Banking in India – Reforms and Reorganization

Rajesh Chakrabarti
College of Management, Georgia Tech
800 West Peachtree Street,
Atlanta GA 30332, USA
Tel: 404-894-5109
Fax: 404-894-6030
E-mail: rajesh.chakrabarti@mgt.gatech.edu

Abstract:
The banking industry in India is undergoing a transformation since the beginning of liberalization. Interest rates have declined considerably but there is evidence of under-lending by the banks. The “social” objectives of banking measured in terms of rural credit are, expectedly, taking a back seat. The performance of the banks has improved slightly over time with the public sector banks doing the worst among all banks. The banking sector as a whole and particularly the public sector banks still suffer from considerable NPAs, but the situation has improved over time. New legal developments like the SARFAESI Act provide new options to banks in their struggle against NPAs. The adoption of Basel-II norms however imply new challenges for Indian banks as well as regulators. Over time, the Indian banking industry has become more competitive and less concentrated. The new private sector banks have been the most efficient though the recent collapse of Global Trust bank has raised issues about efficiency and regulatory effectiveness.
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1. Introduction

The changes in Indian banking since liberalization have been no less marked than those in the financial markets. In relatively less conspicuous but equally certain ways, the banking sector has moved towards greater privatization and globalization in the decade and a half since liberalization. As in the case of financial markets, the ride has not been free of bumps, but on the whole, it has stayed on course. Larger private banks – often floated by public institutions – as well as foreign banks have entered the arena and several new financial products are being offered. While mishaps like the Global Trust Bank collapse have occasionally shaken the confidence of depositors and the financial system, timely intervention and bail-out, regardless of their feared long-term effects, have avoided them from boiling over to crisis proportions.

With total deposits of over 11 lakh crores (roughly over $245 billion dollars) in 2001-02, the Indian commercial banking sector is one of the largest in the world. Over the decades, the Indian banking sector has grown steadily in size, measured in terms of total deposits, at a fairly uniform average annual growth rate of about 18% (see figure 1). Liberalization did not create a noticeable rise in the growth rate. If anything, the growth rate has declined marginally. Nevertheless, other changes in the nature of banking in India have continued to occur over the years.

[Figure 1 about here]

2. Indian Banking – a background

Banking is an ancient business in India with some of oldest references in the writings of Manu. Bankers played an important role during the Mogul period. During the early part of the East India Company era, agency houses were involved in banking. Modern banking (i.e. in the form of joint-stock companies) may be said to have had its beginnings in India as far back as in 1786, with the establishment of the General Bank of India. Three Presidency Banks were established in Bengal, Bombay and Madras in the early 19th century. These banks functioned independently for about a century before they were merged into the newly formed Imperial Bank of India in 1921. The Imperial Bank was the forerunner of the present State Bank of India. The latter was established under the State Bank of India Act of 1955 and took over the Imperial Bank. The Swadeshi movement witnessed the birth of several indigenous banks including the Punjab National Bank, Bank of Baroda and Canara Bank. In 1935, the Reserve Bank of India was established under the Reserve Bank of India Act as the central bank of India.

In spite of all these developments, independent India inherited a rather weak banking and financial system marked by a multitude of small and unstable private banks whose failures frequently robbed their middle-class depositors of their life’s savings. After independence, the Reserve Bank of India was nationalized in 1949 and given wide powers in the area of bank supervision through the Banking Companies Act (later renamed Banking Regulations Act). The nationalization of the Imperial bank through the formation of the State Bank of India and the subsequent acquisition of the state owned
banks in eight princely states by the State Bank of India in 1959 made the government the dominant player in the banking industry. In keeping with the increasingly socialistic leanings of the Indian government, 14 major private banks, each with deposits exceeding Rs. 50 crores, were nationalized in 1969. This raised the proportion of scheduled bank branches in government control from 31% to about 84%. In 1980, six more private banks each with deposits exceeding Rs 200 crores, were privatized further raising the proportion of government controlled bank branches to about 90%.

As in other areas of economic policy-making, the emphasis on government control began to weaken and even reverse in the mid-80s and liberalization set in firmly in the early 90’s. The poor performance of the public sector banks, which accounted for about 90% of all commercial banking, was rapidly becoming an area of concern. The continuous escalation in non-performing assets (NPAs) in the portfolio of banks posed a significant threat to the very stability of the financial system. Banking reforms, therefore, became an integral part of the liberalization agenda. The first Narasimham Committee set the stage for financial and bank reforms in India. Interest rates, previously fixed by the Reserve Bank of India, were liberalized in the 90’s and directed lending through the use of instruments of the Statutory Liquidity Ratio was reduced. While several committees have looked into the ailments of commercial banking in India, three of them – the Narasimham committee I (1992) and II (1998) and the Verma committee – have aimed at major changes in the banking system. Nevertheless, more than a decade since the beginning of economic reforms, the banking sector is still struggling under the burden of considerable NPAs and the poor performance of public sector banks continues to be a major issue.

The financial reform process is often thought of as comprising two stages – the first phase guided broadly by the Narasimham Committee I report while the second is based on the Narasimham Committee II recommendations. The aim of the former was to bring about “operational flexibility” and “functional autonomy” so as to enhance “efficiency, productivity and profitability”. The latter focused on bringing about structural changes so as to strengthen the foundations of the banking system to make it more stable.

During the 90’s quite a few new private sector banks made their appearance, predominantly floated by public sector or quasi-public sector financial institutions. Among the completely private sector banks that made their debut during this period, the Global Trust Bank ended in a major failure in 2004 and its depositors had to be bailed out by the RBI through a merger with the Oriental Bank of Commerce. Several foreign banks also made their entry into the Indian banking scenario while the existing foreign banks expanded their operations. Meanwhile, the performance of public sector banks continued to be saddled with operational and lending inefficiencies. The Verma Committee identified three public sector banks – Indian Bank, UCO Bank and United Bank of India – as the weakest of the twenty-seven public sector banks, in terms of NPAs and accumulated losses. In March 2002, the gross NPAs of scheduled commercial banks amounted to Rs. 71,000 crores out of which Rs. 57,000 crores or roughly 80% came from the public sector banks. The following year witnessed a marginal improvement in the situation.

Financial liberalization has, however, had a predictable effect in the distribution of scheduled commercial banking in India. The reforms era growth in banking have
focused on the more profitable urban and metro areas of the country. Between 1969 and 1991 for instance, the share of the rural branches increased from about 22% to over 58%. In 2004, the corresponding figure stood at a much lower 46%. The number of rural bank branches actually declined from the 1991 figure of over 35,000 branches by about 3000 branches. Between 1969 and 1991 the share of urban and metro branches fell from over 37% to less than 23%. In the years since it has crawled back up to over 31%. Figure 2 provides a snapshot of this changing facet of Indian banking.

Given this background, in the following sections of this chapter we shall discuss some of the major contemporary policy issues. These include the nature and effects of interest rate deregulation, public sector bank performance, the nature and management of NPAs, and the new competitive market structure of commercial banking.

3. Interest rate deregulation and bank credit

Arguably the most far-reaching impact of banking liberalization in India has involved the deregulation of the interest rate. From a completely government-determined interest rate structure, Indian banks have now gradually moved to an almost entirely market-driven interest rate system. During this period interest rates have declined somewhat – the development with arguably the largest direct impact on common people. Figure 3 shows the evolution of interest rates in India in the years since liberalization.

Figure 4, which shows the real interest rate (interest rate less the appropriate inflation rate), brings home the point more dramatically. Throughout the period, the deposit rates have remained less than 5%, often dipping below into the negative region. At the same time the lending rates, while exhibiting some decline, have remained relatively obstinately high. The “stickiness” of the lending rates has been a salient feature of the interest rate movement of this period.

In spite of the marginal decline in the lending rates of scheduled commercial banks in India, Indian lending rates remained among the highest in the world. Figure 5 shows the comparative picture of real interest rates in different countries of the world. Particularly during the second half of the decade since the beginning of liberalization, India had one of the highest interest rates in the world. Many argue that these high interest rates have proved to be an impediment to even faster growth in the Indian corporate sector.

Regardless of the actual movement of the rates, what is truly significant is the fact that the rates are now determined largely by competitive market forces rather than the government. This means that lending rates are determined by forces of demand and supply for such funds rather than by government policies. Nevertheless, the corporate loan market does not appear to have fully equilibrated over time. Recent studies by Banerjee and his co-authors (Banerjee and Duflo (2003) and Banerjee et al (2004)) have found that banks are still under-lending to corporates and companies remained loan-starved. So interest rates have exhibited some upward “stickiness” as well and not
worked perfectly in allocating credit. Restrictions and policies set by the government or self-imposed by the banks continue to play a role in the Indian credit market. Box 1 explains the evidence of under-lending in greater detail.

[Box 1 about here]

Another notable feature of Indian banking in the post-reforms era has been the stickiness in volume of credit. Between 1969 and 1991 the share of credit in the pool of credit and investments declined steadily from over 72% to about 61%. Obviously the increasing Statutory Liquidity Ratio (SLR) requirements were instrumental in this decline. Since the reforms, however, these requirements have been reduced gradually from as high as 38% to 25%. Nevertheless, the in post-1991 period, the share of credit has not registered a particular rise, though the decline appears to have been arrested somewhat. Figure 6 portrays the evolution of the credit-investment portfolio of scheduled commercial banks. Being cumulative measures, these variables are by nature somewhat sticky, but given the considerable period of time since liberalization, the lack of a reversal in the long-term trend is quite clear. The likely reason behind this phenomenon lies in the incentive structure of bank employees, particularly those of the public sector banks. As Banerjee et al (2004) point out, public sector bank employees function under the threat of inquiries by the Central Vigilance Commission (CVC) for every loan that goes bad. On the other hand, they have little to gain in the case of successful lending. As a consequence, they are reluctant to increase loan levels to their clients or make large loans to fresh clients. The alternative to loan-making is investment in government securities that are default-free by nature. This explains the high and sticky proportions of investments in bank portfolios.

[Figure 6 about here]

4. Commercial Bank Performance

Performance of commercial banks in India has been under policy and academic spotlight for a while now with the public sector bank performance receiving most attention. The performance of several public sector banks (PSBs) has been so poor that many have called for a complete overhaul of these banks and privatization as a solution. Performance evaluation of banks, particularly in an economy that is dominated by public sector banks that are not driven purely by profit motive, is not a simple task. Profitability as the sole measure of performance is disputed by many and several measures of efficiency, some with less than unequivocal support from experts, have been used in the literature. This includes spread analysis and the Data Envelopment Analysis (DEA) of banks. Here we take a look at a few of these measures to evaluate the performance of banks in the post-reforms era.

D’Souza (2002) provides an overview of the performance of the different groups of banks during the decade of the 90s. We begin with Figure 7 that focuses on profitability as a proportion of working funds. It is evident from this figure that with the exception of 1992-93, foreign banks are the most profitable bank category in India, followed by private banks. Public banks are the worst, though their performance in the second half of the decade with some of the reform measures becoming more effective, appear to have improved and they seem to be closing the gap with their smaller and more profitable competitors.
Many argue that a more appropriate measure of bank performance and efficiency is provided by an analysis of the “spread” or the difference between the interest charged and interest paid by the banks as a proportion of the working funds of the banks. Figure 8 shows the variation of this metric for different categories of banks during the 90s. A look at this figure shows that there has been a mild improvement in the efficiency of the banking sector in general during the decade (a conclusion also supported by Koeva (2003)) much of which has been driven by improvements in performance of the private foreign banks. Within the private sector banks, the “new” private sector banks, those that came up in the post-reforms era, have driven the efficiency gains.

Another measure of efficiency of the banking sector is the productivity of its personnel. A measure of productivity in the banking sector is the ratio of “turnover” or the total business generated as the sum of total deposits and advances to the total number of employees. The evolution of this metric for different types of banks is shown in Figure 9. There is improvement across the categories over the time period. However, what catches the eye in Figure 8 is the cross-sectional variation in turnover per employee among the different types of banks. The foreign banks’ turnover per employee is about five times that of the nationalized banks. Equally impressive has been the relative surge of the private banks on this metric, from below par when compared to the public sector banks at the beginning of the decade to about twice as efficient as the nationalized banks a year later. Much of the relative poor performance of the public sector banks stem from the fact that they are required to have branches in rural areas all over the country that are largely cost centers. However, as D’Souza (2002) points out, public sector banks are overstuffed even when their metro and urban area branches are considered. Superior use of information technology and niche banking allow foreign banks to be much more efficient. As for private banks, their climb of the efficiency ladder has been driven almost exclusively by the new private banks – ICICI Bank, UTI Bank, HDFC Bank etc. – that have followed the foreign bank-type staffing practices with almost non-existent clerical and subordinate staff. All these features have important policy implications for the debate concerning restructuring and privatizing of public sector banks – a topic we consider in the final section of this chapter.

While the turnover per employee analysis gives us some idea about the efficiency of banks, a comprehensive performance analysis of the efficiency of the banking sector ideally involves a multi-dimensional analysis, with multiple inputs and outputs. A technique that has found favor among researchers around the world for measuring banking and comparing banking efficiency involves the Data Envelopment Analysis (DEA) and the Malmquist Total Factor Productivity (TFP) Indices. The former is a variant of the familiar Linear Programming exercise that uses non-parametric methods to create an efficiency surface or “envelope” and to calibrate the efficiency of individual banks in relation to this envelope by studying its distance from this boundary. Das (2002) carries out such an analysis for the Indian banking sector. Bhaumik and Piesse (2003) have also used similar methods for an analysis of role and effects of foreign banks in India. The advantage of these analyses is that they can incorporate risk-taking explicitly.
into the performance analysis. Das (2002) finds that risk-taking and productivity are inversely related and are jointly determined in banks.

5. Non-Performing Assets

Perhaps the best measure of a country’s financial health and robustness is the extent of non-performing assets (NPAs) in its banking system. Broadly speaking, a non-performing advance is defined in India as one with interest or principal repayment installment unpaid for a period of at least two quarters. NPAs form a substantial drag for individual banks as well as the banking system of a country. They represent the poor quality of the assets of the bank and have to be provisioned for using capital. Obviously they have a huge negative impact on a bank’s profitability and can lead to complete erosion of its asset base. NPAs are a key issue in banking and indeed financial stability around the world. Banks of countries ranging from developed countries like Japan to emerging markets like China are all dealing with the problem of controlling and reducing their burgeoning shares of NPAs. See Box 2 for a discussion of the NPA situation in banking sectors around the world and their resolution. Indian banks have had their share of NPAs and many are struggling with them today. Decades of government-controlled banking with politically and socially motivated lending often marked with cronyism, favoritism and lack of transparency have saddled several banks with sizeable non-performing assets. Some, like the three pointed out by the Verma commission, are sinking under their weight. Recognizing these NPAs, taking the hit on the assets, and recapitalizing banks to withstand the write-downs are all issues central to the banking sector reform process and policy.

[Box 2 about here]

It is not surprising that public sector banks have traditionally had higher levels of NPAs than private sector banks and foreign banks. In recent years, however, they appear to have managed their NPAs well, steadily reducing them (see figure 10) to levels comparable to those of private banks. On the other hand, the new private sector banks have witnessed an increase in the share of NPAs in their portfolios.

[Figure 10 about here]

A closer look at the cross-sectional distribution of NPAs among the different banks (figure 11), however, suggest that as a group, public sector banks have a tighter distribution than other categories, particularly foreign banks which show considerably larger skewness in the ratio of net NPAs to net advances.

[Figure 11 about here]

There is, however, skepticism in some quarters about the definition and measurement of NPAs in Indian banks. Banerjee et al (2004) and Topalova (2004), for instance, argue that banks indulge in creative accounting and loan rollovers – “evergreening” – to keep the NPA figures artificially low. Topalova (2004) find that the share of “potential NPAs” defined as firms whose reported interest expense is greater than their EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) has risen considerably in the period since 1989, suggesting that it is largely “evergreening” of their loans that keeps the NPAs at their reported levels. She also finds that the banks face a considerable interest rate risk in that a 2% rise in lending rates could cause a 4 percentage point increase in the share of NPAs.
International NPA recognition standards as well as capital adequacy ratios were set in the Basel recommendations in 1988. These rules are now being replaced with a new, more complex supervisory system, called Basel II. These are explained in greater details in Box 3. In order to conform with these recommendations, the banking sector in India needs to pay even greater attention to its NPAs and avoid generating new NPAs.

[Box 3 about here]

The Reserve Bank of India has been overtly concerned with the NPA issue for at least two decades. In 1985 it introduced the “Health Code” classification for loans of all commercial banks (except for foreign banks, most of which had already had such measures in their systems). This system classified loans into eight categories ranging from “satisfactory” to “bad and doubtful debts”. Four years later, it stipulated that recognition of income for loans in Health code categories 5 (Advances recalled) or worse be changed from “accrual basis” to actual realization basis. This was an important step in recognizing NPAs. During the first years of liberalization, 1992-93, RBI introduced prudential regulations recommended by the first Narasimham Committee about income recognition, asset classification and provisioning. While these strict provisioning rules posed considerable challenges for the banks hitherto functioning under looser standards, they prevented the NPA situation in India from ballooning to out-of-control proportions and destabilizing the entire financial structure. The RBI has also worked on prodding the commercial banks to improve their credit appraisal, monitoring and supervision.

Research and analyses of the NPA accounts have resulted in some insights about the nature of and reasons behind these NPAs. The most important reason for the generation of NPAs was diversion and tunneling of funds by borrowers. Internal business failures (poor performance of the borrower’s business because of failure in the face of competitive forces) came second followed by adverse changes in the external conditions like the economy. Time/cost overrun in projects came next followed by reasons like adverse changes in government policies, willful default, directors’ disputes and misappropriation as well as problems created by inefficiencies in fund release by the bank itself. It is also observed that the priority sector lending generated a higher proportion of NPAs than the non-priority sectors. While this is generally accepted to be the case and also backed by evidence from a study of NPAs of 33 banks by the RBI, Mukherjee (2003) argues that in recent years the relative contribution of non-priority sector in the NPAs of banks has been increasing.

Willful default and tunneling of funds being the most important causes of NPAs for banks, it became essential to arm the banks with greater power to attach a borrower’s assets and realize at least part of its outstanding credit or at least use it as a viable threat in negotiations. Traditionally the Indian legal system has been overly sympathetic to borrowers and the banks have had very little power to actually attach the assets used to securitize the loans. Clearly borrowers, aware of the situation, take full advantage of this weakness of banks. The Sick Industrial Companies Act (SICA) and the Board for Industrial and Financial Reconstruction (BIFR) have hardly helped in banks recovering their dues from companies with failing businesses owing to either unethical intent or incompetence of their mangers. In 1993, Debt Recovery Tribunals (DRTs) were set up to help banks in recovering their NPAs. Their performance, however, has been far from encouraging for the banks. Muniappan (2002) points out that till 2001, DRTs reached a

1 “Some Aspects and Issues Relating to NPAs in Commercial Banks”, Reserve Bank of India.
decision in less than 23% of the cases with them involving less than 13% and even in those cases, the recovery rate is below 30%.

In order to give more teeth to Indian banks in this respect the NPA ordinance was introduced in the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Ordinance (and subsequently) Act of 2002. The act enables banks to attach and sell off pledged assets in case of default, a feature that has been used considerably by the banks to improve their NPA situation in recent years. See Box 4 for a more detailed discussion of the SARFAESI Act and its effects on banks.

Mukherjee (2003) points out that there are broadly two ways to financially restructure a banking system out of the NPA situation. One can either follow the Asset Management/Reconstruction Company (AMC/ARC) approach to clean the balance sheet of banks of their NPAs (at a discount) and use the greater efficiency of the (government-funded) specialized AMCs in realizing the bad debts. Alternatively one could follow the creditor-led reconstruction approach. Both channels have been tried out by countries around the world with mixed results. Mukherjee (2003) argues that given the illiquid nature of securities backing the NPAs and the level of development of the legal system and financial markets, the Indian situation is more amenable to the second approach.

6. The emerging structure of commercial banking

The years since the beginning of liberalization have brought about significant changes in the structure and character of the Indian banking sector. The most visible change is perhaps the emergence of new private sector banks as well as the entry of several new foreign banks. The spirit of competition and the emphasis on profitability are gradually but doubtlessly pushing the public sector banks towards a more profit-oriented model departing from the socialistic approach followed for decades.

A clear effect of these changes has been a reduction in the concentration in the banking industry. Koeva (2003) points out that the Herfindahl indices for assets, loans and deposits all show a notable decline during the period. Between 1991-1992 and 2000-2001 the Herfindahl index for advances dropped by over 28% while those for assets fell by about 20%. Over the period, SBI, the largest Indian bank, witnessed a decline in asset market share from 28% to 24% while its loan market share dropped from 27% to 22%. The deposit share, on the other hand, stayed pretty much the same at 23%. The asset, loan and deposit shares of the top 10 banks all fell from close to 70% to below 60%. Clearly, the banking sector in India has become more competitive since liberalization.

In general it seems that the emergence of the new private banks as well as the increased participation of foreign banks has increased professionalism in the banking sector. However the collapse of the Global Trust Bank in mid-2004 has dented the public impression about the efficiency of these banks as well as the monitoring abilities of the regulators. The fall of Global Trust Bank is briefly described in Box 5.

Several foreign banks have entered the Indian market since liberalization. On March 2003, there were 36 foreign banks operating in India including 11 from Europe, 6 each from the Middle East, North America and East Asia (excluding Japan) and 4 from Japan. Foreign banks tend to perform better than domestic banks in most emerging
markets and add to operative efficiency of the banking sector as a whole. However, it is also frequently the case that they avoid risky lending, particularly to the small and medium industries. Using Data Envelopment Analysis on the performance of Indian banks between 1995-96 and 2000-01, Bhaumik and Piesse (2003) argue that foreign banks in India have had significantly higher credit-deposit ratio than their domestic counterparts, but in terms of technical efficiency they have lagged behind new private banks as a group. During the period about half of them actually experienced a decline in technical efficiency.

Given the apparently stronger profitability and NPA position of the private banks as compared to the public sector banks, and the ongoing drive at privatization of public sector enterprises in general as part of the reforms process; the issue of a privatization drive for public sector banks has drawn considerable attention among academicians and policy makers. Banerjee et al (2004), for instance, cautiously recommends privatization of public sector banks if only to free them from the constant fear of CVC inspections and thus correcting their distorted incentive structures in lending. They argue that the the issue of “priority sector lending”, an important concern against privatization is no longer that crucial since in 2003 the share of credit of private sector banks going to the priority sector (under its new definition) has surpassed that of the public sector banks. As for bank failures, they argue that it is unlikely that the government will allow a private sector bank to fail either (borne out amply in the case of Global Trust Bank) and public sector banks are effectively failing too – partly from corruption and partly from incompetence. On balance, therefore, they recommend privatization with stronger regulation.

Many others argue that privatization per se is not the solution for the woes of the public sector banks. Sarkar et al (1998) contend that it is not ownership itself but the existence of a market for corporate control and the resulting market discipline on managerial decisions that makes the real difference. Mathur (2002) points out that public sector banks are already feeling the heat of competition from new entrants in the banking sector and that there is no systematic evidence that private banks do better than public sector banks in emerging markets. He argues that the case for privatization is made more on the basis of perceptions than based on a comprehensive review of facts and evidence. Banks are different from other enterprises in that they directly affect thousands, if not millions, of depositors and play a crucial role in economic growth. Privatization of public sector banks has its own risks and it is not clear that the expected benefits necessarily justify assuming those risks. Perhaps bringing more transparency in public sector banking decisions and subjecting these banks to competitive pressures will accomplish the improvements in their performance rather than selling them lock, stock and barrel to private parties.
References

Box 1: Under-lending by Indian banks

Recent studies by Banerjee and his co-authors have found evidence of “under-lending” by Indian banks to the corporate sector. Under-lending is the situation when the marginal rupee lent to a borrower yields a higher marginal product than its interest cost. It is a system-wide feature indicating that companies cannot get adequate credit not just from a single bank but from the banking system in general. While this is true, in reality a company enjoys carefully developed relationship with a bank and it is not easy to seek loans from another. Thus the findings of Banerjee and Duflo may be more marked for the public sector banks that they study.

The analysis of Banerjee and Duflo (2002) focuses on an event in January 1998 that raised the limits investment in plants and machinery of “small scale industry” (SSI) from Rs 65 lakhs to Rs. 3 crores. This being a priority sector with banks required to lend at least 40% of all credit to this sector, several new firms now became eligible for credit under this priority sector category. By analyzing loans to over 250 companies during 1997 through 1999, they found the following facts. The fact that the SSI limit actually imposed a constraint was reflected in the growth rate of credit. In 1997 firms with investments below Rs 65 lakhs registered over twice the growth in credit limits than those in the 65 lakhs to 3 crores band. This almost reversed in 1998 and became equal in 1999. The interest rates on the new loans to the larger companies were the same as before. Also the large firms made as much use of these credit limits as they did before the new loans were granted. Sales in these companies rose almost as fast as credit and for the profitable companies, the rise in profits was even bigger.

Subject to some qualifications, Banerjee and Duflo (2002) estimate that a Rs. 1,000 increase in the loan size leads to an increase in profits of at least Rs. 730. This is clear indication that companies can enhance profits by borrowing more from the banks.

Banerjee and Duflo also find no evidence that larger firms are more likely to default than smaller firms and contribute to the NPAs of the banks. Thus a default premium cannot explain the gap between interest rates and the marginal rates of return on capital for the firms. They estimate (drawing also on their previous work, Banerjee and Duflo (2001)) that the interest rates that the banks should be charging firms is close to 22% as compared to the average interest rates of 16%. Thus, the interest rates were depressed by close to 25% from the equilibrium level according to their estimates.

Thus, after more than six years since the beginning of liberalization, bank credit was still scarce while interest rates, though high by world standards, appear to be less than the equilibrium levels. Till 1997, public sector banks closely followed the RBI’s conservative rules and directives in determining the “maximum permissible bank finance” limits for companies. In 1997, following the recommendations of the Nayak Committee, banks were allowed to formulate their own lending policies. However, as Banerjee et al (2004) argue, loan officers in public sector banks have little incentive to lend but significant risk of investigation in the case of a bad loan. Faced with this incentive structure, the banks predictably take the easy way out – investing in government securities.
Box 2: NPAs around the world

Default risk is an essential feature of all lending and all banks have or at have had at some point in time, “bad” or unrecoverable loans in the portfolio. As long as such loans form a relatively small part of a bank’s portfolio, they are not a reason for extraordinary concern. However, when such loans, technically speaking NPAs, exceed a certain threshold, they begin to threaten the viability of the bank in question. Occasionally, owing to macroeconomic reasons, entire banking systems witness an unacceptably high level of NPAs which can trigger off a “banking crisis” with extremely adverse economic fallout at the national level.

Several countries in the world – both advanced and developing – have experienced such banking crises that have shaken the financial stability of their economies. The savings-and-loan crisis of the USA in the late 80’s, the banking crises in Thailand and other Asian countries during the Asian crisis, the Latin American debt crisis of the early 80’s and the more recent Argentine banking and currency collapse all involve disproportionately large NPAs in the assets of the banking sector. The Achilles’ heel of the Japanese economy during its current over-a-decade-long recession is the NPA situation of its banks. The greatest concern that investors and regulators have about China is its level of NPAs.

Given the potential threat of NPAs to financial stability, banking and monetary authorities as well as scholars and economists keep a close watch on the levels of NPAs in the banking sector. Several Asian countries have considerably large amounts of NPAs in their banking systems. Ernst and Young (2004) estimates that Asian countries have a total of about $1 trillion in their books compared to about $ 300 billion in Europe. Among Asian countries Japan has total NPAs of about US$330 billion which is about $600 billion less than its NPA level during the Asian crisis. China has about $307 billion in non-performing loans in its books. India’s NPA stock is about a tenth of that of China’s. Germany leads the European economies in the level of NPAs.

Asian banks have reduced their NPA levels by about US $ 1 trillion since the Asian crisis, which is no mean accomplishment. Asset Management Companies appear to be the method of choice for many countries. These institutions take the NPAs off the balance sheets of banks and work on redeeming the loans. Mukherjee (2003) points out that this AMC approach has been successfully used in the US savings-and-loan meltdown in the 80’s as well as in Sweden in the early 90’s to financially restructure the banking sector. Mexico and Philippines, on the other hand, have been far less successful with this approach. The alternative method, of arming banks themselves to realize their bad debts, has also been tried out in many countries – successfully in Norway, Chile and Poland and with less success in Thailand and Argentina. While disposing off existing NPAs is a challenging exercise for any country, equally important is the prevention of new NPAs. Better credit evaluation and monitoring remain the only methods to improve the quality of new loans.
Box 3: Capital Adequacy – Changing rules

In 1988, The Basel Committee on Banking Supervision created a historical document that has since set the ground rules for international banking around the globe. The central issue of the Basel Accord, as it is called, was the stability of banking systems and the emphasis was solidly on capital adequacy of banks. Capital was categorized into different tiers and minimum limits were set for adequacy of each tier of capital depending upon the quality of the loan portfolio of the bank.

The Basel Accord is not a one-time deal. Minor amendments and revisions have continued since its initiation. The Accord went a long way increasing the capital adequacy of banks around the world, with most changes, often painful for individual banks as well as economies, coming in the transitional period between 1988 and 1992. However, a decade or so since its adoption, a need was felt to substantially alter the framework, to come up with a largely new system. It was clear that developments and innovations in financial markets had changed the nature of risks faced by banks and the risk definitions of the 1988 Accord failed to capture the entire picture. The resulting supervisory structure no longer necessarily provides the best incentives for banks or leads to the optimum asset structures for them. After years of long and intense discussions and negotiations, the Basel Committee finally came up with a revised set of regulations in June 2004, popularly called “Basel-II”.

There are three major pillars of Basel-II: minimum capital requirements, supervisory review and market discipline. Regarding minimum capital requirements, Basel-II moves beyond the “one-size-fits-all” approach of the 1988 agreement to allow banks to follow one of two choices. They can either use external credit-rating agencies to assess operational risks of the borrowers or use their internal models to develop an Internal Ratings Based (IRB) approach to determining appropriate minimum capital requirements. The second pillar stresses oversight and monitoring of bank risk management by the top management and board of the bank and allows regulators room to review the banks’ choices of capital adequacy and risk management practices and require them to hold more capital if necessary. Finally, the third pillar pertains to periodic reporting of specific variables by banks so as to allow for the financial markets to appropriately value and discipline them. This covers key information about major borrowers, the types of capital of the bank, capital adequacy, credit risk evaluation methods, outside rating agencies if any and details of the credit risk assessment by the banks.

In the years of come, Indian banks, like their counterparts around the world, will adjust and conform to Basel-II. However, it is generally believed that the Basel-II recommendations require a much greater sophistication in risk-management practices of Indian banks as well as in Indian financial markets than currently available. Thus the transition portends to be a challenging period for Indian banks as well as for the RBI.
Box 4: The SARFAESI Act

India’s legal system has traditionally been friendly towards borrowers and famously slow and inefficient. Consequently once a bank makes a loan to a company, it has very little bargaining power in terms of calling the loan back or getting its hands on assets that formally securitize the loan. In 1993, Debt Recovery Tribunals (DRTs) were set up precisely to avert this problem, to give banks faster access to justice.

In 2002, a major step in empowering banks in their loan recovery efforts came in the form of the NPA Ordinance, later turned into the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act. The Act paves the way for the establishment of Asset Reconstruction Companies (ARCs) that can take the NPAs off the balance sheets of banks and recover them. Operations of these ARCs would be restricted to asset reconstruction and securitization only. It also allows banks and financial institutions to directly seize assets of a defaulting borrower who defaults fails to respond within 60 days of a notice.

The SARFAESI Act and the action of creditors have been challenged in courts almost immediately. In a decision in the Mardiya Chemicals vs. ICICI case, the Supreme Court upheld the Act in 2004, tilting the balance for the banks. Meanwhile, the RBI has been encouraging the banks to use the provisions of the SARFAESI Act. Till end-June 2003, Public Sector Banks had issued 33,736 notices for an outstanding amount of Rs.12,147 crore with a recovery of Rs. 499.20 crore from 9,946 cases. Of this the State Bank of India alone had issued over 7,000 notices followed by Punjab National Bank, Central Bank of India and Oriental Bank of Commerce, each with over 2,000 notices issued.

While the average recovery rate for Public Sector Banks has been only 4.1%, Union Bank of India, Andhra Bank, Corporation Bank, Vijaya Bank, and Syndicate Bank have all registered double-digit recovery rates under the SARFAESI Act.

It is still too early to gauge the full effects of the SARFAESI Act on the banking system and the NPA situation. It is likely that the Act will substantially strengthen the bargaining position of the banks vis-à-vis its clients, particularly the willful defaulters. The Act is still an evolving instrument with discussions and lobbying likely to bring in amendments to it in the years to come.

*Trend and Progress of Banking 2002-2003, Reserve Bank of India.*
Box 5: The collapse of the Global Trust Bank

On July 24, 2004, RBI imposed a 3-month moratorium on withdrawals exceeding Rs. 10,000 for depositors of the Global Trust Bank (GTB). Depositors were caught by surprise and something close to a run on the bank ensued. The government allayed the fears of the depositors within 48 hours though, announcing the merger of the bank with Oriental Bank of Commerce (OBC) a healthy, profit-making public sector bank.

While the collapse of a private bank is not unheard of before – Nedungadi Bank and Benares State Bank failed within the two preceding years – the fall of GTB is special for several reasons. For one, unlike the other failures, GTB is a “new” public sector bank, started in 1994 with several high-profile investors, including the International Finance Corporation.

The case also raises troubling questions about the supervisory mechanism in India. At the time of its collapse, GTB had a portfolio, 20% of which was made of NPAs. Its total losses amounted to a whopping Rs. 272 crores in 2003-04. The RBI was aware of the problems of GTB since at least 2001-02. In March 2002, RBI’s special audit found that GTB had a negative net worth, a quite different figure from GTB’s own audited results showing a net worth of Rs. 400 crores. The RBI forced GTB to change its auditors and complained about the old auditor to the Institute for Chartered Accountants of India. GTB was in RBI’s close inspection since then and in September, 2003 the apex bank expressed satisfaction at its positive operating profits.

The financial mismanagement of GTB is only part of the story. The bank’s most prominent promoter, Ramesh Gelli, has been indicted of close relationship with Ketan Parekh, the mastermind behind a major stock market scam. The promoters have been blamed for rigging the stock price of GTB before a proposed merger with the UTI Bank in 2001. Gelli was forced to step down as GTB Chairman after these findings. Surprisingly, he made his way back to the GTB board yet again. These issues raise important questions about corporate governance in banks and the efficacy of the regulators in the system.

Merging failing banks with healthy private sector banks seems to be the favored bail-out strategy of the RBI and government. Benares State Bank was merged with the Bank of Baroda and Nedungadi Bank with Punjab National Bank. With the merger of GTB with the several times larger OBC, a bank with zero NPAs and a profit of Rs. 686 crores in 2003-04, confirms the pattern. Apparently OBC was on the lookout for a bank with strong presence in the South and GTB fitted the bill in that regard. Clearly, the government will not let private bank depositors suffer. Notwithstanding the moral hazard issues pointed out by many, this probably best serves the depositors. The effects on the healthy public sector banks with which they are merged and on the financial system as a whole are, of course, more difficult to judge.
Figure 1

Deposits in Commercial Banks

Source: Statistical Tables relating to banks
Figure 2

Number and distribution of bank branches in India

Source: Reserve Bank of India, Handbook of Statistics on the Indian Economy
Figure 3

Interest rates in India

Source: Mohan (2002) and RBI, Statistical Tables Relating to banks
Figure 4

Real Interest Rates in India

Source: Mohan (2002)
Figure 5

Real Interest Rate (prime rate) around the world

Source: Mohan (2002)
Figure 6

Ratio of Credit to Investments & Credit

Source: Reserve Bank of India, Handbook of Statistics on the Indian Economy
Figure 7

Profits as a percentage of Working Funds

Source: D’Souza (2002)
Table 8
Spreads as percentage of Working Funds

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Source: D’Souza (2002)
Figure 9

Turnover per employee

Source: D’Souza (2002)
Figure 10

Gross NPAs as a percentage of total assets

Source: Trend and Progress of Banking in India, Reserve Bank of India
Figure 11

NPA category-wise breakdown of banks in March 2003

Source: Trend and Progress of Banking in India, 2002-03, Reserve Bank of India