### **Chapter IV**

### Financial Institutions

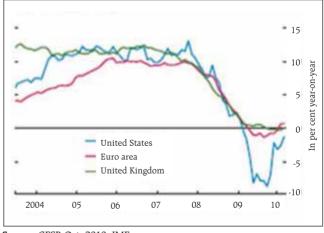
Banks in advanced economies continue to be weighed down by slow credit growth, funding risks, reliance on government and central bank support, contagion impact from the concerns about sovereign debt sustainability, etc. In contrast, the Indian financial system which is largely dominated by the banking sector, remains well capitalised. Some concerns, however, remained. Credit off take has recovered during the first half of 2010-11 but remains off its pre-crisis levels. Deposit growth remained subdued resulting in increased reliance of banks on borrowings (especially certificate of deposits) to fund credit growth. Resultantly, the incremental credit deposit ratio was high especially during the first quarter of 2010-11. Asset quality remained robust though some concerns emanated from the fact that slippages exceeded the rate of growth of advances, and resulted in increased requirements for provisions. The increase in delinquency in the housing loan segment could cause some concern. Housing prices have risen sharply in some centres, leading to the Reserve Bank tightening prudential norms in respect of housing loans. Growing concentration of liabilities in short term while funding assets of relatively longer terms could be a concern if these mismatches persist, though mitigating factors such as high level of low cost deposits and interest rate reset clauses stipulated by banks for longer term loans e.g. infrastructure loans, exist. Several steps to develop alternative financing options for infrastructure may assist in lowering such mismatches. While consolidation in the co-operative sector led to improvements in their financial soundness indicators, progressive tightening of their regulatory regime has brought the regulatory structure for the sector closer to that for the commercial banks. Prudential requirements for the non-banking financial sector were further tightened as the criticality of the sector's inter-connectedness with the banking system and its importance for financial stability is being increasingly realised. Their activities are now being monitored based on their core operational area and balance sheet characteristics. A Banking Stability Index has been introduced in this FSR to assess the dimensional changes in the risks/vulnerabilities being faced by the banking sector. The Index indicates an improvement in the stability of the banking sector over the past few years though dimensional risks associated with the liquidity of scheduled commercial banks have increased as compared to the risks in September 2009.

#### Post crisis Global scene

# Despite improvements in asset quality and capital strength, recovery remains uncertain

4.1 Banks, globally, remained vulnerable to the still tentative global recovery and to the disturbances caused in global financial markets by the sovereign debt crisis which first emerged in May 2010. The EU-IMF bailout package and the publication of the results of stress tests conducted on many large European banks by the EU helped restore some normalcy. But some tensions have emerged again as concerns about Ireland's sovereign debt and the health of Irish banks have resurfaced. Credit off take improved (Chart 4.1), estimate of crisis-related bank write downs declined (from US \$ 2.8 trillion in April 2010 to US \$ 2.3 trillion in October 2010) and substantial recoveries were made. The banking system in advanced economies, however, continued to remain vulnerable to confidence shocks, and to

Chart 4.1: Banks' Private Credit Growth in Advanced Economies

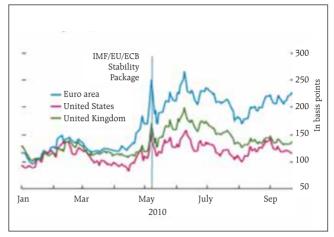


Source: GFSR Oct. 2010, IMF

excessive reliance on government or central bank support. Concerns about the sustainability of the improved conditions and about imminent further deleveraging remain (on account of funding risks as banks face a "wall of redemptions" in the next couple of years) (GFSR October 2010). Banks improved their capital adequacy ratios even as the global reforms agenda unfurled requiring them to keep aside much higher levels and improved quality of capital than before. However, the banks have a long implementation period extending up to 2019 to adjust to the requirements for higher quality and quantity of capital.

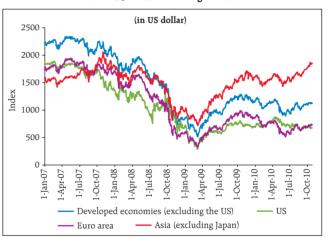
- 4.2 The above trends were reflected in the movements of the banking sector CDS spreads (Chart 4.2) and in the performance of banking stocks (Chart 4.3). Banking stocks in Asia performed better reflecting the less severe impact of the crisis on Asian economies and their faster recovery.
- 4.3 International banks had been provided credit guarantees on debt issuances for a limited period during the post-Lehman scenario by advanced country sovereigns and large sums of short and medium term capital were raised by the banks for refinancing their existing assets and fund new ones. The redemption of these bonds over the next two years could prove to be a major refinancing challenge if the vulnerabilities in the funding markets as well as competitive demand for funds from sovereigns remain.
- 4.4 A more recent threat has emerged from alleged irregularities in mortgage documents in the US housing markets. If documentation problems prove to be pervasive and, more importantly, throw into doubt the ownership of properties pertaining to foreclosed loans and pooled mortgages, the consequences could be severe enough to threaten financial stability.
- 4.5 Despite the financial crisis having revealed funding mismatches to be one of the major structural weaknesses of international banks, there was little incentive for the banks for lengthening their funding maturities in the current low interest rate environment. On the contrary, banks are incentivised to "ride the yield curve" and increase maturity of their assets. Such strategies by the banks along with existence of promise of central banks to keep rates at

Chart 4.2: Banking Sector CDS Spreads



Source: GFSR Oct. 2010, IMF

Chart 4.3: Global Banking Indices



low levels for 'extended period' may create vulnerabilities. Funding markets were vulnerable to negative public announcements as such events could cause short term financiers to pull out, triggering distress sales by the borrowers. Vulnerabilities in global bank funding markets remain a key concern for emerging markets as these could cause disruption in the capital flows, affecting trade credit and impairing the ability of domestic firms to raise capital abroad. In this context, a multinational structure of global banks (operating through sizeable foreign branches and subsidiaries and funding those affiliates locally in the host country and currency) may reduce reliance on cross border funding needs.

4.6 Banks in India remained resilient even during the crisis and do not face the funding and maturity risks of the kind encountering the global banks. However, given the growing integration of the Indian financial sector with the global economy, the CDS spreads of the banks in India as also their equities' performance largely paralleled the global trends, especially trends in Asia (Charts 4.4 & 4.5).

#### Domestic developments

#### Scheduled Commercial Banks

#### Balance sheet

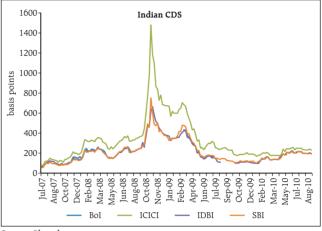
# Recovery in credit growth has pulled the balance sheet along

4.7 The size of the balance sheet of scheduled commercial banks grew by 16.49 per cent on a year on year basis as at end September 2010 marking an improvement over the growth rate of 14.86 per cent witnessed during 2009-10. The higher growth was primarily driven by a recovery in credit off take. However, balance sheet growth rates remained off their pre-crisis peaks (Charts 4.6 and 4.7).

# Penetration of the banking sector has continued to grow

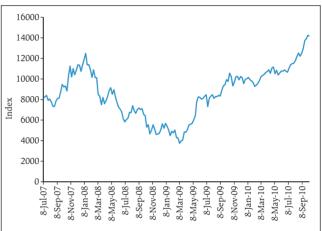
4.8 The penetration of the banking sector in the economy (as evidenced by the ratio of banking assets

Chart 4.4: CDS Spread of Select Indian Scheduled Commercial Banks



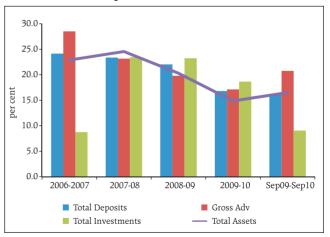
Source: Bloomberg

Chart 4.5: Performance of Indian Scheduled Commercial Banks' Equities (BSE Bankex)



Source: Bloomberg

Chart 4.6: Growth of Deposits, Advances and Investments of the SCBs



35.0 30.0 25.0 20.0 per cent 15.0 10.0 5.0 0.0 -5.0 2009-10 Sep09-Sep10 Sep09-Sep10 Sep09-Sep10 2009-10 Sep09-Sep10 Sep09-Sep10 All Banks PSBs New Pvt Sector Foreign Banks Old Pvt Sector banks banks ■ Total Deposits ■ Gross Adv ■ Total Investments

Chart 4.7: Trend of Growth in the Important Balance Sheet Items of Bank Groups

Source: RBI Supervisory Returns

to GDP) continued to display an increasing trend, albeit at a slower rate (Chart 4.8).

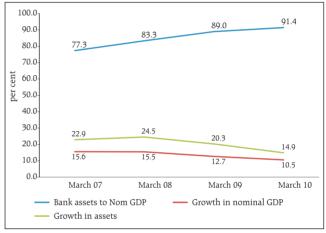
4.9 The composition of the balance sheet of the domestic scheduled commercial banks continued to be dominated by traditional balance sheet items. The deposits constituted nearly 80 per cent of liabilities and advances comprised about 57 per cent of assets. The investments, which accounted for another 30 per cent of assets, mostly consisted of risk free government securities (about 80 per cent of the total investment exposure) (Chart 4.9).

#### **Advances**

#### Respectable but cautious growth was seen

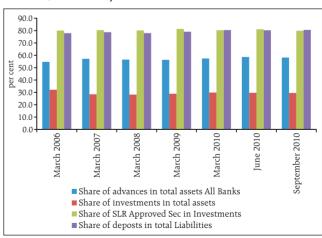
- 4.10 Credit off-take picked up with advances growing by 20.7 per cent on a year on year basis as at end-September 2010. The growth, however, remained well below the average of 25 per cent registered during 2006-07 and 2007-08 (Chart 4.10).
- 4.11 The ratio of credit to GDP continued to grow reflecting both the relatively robust GDP growth and greater financial inclusion in the country. However, the ratio remained much lower than that in many advanced economies (Chart 4.11). A recent BIS study found that in a sample of 27 financial crises between 1981 and 2003. 20 crises were preceded by a period in which credit to GDP ratio expanded strongly for a number of consecutive quarters. Further, there were 13 crises in

Chart 4.8: Growth of Assets to GDP Ratio of SCBs



Source: RBI Supervisory Returns; CSO

Chart 4.9 Share of Major Constituents in the Balance Sheet of SCBs



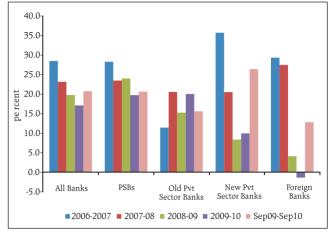
the above sample which were preceded by period of credit booms<sup>1</sup>. It was also observed that 17 of the 20 crises that were preceded by an increase in credit to GDP ratio also saw a subsequent reduction in that ratio. As discussed in Chapter V of this Report, however, there are significant structural difficulties in using the credit to GDP ratio as an indicator of buildup of systemic risks in case of emerging economies such as India.

#### **Deposits**

# Growth remains subdued. However, share of low cost deposits has increased

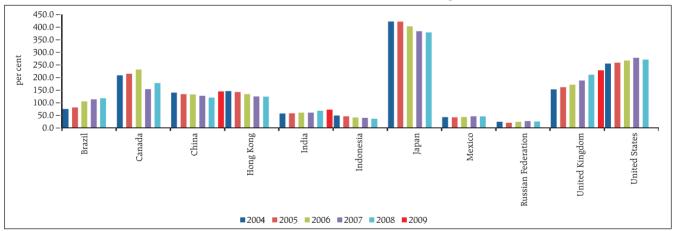
4.12 As discussed in paragraph 4.9 above, deposits are the major source of funds for scheduled commercial banks in India. Deposits continued to grow during 2009-10 and by about 16 per cent on year on year basis as at end September 2010 indicating a distinct slowdown from the growth rates witnessed during the preceding years. However, the share of CASA (Current Account and Savings Account) deposits in total deposits grew from 34.06 per cent in March 2009 to 34.48 per cent in March 2010 and further to 35.08 per cent in September 2010 (Chart 4.12). There was, however, a simultaneous increase in banks' reliance on the 'Certificate of Deposits (CDs)<sup>2</sup>' to meet their funding needs (CDs

Chart 4.10: Growth in Advances of Bank Groups



Source: RBI Supervisory Returns

Chart 4.11: Credit to GDP Ratio of Select Economies during 2004-09



Source: World Bank Indicators 2010

<sup>&</sup>lt;sup>1</sup> Mendoza and Terrones (2008) define a credit boom as a period in which the credit ratio exceeds its long-term trend by a certain threshold. According to the definition of credit boom by Borio and Drehman (2009), there were 17 financial crises in the sample of 27 crises which were preceded by period of credit booms.

<sup>&</sup>lt;sup>2</sup> Certificates of Deposit (CDs) is a negotiable money market instrument issued by scheduled commercial banks and select all-India Financial Institutions (FIs). While there is no limit in case of banks as regards the amount of CD issue, the FIs have an umbrella limit fixed by RBI. Minimum amount of a CD is  $\mathfrak{T}$  1 lakh and in the multiples of  $\mathfrak{T}$  1 lakh thereafter. The maturity period of CDs issued by banks is not less than 7 days and not more than one year and in case of FIs it is not less than 1 year and not exceeding 3 years. Banks / FIs cannot grant loans against CDs. Furthermore, they cannot buy-back their own CDs before maturity.

increased by 1.7 times during 2009-10). Though the year on year increase slowed down to about 50 per cent in June 2010 and September 2010, the increase on an already high base of 2009 indicated that deposit growth was inadequate to fund credit growth. Increasing reliance on CDs could impact the cost of funds of banks, especially given the recent increase in CD rates as discussed in Chapter III of this Report.

### Term deposits, the source for longer term credit has grown but majority of deposits were in short term

4.13 Terms deposits have also continued to grow facilitating funding of longer term credit. However, a study of the maturity profile of, *inter alia*, deposits indicates a preponderance of deposits in the shorter time bucket, which combined with growth in longer term assets (e.g. infrastructure lending), could exacerbate asset liability mismatches as discussed in paragraph 4.61 of this Chapter.

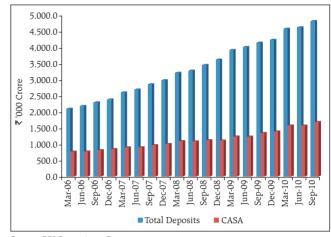
# Credit to Deposit (CD) and investment to Deposit (ID) ratios

# Sluggish deposit growth resulted in steep rise in incremental CD ratio

4.14 Credit to deposit (CD) (incremental) and Investment to Deposit (ID) (incremental) ratios measure the extent to which (incremental) credit and (incremental) investments are financed by (incremental) deposits. While the CD and ID ratios of the SCBs remained largely stable during 2009-10, there were large fluctuations in the incremental ratios during the same period (Table 4.1).

4.15 For the quarter ended June 2010, when the incremental CD ratio was a high 253 per cent, there were 24 banks with incremental CD ratio greater than 100 per

Chart 4.12: Deposits and Portion of CASA deposits of the SCBs



Source: RBI Supervisory Returns

Table 4.1: CD and ID Ratios of SCBs											
	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10
Percent Increase in Credit	9.7	2.3	7.7	2.6	5.9	-0.6	3.8	3.9	9.2	3.2	3.1
Percent Increase in Deposits	7.8	2.1	5.4	4.8	8.3	2.3	3.3	2.1	8.2	0.9	4.2
CD ratio	72.5	72.7	74.3	72.8	71.2	69.2	69.5	70.7	71.4	73.0	72.3
Incremental CD ratio	89.0	81.6	103.3	41.2	52.4	-17.8	80.2	127.1	79.8	253.6	54.5
Investment to Deposit ratio	36.2	36.4	33.3	37.1	36.5	39.0	39.1	39.0	37.1	36.9	36.7
Incremental ID ratio	21.6	48.6	-24.2	115.4	30.1	143.1	42.0	35.3	14.0	19.2	30.3

cent. In the subsequent quarter, the incremental CD ratio came down to 54.4 per cent. The incremental credit during the quarter ended June 2010 was largely funded by way of increase in borrowings (13.44 per cent), reduction in the stock of investments, reduction in the dues from banks and utilising cash balances. The sharp increase in the incremental CD ratio during quarter ended June 2010 was influenced by few big banks which had funded their incremental advances through borrowings and retirement of their investments. The credit growth funded through such means cannot be sustained and may also impact margins if borrowings are contracted at interest rates higher than deposit rates.

# Reliance on Bulk deposits was greater in case of old private and foreign banks

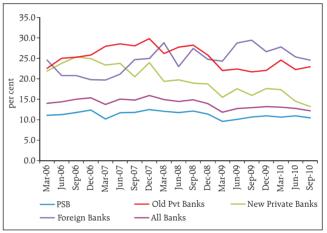
4.16 Old private sector banks and foreign banks continued to display a high degree of reliance on big ticket deposits (i.e. deposits of ₹ 15 lakh and above) though a sharp reduction in such reliance was evidenced in case of new private sector banks (Chart 4.13). Excessive reliance on bulk deposits could affect the profitability of banks, especially if they are contracted at higher than card rates. They could also engender liquidity risks arising out of sudden withdrawal and/ or non-rollover of such deposits.

#### Leverage

# Leverage<sup>3</sup> of global banks in advanced economies remains high

4.17 Excessive leverage of banks globally is widely believed to have contributed significantly to the global financial crisis. Though some lowering has taken place, the leverage continues to remain high relative to the leverage ratios of Indian banks.

Chart 4.13: Reliance on Big Ticket Deposits



The leverage multiples in the charts 4.14 and 4.15 are balance sheet leverages (ratios of total assets to total equity of the banks adjusted by deducting intangible assets). The calculations are based on definitions of leverage ratio in the CGFS paper on 'The role of valuation and leverage in procycliality' (April 2009) and an IMF policy paper on 'The Leverage Ratio' (December 2009). The IMF policy paper defines the term leverage ratio as the ratio of Tier I capital to total assets' whereas the inverse of the said ratio has been referred to as leverage multiple. The recent BCBS paper 'Basel III: A global regulatory framework for more resilient banks and banking system' (December 2010) has indicated the leverage as ratio of Tier-I Capital to Total assets, the numerator and denominator being adjusted in accordance with relative prescriptions given in the paper. Leverage ratio requirement is intended to achieve the objectives of constraining leverage in the banking sector, thus helping to mitigate the risk of build up and release of excessive leverage, a process which can damage the financial system and the economy, and to introduce additional safeguards against model risk and measurement error. This will reinforce the risk based capital requirements with a simple, non-risk based "backstop" measure. The Committee will test a minimum Tier 1 leverage ratio of 3 per cent during the parallel run period from 1 January 2013 to 1 January 2017. Based on the results of the parallel run period, any final adjustments to the definition and calibration of the leverage ratio will be carried out in the first half of 2017, with a view to migrating to a Pillar 1 treatment on 1 January 2018.

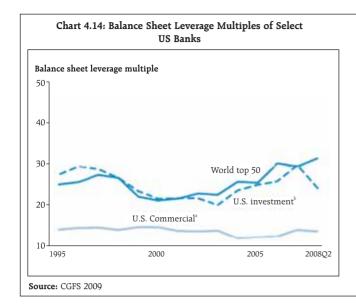
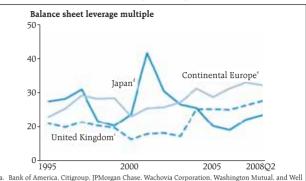


Chart 4.15: Balance Sheet Leverage Multiples of Select Banks of Europe and Japan



- Fargo & Company.

  Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley
- Barclays, HSBC, Lloyds TSB Group, and Royal Bank of Scotland.

  ABN AMRO Holding, Banco Santander, BPN Paribas, Commerzbank, Credit Agricode, Credit Suisse, Deutsche Bank, Société Générals, UBS, and UniCredit SpA.

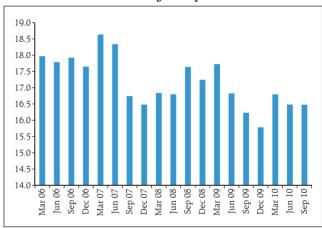
### Indian banks continue to be moderately leveraged4

4.18 The leverage multiples of the US, European and Japanese banks was around 30 for the world's top 50 banks in 2007 (Chart 4.14 and 4.15). In contrast, the leverage multiple of SCBs in India remained moderate (Chart 4.16). The multiple for banks in India declined marginally during 2009-10 (from 17.75 to 16.83). The level of leverage of Indian banks also reflected comfortable Tier-I capital position, modest growth in overall banking assets and recapitalisation of few Public Sector Banks (PSBs) that was done during 2009-10. Global initiatives towards introduction of a leverage ratio for banks is thus not expected to be a binding constraint though there are some definitional concerns in this connection as has been discussed in Chapter V of this Report.

### Exposure to highly leveraged corporates remained moderate

4.19 While the leverage of the banks themselves is an important risk indicator, their exposure to the highly leveraged companies is of equal concern. A study in this regard has shown that the Indian Banks have moderate level of exposures in companies which were highly leveraged. The growth in the exposure to such companies was however coming down (Box 4.1).





Leverage multiples of Indian banks are balance sheet leverages (ratios of total assets to total equity of the banks adjusted by deducting intangible assets) calculated using a similar methodology to that used by CGFS and IMF as described in footnote 3.

#### Box 4.1: Indian Banks' Exposure to Highly Leveraged Companies

A very high level of leverage in the balance sheets of companies entails higher probability of distress and possibility of even failures. In order to assess the vulnerabilities added to the system as a result of banks' exposures to such companies, a study in this regard was conducted by the Reserve Bank. The study took a sample of the 25 most leveraged companies (excluding banks) in India. Of these 25 companies, 20 companies were top BSE 100 companies in terms of their Debt Equity Ratio (DER) and the remaining 5 companies (though not part of BSE 100) were selected on the basis of a combined high DER and net worth of more than ₹ 1500 crore.

The study has observed the following:

- (i) As per the list of BSE 100 companies, the highest DER was 245.1 per cent and only eight companies had DER above 100 per cent.
- (ii) Among the non-BSE 100 companies in the sample, the DE ratio ranged between 117.7 per cent and 507.4 per cent.
- (iii) Traditionally, the highly leveraged industries in India are manmade textiles, cotton textiles, sugar, paper and paper products, plastic products, iron and steel, fabricated metal products, chemical, hotels and restaurants and real estate. In the aforesaid sample, the manmade textile industry had the highest leverage with a DER of about 200 per cent, closely followed by the cotton textile industry. Five companies in the selection had a DER in excess of 200

- per cent. Of these, two companies were from the iron and steel sector.
- (iv) Fund based exposure constituted 64 per cent of the total exposure to these 25 companies in September 2010. Total exposure to these companies in September 2010 grew by about one per cent over March 2010, whereas the yoy growth between March 2009 and 2010 was 18 per cent. Public Sector Banks accounted for 68 per cent of the total banks' exposure in March 2009 which increased to 73 per cent in March 2010 but came down to 69 per cent in September 2010. New Private sector banks had a share of 20 per cent exposure in September 2010.
- (v) Further, five banks alone accounted for about 53 per cent of the total exposure towards these 25 companies, which included three PSBs and two new private sector banks. There were 24 banks which had exposure in excess of ₹ 2000 crore.
- (vi) At the system level, exposure in these 25 companies was about 6 per cent of the gross advances of the SCBs. There was one foreign bank which had 17 per cent of its gross advances exposure in 10 out of the 25 companies.
- (vii) About 36 per cent of this exposure was to the iron and steel sector.
- (viii) One airline company had a DER of more than 500 per cent, which was much above the industry average.

### Sectoral Credit Analysis

# Real estate and Infrastructure loans have driven the credit growth

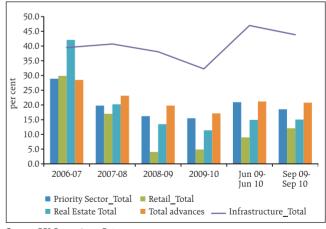
4.20 Credit growth during 2008-09 and 2009-10 was sluggish. Advances picked up as at end September 2010 as credit off take improved to 20.7 per cent on a year on year basis (Chart 4.17). The recovery was observed to be primarily on account of incremental advances to infrastructure, real estate, retail and priority sectors.

#### **Retail Credit**

# Growth remains moderate but incremental rise in impairment in housing loans was discernible

4.21 The share of retail credit in the total advances of scheduled commercial banks was 19 per cent. Its share had significantly reduced from the pre-crisis level of 26 per cent. Growth rate in the sector showed recovery

Chart 4.17: Growth of Sectoral Credit of SCBs



as at end September 2010 as it registered increase of 12.07 per cent on year on year basis as against average growth of 4.5 per cent in 2008-09 and 2009-10.

### Housing loans and personal loans were the key contributors to the growth of retail loans

4.22 Housing loans are a major component of retail credit in India and were one of the prime drivers in the growth of the retail loan portfolio of SCBs, especially during the last year and a half (Charts 4.18 and 4.19). Such loans accounted for over 56 per cent of total retail credit as at end September 2010 – a little above their share in March 2010 which was 54.3 per cent. As a proportion of the aggregate advances of SCBs, housing loans have averaged above 10 per cent over the last few years (Chart 4.20).

# Rebound in the growth of housing loans led to tightening of prudential norms

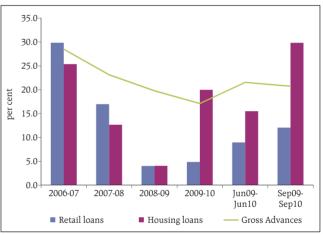
Growth in the housing loan portfolio of banks recovered sharply during 2009-10 after the slowdown experienced during the previous two years in the aftermath of the financial crisis. The portfolio grew by about 20 per cent during 2009-10 and by about 30 per cent as at end September 2010 on a year on year basis as compared to 13 per cent during 2007-08 and 4 per cent during 2008-09. There was concomitant increase seen in the housing prices during 2009-10 and thereafter resulting in prices at many centres surpassing their precrisis levels. Alluring schemes for housing loans offered by the banks could also be adding to demand pressures and housing prices. In response to these developments, and as a precautionary measure to curb any build up of excessive risks in this sector, the Reserve Bank announced a series of measures in the Second Quarter Review of Monetary Policy in November 2010. These include, inter alia, restriction of Loan to Value ratio of housing loans to 80 per cent (90 per cent for loans up to ₹ 20.00 lakh) and increase in the risk weights on large housing loans (₹ 75 lakh and above) to 125 per cent in order to prevent excessive leveraging. The previous FSR had pointed out some concerns with respect to the growing incidence of home loans with "teaser rates" home loans with an initially low fixed interest rate, which in later years increases to higher levels. This practice raises concern as some borrowers may find it

Chart 4.18: Housing and Personal Loans and Level of Unsecured Credit of SCBs



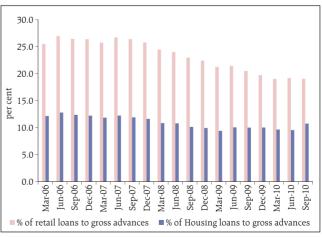
Source: RBI Supervisory Returns

Chart 4.19: Growth of Retail and Housing Credit of SCBs



Source: RBI Supervisory Returns

Chart 4.20: Share of Retail and Housing Credit of SCBs in their Total Advances



difficult to service the loans once the normal interest rate, which is higher than the rate applicable in the initial years, becomes effective. It has been also observed that many banks at the time of initial loan appraisal, do not take into account the repaying capacity of the borrower at normal lending rates. Therefore, in view of the higher risk associated with such loans, the standard asset provisioning on the outstanding amount has now been increased from 0.40 per cent to 2.00 per cent. However, the provisioning on these assets would revert to 0.40 per cent after 1 year from the date on which the rates are reset at higher rates if the accounts remain 'standard'.

#### Significant portion of the retail loans was unsecured

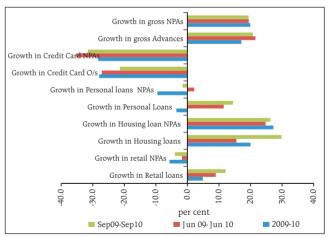
4.24 The share of unsecured credit (primarily personal loans) - the other major component of retail credit in the retail loan portfolio of the commercial banks - remains high at about 35 per cent. Personal loans which had a negative growth of 3.48 per cent during 2009-10, increased by 14.49 per cent in September 2010 on a year on year basis. NPAs in personal loans accounted for 40 per cent of the retail loan NPAs. However, the NPAs in personal loans declined on year-on-year basis as at end-September 2010.

### Increase in retail sector delinquency has slowed down, but in case of housing loans it could cause some concern

4.25 Delinquencies in the retail sector, which had increased sharply in the wake of the slowdown and aggressive lending earlier in the boom years, showed an improving trend during 2009-10 and in the subsequent quarters (Chart: 4.21). Despite the decline in the rate of delinquencies, the ratio of the NPAs in the retail portfolio to total retail advances remained high at 3.74 per cent in September 2010. The NPAs in the housing segment grew sharply during 2009-10 (27.22 per cent) and continued to register significant increase as at end September 2010 on a year on year basis (26.31 per cent). Housing loan and personal loan NPAs held the key to the level of NPAs in retail sector as also overall gross NPAs inasmuch as these constituted about 73 per cent of the retail NPAs during March 2005 - September 2010 and 21.5 percent of the overall gross NPAs of the SCBs during the same period.

4.26 The sharp increase in retail NPAs during 2007-08 and 2008-09 was, at least, partially, a result of adverse

Chart 4.21: NPAs Growth of SCBs in Retail Sector



credit selection during the expansionary phase of the economy. As the economy recovers and regains the higher growth trajectory achieved before the crisis, banks will need to guard against any dilution in their credit appraisal standards.

#### Infrastructure

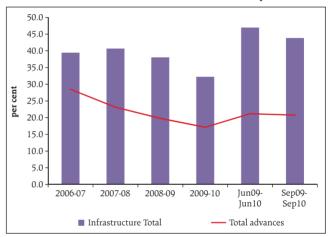
### Banks' finance has increased substantially to this preferred sector but it has also added to asset liability mismatches in the long term

4.27 Advances to infrastructure continued to exhibit strong growth – above 30 per cent for 2009-10 and above 40 per cent as at end September 2010 on a year on year basis (Chart 4.22). The growth rate of infrastructure advances remained well above the growth rate of aggregate advances and hence, the share of infrastructure lending in total advances increased to 12.4 per cent in September 2010 from 6.2 per cent in March 2005 and 10.4 per cent in March 2010. The bulk of the exposure in infrastructure was concentrated in PSBs which accounted for nearly 88 per cent of the outstanding amount of infrastructure advances of SCBs. There has been a sharp increase in the absolute levels of NPAs in the sector (from ₹ 1442 crore to ₹ 2725 crore between September 2009 and September 2010) though the NPA ratio remains below one per cent of infrastructure advances.

# Infrastructure finance is the need of the hour but could cause ALM concerns for the banks

4.28 The increasing exposure of the banking sector to infrastructural lending was, at least in part, a reflection of the acute need for improving the country's infrastructure. Nonetheless, the growing exposure to the infrastructure sector may pose some concerns for the banking sector as the portfolio grows despite mitigating factors like high level of CASA deposits and interest rate reset clauses stipulated by banks. The other vulnerability is banks' inability to price the loans on fixed term basis over the long horizon of infrastructure projects which increases the credit risk. The asset liability management issues associated with infrastructure lending could also potentially get exacerbated given the not insignificant probability of projects getting delayed in view of various sociopolitical and legal-administrative bottlenecks including environmental issues that these projects encounter.

Chart 4.22: Growth of Infrastructure Advances by SCBs



#### Further regulatory relaxations may not be easy

4.29 The relaxations in exposure norms (5 per cent in the case of single borrower limit and 10 per cent in case of group exposure limit) continue to be operative for facilitating lending to the sector. There have been representations to the Reserve Bank from various quarters to further relax the exposure norms in regard to infrastructure loans. However, given the regulatory aim to minimise the buildup of excessive concentration risks and the fact that infrastructure financing adds to asset liability mismatches, any further relaxation in the exposure norms may not be warranted. In fact, the current exposure norms for infrastructure financing in India are way above the international norms.

### Financing infrastructure requires finding a sustained solution

4.30 Financing infrastructure will thus require finding a sustained solution in the form of developing markets for long term funding. The previous FSR had outlined the various measures taken by the Government and by the Reserve Bank to facilitate lending to the infrastructure sector. A few additional measures taken in this direction include take-out financing arrangements with Infrastructure Development Finance Company (IDFC) as also other Financial Institutions, and External Commercial Borrowings (ECBs) under the approval route for the purpose of refinancing rupee loans for certain categories of infrastructure projects subject to certain limitations. Also, the proposed take out financing of about ₹ 25,000 crore by the India Infrastructure Finance Company Limited (IIFCL) over the next three years, as announced in Union Budget 2010-11, could provide some room to banks in addressing their ALM issue. IIFCL has also been authorised to refinance bank lending to infrastructure projects. Further, setting up of infrastructure debt funds on the lines of venture capital funds has been proposed by the government for raising low-cost long term funds for infrastructure (public private partnership) projects which are past the construction stage and in case of which a public authority has given compulsory buy-out guarantee. Several steps have also been taken to facilitate the development of the corporate bond market as have been discussed in Chapter III of this report. Apart from the measures to facilitate funding, the asset classification norms for the sector have been partially modified to allow commencement of commercial operations to be extended by a maximum of four years from their original dates in case of restructured project loans involving delays due to court cases, without requiring the asset classification of the project to be downgraded. The provisioning requirements in case of un-secured exposures of infrastructure advances, categorised as substandard, have been reduced to 15 per cent (as against 20 per cent for other exposures) provided there is a mechanism to escrow the cash flows from the project and the bank has a clear and legal first claim on these cash flows.

#### **Real Estate**

# Revival of bank finance to real estate was seen amidst rising property prices

4.31 The real estate exposures of SCBs – both residential mortgages and commercial real estate - has been gathering momentum in recent quarters and account for about 18 per cent of total advances. The year on year growth rate in the real estate exposure revived as at end September 2010 to 18 per cent, after a slowdown in the aftermath of the crisis (Chart 4.23).

4.32 Exposure to commercial real estate (CRE) comprises about 25 per cent of total real estate exposure in September 2010. The share of this segment in real estate exposure has increased sharply in recent quarters (from 16.40 per cent in March 2009) primarily due to a change in definition of commercial real estate<sup>5</sup>. Trends in housing credit (which comprises about 61 per cent

<sup>&</sup>lt;sup>5</sup> Circular DBOD.BP.BC.No.42/08.12.015/2009-10 dated September 9, 2009 on Guidelines on Classification of Exposures as Commercial Real Estate Exposures (CRE) has essentially adopted the Basel-II norms in this regard. For an exposure to be classified as CRE, the essential feature would be that the funding will result in the creation / acquisition of real estate (such as, office buildings to let, retail space, multifamily residential buildings, industrial or warehouse space, and hotels) where the prospects for repayment would depend primarily on the cash flows generated by the asset. Additionally, the prospect of recovery in the event of default would also depend primarily on the cash flows generated from such funded asset which is taken as security. Exposures to entrepreneurs for acquiring real estate for the purpose of their carrying on business activities, which would be serviced out of the cash flows generated by those business activities will not be classified as commercial real estate. However, the exposures to be repaid out of the rentals generated by these properties may be classified as CRE because even though such exposures do not result in funding / acquisition of commercial real estate, the repayment might be sensitive to fall in real estate rentals and as such generally such exposures should be classified as CRE.

of total real estate exposure of SCBs) have been discussed in paragraphs 4.22 and 4.23 of this Chapter.

### Increasing trend in the NPAs was being noticed due to increase in impairment in housing loans

4.33 The real estate NPAs showed increase of 8 per cent during the quarter ended September 2010. However, the share of real estate NPAs in SCBs' total NPAs marginally declined from 13.58 per cent in March 2010 to 13.13 per cent in September 2010. The gross NPA ratio for the real estate sector stood at 1.90 per cent as against overall gross NPA ratio at 2.58 per cent as at end September 2010 (Chart 4.24).

4.34 As against their share of about 60 per cent in the total real estate loans, the residential mortgage NPAs contributed nearly 80 per cent of real estate NPAs as at end September 2010. NPAs in residential mortgages increased on a year on year basis as at end September 2010 (as discussed in paragraph 4.25 of this Chapter). However, the gross NPA ratio remained unchanged at about 2.5 per cent. The increase in the absolute levels of NPAs in the residential mortgage loans were largely a result of adverse credit selection during periods of aggressive lending prior to the crisis. The banks have, off late, taken steps to strengthen the credit sanction mechanism in this area as also their monitoring by undertaking centralised processing of loan applications. With improved IT enabled financial tools, the banks have also been able to monitor the loan accounts more effectively.

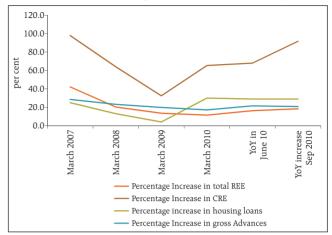
4.35 The NPAs in case of CRE advances declined marginally during the half year ended September 2010. The gross NPAs ratio in CRE declined from 1.66 per cent in March 2010 to 1.46 per cent in September 2010. However, there were some instances of slippages of large commercial real estate accounts, including restructured accounts<sup>6</sup>.

#### **Exposure to NBFCs**

#### Exposure has grown but remained small

4.36 Exposures to NBFCs continued to grow during 2009-10 and in the subsequent quarters (Chart 4.25) though overall exposures to the sector was less than 4 per cent of aggregate advances of the SCBs. Impaired

Chart 4.23: Growth in Components of Real Estate Loans by SCBs



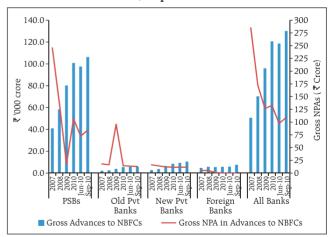
Source: RBI Supervisory Returns

Chart 4.24: Share of NPAs in Real Estate Loans by SCBs



Source: RBI Supervisory Returns

Chart 4.25: Exposure to NBFCs



<sup>&</sup>lt;sup>6</sup> In view of the probability of slippage of restructured real estate accounts, the Reserve Bank undertook a study in this respect based on a sample of six commercial banks. The study revealed that, in the above sample, 19 per cent of real estate accounts restructured in 2008-09 and 9 per cent of accounts restructured in 2009-10 slipped into NPAs.

assets in this sector were also low at less than 1 per cent of relative exposures.

#### Securitisation

#### Volumes suffered a decline in 2009-10

4.37 Securitisation volumes in India declined in 2009-10 for the second year in a row with issuance volumes declining by nearly 22 per cent. The dip in the overall securitisation volumes was largely a result of the 60 per cent reduction in single corporate loan securitisations or Loan Sell-Offs (LSO), which were mostly short-term in nature. The causative factors included market volatility. tight liquidity, redemption pressures faced by mutual funds (mutual funds are key investors, particularly in LSO segment) on the back of proposed regulatory changes on minimum holding period and minimum retention requirement in case of the securitisation deals, etc.

4.38 Globally, the securitisation markets had come to a virtual standstill in the wake of the financial crisis. However, in view of the essential risk dispersal qualities of securitisation and the fact that it also ameliorates liquidity issues for genuine credit expansion, internationally there are efforts on going to revive the securitisation markets (Box 4.2).

#### Box 4.2: Reviving Securitisation Markets

Securitisation was considered to be one of the primary causative factors leading to the global financial crisis. In the aftermath of the crisis, securitisation instruments have been viewed with suspicion and the market for securitisation has virtually frozen. However, it was also realised that as a product, securitisation is essentially a superior risk management tool and that its misuse was a result of failure in framing appropriate regulation and in permitting the market to grow unfettered. Consequently, a number of initiatives are being taken internationally to revive the securitisation markets on a sounder footing.

In this regard, BCBS has proposed reforms aimed at realigning regulatory capital requirements for securitisation products. The Pillar I reforms have multiple goals and aim to better reflect the risks involved by way of increasing the risk weights attached to these exposures and to eliminate the opportunities for regulatory arbitrage. The BCBS has also carried out revisions to Pillar 3 requirements with a view to enhance market discipline across all aspects of securitisation.

With a view to reducing reliance on rating agencies, a series of policy initiatives have been undertaken to encourage the agencies to tighten their internal governance and improve their transparency and disclosure standards. European regulations now require rating agencies to differentiate their securitisation product ratings from those on regular corporate and sovereign debt. The U.S. Treasury has also advocated differential rating scales in its Financial Regulatory Reform white paper released in August 2009. Further requirements have also been introduced regarding the publication of rating performance metrics to facilitate cross-product and cross-rating comparisons. Improving disclosure standards and making publicly available detailed information about the assets underlying the structured finance products, could also help reduce rating shopping by making it possible for entities other than the credit rating agency hired by the originator to develop and disseminate opinions about the securities. The International Organisation of Securities Commission (IOSCO) has published disclosure principles for Asset Backed Securities (ABS) for regulatory regimes outlining the information which should be included in any offer document of ABS, including residential and commercial mortgage-backed securities

Compensation systems based on immediately measurable accounting results also played a role in creating the conditions that led to the crisis. Accounting standards that eliminate the upfront recognition of income from securitisations—and thereby the immediate impact on compensation could significantly alter compensation schemes. Introducing a longer-term perspective on structuring securitisations should force originators to better account for the risk-return trade-off of the instrument and provide incentives for better underwriting standards. A welcome development in this regard is the FASB's elimination of the gain on sale accounting treatment that had added to the profitability of certain securitisations.

Another set of initiatives are aimed at product standardisation and simplification which would increase transparency and facilitate better understanding of risks thus contributing to the development of a liquid secondary market.

Again, a set of recent policy moves attempt to get more securitiser "skin in the game" to ensure that someone is taking responsibility for diligent loan underwriting and monitoring. It is clear that, in many cases, securitisation product issuers were poorly incentivised to conduct the appropriate (continuous) due diligence on loan originators. In order to incentivise stronger issuer due diligence effort, the European and U.S. authorities are proposing to amend securitisation-related regulations to incentivise issuers to retain an economic interest in the securitisation products they issue. The European Union (EU) Parliament has amended the Capital Requirements Directive, which sets out the rules for Basel II implementation in Europe, to provide incentives for securitisers to retain at least 5 per cent of the nominal value of originations. In a June 17, 2009 white paper, the U.S. government called for similar risk retention requirements for U.S. securitisers. Both propose several risk retention options, including retaining the equity tranche and equal amounts of all tranches ("vertical" slices).

#### Off balance sheet (OBS) exposure

### OBS exposure are mostly in traditional instruments. A sharp increase was noticed in case of foreign banks.

4.39 The total OBS exposures of the SCBs as a percentage of total balance sheet size had declined 218 per cent to 178 per cent during 2009-10 but showed moderate increase in the half year ended September 2010 (Chart 4.26) rising to 210.8 per cent as at end-September, 2010. Overall exposure for SCBs was not indicative of being excessive. However, the ratio of OBS exposures to balance sheet size of foreign banks increased from 1555 per cent as at end March 2010 to 1828 per cent as at end September 2010.

4.40 Further, banks in India, especially domestic banks, have been holding mostly traditional off balance sheet items like credit contingents (financial and performance guarantees, acceptances, endorsements etc.) and forward foreign exchange contracts (Chart 4.27).

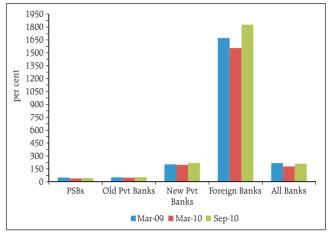
4.41 As reported in the previous FSR, the approach to introduction of derivative products in the Indian financial markets has been cautious. Nevertheless, the menu of available derivative products has been expanded in a calibrated manner and banks in India are increasingly using these products to manage risks as also offering the same to their corporate clients.

4.42 Foreign banks continued to account for the bulk of OBS exposures, especially derivative related exposures (Chart 4.28).

### Credit Equivalent of the OBS exposure was not significant

4.43 Credit equivalent of the off balance sheet exposure, which is the potential balance sheet exposure based on which the capital requirements are estimated, as a ratio of balance sheet size remained low and, in fact, exhibited a declining trend (from 8.8 per cent in March 2009 to 5.3 per cent in March 2010 and further to 4.8 per cent in the half year September 2010)

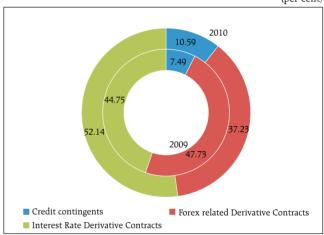
Chart 4.26: Off Balance Sheet Exposure as Percentage of the On Balance Sheet Assets



Source: RBI Supervisory Returns

Chart 4.27: Composition of OBS Exposures

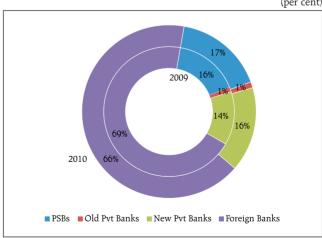
(per cent)



Source: RBI Supervisory Returns

Chart 4.28: Concentration of OBS Exposure among the Bank Groups

(per cent)



(Chart 4.29). The ratio in case of foreign banks was typically high at 51 per cent in March 2010 but declined to 45.46 per cent in September 2010. The aggregate MTM positions of the SCBs remained positive.

#### Financial Soundness Indicators

#### Capital to risk weighted assets ratio (CRAR)

# Indian banks remain well capitalised. No bank had CRAR less than stipulated minimum.

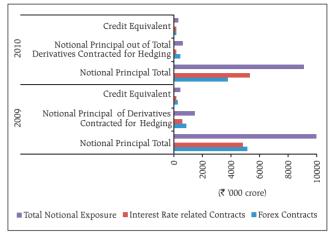
4.44 SCBs with overseas presence migrated to the Basel II framework with effect from March 31, 2008 while other commercial banks (except RRBs) migrated to the new framework with effect from March 31, 2009. The time schedule for implementation of advanced approaches under Basel II has also been notified though there remain several challenges (with respect to creating requisite IT and risk management infrastructure, upgrading skills and building requisite historical data) in migrating to these approaches.

4.45 SCBs in India are required to maintain capital to the extent of 9 per cent of risk weighted assets (as against the Basel II requirement of 8 per cent). With effect from April 1, 2010, they are also required to maintain a core CRAR (Tier I capital to total risk weighted assets) of 6 per cent (as against the Basel II requirement of 4 per cent). The capital adequacy position of SCBs was well above the regulatory requirements with CRAR and core CRAR being in excess of 14 per cent and 10 per cent respectively in March 2010 and in September 2010. The ratios declined marginally in September 2010 due to greater credit off take (Chart 4.30).

4.46 There was no commercial bank which had CRAR less than 11 per cent or core CRAR less than 6 per cent as on September 30, 2010 indicating that the capital adequacy position of banks was comfortable both at the micro and the macro level.

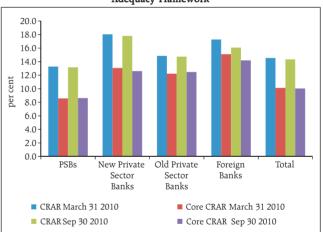
4.47 As an additional safeguard, domestic regulations required SCBs to compute their respective capital adequacy ratios under Basel I guidelines in addition to computing the same under Basel II guidelines in order to ensure that the capital maintained in respect of credit and market risks by

Chart 4.29: Off Balance Sheet Exposure-Notional and Credit Equivalents



Source: RBI Supervisory Returns

Chart 4.30: Capital Adequacy under New Capital Adequacy Framework



SCBs is not less than 80 per cent of the capital requirements under Basel I. The capital adequacy ratios under Basel I guidelines, though a tad lower than the ones under Basel II guidelines<sup>7</sup> were also well above the minimum prescribed (Chart 4.31).

4.48 The comfortable capital adequacy position of banks in India implies that the distance to comply with the requirements under Basel III<sup>8</sup> may not be very significant at the system level though there are some concerns/challenges as have been discussed in Chapter V of this Report.

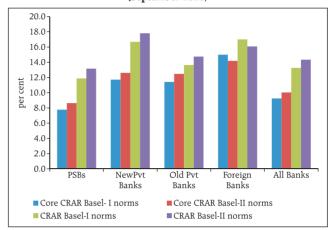
### Overall Asset Quality

# Asset quality continued to deteriorate in the aftermath of the global financial crisis

4.49 During 2009-10, growth in the stock of NPAs was 20.61 per cent which outpaced the rate of growth of gross advances at 16.68 per cent. Consequently, the gross and net ratio of NPAs to gross and net advances deteriorated during 2009-10. The deterioration in the asset quality continued as at end September 2010, as the gross NPAs increased by about 19.34 per cent on year on year basis (Chart 4.32). The gross NPA ratio at 2.39 per cent as at end March 2010 increased to 2.58 per cent as at end September 2010. However, the net NPA ratio improved (from 1.12 per cent to 1.06 per cent) as banks increased their provisions in a bid to meet the regulatory requirement of 70 per cent provision coverage ratio (Chart 4.33).

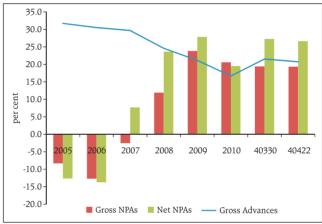
4.50 The rate of increase in NPAs remained high in spite of large quantum of accounts written off or recovered under the one time compromise settlement schemes of individual banks (Chart 4.34). The increase in NPAs may have been greater but for the onetime special dispensation in restructuring norms permitted by the Reserve Bank in case of entities temporarily affected by the impact of the financial crisis. The

Chart 4.31: Capital Adequacy under Basel-I and Basel-II Frameworks (September 2010)



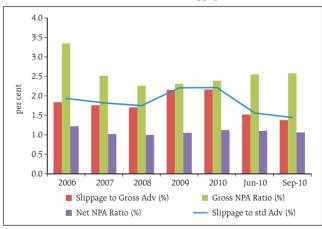
Source: RBI Supervisory Returns

Chart 4.32: Growth Rates of Gross NPAs of SCBs



Source: RBI Supervisory Returns

Chart 4.33: NPA Ratios and Fresh Slippage Ratios of SCBs



<sup>&</sup>lt;sup>7</sup> CRAR and core CRAR for all SCBs are higher under Basel II guidelines as compared to under the Basel I guidelines by 78 and 74 basis points respectively. This is due to, *inter alia*, the benefits available in respect of reduced risk weights for highly rated accounts, reduced risk weights in exposures to regulatory retail and residential housing loans to individuals.

<sup>&</sup>lt;sup>8</sup> A set of global reforms to the regulatory framework for banks aimed at, *inter alia*, increasing the quality and quantity of capital and improving its risk coverage so as to better address both firm specific and systemic risks.

slippage ratio<sup>9</sup> as at end September 2010 over March 2010 remained high at 1.42 per cent (annualised) though it marked an improvement over the ratio for 2009-10 at 2.21 per cent.

# NPAs concentrated in few big accounts require focused recovery efforts

4.51 Significant concentration of NPAs in a few accounts persisted with the top 30 impaired assets of the SCBs accounting for 30 per cent of the gross NPAs. These could potentially increase the provision requirements of the banking sector substantially if the asset quality of one or more of these large accounts does not improve.

### Older NPA accounts, comprised about half of the gross NPAs

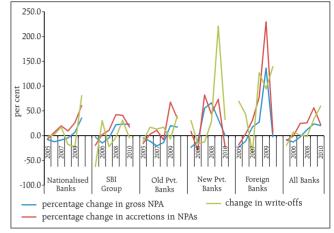
4.52 Doubtful and loss assets comprised over 50 per cent of the stock of NPAs of SCBs indicating the preponderance of such advances (Chart 4.35). Coupled with the fact that accretion to NPAs remained elevated, the quality of assets of the banking sector continued to cause some concern.

### Emerging developments in the telecom and real estate sectors may impact lending to and asset quality of these sectors

4.53 In a recent report by the Comptroller and Auditor General of India, it was brought out that irregularities in the allotment of 2G spectrum licenses below market rates had resulted in significant loss of revenue to the exchequer. In case the resultant government action results in the cancellation of licenses issued to telecom companies, there may be an impact on the repayment of dues to banks which have funded these companies against the security of the 2G licences.

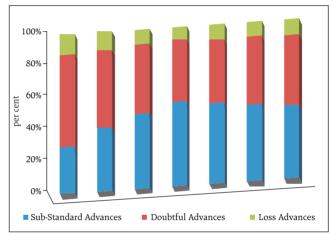
4.54 In a separate development, allegations of irregularities in the sanction of real estate loans have also surfaced in some banks. Detailed enquiries have been undertaken though preliminary findings do not point to widespread irregularities or systemic concerns. Nevertheless, these developments may still have adverse repercussions in the form of overly cautious lending to both the sectors.

Chart 4.34: Growth in the Gross NPAs of Bank Groups



Source: RBI Supervisory Returns

Chart 4.35: Category wise Break up of Gross NPAs of SCBs



<sup>9</sup> Slippage ratio denotes the new impaired loans as percentage of opening stock of performing loans

#### Restructurings of standard assets

# Risk of Slippages in restructured accounts called for continuous vigilance

4.55 Since the spillover effects of the global downturn started affecting the Indian economy particularly from September 2008 onwards creating stress for the otherwise viable units / activities, a special regulatory dispensation for a short (limited) period as regards restructuring of stressed standard advances and their asset classification were announced by the Reserve Bank. The quantum of the standard assets restructured increased sharply during 2008-09 by 192 per cent (2.22 per cent of the gross standard advances) and further by 60.18 per cent during 2009-10 (3.03 per cent of gross standard advances). As the currency of the special dispensation expired, fresh instances of restructuring of standard advances have declined sharply. While there is risk of a portion of restructured accounts slipping into NPAs and impairing asset quality, so far there is little evidence of large scale slippages of restructured accounts. An internal study of the impact of slippages of restructured accounts on the capital adequacy position of banks showed minimal impact on CRAR even with an assumed slippage of 30 per cent of the restructured accounts. Nevertheless, there continues to be a need to exercise continued vigilance on this front.

### Minimum Provision coverage ratio

### Countercyclical measure to arrest slippages

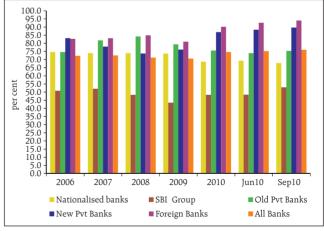
4.56 The provision coverage ratio (PCR)<sup>10</sup> for SCBs was comfortable at 75.9 per cent as at September 30, 2010. The banking sector, in the aggregate, met the regulatory requirement of 70 per cent PCR in September 2010. However, PSBs (accounting for about 73 per cent of the banking sector NPAs) were yet to meet the PCR requirement (Chart 4.36).

#### **Profitability**

### Low rate of growth in Interest income was a bottleneck in improvement of profitability

4.57 The SCBs' profitability indicators suffered a setback during 2009-10 as a result of subdued credit

Chart 4.36: Provision Coverage Ratio 11 of Bank Groups



Provision Coverage Ratio = Provisions Held (Specific + Floating) plus stock of technical write-offs / Gross NPAs plus stock of technical write-offs\*100.

<sup>&</sup>lt;sup>11</sup> Data on technical write-off used for the computation of the PCR pertains to the period March 1997 till September 2010, as reported under the RBI supervisory returns.

off take and consequent preference for risk free but low yielding investments evidenced during the crisisaffected period (Chart 4.37). Also affecting profitability of banks was the increased requirements for provisions (both due to increased slippages of standard assets and to meet the requirement of 70 per cent provision coverage ratio). In 2010-11, the requirement to compute interest on savings account balances on a daily basis also had an impact on the banks' bottom line. The total income of the SCBs could increase by 6.82 per cent during 2009-10 due to sluggish growth in interest and non-interest incomes (the interest income accounts for nearly 84 per cent of the total income). The decline in the non-interest income was mainly due to reduced profits from forex and trading operations as both declined (by 21.96 per cent and 10.76 per cent respectively) during the year. Foreign banks were observed to have suffered considerable net losses on trading books (Chart 4.38).

# Profitability ratios reflected less than optimal asset productivity

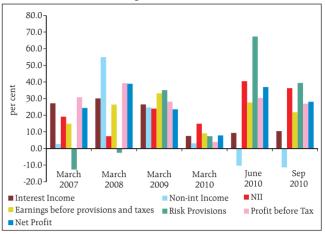
4.58 The profitability ratios of the SCBs indicated moderate level of concern inasmuch as the Return on Assets (RoA) and the Return on equity (RoE) of the banks deteriorated from 1.02 per cent and 13.18 per cent during 2008-09 to 0.96 per cent and 12.52 per cent respectively during 2009-10. During the half year ended September 2010, the RoA and the RoE showed some improvement (Chart 4.39). Significant observations are the decline in the proportion of non-interest income in total income and the rise in efficiency ratio<sup>12</sup> which had been falling until June 2010. The rise in the efficiency ratio is attributed to relatively higher growth in SCBs' non -interest expense compared to growth in their total income.

#### Liquidity

### Banks remain liquid in short term, however may face stress in the medium to long term

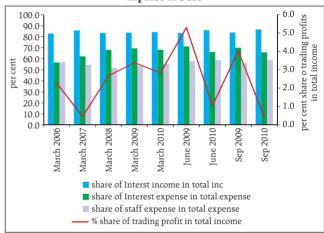
4.59 A liquidity gap analysis (flow approach) in the short term time buckets (up to 28 days) indicates no

Chart 4.37: Growth of Select Components of Income and Expense of SCBs



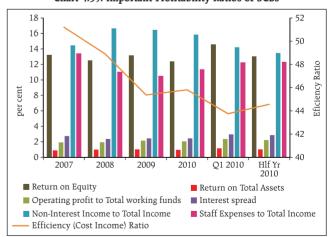
Source: RBI Supervisory Returns

Chart 4.38: Share of Important Components of Income and Expense of SCBs



Source: RBI Supervisory Returns

Chart 4.39: Important Profitability Ratios of SCBs



<sup>&</sup>lt;sup>12</sup> Efficiency ratio is also known as Cost to Income ratio. It is the ratio of Non-interest Expense divided by Net Total Income (Net total income is equal to the difference between Total income and interest expense). It is the measure of the extent of net total income which meets the non-interest expenses. A lower efficiency ratio is desirable.

major vulnerability at the system level with positive mismatches seen in all the time buckets (Table 4.2). A stock analysis of the liquidity, based on ratios of assetliability items, however, indicated certain strains at the system level, mainly on account of increased reliance of the banks on borrowings and decline in the level of liquid assets (Chart 4.40).

4.60 A further analysis of liquidity through ratios reveals an increasing reliance on volatile liabilities to support balance sheet growth (Table 4.3). The share of core deposits to total assets has progressively declined over the years (except in the quarter ended March 2010 and September 2010). Despite a high ratio of temporary assets to total assets, the coverage of liquid assets in relation to volatile liabilities has remained less than one, indicating potential liquidity strains. The dependence on purchased liquidity by the banks as seen from Ratio 3 ([Loans + Mandatory CRR + Mandatory SLR + Fixed Assets] / Core Deposits) however, showed a marginal decline in 2008-09 but changed little thereafter.

4.61 From a longer term perspective, the maturity profile of the deposits, advances and investments of banks during the period March 2009 – September 2010 revealed that there was concentration of shorter term deposits as against deployment of credit in the medium to long term tenure implying presence of inherent structural mismatches in the SCBs' balance sheet

Table 4.2: Short Term Liquidity Assessment of the SCBs (Flow Approach)									
Net cumulative mismatch as percentage of outflow									
1 Day 2 to 7 days 8 to 14 days 14 to 28 days									
17.80	14.38	7.86	8.63						
24.60	23.87	17.19	15.77						
34.35	28.48	19.23	16.74						
30.96	25.18	19.39	15.71						
19.54	14.64	8.13	6.46						
12.21	9.02	6.06	6.55						
10.79	8.16	4.83	4.48						
	1 Day 17.80 24.60 34.35 30.96 19.54 12.21	(Flow Approach)           Net cumulative mismatch           1 Day         2 to 7 days           17.80         14.38           24.60         23.87           34.35         28.48           30.96         25.18           19.54         14.64           12.21         9.02	(Flow Approach)       Net cumulative mismatch as percentage of 1 Day     2 to 7 days     8 to 14 days       17.80     14.38     7.86       24.60     23.87     17.19       34.35     28.48     19.23       30.96     25.18     19.39       19.54     14.64     8.13       12.21     9.02     6.06						

Source: RBI Supervisory Returns

Chart 4.40: Liquidity Assessment (Stock Approach)

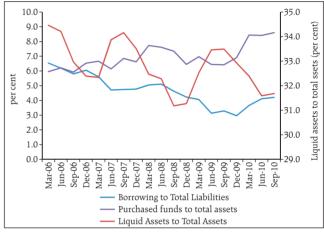


Table 4.3: Liquidity Ratios- Dependence on Short Term Funds for Long Term Financing									
	Liquidity Ratios								
Liquidity Ratios	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	Sep-10			
1. (Volatile Liabilities - Temporary Assets) / (Earning Assets - Temporary Assets) (%)	38.4	41.4	43.9	38.2	40.9	40.9			
Core Deposits / Total Assets (%)	53.9	52.2	49.3	48.4	49.8	51.0			
2. (Loans + Mandatory CRR + Mandatory SLR + Fixed Assets )/ Total Assets (%)	79.9	83.4	85.9	79.4	81.7	82.4			
3. [Loans + Mandatory CRR + Mandatory SLR + Fixed Assets ] / Core Deposits	1.5	1.6	1.7	1.6	1.6	1.6			
4. Temporary Assets / Total Assets (%)		43.4	52.0	47.9	41.2	47.6			
5. Temporary Assets / Volatile Liabilities	0.53	0.65	0.71	0.72	0.65	0.70			
6. Volatile liabilities/Total Assets (%)	57.1	66.8	73.1	66.1	63.7	67.7			
7. (Market Value of Non-SLR Securities + Excess SLR Securities)/ (Book Value of Non-SLR Securities + Excess SLR Securities)	1.1	1.0	1.0	1.0	1.0	0.9			
Source: RBI Supervisory Returns									

(Table 4.4). The growing infrastructure financing by the SCBs is likely to further widen the existing asset liability mismatches. However, a large share of low cost deposits (CASA deposits) which are stable help mitigate the liquidity risk.

#### Interest rate sensitivity

#### Evidence of increase in interest rate risk is visible

4.62 Though a normal part of banking and an important source of profitability and shareholder value, excessive interest rate risk can pose a significant threat to a bank's earnings and capital base. Interest rate risks are typically measured by simple gap analysis<sup>13</sup> or duration gap analysis<sup>14</sup> or with the help of other more sophisticated tools like Value at Risk (VaR) or Stress Testing Techniques. Regulatory provisions for the SCBs in this regard were first prescribed in February 1999 stipulating a simple gap analysis for interest rate risk measurement from the 'earnings perspective'. Banks were, however advised to migrate to modern techniques such as Duration Gap Analysis (DGA), Simulation and VaR over a period of time.

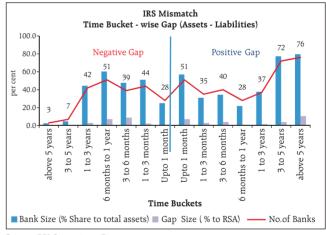
4.63 Data on maturity time bucket wise Rate Sensitive Assets and Liabilities (RSAs and RSLs) in September 2010 pointed to build up of mismatches in the time bucket of beyond 5 years which may partly be due to increasing exposure to infrastructure financing (Chart 4.41).

4.64 The Reserve Bank has revised its guidelines on the measurement of interest rate risk in November 2010. The banks have now been advised to adopt duration gap analysis in addition to the traditional gap analysis to assess the effect of interest rate changes on the market value of their equities, thereby indicating a significant departure from a rather limited analysis focused only on earnings.

Table 4.4: Maturity Profile of Deposits and Advances (per cent) All Banks Upto 1 yr 1-3 yr 3-5 yr Beyond 5 yrs Mar 09 Deposits 44.00 30.17 7.70 18.13 Advances 35.14 38.34 9.94 16.58 Jun 09 Deposits 43.88 29.65 8.35 18.12 Advances 34.37 10.34 16.09 39.20 8 54 18 62 Sep 09 Deposits 43.53 29.31 Advances 34.15 37.72 10.70 17.42 Dec 09 Deposits 42.67 29.39 8.33 19.62 Advances 34.24 37.33 10.74 17.68 Mar 10 Deposits 43.91 28.80 8.06 19 24 Advances 34.47 37.35 10.53 17.65 Jun 10 Deposits 42 77 20 11 8.35 10 77 Advances 35.08 37.20 10.50 17.22 Sep 10 Deposits 43.16 28.37 8.34 20.13 34.58 37.40 Advances 10.49 17.53

Source: RBI Supervisory Returns





<sup>&</sup>lt;sup>13</sup> The gap between interest rate sensitive assets and liabilities arranged in prudential time buckets is multiplied by an assumed change in interest rate to estimate the effect on net interest income.

<sup>&</sup>lt;sup>14</sup> Duration-based weights are applied to time bands in combination with a maturity/ repricing schedule to provide an approximation of the change in a bank's economic value resulting from a given change in the level of market interest rates.

#### Measuring Banking Stability (based on select indices)

#### Risks related to liquidity indicators have increased

4.65 An overall assessment of the stability of the banking sector during the year September 2009-September 2010<sup>15</sup> was conducted using a stability map (Chart 4.42). The stability map is based on five critical indices for explaining any change in the risk dimensions of the banking sector with respect to the position as on a past date, in this case with reference to September 30, 2009.

4.66 The banking stability map indicates that risks affecting liquidity of the banking sector recorded dimensional increase (year on year) as at end September 2010 as compared to September 2009. This partially reflects the relative deterioration as indicated by increased reliance of the banks on borrowings and decline in the level of their liquid assets (paragraph 4.59 of this Chapter).

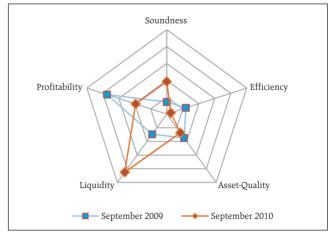
4.67 Soundness indicators show a deterioration as there has been some decline in the capital adequacy ratios of banks vis-à-vis the position in September 2009 though the ratios continue to remain well over regulatory requirements (paragraph 4.45 of this Chapter). Profitability, efficiency and asset quality indicate reduced dimensional risk in September 2010 as compared to September 2009.

### **Banking Stability Index**

# Stability index has strengthened over the years; nevertheless, the improvement rate has slowed down

4.68 The quarterly series of the Banking Stability Index<sup>16</sup> points to an improvement in the stability of the banking sector (as indicated by the aforesaid five sub-indices) over

Chart 4.42: Banking Stability Map



Away from the center signifies more risk

Source: RBI Supervisory Returns and RBI staff calculations.

<sup>&</sup>lt;sup>15</sup> Banking Stability Map has used five key risk dimensions viz. banks' soundness, operational efficiency, asset-quality, liquidity and profitability based on capital adequacy ratio, cost-to-income ratio, non-performing loans to total loans ratio, liquid assets-to-total assets ratio and net profit-to-total assets ratio respectively. CRAR has been calculated under Basel I norms. A measure of each dimension is calculated as the weighted average of the indicator for the banking sector as a whole, where the weights are the ratio of individual bank asset to total banking system assets. The indices were normalised to take values between zero (minimum) and 1 (maximum), the values being the relative measure of performance during the sample period (2006-10). If an index pertaining to a particular risk dimension shows a shift to higher value compared to its value in the past and thereby increases its distance from the centre, it would mean that the risk or vulnerability in that dimension has increased. The index for each risk aspect for a particular period is computed as follows:

<sup>(</sup>Ratio on a given date/period minus Minimum-value in-the-period) divided by (Maximum-value in-the-period minus Minimum-value in-the-period)

16 Based on the individual indices, a single point reference in the form of Banking Stability Index has been devised. This index is a simple average of the complementary of five sub-indices chosen for banking stability map.

the past few years. Increased risk perceptions (primarily liquidity risks) led to a marginal decline in the index during the half year September 2010 (Chart 4.43).

#### Regional Rural Banks

# Consolidation has improved the financial soundness of RRBs

4.69 Regional Rural Banks (RRBs) were conceived as institutions that combined the local feel and familiarity of co-operatives, with the business organisation of commercial banks. Historically, these institutions were plagued with concerns like low capital base, operational inefficiency and mounting losses. To address these issues, a state level sponsor bank-wise amalgamation programme and a separate process of recapitalisation were initiated. Consequently, the number of RRBs was brought down from 196 in 2005 to 82 in March 2010 and 27 RRBs were recapitalised.

4.70 The financial soundness indicators of the RRBs improved during 2009-10. Their net profit grew by 41.1 per cent, balance sheet size increased by 22.1 per cent and net worth increased by 21.72 per cent. The measures initiated for consolidation also resulted in a reduction of the number of loss making branches. RoA improved to 1.1 per cent as compared to one per cent during 2008-09. Asset quality has also improved (Chart 4.44).

# Gradual progression to a regulatory regime similar to other commercial banks

4.71 A gradualist approach to prescription of capital adequacy requirements for RRBs has been adopted in India. Several measures have, however, been taken in recent times to strengthen the regulatory framework for RRBs. RRBs have been advised to disclose the level of CRAR (computed on the lines of Basel-I norms) as Notes on Accounts to their Balance Sheets with effect from March 31, 2008. As on March 31, 2010, there were 53 RRBs whose CRAR was above 9 per cent and 13 RRBs had CRAR above 5 per cent (54 and 11 RRBs respectively in 2009). Seven RRBs had a CRAR of less than one per cent. A Committee constituted by the Government to suggest a roadmap for bringing the CRAR of RRBs to 9 per cent by March 2012 has recommended further recapitalisation of 40 RRBs and has proposed that RRBs with relatively higher net worth be allowed to access the capital markets in due course.

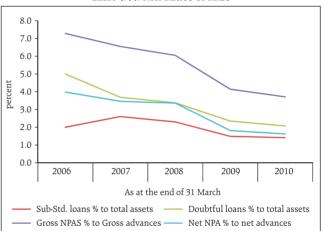
Chart 4.43: Banking Stability Index



Higher value signifies more stability

Source: RBI Supervisory Returns and RBI staff calculations.

Chart 4.44: NPA Ratios of RRBs



\* 2010 fig. is Provisional **Source:** NABARD

#### Cooperative Banking Sector

### Critical for the achievement of greater financial inclusion

4.72 In India, the cooperatives were the first formal institution to be conceived and developed to purvey credit to rural India. Their wide network, both in urban and the rural regions, supplements the financial intermediation work of commercial banks and play a critical role in fostering financial inclusion. However, their financial viability and soundness as well as duality of control<sup>17</sup> remain key areas of concern. The Committee on Financial Stability Assessment (2009) characterises dual control as "the single most important regulatory and supervisory weakness" in the cooperative banking sector.

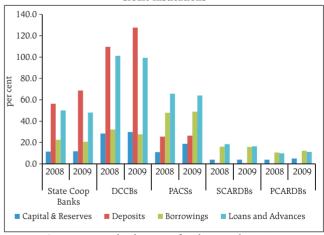
#### Rural cooperative credit

4.73 The short-term cooperative structure is a three tier structure having State Cooperative Banks (StCBs) at the apex level followed by District Central Cooperative Banks (DCCBs) at the intermediate district level followed by Primary Agricultural Credit Societies (PACSs) at the village level. The longer term structure comprises State Cooperative Agriculture and Rural Development Banks (SCARDBs) and Primary Cooperative Agriculture and Rural Development Banks (PCARDBs).

# Financials of rural cooperative credit institutions need further improvement

4.74 Concerns about the financials of the sector persisted – balance sheet growth was modest, long term institutions continued to rely excessively on borrowings and asset quality remained a concern. Profitability indicators showed little improvement. The stipulated minimum net worth could not be achieved in the case of 5 StCBs (out of 31) and 82 DCCBs (out of 371)<sup>18</sup>. Financials showed improvement only in the case of DCCBs (in the short term rural cooperative structure) and in the case of SCARDBs (in the long term structure) (Charts 4.45 and 4.46).

Chart 4.45 : Important Balance Sheet Items of Rural Co-operative Credit Institutions



<sup>&</sup>lt;sup>17</sup> While incorporation/registration and management-related activities of cooperative banks are regulated in the States by the Registrar of Cooperative Societies or the Central Registrar of Cooperative Societies, banking-related activities are under the regulatory/supervisory purview of the Reserve Bank of India or NABARD. This duality of control affects the quality of supervision and regulation and the functioning of cooperative banks.

As per the status report from NABARD in respect of the position as on June 30, 2010

4.75 Another area of concern was the fact that licensing of all StCBs and DCCBs was yet to be achieved. Seven StCBs and 164 DCCBs remained to be licensed as at end-September 2010.

### Urban Cooperative Banks (UCBs)

# Consolidation progressed as did measures to strengthen the regulatory regime

4.76 The consolidation of UCBs continued under the aegis of the TAFCUB (Task Force for Cooperative Urban Banks) formed in various states in terms of a Memorandum of Understanding between the Reserve Bank and the respective state governments. Out of a total of 103 NOCs for mergers issued by the Reserve Bank, the majority (91) were in respect of weak banks and out of these, 71 mergers have been so far notified.

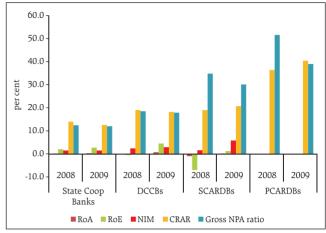
4.77 Grade III and IV banks<sup>19</sup> continued to form a not insignificant chunk of the urban co-operative segment though their number as well as the share of business in the sector have progressively reduced (Table 4.5).

#### Financial Soundness Indicators

# Soft spots remain though consolidation has resulted in some improvement

4.78 As the UCBs perform the same banking functions as commercial banks and are exposed to similar risks in their operations, the capital adequacy norms were

Chart 4.46: Financial Soundness Indicators of Rural Cooperative Credit Institutions



Source: RBI's Report on Trend and Progress of Banking in India 2009-10

Table 4.5: Grade wise Presence of Urban Co-operative Banks													
												(₹ Crore)	
GradeGrade	Numb UC			ercentage otal		Amount of Deposits		Deposits in percentage to total		Amount of Advances		Advances as percentage to total	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	
I	845	879	49.1	52.5	102330	128770	65.1	70.4	61761	77265	64.2	70	
II	484	465	28.1	27.8	30626	34756	19.5	19	18920	21245	19.7	19.3	
III	219	179	12.7	10.7	7954	7494	5.1	4.1	5405	4731	5.6	4.3	
IV	173	151	10.1	9	16131	11842	10.3	6.5	10148	7062	10.5	6.4	

<sup>&</sup>lt;sup>19</sup> For regulatory purposes, UCBs are classified into Grades I, II, III and IV based on CRAR, net NPA, and profitability during previous years and compliance with CRR/SLR in the previous financial year. Banks with no supervisory concerns are classified as grade I banks. Banks classified in grade II are those which are relatively sound while those in grades III and IV are financially weak banks. From the inspection cycle of March 31, 2009, a revised CAMEL rating model has been made applicable to UCBs.

extended to UCBs with effect from March 2002. The capital adequacy norms for UCBs continues to be on the lines of Basel-I norms. 14 per cent of the UCBs could not meet the regulatory requirement of 9 per cent capital adequacy as at end March 2010 though the capital adequacy of the sector as a whole was above 12 per cent. Eight banks had negative CRAR as at end June 2010 (Table 4.6).

4.79 Asset quality of UCBs remained vulnerable with high gross and net NPA ratios though some improvement has been evident in recent years (Chart 4.47). Provision coverage ratio was comfortable at over 60 per cent in March 2010.

4.80 Profitability indicators were not very healthy and they deteriorated further during 2009-10 (Table 4.7).

4.81 Liquidity stress tests conducted internally pointed to a comfortable liquidity position of UCBs in the normal course of business (the stress tests are discussed in Chapter VI of this Report).

### Non-banking financial companies (NBFCs)

### Regulatory regime is being strengthened with focus on balance sheet characteristics of these companies

4.82 The non-banking financial sector in the country is crucial for broadening the access of financial services to a broader segment of the country. This sector is also extremely heterogeneous in terms of size, activities, nature of incorporation, which makes the task of

Table 4.6: Capital Adequacy Ratios of Urban Co-operative Banks										
	Leverage Ratio	CRAR<3	3 <crar<6< th=""><th>6<crar<9< th=""><th>CRAR&gt;9</th></crar<9<></th></crar<6<>	6 <crar<9< th=""><th>CRAR&gt;9</th></crar<9<>	CRAR>9					
Non Scheduled	14	135 (8.3)	25 (1.5)	58 (3.6)	1403 (86.6)					
Scheduled	11.8	9 (17.0)	(3.8)	(1.9)	41 (77.4)					
All UCBs	13.0	144 (8.6)	27 (1.6)	59 (3.5)	144 (86.3)					

Note: (1) Consolidated CRAR and leverage ratio for the UCB sector as a whole may not be representative of the sector because of the large variation across individual banks.

- (2) Figures in parentheses are percentage to respective totals.
- (3) Leverage ratio is calculated as 'capital and reserves' to total assets.
- (4) Data are provisional

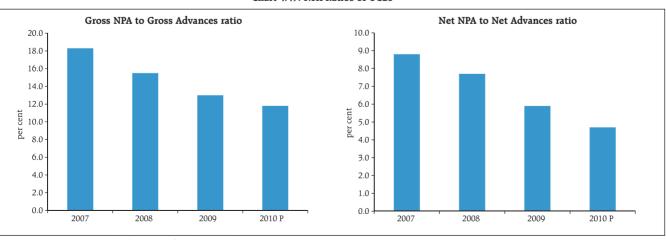
Source: RBI's Report on Trend and Progress of Banking in India 2009-10

Table 4.7: Profitability Ratios of Urban Co-operative Banks Scheduled UCBs Non-Scheduled UCBs All UCBs 2008-09 2009-10 2008-09 2009-10 2008-09 2009-10P 1.1 0.7 0.6 0.8 Return on Assets 9.2 5.7 5.1 4.9 6.8 5.2 Return on equity Net interest Margin 29 2.5 3.3 3.1 3.1 2.8 Non-interest Margin -1.0 -12 -1.6 -1.6 -1.4

P: Provisional data

Source: RBI's Report on Trend and Progress of Banking in India 2009-10

Chart 4.47: NPA Ratios of UCBs



regulation and supervision extremely challenging. The Reserve Bank is the regulator and supervisor of all deposit taking non-banking financial companies. Certain non-deposit taking non-banking financial institutions, based on their activity, are also within the regulatory perimeter of the Reserve Bank while other non-banking financial entities are regulated variously by other regulators (the regulatory structure was detailed in the previous FSR). Considering their systemic importance, holding companies or Core Investment Companies have since been brought within the regulatory purview of the Reserve Bank with a view to focusing regulatory attention on containing excessive leverage.

4.83 As discussed in the previous FSR, the Reserve Bank's regulatory mechanism for NBFCs focuses on deposit taking NBFCs (NBFCs-D) and non-deposit taking NBFCs with an asset size of ₹ 100 crore and more which are classified as systemically important non-deposit taking NBFCs (NBFCs-ND-SIs). Since 2007, the regulatory requirements for NBFCs-ND-SIs have been increasingly tightened in view of the growing importance of this segment and its inter-linkages with banks and other financial institutions.

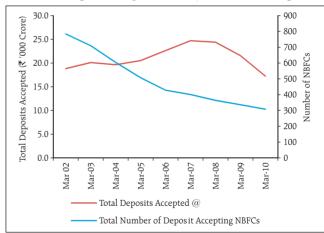
4.84 As the regulatory regime for deposit taking NBFCs has been progressively strengthened, there has been a sharp decline in the number of such entities as well as the quantum of deposits held by them (Chart 4.48).

#### Financial Soundness indicators

# Capital Adequacy and Asset quality ratios showed improvement but rapid expansion of NBFC - ND- SIs and overall lower profitability was a concern

4.85 Deposit taking NBFCs are required to maintain a minimum CRAR of 12 per cent<sup>20</sup>. In the case of NBFCs ND-SIs, CRAR stipulation as on March 2010 was a minimum of 12 per cent, to be increased to 15 per cent by March 2011. Infrastructure companies are required to maintain CRAR and core CRAR of minimum 15 per cent and 10 per cent respectively. Deposit taking NBFCs, with the exception of four companies, had met the minimum CRAR requirement as at end March 2010 and

Chart 4.48: Deposit Taking NBFCs and Quantum of their Deposits



@: Including residuary non-banking companies (RNBCs).Source: RBI's Report on Trend and Progress of Banking in India 2009-10

 $<sup>^{\</sup>rm 20}$   $\,$  15 % in the case of unrated deposit-taking loan/investment companies

end September 2010. The aggregate CRAR of the NBFCs-ND-SI stood at 39.6 per cent as at end March 2010 as compared with 39.0 per cent in the previous year. The asset quality of the deposit taking NBFCs was also healthy (Table 4.8). The Gross NPA ratio for 2010 (provisional) stood at 1.3 per cent for deposit taking NBFCs while it was 2.6 per cent for NBFCs-ND-SIs in June 2010.

4.86 The balance sheet size of deposit taking NBFCs grew at the rate of 21.5 per cent in 2009-10 as compared with 3.4 per cent in the previous year. The increase in balance sheet size was mostly funded through increased borrowings. The growth was most pronounced in the case of Asset Finance Companies. The asset size of NBFC-ND-SIs increased by 16.7 per cent in 2009-10. This was accompanied by a sharp increase of 22.1 per cent in the unsecured borrowings of the NBFC-ND-SIs, mostly sourced from banks/FIs. On the asset side, their exposure to capital market also increased sharply (28.9 per cent).

4.87 The financial performance of deposit taking NBFCs deteriorated with RoA continuing its declining trend (Chart 4.49). In the case of NBFC-ND-SIs, a marginal improvement was seen in their performance during 2009-10 as their net profits increased by 0.89 per cent. Their RoA, however, declined from 2.2 per cent to 1.9 per cent during the period.

4.88 A critical analysis of the financial performance of the NBFCs sector reveals rapid growth being witnessed particularly in the NBFCs-ND-SI sector, and deterioration in its profitability ratios. The growth of the NBFC sector acquires criticality in the view of the tightening regulation of the banking sector and the fact that the regulation in the NBFC sector remains relatively lighter as compared to that of the banking sector. Several gaps / loopholes in regulations remain which have been discussed in Chapter V of this Report.

#### Financial Institutions (FIs)

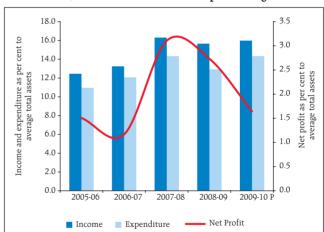
#### Financial soundness indicators remained robust

4.89 FIs constitute a segment of the non-banking financial sector in the country and there are presently four FIs under the regulatory perimeter of Reserve Bank (EXIM Bank, NABARD, NHB and SIDBI). During 2009-10, while the balance sheet size of the FIs increased by 13.4 per cent, the profitability in terms of RoA declined

Table 4.8: NPA Ratios of Deposit Taking NBFCs Net NPA to Credit Gross NPA to Credit Exposure Exposure 2 3 2002 10.6 3.9 2003 2.7 88 2004 8.2 2.4 2005 5.7 2.5 2006 0.5 36 2007 22 0.2 2008 2.1 # 2009 2 # 2010 P 1.3

P: Provisional #:Provision exceeds NPAs **Source:** RBI Supervisory Returns

Chart 4.49: Financial Performance of Deposit Taking NBFCs



marginally from 1.3 per cent in 2008-09 to 1.2 per cent in 2009-10. The FIs remained well capitalised (mainly due to major portion of their profits being retained) with CRAR at 23.23 per cent as on September 30, 2010. A slight reduction in CRAR from its level of 24.17 per cent in March 2010 was evidenced. The high CRAR, to some extent, was nonetheless indicative of less than optimal utilization of their capital funds. The asset quality was robust (with gross NPAs at 0.25 per cent in March 2010 and 0.29 per cent in September 2010) while leverage ratios, at 8.79 in March 2010 and 9.18 in September 2010, were not considered to be excessive.

#### Concluding remarks

4.90 The banking system in advanced economies continues to be vulnerable to confidence shocks and funding risks and remains excessively reliant on government or central bank support. Banks improved their capital adequacy ratios even as the global reforms agenda unfurled making it clear that banks would have to keep aside much higher quantity and quality of capital than before.

4.91 The financial sector in India remains resilient. Capital adequacy ratios of scheduled commercial banks are well above the regulatory requirements – both from a micro and a systemic perspective - implying that the distance to compliance with Basel III requirements, when adopted, may not be very significant at the system level. Leverage ratios remain comparatively low as compared to ratios in advanced nations. Credit off take improved with rebound in economic growth. Credit acceleration was evidenced across sectors. However, it was particularly marked in case of infrastructure advances and retail credit. Increase in advances in both these sectors has to be viewed with caution – the first because it could aggravate asset liability mismatches despite mitigating factors such as high level of CASA deposits and interest rate reset caluses stipulated by banks and the second because of the

higher than average ratio of impaired assets. Several measures have been taken to develop alternative financing options for infrastructure viz., take out financing, infrastructure debt funds, promoting the corporate bond market and the proposed introduction of CDS on corporate bonds, which may reduce the pressure on banks to fund long term projects.

4.92 Asset quality continues to pose some concerns as the growth in NPAs outstripped growth in advances leading to a deterioration of gross NPA ratios. These ratios deteriorated despite increased write offs and one time settlements. Net NPA ratios improved primarily because of increased provisions as banks attempted to meet the regulatory requirement of 70 per cent provision coverage ratio. Profitability of banks was affected due to sluggish growth in their income and increased requirements for provision. Liquidity position of banks was comfortable in the short run but mismatches arise in the longer run. This has resulted in a dimensional increase in the risks associated with liquidity as illustrated by the Banking Stability Map. OBS exposures, especially derivative exposures continued to be concentrated in foreign banks. The ratio of these exposures to balance sheet size of foreign banks is increasing which warrants monitoring.

4.93 The co-operative sector contributed towards greater financial inclusion in the country. Multifaceted efforts at reorganisation of the sector (for example through mergers and amalgamations), recapitalisation, intensive supervision, etc. have led to some improvement in the performance and financial soundness parameters of this segment though many concerns remain. While the segment is not systemically important in terms of size, past instances have amply demonstrated the tremendous impact of any failures in the segment can have on market sentiments with downstream impact on the smooth functioning of the financial sector.