995	3525	70.71	866	17.37	594	11.92	-	-	4985
1996	3527	70.50	873	17.45	603	12.05	-	-	5003
1997	3525	70.28	882	17.58	609	12.14	-	-	5016
1998	3538	70.09	896	17.75	624	12.36	-	-	5048
1999	3526	69.55	903	17.81	641	12.64	-	-	5070
2000	3495	68.83	928	18.27	655	12.90	-	-	5078
2001	2509	69.31	668	18.45	443	12.24	-	-	3620
2002	2499	69.11	670	18.53	447	12.36	-	-	3616
2003	2495	69.13	671	18.59	443	12.27	-	-	3609
2004	2487	68.74	682	18.85	449	12.41	-	-	3618
2005	2481	68.05	690	18.92	475	13.03	-	-	3646
2006	2353	64.52	732	20.07	340	9.32	-	-	3647
2007	2321	62.99	762	20.68	365	9.91	237	6.43	3685
2008	2324	61.64	790	20.95	393	10.42	263	6.98	3770
2009	2346	60.09	845	21.64	432	11.07	281	7.20	3904
2010	2396	57.85	931	22.48	512	12.36	303	7.32	4142

Note: Required data for the year 1988 was not available. Hence this year has been omitted. This problem persists in other tables as well.

Table 4.2: Number of offices of Scheduled Commercial Banks in Tamil Nadu-Population group wise (1980-2010)

				1			1		
Year	Rural	%tage to total	Semi- Urban	%tage to total	Urban	%tage to total	Metropolitan	%tage to total	Total
1980	979	34.83	852	30.31	980	34.86	-	-	2811
1981	1097	35.94	896	29.36	1059	34.70	-	-	3052
1982	1253	37.83	925	27.93	1134	34.24	-	-	3312
1983	1338	38.97	951	27.70	1199	34.93	-	-	3433
1984	1509	41.59	935	25.77	1184	32.64	-	-	3628
1985	1686	42.38	981	24.66	1311	32.96	-	-	3978
1986	1687	41.66	983	24.28	1379	34.06	-	-	4049
1987	1674	41.09	1005	24.67	1395	34.24	-	-	4074
1989	1838	42.51	1055	24.40	1431	33.09	-	-	4324
1990	1909	43.35	1055	23.96	1440	32.70	-	-	4404
1991	1930	43.53	1055	23.79	1449	32.68	-	-	4434
1992	1936	43.41	1059	23.74	1465	32.85	-	-	4460
1993	1942	42.95	1066	23.57	1514	33.48	-	-	4522
1994	1958	42.63	1105	24.06	1530	33.31	-	-	4593
1995	1846	39.67	1150	24.72	1657	35.61	-	-	4653
1996	1845	39.02	1176	24.87	971	20.54	736	15.57	4728
1997	1847	38.62	1193	24.95	989	20.68	753	15.75	4782
1998	1847	38.35	1199	24.90	1001	20.78	769	15.97	4816
1999	1839	37.67	1211	24.81	1025	21.00	807	16.53	4882
2000	1827	37.24	1221	24.89	1041	21.22	817	16.65	4906
2001	1829	37.08	1222	24.78	1048	21.25	833	16.89	4932
2002	1775	36.22	1226	25.02	1053	21.49	846	17.27	4900
2003	1749	35.68	1230	25.09	1068	21.79	855	17.44	4902
2004	1721	35.01	1241	25.24	1087	22.11	867	17.64	4916
2005	1715	34.16	1271	25.31	1126	22.43	909	18.10	5021
2006	1607	31.67	1390	27.39	1153	22.72	924	18.21	5074
2007	1597	30.14	1491	28.14	1232	23.25	979	18.48	5299
2008	1650	28.87	1676	29.32	1346	23.55	1044	18.26	5716
2009	1702	27.99	1834	30.16	1428	23.49	1116	18.36	6080
2010	1763	27.23	1997	30.85	1521	23.49	1193	18.43	6474
		<del>-</del>		<del>-</del>				_	

Table 4.3: Deposits and credit per office of scheduled commercial banks in Bihar (1980-2010)  $\,$ 

Year	Total deposits (in	Deposit per office (in	Total credit sanctioned	Credit per office (in
	lakhs of rupees)	lakhs of rupees)	(in lakhs of rupees)	lakhs of rupees)
1980	138481	73	57886	30.5145
1981	174154	70.85191	72741	29.59357
1982	194699	67.5569	81424	28.2526
1983	235313	75.90742	103302	33.32323
1984	279636	86.87046	111121	34.52035
1985	352819	88.09463	129833	32.41773
1986	424507	99.25345	150041	35.0809
1987	509737	118.7091	168457	39.23079
1989	715463	157.4522	233510	51.38864
1990	831690	176.6546	305762	64.9452
1991	940955	191.7968	360236	73.42764
1992	1016113	206.1499	375061	76.09272
1993	1132468	228.3662	423619	85.42428
1994	1275366	256.3035	449506	90.33481
1995	1527409	306.401	496441	99.58696
1996	1797101	359.2047	541577	108.2504
1997	2144267	427.4854	619108	123.4266
1998	2579491	510.9927	730809	144.772
1999	3096270	610.7041	794191	156.6452
2000	3740345	736.5784	839907	165.4011
2001	2680073	740.3517	554238	153.1044
2002	2983254	825.0149	636830	176.1145
2003	3293163	912.4863	760611	210.7539
2004	3600060	995.0415	896714	247.848
2005	4100740	1124.723	1137856	312.0834
2006	4572272	1253.708	1386460	380.1645
2007	5620222	1525.162	1819293	493.7023
2008	6792436	1801.707	1915634	508.1257
2009	8700230	2228.543	2330769	597.0207
2010	10036678	2423.148	2912488	703.1598

Table 4.4: Deposits and credit per office of scheduled commercial banks in Tamil Nadu (1980-2010)

Year	Total deposits (in	Deposit per office (in	Total credit sanctioned	Credit per office (in
1 Cai	lakhs of rupees)	lakhs of rupees)	(in lakhs of rupees)	lakhs of rupees)
1980	229845	81.76628	202322	71.9751
1981	263285	86.26638	258541	84.71199
1982	295368	89.18116	289622	87.44626
1983	357633	104.1751	338050	98.47073
1984	419158	115.5342	379642	104.6422
1985	516375	129.8077	441646	111.0221
1986	580799	143.4426	511065	126.2201
1987	690281	169.4357	627816	154.1031
1989	936256	216.5254	929440	214.9491
1990	1133999	257.493	1090733	247.6687
1991	1360089	306.7409	1318411	297.3412
1992	1581239	354.5379	1407978	315.6901
1993	1918356	424.2273	1653833	365.7304
1994	2155002	469.1927	1776848	386.86
1995	2580660	554.6228	2235364	480.4135
1996	2909641	615.4063	2762485	584.2819
1997	3326596	695.6495	3236700	676.8507
1998	3997529	830.0517	3701151	768.5114
1999	4585715	939.3107	4160992	852.313
2000	5517493	1124.642	4888289	996.3899
2001	6306488	1278.688	5711962	1158.143
2002	7328940	1495.702	6257841	1277.11
2003	8448241	1723.427	7663114	1563.263
2004	9740558	1981.399	9064032	1843.782
2005	10958511	2182.536	11085222	2207.772
2006	13269983	2615.29	14661301	2889.496
2007	16242616	3065.223	18592079	3508.601
2008	19855422	3473.657	22768632	3983.316
2009	24545788	4037.136	26532530	4363.903
2010	28363655	4381.164	32289381	4987.547

Table 4.5: Average population per office of scheduled commercial banks-Bihar

District	1981	1991	2001
Aurangabad	38658.5	19012.2	24253.7
Begusarai	33868.4	17791.9	22590.1
Bhagalpur(includes Banka)	29788.9	17404.7	22032.5
Bhojpur(includes Buxar)	31267.5	17352.1	21318.9
Darbhanga	22563.9	17682.8	22729.6
Gaya (includes Arwal, Jehanabad)	31981.4	17065.3	21406.6
Gopalganj	68106.1	19589.7	23655.4
Katihar	33223.8	20509.8	26006.9
Purnia (includes Araria, Kishanganj)	34909.7	22261.8	29551.22
Madhubani	24482.6	19666.8	24657.1
Munger (includes Jamui, Khagaria, Lakhisarai, Sheikhpura)	30140.2	19272.6	13565.2
Muzaffarpur	23812.0	16319.9	20252.5
Nalanda	27819.1	18672.8	21949.3
Nawada	37902.7	19424.2	25852.8
Paschim Champaran	29008.9	18819.8	24154.5
Patna	15725.0	12141.6	13837.5
Purbi Champaran	26364.1	19889.3	24778.4
Rohtas (includes Kaimur)	26003.6	17579.9	22394.1
Samastipur	28998.3	19133.3	23574.9
Saran	37220.0	19059.1	23887.5
Sitamarhi (includes Sheohar)	36455.6	20616.3	27574.8
Siwan	48079.2	18398.1	22248.7
Saharsa (includes Supaul, Madhepura)	43438.3	20638.2	26485.6
Vaishali	30227.8	21677.4	25889.7
Bihar State	28444.5	17606.3	22928.3

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various Years. For finding the average population census data (1981, 1991, 2001) was used.

Table 4.6: Average population per office of scheduled commercial banks-Tamil Nadu

District	1981	1991	2001
Chengai (includes Kancheepuram, Thiruvallur)	21526.8	18393.6	18588.2
Chennai	6592.8	4611.5	5214.5
Coimbatore	12750.8	10728.9	9775.4
Dharmapuri (includes Krishnagiri)	26627.5	16409.4	18192.9
Erode	20082.15	12610.1	12531.5
Kanyakumari	16174.9	13226.0	12892.6
Madurai (includes Dindigul, Theni)	17116.6	12677.0	12951.8
Nilgiris	12118.6	10145.9	10299.2
North Arcot (includes Tiruvannamalai, Vellore)	20249.2	16405.8	17588.3
Pudukottai	21032.9	15081.2	16777.0
Ramanathapuram (includes Sivaganga, Virudhunagar)	16113.2	12708.9	12997.6
Namakkal (includes Salem)	18210.1	14986.1	16339.8
South Arcot (includes Cuddalore, Villupuram)	25312.5	15942.6	16813.3
Thanjavur (includes Nagapattinam, Thiruvarur)	16861.2	13857.7	14211.2
Tiruchirapalli (includes Ariyalur, Karur, Perambalur)	15637.7	12539.5	12980.6
Tirunelveli (includes Toothukudi)	13905.6	11779.0	12102.1
Tamil Nadu State	15861.7	12598.3	12653.6

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various Years. For finding the average population census data (1981, 1991, 2001) was used.

Table 4.7: Population group wise credit-deposit ratios of scheduled commercial banks (1980-2010)

	All	CDR	-Rural	CDR- S	emi-urban	CDR-	- Urban	CDR- M	Ietropolitan
YEAR	India CDR	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation
1980	67.2	54.5	-	47.2	-	60.0	-	87.0	-
1981	66.5	58.2	-	49.9	-	61.4	-	82.1	-
1982	67.4	59.4	-	50.7	-	60.4	-	84.9	-
1983	67.7	59.3	-	50.9	-	59.2	-	87.1	-
1984	70.7	63.2	-	52.8	-	57.1	-	84.2	-
1985	67.9	69.9	-	55.1	-	57.9	-	81.2	-
1986	62.1	65.6	-	51.8	-	53.9	-	71.8	-
1987	59.5	62.8	-	49.5	-	52.2	-	68.8	-
1989	60.8	66.0	-	49.1	-	55.7	-	68.5	-
1990	60.7	61.2	97.1	49.1	48.3	55.6	52.9	69.9	58.0
1991	61.9	60.0	85.9	49.0	50.2	56.2	55.7	72.8	62.5
1992	57.7	57.9	77.0	46.4	49.0	53.6	54.5	65.1	56.5
1993	58.9	55.3	73.4	44.0	47.3	51.6	52.6	70.9	62.5
1994	54.3	50.0	62.6	39.0	42.0	48.3	48.7	66.1	60.0
1995	55.6	48.6	64.7	39.7	44.5	46.5	44.3	68.8	63.1
1996	59.8	47.3	63.0	40.0	44.3	47.2	46.5	79.2	72.4
1997	56.8	44.1	54.6	38.1	41.4	44.4	46.0	76.1	70.2
1998	55.3	43.4	55.5	36.6	40.2	43.0	44.3	74.1	67.7
1999	54.8	41.0	52.5	35.7	40.3	42.6	44.1	74.7	67.8
2000	56.0	40.4	49.3	34.7	40.0	41.9	42.1	78.9	73.2
2001	56.7	39.0	49.4	33.2	38.2	43.0	43.8	80.9	74.7
2002	58.4	41.8	55.0	34.3	41.9	42.4	48.4	82.5	71.8
2003	59.2	43.7	60.3	35.3	43.1	42.6	49.2	82.8	70.9
2004	58.2	43.6	56.3	37.3	42.8	45.5	51.5	75.9	67.7
2005	66.0	51.6	75.3	44.2	48.3	50.5	56.6	83.7	73.8
2006	72.4	55.8	88.2	50.1	57.8	57.0	64.1	87.5	76.3
2007	75.0	61.2	93.2	52.7	59.5	59.5	65.8	88.5	79.0
2008	74.4	60.3	106.5	53.2	59.5	58.4	65.5	87.2	75.7
2009	72.6	57.1	85.1	50.0	58.7	55.6	60.6	86.9	78.4
2010	73.3	59.3	91.6	52.1	59.9	59.1	62.8	85.9	77.4

Table 4.8: Region-wise credit-deposit ratio of scheduled commercial banks (1975-2010)

YEAR	All	,0	nern Region	CDR-Nort			ern region as	`	ral region as	CDR-West	ern region as	CDR-Sout	hern region
	India	as per	C	region as p	er	per	C	per	C	per	· ·	as per	C
	CDR	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation	Sanction	Utilisation
1975	72.2	69.5	65.6	39.8	73.1	63.3	63.5	56.5	63.8	74.2	71.0	91.2	93.6
1976	77.2	103.6	101.4	40.6	64.7	60.0	60.8	46.4	53.9	72.7	69.4	95.0	95.4
1977	72.5	101.3	100.5	38.9	53.0	59.0	59.4	47.8	52.6	65.9	62.6	82.7	84.2
1978	69.8	88.6	90.3	38.4	54.4	58.6	57.7	48.0	51.5	67.0	63.6	78.6	79.4
1979	69.1	84.6	84.2	36.5	53.4	55.6	54.8	49.8	54.1	69.0	65.9	78.0	79.3
1980	67.2	76.1	75.3	35.6	49.2	56.1	55.5	45.7	49.2	70.5	68.4	77.6	78.5
1981	66.5	68.7	68.0	40.1	53.1	53.4	52.3	50.6	53.4	70.6	69.0	80.9	82.0
1982	67.4	75.1	73.9	42.3	63.4	54.7	53.8	51.7	54.6	69.0	66.6	79.2	80.8
1983	67.7	64.9	65.6	43.2	53.6	56.7	55.8	50.1	53.1	78.5	78.6	79.3	76.6
1984	70.7	68.1	68.8	45.5	73.7	51.5	50.2	57.3	57.2	83.7	81.7	81.9	82.5
1985	67.9	66.4	66.1	42.2	65.9	53.8	52.6	48.5	48.7	81.5	80.3	77.7	78.3
1986	62.1	57.3	56.9	43.6	57.4	45.7	44.1	47.6	49.4	71.8	70.6	78.6	79.4
1987	59.5	49.8	48.8	47.1	60.7	46.5	44.9	45.6	47.8	65.9	64.7	82.3	83.3
1988	56.2	43.7	42.9	49.4	60.5	46.7	45.5	43.1	45.0	61.3	60.2	80.4	81.2
1989	60.8	47.0	45.9	50.3	69.8	53.7	52.4	47.3	49.9	66.6	65.2	83.8	84.5
1990	60.7	49.0	47.6	54.9	70.0	53.3	52.6	47.1	49.8	65.3	63.7	82.4	83.2
1991	61.9	53.7	52.4	46.9	60.9	49.9	49.2	50.3	52.8	67.7	66.1	81.1	82.1
1992	57.7	51.1	49.3	46.7	66.3	49.5	49.1	47.6	50.2	58.2	56.5	76.5	77.7
1993	58.9	58.0	56.7	44.7	64.0	50.5	50.4	46.7	49.7	60.5	58.5	71.5	72.3
1994	54.3	57.8	56.6	38.9	50.0	44.1	43.9	42.0	44.3	53.2	52.2	67.3	67.9
1995	55.6	48.6	47.5	35.6	45.9	47.1	46.6	39.0	41.2	63.2	62.4	69.4	69.9
1996	59.8	51.4	50.4	35.5	41.1	47.0	46.4	40.0	42.0	72.2	71.4	74.2	74.8
1997	56.8	48.4	47.0	32.1	36.1	42.8	42.1	37.5	40.7	67.2	66.2	74.5	75.3
1998	55.3	48.8	47.5	30.4	33.5	40.9	40.4	35.8	39.2	66.5	65.0	71.1	72.0
1999	54.8	51.1	49.4	28.9	33.7	38.2	38.0	33.7	36.8	68.0	67.0	68.2	68.7
2000	56.0	51.1	49.6	28.1	30.6	37.0	37.2	33.9	36.8	75.4	74.6	66.2	66.8
2001	56.7	54.7	52.5	27.6	32.0	36.7	36.6	32.7	36.9	75.5	74.8	66.6	66.8
2002	58.4	56.2	55.0	27.2	53.2	37.6	41.4	33.9	38.4	79.7	71.3	64.6	68.9

2003	59.2	56.0	56.5	27.4	48.2	39.6	42.8	33.3	38.6	81.0	71.5	66.3	71.2
2004	58.2	54.8	56.8	29.8	33.7	41.8	45.2	35.6	39.9	72.0	63.2	68.5	72.7
2005	66.0	59.5	62.2	35.0	44.6	45.5	50.4	40.8	45.8	83.5	71.8	78.1	83.9
2006	72.4	64.6	67.9	40.7	52.3	49.2	55.6	44.2	50.0	92.0	78.9	84.4	90.8
2007	75.0	69.6	71.2	40.7	48.6	54.1	60.6	47.4	52.3	90.1	77.3	87.0	96.6
2008	74.4	67.7	70.1	40.7	48.3	51.5	58.2	46.1	54.6	88.6	76.0	89.1	96.8
2009	72.6	68.9	71.1	36.0	39.2	48.8	50.8	44.3	48.7	85.6	77.0	87.9	94.1
2010	73.3	74.4	74.9	35.5	39.1	50.8	53.5	47.3	51.0	79.1	74.7	92.7	94.8

Table 4.9: Credit-deposit ratios of Bihar and Tamil Nadu (1975-2010)

	BIF	IAR	TAMIL	L NADU
YEAR	CDR as per place			
	of sanction	of utilisation	of sanction	of utilisation
1975	44.8	63.5	105.7	103.9
1976	43.5	61.3	119.3	114.2
1977	38.4	54.2	100.9	99.7
1978	41.2	53.4	93.4	92.8
1979	39.2	49.6	91.3	90.8
1980	41.8	47.2	88.0	87.7
1981	41.8	47.3	98.2	98.4
1982	41.8	47.5	98.1	100.3
1983	43.9	50.4	94.5	86.7
1984	39.7	43.4	90.6	89.9
1985	36.8	39.5	85.4	84.8
1986	35.3	36.2	88.0	87.2
1987	33.0	33.6	91.0	90.5
1988	32.1	33.0	91.1	90.6
1989	32.6	33.3	99.3	98.4
1990	36.8	39.0	96.2	95.4
1991	38.3	39.5	96.9	97.2
1992	36.9	38.5	89.0	89.1
1993	37.4	40.9	86.2	86.2
1994	35.2	37.0	82.5	82.7
1995	32.5	33.8	86.6	86.8
1996	30.1	31.1	94.9	94.4
1997	28.9	29.7	97.3	97.3
1998	28.3	28.7	92.6	92.6
1999	25.6	27.4	90.7	90.3
2000	22.5	23.2	88.6	87.5
2001	20.7	20.7	90.6	90.6
2002	21.3	21.9	85.4	88.5
2003	23.1	23.7	90.7	93.1
2004	24.9	26.9	93.1	96.1
2005	27.7	31.4	101.2	105.4
2006	30.3	40.0	110.5	109.3
2007	32.4	49.0	114.5	118.6
2008	28.2	45.0	114.7	117.0
2009	26.8	26.6	108.1	115.2
2010	29.0	29.7	113.8	113.5

 $\begin{tabular}{ll} Table 4.10: Population group wise credit-deposit ratios of scheduled commercial banks in Bihar (1980-2010) \end{tabular}$ 

Year	Rural	Semi-Urban	Urban	Metropolitan
1980	60.33	36.66	40.35	-
1981	56.44	36.31	40.80	-
1982	52.69	38.56	39.66	-
1983	52.04	40.22	43.13	-
1984	59.97	33.82	34.66	-
1985	53.34	31.75	32.56	-
1986	51.51	29.70	30.98	-
1987	50.12	27.64	27.53	-
1989	42.45	30.28	27.27	-
1990	51.46	31.25	30.88	-
1991	47.58	34.83	33.94	-
1992	49.04	29.48	32.99	-
1993	49.16	31.18	32.46	-
1994	45.94	29.38	30.71	-
1995	42.24	26.58	29.72	-
1996	37.03	24.14	29.37	-
1997	31.64	22.01	32.11	-
1998	30.96	20.89	32.43	-
1999	25.18	19.09	31.44	-
2000	22.44	17.88	26.11	-
2001	21.24	17.76	22.47	-
2002	22.50	19.85	21.45	-
2003	25.12	21.86	22.23	-
2004	26.35	22.62	25.35	-
2005	31.93	25.14	26.18	-
2006	36.79	28.62	27.36	26.80
2007	45.41	30.88	29.38	22.97
2008	34.63	27.11	25.88	24.74
2009	35.48	25.51	25.65	20.71
2010	37.44	27.32	27.25	23.81

Table 4.11: Population group wise credit-deposit ratios of scheduled commercial banks in Tamil Nadu (1980-2010)

Year	Rural	Semi-urban	Urban	Metropolitan
1980	87.20	68.24	95.19	-
1981	98.91	72.53	107.97	-
1982	91.82	69.55	110.58	-
1983	89.55	67.91	106.23	-
1984	90.28	69.84	98.85	-
1985	91.20	67.05	91.40	-
1986	106.28	67.03	94.85	-
1987	92.25	71.00	98.17	-
1989	112.75	81.94	102.98	-
1990	102.01	73.06	103.19	-
1991	104.68	72.77	104.17	-
1992	92.58	65.94	95.89	-
1993	87.45	63.32	93.05	-
1994	82.71	60.87	89.17	-
1995	85.40	64.79	92.84	-
1996	84.38	67.36	94.56	110.93
1997	79.19	62.53	89.95	125.44
1998	76.23	59.38	85.52	117.49
1999	68.08	56.85	87.23	117.04
2000	63.39	52.35	83.28	117.61
2001	58.49	50.79	80.72	128.80
2002	54.82	50.72	73.00	121.00
2003	60.09	50.88	75.32	129.69
2004	60.38	55.05	83.02	125.20
2005	75.29	67.24	97.96	124.07
2006	85.51	75.39	108.70	130.41
2007	90.04	78.88	120.34	130.00
2008	85.09	80.99	124.03	129.46
2009	87.33	79.17	113.38	120.75
2010	94.80	84.65	108.77	131.56

Table 4.12: Credit-deposit ratios (as per place of sanction) of districts of Bihar (1980-2010)

Year	Aurangabad	Begusarai	Bhagalpur	Bhojpur	Darbhanga	Gaya	Gopalganj	Katihar	Madhubani	Munger	Muzaffarpur	Purnia
1980	19.98	42.61	42.29	22.62	39.21	30.19	55.60	55.71	38.43	26.83	39.76	83.13
1981	22.03	41.50	78.57	24.35	40.52	28.72	45.22	48.20	38.82	35.58	39.03	86.69
1982	25.62	57.53	45.50	28.66	37.55	34.53	59.82	43.42	52.20	44.53	42.97	91.18
1983	25.16	46.66	39.50	24.78	44.75	35.25	65.38	42.52	69.57	64.15	39.51	75.40
1984	29.09	48.81	42.26	38.94	41.29	39.06	59.28	65.32	67.47	39.69	34.63	87.29
1985	31.77	38.19	34.77	25.44	46.71	30.61	42.12	46.93	61.60	31.88	35.11	72.19
1986	29.14	41.83	35.12	23.68	46.08	29.41	25.44	46.69	56.43	34.03	35.55	70.22
1987	26.98	42.07	35.23	22.11	45.71	26.47	28.29	48.50	55.77	33.20	31.56	69.07
1989	40.24	44.85	34.66	25.87	45.39	28.41	15.74	53.70	54.34	32.80	33.58	60.97
1990	51.40	52.72	39.09	25.82	31.60	29.84	32.32	75.01	60.71	25.74	43.73	67.26
1991	48.71	57.54	42.13	28.69	48.91	32.69	34.73	74.31	53.62	33.84	43.93	92.07
1992	37.86	46.76	45.07	30.70	40.23	34.42	31.31	78.71	54.00	35.75	42.89	67.25
1993	44.87	47.53	44.47	29.65	45.17	38.18	30.10	76.52	55.11	37.84	43.24	73.57
1994	40.72	44.05	44.10	26.60	44.02	35.84	28.12	65.07	47.99	32.67	42.99	72.65
1995	33.83	40.04	37.17	27.61	41.37	33.25	24.80	59.03	43.93	31.87	37.28	60.92
1996	28.39	38.83	32.45	24.28	32.34	29.91	23.19	53.53	34.68	29.33	33.08	57.10
1997	22.56	32.28	30.14	19.90	27.21	24.38	19.98	42.25	27.81	24.67	27.54	52.12
1998	22.90	28.03	29.66	20.65	24.89	22.77	20.72	38.34	27.23	22.39	26.17	48.77
1999	19.31	28.87	27.04	19.27	21.64	18.61	15.93	39.64	24.83	20.76	25.35	45.99

2000	18.85	26.44	24.18	17.36	16.69	17.72	14.47	35.09	20.04	19.01	21.68	39.27
2001	15.84	22.58	21.64	15.31	17.63	16.08	15.01	35.29	17.98	16.36	3.05	37.17
2002	17.45	24.32	23.13	15.63	19.45	16.58	16.24	37.17	24.26	17.67	23.44	39.49
2003	19.09	29.15	25.45	18.12	21.67	17.86	17.90	41.62	27.68	19.09	25.39	43.29
2004	20.56	30.80	27.05	18.24	23.11	19.66	18.12	46.65	26.57	20.33	26.86	44.72
2005	24.29	35.06	33.15	22.60	23.93	22.18	22.70	57.66	27.23	23.88	28.65	48.35
2006	24.96	40.38	38.00	24.59	0.48	24.85	43.93	62.52	28.06	24.95	29.76	50.92
2007	23.85	44.29	38.28	28.58	27.35	26.35	26.17	57.01	118.66	26.91	35.85	52.57
2008	23.05	37.77	34.53	26.14	20.59	27.06	21.34	52.46	24.68	24.97	30.19	50.27
2009	22.46	33.24	29.00	22.94	22.74	26.09	26.54	44.46	23.52	23.28	42.81	41.92
2010	23.09	34.74	30.19	24.74	23.32	27.10	27.77	42.88	25.11	20.54	46.08	46.34

Note: Currently there are 38 districts in Bihar. In 1980 there were only 24 districts. New districts were carved out from existing ones. To make the data set comparable credit-deposit ratios are computed for the initial 24 districts by adding up the figures of the new districts to their parent districts. For details refer to Table 4.5. Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years.

Table 4.12 (continued): Credit-deposit ratios (as per place of sanction) of districts of Bihar (1980-2010)

Year	Nalanda	Nawada	Paschim Champaran	Patna	Purbi Champaran	Rohtas	Samastipur	Saran	Sitamarhi	Siwan	Saharsa	Vaishali
1980	56.62	53.29	58.00	45.66	68.74	40.14	48.04	40.81	48.80	37.31	85.85	45.06
1981	56.09	42.95	55.73	52.62	62.58	35.19	47.75	32.06	52.88	35.50	68.70	45.23
1982	39.38	52.80	94.03	47.22	59.03	37.59	56.30	29.44	58.10	33.53	68.75	43.75
1983	53.64	41.62	80.13	53.87	79.27	34.72	58.97	30.94	68.32	34.18	64.60	47.10
1984	70.64	32.77	103.65	35.95	94.93	39.33	51.06	35.62	80.90	38.65	89.86	48.01
1985	58.81	31.18	69.18	37.24	63.21	31.00	40.53	29.26	67.43	31.38	66.96	41.08
1986	59.11	31.27	65.58	35.19	62.66	31.10	40.11	27.99	61.03	31.35	62.09	41.17
1987	47.29	32.97	60.84	29.39	65.81	32.63	40.10	24.63	61.10	27.27	56.31	38.52
1989	51.59	48.78	59.05	27.14	58.33	33.61	43.00	25.46	55.76	29.49	56.85	43.82
1990	46.88	50.84	58.16	30.60	60.29	55.85	46.67	51.76	66.16	29.39	54.43	42.00
1991	47.17	48.39	60.28	32.60	67.92	39.79	43.92	36.52	64.41	23.89	62.80	41.23
1992	43.60	44.90	56.61	33.27	53.96	41.49	41.95	35.34	67.17	24.75	65.35	40.66
1993	45.67	50.08	65.22	31.92	56.16	43.61	41.94	33.72	70.26	24.80	63.38	40.24
1994	38.82	47.15	58.68	31.76	55.06	39.97	43.13	29.67	67.26	23.19	59.00	37.53
1995	37.00	40.23	64.14	28.19	48.82	36.78	33.10	23.84	62.12	19.86	48.34	30.18
1996	30.18	36.69	73.24	22.31	43.81	33.97	30.91	20.71	51.16	16.76	44.02	26.10
1997	25.31	32.69	66.08	21.15	37.30	28.48	24.87	18.15	46.78	13.89	41.42	23.40
1998	24.48	31.33	55.78	23.42	33.93	28.31	24.41	17.37	42.67	13.72	41.86	21.81

1999	20.35	24.81	41.51	21.16	28.81	25.08	22.47	15.38	35.95	12.02	39.10	18.28
2000	16.96	23.58	34.13	19.92	23.54	25.40	21.02	13.27	28.25	13.04	30.95	14.16
2001	13.93	19.27	43.77	23.68	22.92	23.19	20.64	11.54	25.46	11.96	29.10	13.44
2002	15.80	18.93	41.75	21.36	25.71	24.87	24.82	13.09	28.29	11.29	34.88	16.17
2003	17.20	18.39	52.03	21.48	27.59	27.02	28.20	14.61	29.43	12.98	37.63	18.20
2004	18.42	17.60	48.45	25.00	29.57	28.07	28.35	18.00	32.73	13.22	35.51	20.61
2005	22.35	18.56	51.14	25.46	35.06	33.02	33.90	21.45	33.59	14.23	37.56	24.79
2006	24.50	21.40	57.17	26.12	39.81	37.48	33.60	24.78	34.67	15.65	37.26	25.91
2007	24.65	25.24	62.67	23.22	40.78	40.63	35.69	26.27	40.74	19.56	34.63	30.69
2008	24.29	25.85	45.74	24.56	31.76	41.82	33.29	20.07	26.75	14.62	32.67	25.25
2009	23.15	24.33	44.56	20.92	33.72	38.14	33.25	23.53	31.87	18.23	25.72	27.51
2010	25.56	28.81	44.05	23.80	38.09	40.65	36.82	24.18	32.97	18.75	30.11	30.06

Note: Currently there are 38 districts in Bihar. In 1980 there were only 24 districts. New districts were carved out from existing ones. To make the data set comparable credit-deposit ratios are computed for the initial 24 districts by adding up the figures of the new districts to their parent districts. For details refer to Table 4.5. Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years.

Table 4.13: Credit-deposit ratios (as per place of sanction) of districts of Tamil Nadu (1980-2010)

Year	Chengai	Chennai	Coimbatore	Dharmapuri	Erode	Kanyakumari	Madurai	Nilgiris
1980	64.21	102.66	99.02	90.87	63.55	54.31	87.24	118.83
1981	72.24	121.12	106.16	103.75	65.09	58.75	92.18	132.27
1982	69.57	123.17	111.98	117.20	58.33	51.76	89.46	142.16
1983	72.03	117.74	107.72	104.80	58.55	54.70	94.13	121.38
1984	77.18	107.25	110.78	113.30	62.56	60.45	92.86	125.89
1985	75.44	97.75	99.66	116.05	65.33	57.37	92.50	100.94
1986	68.74	102.80	105.26	111.10	68.40	51.43	97.18	112.58
1987	76.88	106.07	104.62	116.16	73.55	53.88	102.02	73.87
1989	79.84	108.53	119.18	151.50	95.81	62.85	102.40	109.39
1990	81.47	111.21	105.15	128.08	79.02	53.54	100.07	97.51
1991	81.39	112.18	104.57	118.92	76.25	54.83	95.82	116.46
1992	72.00	102.00	100.28	117.66	71.15	49.75	93.79	81.49
1993	77.50	97.57	100.11	104.38	63.09	45.60	86.60	98.31
1994	68.57	92.65	98.54	91.60	62.92	41.11	85.49	108.02
1995	63.77	97.46	110.75	91.33	65.48	42.39	88.48	159.10
1996	64.61	110.93	132.68	90.16	72.91	41.68	97.40	129.67
1997	56.22	125.44	130.27	81.02	72.99	41.82	91.47	131.81
1998	51.97	117.49	126.80	77.47	75.81	43.87	78.40	111.16
1999	44.20	117.04	129.84	72.89	72.12	41.46	76.91	106.28
2000	42.02	117.61	121.04	69.07	69.00	38.21	71.18	105.96
2001	38.95	128.80	119.76	72.93	66.17	36.76	65.53	96.93
2002	36.25	121.00	106.18	67.54	65.43	38.97	61.27	57.55
2003	36.55	129.69	105.94	63.66	64.94	43.70	68.31	59.50
2004	39.34	125.20	116.53	60.88	68.94	46.75	78.85	63.14
2005	44.41	124.07	141.93	92.17	85.42	67.63	88.23	72.99
2006	53.65	130.41	153.20	92.04	97.77	79.71	101.31	77.71
2007	46.82	130.00	168.62	101.45	112.08	83.42	106.95	75.87
2008	47.99	129.46	170.36	105.07	114.14	90.01	107.35	70.40
2009	53.79	120.75	159.69	110.47	107.74	83.94	100.27	66.54
2010	48.63	131.56	134.79	119.63	111.93	96.99	102.57	64.46

Note: Currently there are 32 districts in Tamil Nadu. In 1980 there were only 16 districts. New districts were carved out from existing ones. To make the data set comparable credit-deposit ratios are computed for the initial 16 districts by adding up the figures of the new districts to their parent districts. For details refer to Table 4.6.

Table 4.13 (continued): Credit-deposit ratios (as per place of sanction) of districts of Tamil Nadu (1980-2010)

I dill		(1700-2010				1		
Year	North Arcot	Pudukottai	Ramanatha- puram	Namakkal	South Arcot	Thanjavur	Tiruchirapalli	Tirunelveli
1980	89.66	54.19	93.05	65.04	66.88	45.66	84.78	58.51
1981	105.60	65.78	98.30	71.91	74.16	48.98	82.14	61.09
1982	93.49	66.90	90.72	72.17	69.12	49.13	87.74	58.36
1983	82.23	64.53	83.55	71.74	75.41	48.80	81.26	57.71
1984	89.16	63.91	93.01	75.79	51.29	52.76	66.95	64.32
1985	76.27	70.03	86.37	79.10	55.13	52.10	63.97	63.31
1986	81.57	66.91	80.49	70.60	68.04	55.03	69.41	56.57
1987	87.53	85.00	88.24	72.46	72.79	57.61	70.06	58.33
1989	97.42	98.25	94.18	86.45	82.49	61.47	97.75	61.75
1990	99.11	95.38	94.94	78.39	77.98	54.17	78.48	62.32
1991	102.70	84.38	96.52	76.39	74.76	58.91	79.91	61.31
1992	86.15	79.11	79.45	76.74	74.50	53.77	76.75	55.13
1993	93.42	70.91	74.09	73.25	75.44	46.42	71.94	54.02
1994	85.90	66.51	69.76	68.36	70.61	45.75	75.19	54.33
1995	83.79	65.83	71.74	70.94	66.84	45.90	72.66	58.46
1996	82.93	62.07	81.23	75.88	66.46	48.02	69.29	59.93
1997	76.30	52.11	73.37	73.06	54.35	44.14	65.85	54.85
1998	67.48	52.66	68.60	71.42	57.68	43.55	62.30	52.56
1999	65.49	48.55	72.70	71.66	56.72	41.10	57.25	47.28
2000	62.65	46.36	68.28	63.63	54.31	40.08	53.88	46.07
2001	58.70	46.15	66.35	62.19	51.14	37.94	49.84	45.94
2002	54.41	43.22	61.74	62.25	56.00	38.87	48.86	45.45
2003	54.30	50.96	62.98	63.28	57.82	44.00	50.18	50.15
2004	56.32	53.90	70.12	71.11	50.27	48.09	55.24	51.63
2005	72.42	66.27	80.92	79.88	57.55	60.83	68.68	62.75
2006	76.47	73.84	89.36	96.45	67.58	67.11	74.66	69.73
2007	74.98	74.80	98.24	105.68	91.76	69.67	82.93	74.47
2008	76.15	82.56	108.79	106.77	96.43	70.95	84.79	76.15
2009	70.90	73.65	106.10	101.65	82.49	64.38	79.16	72.33
2010	77.31	86.45	112.34	102.79	87.72	70.82	85.24	76.64

Note: Currently there are 32 districts in Tamil Nadu. In 1980 there were only 16 districts. New districts were carved out from existing ones. To make the data set comparable credit-deposit ratios are computed for the initial 16 districts by adding up the figures of the new districts to their parent districts. For details refer to Table 4.6.

Table 4.14: Mobilisation of deposits from and disbursal of credit to Bihar as percentages of all-India total deposits and credit (1980-2010)

Year	Deposits as a %tage of total	Credit (as per place of sanction) as a %tage of total	Credit (as per place of utilisation) as a %tage of total
1980	2.34	1.51	1.66
1981	2.48	1.73	1.98
1982	2.57	1.76	1.65
1983	2.60	1.88	1.91
1984	2.47	1.57	1.71
1985	2.76	1.60	1.71
1986	2.79	1.71	1.62
1987	2.96	1.74	1.85
1988	2.99	1.74	1.86
1989	3.03	1.75	1.86
1990	3.44	2.21	2.33
1991	2.95	1.99	1.94
1992	2.64	1.77	1.84
1993	2.55	1.75	1.76
1994	2.43	1.73	1.74
1995	2.47	1.53	1.55
1996	2.59	1.31	1.34
1997	2.64	1.23	1.25
1998	2.70	1.27	1.28
1999	2.80	1.18	1.19
2000	2.90	1.07	1.08
2001	2.82	1.03	1.03
2002	2.66	0.97	1.00
2003	2.58	1.01	1.03
2004	2.38	1.02	1.10
2005	2.35	0.99	1.12
2006	2.19	0.92	1.21
2007	2.16	0.93	1.41
2008	2.09	0.79	1.26
2009	2.22	0.82	0.81
2010	2.20	0.87	0.89

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI,

Various years

Table 4.15: Mobilisation of deposits from and disbursal of credit to Tamil Nadu as percentages of all-India total deposits and credit (1980-2010)

	B : 0/1 6	Credit (as per place of	Credit (as per place of
Year	Deposits as a %tage of	sanction) as a %tage of	utilisation) as a %tage
	total	total	of total
1980	6.90	9.04	9.01
1981	6.51	9.63	9.65
1982	6.45	9.37	9.59
1983	6.57	9.17	8.41
1984	6.52	8.35	8.29
1985	6.64	8.36	8.29
1986	6.30	8.92	8.83
1987	6.37	9.74	9.69
1988	6.26	10.15	10.09
1989	6.37	10.40	10.31
1990	6.60	10.46	10.37
1991	6.78	10.61	10.64
1992	6.67	10.30	10.30
1993	6.95	10.18	10.18
1994	6.65	10.10	10.13
1995	6.81	10.60	10.62
1996	6.83	10.85	10.79
1997	6.65	11.38	11.38
1998	6.70	11.22	11.22
1999	6.57	10.88	10.82
2000	6.72	10.62	10.49
2001	6.64	10.61	10.61
2002	6.52	9.54	9.89
2003	6.62	10.14	10.41
2004	6.45	10.30	10.64
2005	6.27	9.62	10.02
2006	6.35	9.68	9.58
2007	6.25	9.55	9.89
2008	6.11	9.42	9.61
2009	6.26	9.32	9.93
2010	6.22	9.65	9.63

Table 4.16: Bank credit to GDDP ratios for the districts of Bihar (2004-05 to 2007-08)

(amount in Rs. lakhs)

District	Bank credit outstanding (sanctioned)	GDDP at current prices	Credit to GDDP ratio (percent)	Bank credit outstanding (sanctioned)	GDDP at current prices	Credit to GDDP ratio (percent)	Bank credit outstanding (sanctioned)	GDDP at current prices	Credit to GDDP ratio (percent)	Bank credit outstanding (sanctioned)	GDDP at current prices	Credit to GDDP ratio (percent)
	2	2004-2005		2	2005-2006			2006-2007			2007-2008	
Patna	230921	1856567	12.44	277304	1990729	13.93	321611	2567081	12.53	390515	3208973	12.17
Nalanda	18296	161656	11.32	23088	186401	12.39	27850	218355	12.75	32749	256553	12.77
Bhojpur	23298	160255	14.54	30781	185897	16.56	36064	228879	15.76	46258	267784	17.27
Buxar	15611	94274	16.56	20875	114298	18.26	24074	135993	17.70	30814	167051	18.45
Rohtas	28770	218690	13.16	35472	241506	14.69	45046	280784	16.04	54562	326409	16.72
Kaimur	14527	89558	16.22	18961	99580	19.04	22736	117165	19.41	27340	141861	19.27
Gaya	34398	258241	13.32	42518	284207	14.96	51519	360506	14.29	62525	419184	14.92
Jehanabad	5901	58805	10.03	8003	65988	12.13	9406	82688	11.38	11846	95870	12.36
Arwal	2689	33149	8.11	3725	38169	9.76	4334	45725	9.48	5490	52641	10.43
Nawada	7828	103781	7.54	9780	114622	8.53	12560	144924	8.67	17172	169654	10.12
Aurangabad	14740	133522	11.04	18634	141152	13.20	22066	185278	11.91	25626	217240	11.80
Saran	28576	212340	13.46	37200	238314	15.61	43372	274730	15.79	56165	329065	17.07
Siwan	20281	169488	11.97	23614	187151	12.62	27269	265388	10.28	38226	269062	14.21
Gopalganj	15917	140503	11.33	22395	155709	14.38	49157	195797	25.11	32408	218714	14.82
Muzaffarpur	47902	346933	13.81	56980	361245	15.77	65488	435032	15.05	92074	492311	18.70
Purbi Champaran	28348	264015	10.74	38198	273919	13.94	48552	335112	14.49	61395	334392	18.36
Paschim Champaran	31183	213394	14.61	37156	239217	15.53	50092	312973	16.01	64787	317682	20.39
Sitamarhi	17405	152339	11.43	21665	166742	12.99	25552	212251	12.04	37626	223689	16.82
Sheohar	1422	24202	5.88	1794	25125	7.14	2637	32307	8.16	3737	40779	9.16

Vaishali	20716	204801	10.12	28325	215938	13.12	32435	264366	12.27	45979	281909	16.31
Darbhanga	24813	234953	10.56	30136	253409	11.89	35,306	298715	11.82	45893	344827	13.31
Madhubani	20180	262982	7.67	25005	224907	11.12	29400	289583	10.15	141907	298437	47.55
Samastipur	30667	233245	13.15	43525	247645	17.58	44113	335856	13.13	55414	339242	16.33
Begusarai	26699	280000	9.54	33563	283080	11.86	42473	340993	12.46	55165	417329	13.22
Munger	26103	139422	18.72	36521	153654	23.77	43496	183193	23.74	53811	234585	22.94
Sheikhpura	3401	31205	10.90	4593	37356	12.30	5211	44289	11.77	7531	54017	13.94
Lakhisarai	5894	60264	9.78	8542	66762	12.79	10233	86373	11.85	11735	101119	11.61
Jamui	8625	90142	9.57	11212	101218	11.08	13606	123897	10.98	17067	151938	11.23
Khagaria	10050	106742	9.42	12553	116952	10.73	15095	133534	11.30	19638	157456	12.47
Bhagalpur	33888	255642	13.26	44691	286785	15.58	56,689	341700	16.59	65706	400648	16.40
Banka	9132	100460	9.09	13555	104986	12.91	18422	131123	14.05	23145	150421	15.39
Saharsa	11289	123220	9.16	14385	129017	11.15	17838	151866	11.75	21731	173715	12.51
Supaul	9985	116672	8.56	12589	118309	10.64	15790	139236	11.34	19507	153950	12.67
Madhepura	10115	103451	9.78	13124	106655	12.31	16766	122263	13.71	20945	142670	14.68
Purnia	23441	190378	12.31	30042	203027	14.80	37745	234807	16.07	48343	268750	17.99
Kishanganj	8748	96623	9.05	11182	102754	10.88	14166	122118	11.60	19417	132497	14.65
Araria	14906	135705	10.98	20845	149465	13.95	26582	168719	15.76	33927	203139	16.70
Katihar	24567	199785	12.30	35077	204040	17.19	45548	241437	18.87	49920	275790	18.10
Total	911232	7657403	11.90	1157608	8215929	14.09	1410299	10185037	13.85	1848096	11831352	15.62
0 0 1	f D C.	1 5	6.6	l	1 D 1		DDI W	ъ.	c	. D		1 C

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years. Data for District Domestic Product is sourced from Directorate of Economics and Statistics, Department of Planning and Development, Government of Bihar, Patna.

Table 4.17: Bank credit to GDDP ratios for the districts of Tamil Nadu (2003-04 to 2006-07)

(amount in Rs. lakhs)

District	Bank credit outstanding	GDDP at current	Credit to GDDP ratio	Bank credit outstanding	GDDP at current	Credit to GDDP ratio	Bank credit outstanding	GDDP at current	Credit to GDDP ratio	Bank credit outstanding	GDDP at current	Credit to GDDP ratio
	(sanctioned)	prices 2003-2004	(percent)	(sanctioned)	prices 2004-2005	(percent)	(sanctioned)	prices 2005-2006	(percent)	(sanctioned)	prices 2006-2007	(percent)
Chennai	4479204	1618101	276.82	5235655	1733943	301.95	6018813	1935581	310.96	8107332	2218606	365.42
Kancheepuram	93567	949075	9.86	117806	1071748	10.99	153661	1229848	12.49	200740	1451204	13.83
Thiruvallur	84835	967200	8.77	104278	1111069	9.39	138753	1311010	10.58	221756	1551613	14.29
Vellore	104316	936506	11.14	120447	1091744	11.03	172365	1278608	13.48	201129	1521012	13.22
Thiruvannamalai	39274	373829	10.51	44078	443285	9.94	58000	516725	11.22	77984	605260	12.88
Cuddalore	75849	613282	12.37	75810	670252	11.31	96949	723353	13.40	142141	883441	16.09
Villupuram	50913	464100	10.97	60701	552527	10.99	80922	637450	12.69	110417	745714	14.81
Thanjavur	101541	508884	19.95	120875	569246	21.23	150135	658960	22.78	187836	766797	24.50
Nagapattinam	36043	331238	10.88	42045	358912	11.71	79293	421509	18.81	92854	532993	17.42
Thiruvarur	26204	209087	12.53	29405	227305	12.94	38986	255522	15.26	50047	324386	15.43
Salem	180046	847404	21.25	220622	944445	23.36	256280	1117683	22.93	332698	1298641	25.62
Namakkal	78068	473544	16.49	93361	586242	15.93	123352	691211	17.85	168258	816091	20.62
Dharmapuri	28097	288986	9.72	33061	333691	9.91	49699	404605	12.28	57634	484312	11.90
Krishnagiri	41238	338353	12.19	51412	437039	11.76	78078	527578	14.80	91928	640414	14.35
Nilgiris	43731	217423	20.11	49540	236746	20.93	62116	255796	24.28	73972	309011	23.94
Tiruchirapalli	131763	729444	18.06	162430	832186	19.52	218471	967265	22.59	269466	1164938	23.13
Karur	65795	270294	24.34	78635	322588	24.38	108477	381051	28.47	130991	450978	29.05
Perambalur	14832	152103	9.75	29731	167694	17.73	40074	188309	21.28	52610	214286	24.55
Pudukkottai	31509	303202	10.39	36148	350261	10.32	49747	411485	12.09	65933	471879	13.97

Coimbatore	958124	1636541	58.55	1165682	1984537	58.74	1570087	2338096	67.15	2045931	2769720	73.87
Erode	184370	768782	23.98	215622	938536	22.97	289563	1094063	26.47	362761	1263358	28.71
Madurai	203144	743137	27.34	260818	853630	30.55	332235	984148	33.76	432979	1159998	37.33
Theni	45961	228933	20.08	50367	280737	17.94	66748	327212	20.40	91246	367921	24.80
Dindigul	88310	502833	17.56	117439	584982	20.08	131085	670666	19.55	171477	787249	21.78
Ramanathapuram	27335	274887	9.94	30710	303930	10.10	41923	344430	12.17	57364	389153	14.74
Sivaganga	38922	246419	15.80	47565	284717	16.71	61010	325748	18.73	78429	371836	21.09
Virudhunagar	129704	706494	18.36	160453	794069	20.21	196875	939928	20.95	246340	1115203	22.09
Tirunelveli	98318	746502	13.17	114580	880292	13.02	150665	1002246	15.03	203872	1205959	16.91
Toothukudi	92463	535721	17.26	104339	625583	16.68	130928	721157	18.16	150577	824986	18.25
Kanyakumari	76377	554775	13.77	90417	665419	13.59	139931	822455	17.01	184600	984765	18.75
Total	7649853	17537080	43.62	9064032	20237357	44.79	11085221	23483693	47.20	14661302	27691723	52.94

Source: Computed from Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various years. Data for District Domestic Product is sourced from Department of Economics and Statistics, Government of Tamil Nadu.