

# Indian Banking System Performance during 2005-2008

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## Abstract—

**T**he Indian banking system, reaped the benefits of strong credit off take improved risk management practices and a benign environment has continued to report increase in earnings over the last five years, while improving on its solvency (Net NPAs as % of Net Worth) profile substantially. Gains from trading portfolios booked when interest rates were on a decline during April 2002-March 2004, also supported banks' earnings while helping them make higher provisions against NPAs (and thereby improved their Net NPM and solvency). In the subsequent period, higher income (as a result of increase in proportion of higher yielding credit book), lower credit provisions and improving operating efficiency enabled banks to absorb the higher. In this paper, the analysis has been made for Credit off-take growth, Investment portfolio growth, effects of growth in interest rates, deposit schemes, liquidity profile and capital management.

**Keywords—** Indian Banking System, Credit off-take growth, operating efficiencies, interest margin, profit and loss.

## I. INTRODUCTION

The Indian banking system, reaped the benefits of strong credit off take, improved risk management practices and a benign environment, has continued to report increase in earnings over the last five years, while improving on its solvency (Net NPAs as % of Net Worth) profile substantially. Gains from trading portfolios booked when interest rates were on a decline during April 2002-March 2004, also supported banks' earnings while helping them make higher provisions against NPAs (and thereby improved their Net NPAs and solvency). In the subsequent period, higher income (as a result of increase in proportion of higher yielding credit book), lower credit provisions and improving operating efficiency enabled banks to absorb the higher requirement on fixed income portfolio while continuing to show provisioning requirement on taxed income portfolio while continuing to show strong profitability. Going forward, however, the opening up of financial sector, expected increase in credit provisioning, adoption of new capital adequacy framework and the revised AS-15 framework pose new challenges for the banking system as a whole.

The legal environment in India has also improved with operationalisation of credit information bureau, the SARFAESI act and setting up of asset recovery companies. This coupled with the likely continuance of a favourable operating environment continued to support the bank's earnings. However, effective risk based pricing to meet the ever-increasing competitive pressures determined the profitability levels of Individual banks.

On a systemic level, ICRA expects that the past profitability levels sustained, however the internal capital generation was Unlikely to be commensurate to support the expected capital requirement (without impacting the capitalization levels) for the organic growth, adoption of new capital adequacy framework and the revised AS-15. Thus, the banks continued to resort to external sources for capital augmentation. To maintain easy access to external capital sources, it was being imperative for the banks to maintain superior earnings and solvency.

## II. CREDIT OFF-TAKE CONTINUES TO GROW AND PROVIDE IMPETUS TO BANK'S ASSET BASE

Driven by buoyant economic conditions leading to strong demand for credit from all sectors and individual banks efforts to increase their asset base, the credit portfolio of banks have been increasing at a brisk pace in the last few years. As per RBI, the corporate sector has shown the highest growth in

2006-07, though retail demand, too, continued to be robust. The growth in credit portfolio of the private sector banks continued to overshadow the growth of the public sector banks, although the gap has been reducing on the last few years.

The credit portfolio of the banks was better diversified with the increase in proportion of retail loans. Retail loans account for over 25% of the total credit portfolio as on March 31, 2007 as compared with around 14% as on March 31, 2003, the obvious benefit to the banks was that the loans were now spread across a large number of customers instead of a few large borrowers.

Within the retail space mortgage loans and personal loans accounts for almost 80% of the exposures. While the asset quality of these exposures has been fairly good till date, they were yet to be tested in an economic down cycle. With rise in interest rates in the last 12-18 months, there was a rise in delinquency indicators.

In the corporate credit, sectors such as infrastructure, textiles, chemicals, metals and petroleum have shown the maximum growth. Given the robust growth in the economy, it was expected these sectors to continue consume more bank credit over the medium term. During 2006-07, sectors such as real estate and capital markets too witnessed high growth. However, the slew of RBI initiatives on interest rates and exposure to sensitive sectors such as capital markets, real estate and non-bank finance companies has moderated the credit growth in the last few months with the outstanding bank credit declining sharply in June 2007 over the March 2007 levels.

The incremental loan to deposit ratio has declined from over 100% in 2005-06 to around 86% in 2006-07. We expect the credit off-take to pick up in the busy season, however, the growth rates may be of the aforesaid measures of the RBI.

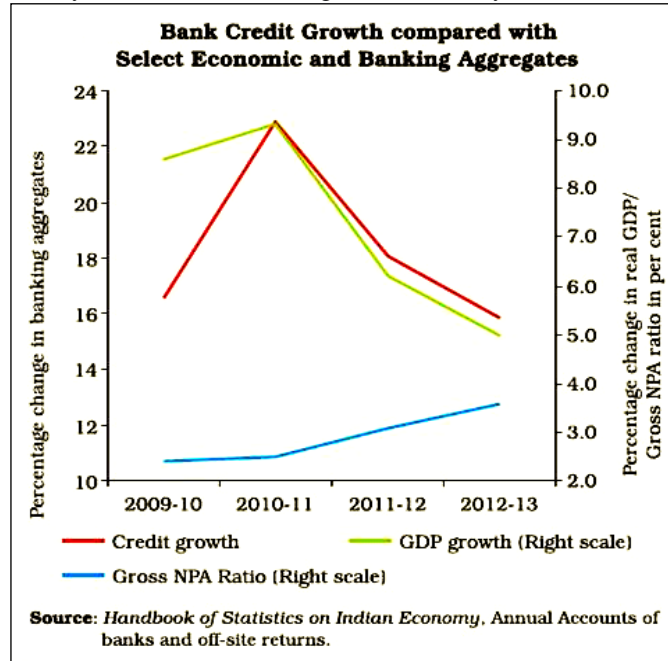


Fig. 1 Bank Credit Growth compared with Select Economic and Banking Aggregates.

**III. ASSET QUALITY INDICATORS CONTINUE TO IMPROVE; CAN THE TREND REVERSE**

I Asset quality and solvency indicators for the Indian banking have improved considerably over the last few years. The gross Non Performing Assets (NPAs) have reduced as a result of relatively lower fresh slippages and better recovery from stock of existing NPAs. Further, the gains from the trading portfolio, booked in the declining interest rate scenario in April 2002 – March 2004, helped the banks to make higher provisions against the NPAs to improve their solvency profile. The reduction in incremental provisions in the few years has not led to any material deterioration in the solvency of the as recoveries from existing NPA.s balanced out the fresh slippages helping the banks in curbing overall Gross NPAs.

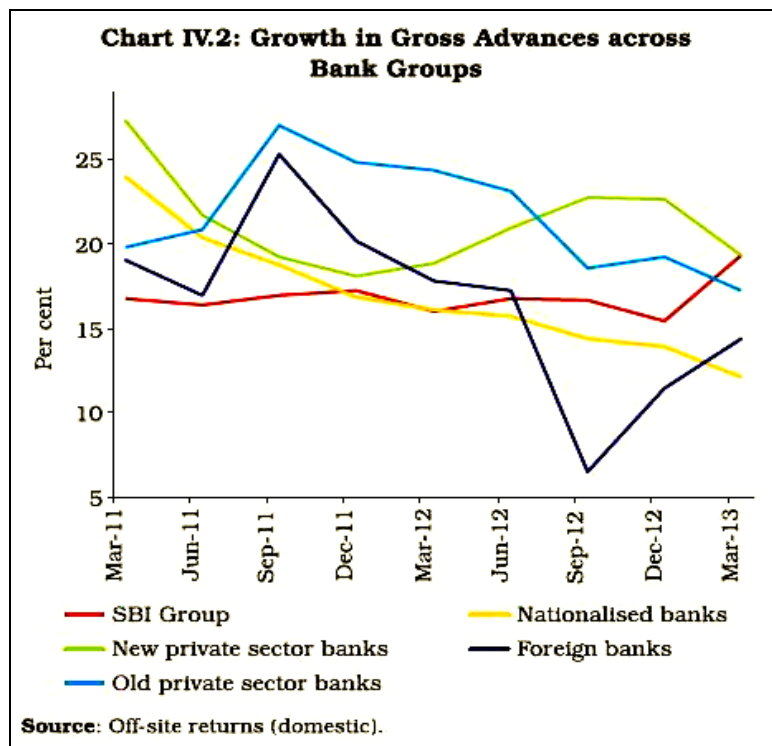


Fig. 2 Growth in Gross Advances across Bank Groups

One also needs to note that a part of the improvement in the asset quality indicators is also aided by the robust growth in the bank's credit portfolio and the increasing emphasis on risk management in the last few years. Other contributory reasons include

- Shift in credit deployment in favour of less vulnerable sectors such as retail and away from SSIs (characterized by high NPA percentages). Although the NPA percentage in the retail segment in general has remained higher for the public sector banks compared with the better-managed private banks, they compare better (lower) than the reported NPAs in most other segments.
- General improvement in the economy.
- Improving legal system that facilitates recovery. Debt Recovery Tribunals, Lok Adalats, SARFAESI Act have helped the banking system recovery in the last few years.
- The operationalization of Credit information Bureau of India Limited (CIBIL), which now has collated a database of over 90 million borrowers along with their credit history, provides a platform for the lenders to weed out some of the risky borrowers.
- Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest

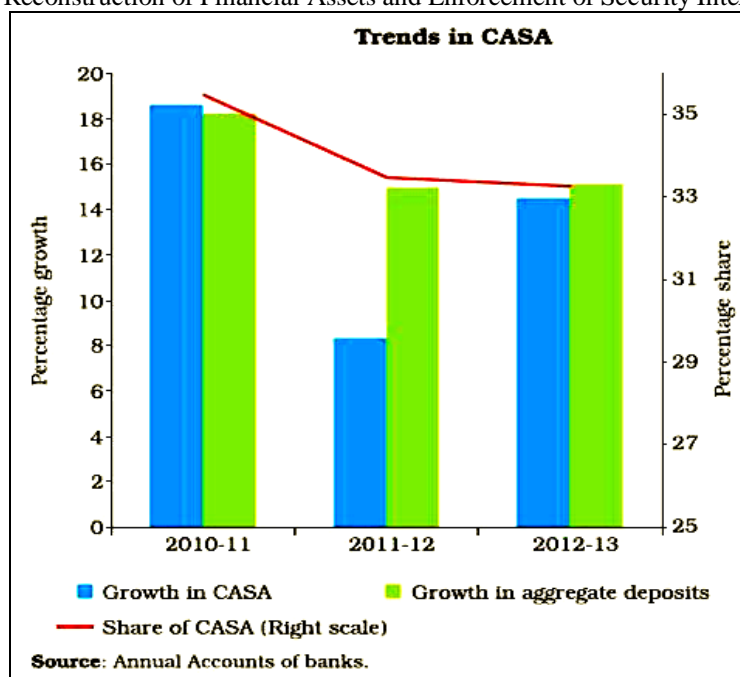


Fig. 3 Trend in CASA (Current and Saving Accounts)

Going forward, while the overall business environment is expected to remain benign, a moderate deterioration in the credit profiles of corporate may be expected, which may increase the fresh NPA generation rate for the banks as these loans have not yet been tested in a negative credit cycle. With banks increasing credit to riskier segments such as unsecured retail loans, we expect to see some deterioration going forward. With increasing interest rates this trend is being seen in case of retail portfolio of some of the private sector banks while the improvements in regulatory environment may continue to facilitate recoveries from NPAs, stagnation or a possible correction in collateral values may reduce the quantum of recoveries from existing stock of NPAs. Thus the incremental NPA generation may exceed the recoveries / up gradations, which would force the banks to make higher credit provisions so as to maintain Net NPA% at reasonably low levels.

#### IV. INVESTMENT PORTFOLIO GROWS IN 2006-07 AFTER DECLINING IN THE PREVIOUS YEAR

In absolute terms, the investment portfolio of banks has risen in 2006-07 as compared to 2005-06. However, driven by rising interest rates that leads to depreciation on the investment portfolio and a growing loan demand, the proportion of investments as a percentage of total assets continue to decline G-Secs at over 80% (around 73% for the private sector banks) form the bulk of the investment portfolio. As on March 2007, G-Secs accounts for around 27% of net demand and time liabilities of the banking system (NDTL) compared to over 40% three years back. In the last few months, with the credit portfolio declining, the proportion of G-Secs has again increased marginally to around 28% as on June 2007.

In order to mitigate accounting impact of adverse movements in interest rates, banks have been consciously tried to reduce the duration of the AFS portfolio. At the same time most banks have transferred a significant proportion of their investments to HTM category and, in the process, booking onetime loss on such transfers in the last three years. However, some of the public sector banks still have a high proportion of their investments in the AFS category and continue remain more vulnerable to rising interest rates.

#### V. MOST BANKS RELATIVELY LESS VULNERABLE TO RISE IN INTEREST RATES THAN BEFORE.

In the last few years the banks investments portfolios (which are predominantly in fixed rates securities) have been adversely impacted by the rise in interest rates. Most banks have managed to bring down the duration of the AFS securities to around 3 to 2.5 (around 1 for private sector banks), thereby, limiting the marked market risks, however, there are still some public sector banks that continue to maintain modified duration levels of over 3, These banks could

continue to face pressures in a rising interest rate regime. However, we feel that interest rates should stabilize or remain range bound at the current levels as the RBI's efforts (especially over the last 6 months) in curbing inflation indicators and credit off-take has begun to yield the desired results. At the same time, with bulk of the advances being linked to prime lending rates, they can protect themselves against any adverse interest rate movements that increase their cost of funds. We however acknowledge that the ability to increase lending rates would be a function of the competitive market forces.

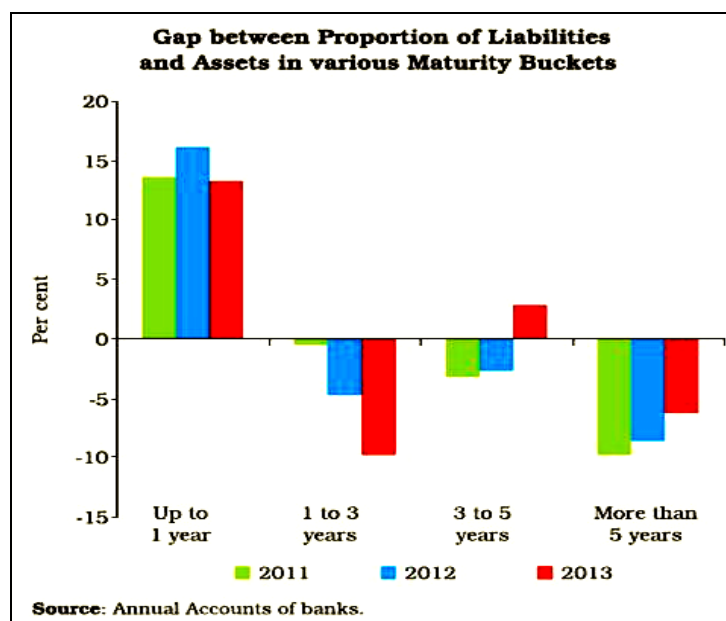


Fig. 4 Gap between Proportion of Liabilities and Assets in various maturity Buckets

#### VI. DEPOSITS REMAIN THE MAIN SOURCE OF FUNDS FOR BANKS

With a wide number of branches (70,711 as on March 31, 2007), deposits remain the preferred source of funds for the Indian Banking System. For the public sector banks, deposits account for over 80% of the liabilities while it is around 72% for the private sector banks as on March 31, 2007. The reach and the franchise of the public sector banks are well captured by the CASA

(Current and savings accounts) that account for nearly 40% of total deposits while it is around 30% for the private sector banks, the deposit base of the banking system grew by 24% in 2006-07 as compared to 18% in the previous year with the private sector and foreign growing at a faster pace.

With the rising interest rate regime, the proportion of term deposits has risen for almost all banks. Thus it has become more challenging for banks to maintain their interest costs amidst competitive pressure.

#### VII. BANKS IN THE PROCESS OF DIVERSIFYING FUNDING SOURCES, ESPECIALLY IN OVERSEAS MARKETS

With the rise in corporate demand for foreign currency funds, the banks have been increasing their foreign currency borrowings in the recent past, however this still continues to remain quite small in relation to the overall assets of the bank, because of regulatory restrictions on the overseas borrowing limits. With the increasing penchant for Indian banks to expand their overseas operations, we could see some increase in the overseas borrowings by these banks. Borrowings by banks (other than deposits and capital bonds) account for around 5-6% of the total liabilities of the system (10-13% for the private and foreign banks). The increasing corporate demand for foreign currency funds is also leading the banks to diversify their sources of funds.

#### VIII. THE LIQUIDITY PROFILE DETERIORATES IN 2006-07 BUT REMAINS COMFORTABLE

The liquidity profile of the Indian banking system is fairly comfortable given the high proportion of statutory investments (25% of NDTL). Consequently, the loan to deposit ratios of the system is around 70-72%. As per our estimates the excess SLR in the banking system has reduced to around Rs 600 billion as on March 2007 from over Rs 2.5 trillion as on March 2005 and around 1.2 trillion as on March 2006. As a result, the ability of the banks to repo the

excess securities to meet any liquidity pressure have reduced, however, lower credit off-take (advances portfolio has actually decreased over March 2007 levels) in the first quarter of 2007-08 coupled with growth in deposits, the excess SLR has again increased to around Rs 1000 billion in June 2007.

It is important to also note that the excess SLR is primarily with the public sector bank. While the strong franchise in terms of branch network and government ownership will help the public sector banks in times of crisis. The private sector banks will need to have strategies to manage such an eventuality though one does not rule out some form of support from the regulator.

Our study indicates that as expected the mismatch profile in the system has deteriorated as on March 31, 2007 as compared to the past few years, driven primarily by an increasing proportion of short-term deposits. The short-term mismatches have increased to 12% of asset base as on March 2007 as compared to 11% as on March 2006.

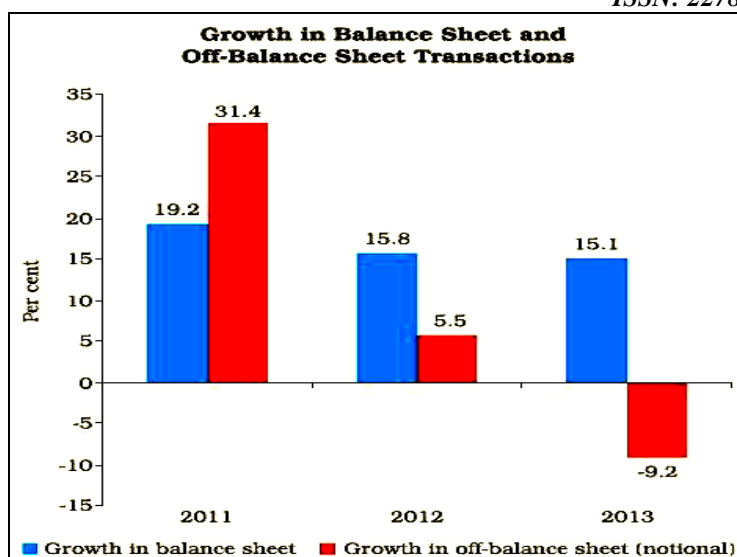


Fig. 4 Growth in Balance Sheet and Off-Balance Sheet Transactions

#### IX. ADEQUATE SYSTEMIC CAPITALIZATION LEVELS

The regulatory capital adequacy levels remains comfortable for the Indian Banks with the overall capital adequacy for the system continuing to remain above 12% as compared to the regulatory minimum of 9%. The tier I capital has, however, decreased in 2006-07 as the banks have been quite active in hybrid debt capital instruments to shore up the regulatory capital levels.

It is important to note that the amount of hybrid debt capital of the banking system is currently low in relation to the bank's core Tier I capital and hence does not adversely affect the capital structure. We estimate the Tier I level of the system to be around 8% as on March 31, 2007 as compared to around 9% as on March 31, 2006.

#### X. FRESH CAPITAL REQUIRED TO MEET BASEL II REQUIREMENTS, ADOPTION OF REVISED AS15 AND ALSO FUND NEW ASSETS

The credit portfolio of the banking system has been growing at around 30% for the last few years. Despite the reported lower growth rate in the last few months on account of the monetary measures taken by the Reserve Bank of India, we expect the system assets to grow at around 25% per annum in 2007-08 and the medium term.

Apart from supporting the credit growth, fresh capital is also the Basel II norms that become applicable to most banks by March 31, 2008. We believe that Basel II does not only aim at shoring up Regulatory Capital adequacy, it is another process that is being used by the Reserve Bank of India to strengthen the Indian banking sector. The RBI has been over the years revising its guidelines in order to strengthen the systems and risk culture in the Indian banks. We estimate that the gain for the banks on credit risk would be more than offset by the additional capital they would have to provide on account operations risk. As per our estimates the banking system would require significant amount of capital over the medium term to maintain the minimum 9% regulatory Capital Adequacy Norms.

Adoption of revised AS 15, could also impact the Tier 1 capital of Indian public sector banks substantially. However, the ongoing talks to defer the adoption of AS-15 over a period of five years starting 2007-08, may give a breather to absorb such deficit in a phased manner.

The Tier 1 capital ratios has seen a decline in 2006-07 as the banks used the hybrid debt capital route to shore up the regulatory capital adequacy levels. The private sector banks do not have major problems in raising fresh capital but the same is not true for the public sector banks, who have a to maintain a minimum government holding of 51%. In most of the public sector banks, the government holding is less than 60% and the scope to raise fresh equity capital is restricted till the floor is revised. We believe that the Government will first explore other avenues such as allowing banks to raise preference shares, allowing some more scope for hybrid debt capital instruments before

We expect the Tier 1 capital ratios for the private sector banks to improve as the largest three players in this space have already raised around US\$ 7 billion by way of equity capital in the current financial year.

#### XI. SOLVENCY INDICATORS CONTINUE TO IMPROVE

The systemic solvency indicators (Net NPAs as percentage of Net worth) continue to improve over the previous years and are estimated at under 12% as on March 31, 2007 (13% as on March 31, 2006). It is however important to note that the solvency indicators for the public sector banks continue to improve while those of the private sector banks have deteriorated in 2006-07 on account of increased delinquencies. However, in absolute terms, the H solvency indicators of the private sector banks (at around 8%) continue to compare favourably with public sector banks which are at around 13%. While no bank has its regulatory capital adequacy below the regulatory minimum of 9% the solvency indicators (net NPA / net worth) of some of them still compare poorer at over 15%. With the top three private sector banks raising over US\$7 million of equity capital in the first half of 2007-08 and some more planning to do so, the solvency indicators of the private sector banks is expected to improve further.

**XII. INTEREST MARGINS DECLINE MARGINALLY BUT MAY GET SUPPORTED BY THE RISE IN PLR RATES AFFECTED BY THE BANKS IN THE LAST 3-6 MONTHS**

The interest margins of the banking system, which have been declining (albeit marginally) over the last three years, reflect the performance of PSBS which hold around three fourth of total banking assets. Interest margins for PSBS have defined primarily on account of significant reduction in yields on investments, though lending spreads (Yields on advances minus cost of funds) have expanded by over 40 basis points over the corresponding period. At the same time with the private sector banks improving their deposit profile (increasing the proportion of CASA deposits) and being more pro-active in raising the lending rates, their interest margins continues to rise. The foreign banks have traditionally been able to maintain a strong CASA mix despite their limited branch network and coupled with their continues focus on retail and SME segment (wherein lending rates get re-priced faster), they have been able to improve their interest margins in 2006-07 as well. 'We do not expect any plans to reduce the Government holding in public sector banks below 51% over the medium Term Going forward, low yields on SLR and CRR balances would put pressure on the yields on the banks; moreover cost of funds could continue to rise given the continued competition to mobilize deposits. However, in the recent past, robust credit off take has facilitated banks in revising their PLRS in the recent past to pass on the increasing cost of funds to borrowers. The continuing pressure to increase volumes even as the overall credit off take moderates may make it difficult for the banks to doing so in future. However, in light over about 25% expected credit growth for 2007-08, we do not expect the interest margins to fall substantially (though it could vary across banks).

**XIII. PUBLIC SECTOR BANKS CONTINUE TO LAG PEERS ON FEE INCOME...**

Though public sector banks have taken initiatives to improve their core fee income over the last few years, their initiatives are yet to show any marked improvements. Consequently, they continue to lag their private and foreign 3 counterparts on the quantum and quality of fee income. We believe that with the public sector banks, once they start utilizing their core banking platforms effectively would give competition to the private sector banks on fee income arena.

The private sector and foreign banks continue to score significantly over the public sector banks in fee income generation driven by their strong IT platforms that help cross selling and meeting many needs of the customers. These banks continue to remain strong in areas like distribution of mutual funds and insurance products, and also foreign exchange transactions (including derivatives) in addition to loan processing fees, which account for bulk of the fee income.

Another indicator for measuring the diversity of revenue streams of banks is fee income as a proportion of net income (total income less interest expense less trading profits). The foreign banks and private sector banks score over the public sector counterparts here as well. While the public sector banks have been reporting a steady improvement (driven by recovery from written off assets), the sustainability of the same remains to be seen.

**XIV. IMPROVEMENT ON OPERATING EFFICIENCIES WITH INCREASED SCALE OF OPERATIONS**

Strong growth in asset base coupled with rationalization of expenses has helped the banking system improve the operating efficiencies. In this regard network have men increasing their IT and employee expenditure, while the private senior banks are also incurring huge expenditure in expanding their branch network.

Consequently, the operating efficiencies as defined by operating expenses as percentage to average total assets continue to improve for the public sector banks. However the branch expansion and incidental costs coupled with the expenses incurred in originating incremental retail assets (DSA/DMA route) lead to an increasing operating cost structure for the private sector banks. The cost to income ratio for public sector banks improved marginally while those of private sector banks deteriorated in 200-07. The foreign banks continue to compare favourable on the cost to income parameter on the back of their strong fee income profile.

**XV. PROFITABILITY LEVELS IMPROVE FOR THE BANKING SYSTEM IN 2006-07**

Despite the competitive pressures, the banking system has been able to steadily improve its core operating profitability (net of treasury profits and provisions for credit & investments). The core portability of the public sector banks continue to rise on the back of improving operating efficiencies while for the private sector banks, the improvement can be attributed to increase in interest margins and fee income. Any pressures on the net interest margins are likely to be offset by some improvement in the fee income and improvement in operating efficiencies of the banks. The overall profitability of the foreign banks continue to out shadow those of its Indian counterparts by a wide margin.

Notwithstanding the rise in interest rates and the continued lower opportunities to make treasury profits, the banking system has been able to maintain its overall profitability defined as net profits as a percentage of average total assets at around 1%. The public sector banks have reported a marginal improvement to 0.92% of average total assets in 2006-07 while the private sector banks reported a marginal decline to 1.07% on account of rising operating expense and increased provisioning requirements. The foreign banks on the other hand continue to report significantly higher return on average assets of over 1.9% in 2006-07 driven by significantly higher interest margins driven by consumer lending and fee income supported by strong treasury and consumer operations.

**XVI. CONSOLIDATION- A LIKELY EVENT IN THE MEDIUM TERM, BUT NOT DEVOID OF RISKS**

The debate for consolidation in the Indian banking sector is not new and we expect consolidation to gain pace as the Indian financial sector opens up by 2009. We have seen seine consolidation in the recent past but they have been

relatively few in number. In most of the cases, the consolidation process seem to have been driven more by the systemic problems that could arise with weak capitalization and/or distressed financial profile of some small public / private sector banks though "bank synergies" have been quoted as the reason. We do acknowledge that consolidation is not a panacea to overcome the challenges and exploit opportunities to compete effectively as the success remains contingent on the synergies between the banks as well as successful implementation of consolidation. We believe that barring a few banks, Indian banking system is largely fragmented and could benefit from consolidation process, especially the smaller regional banks, by improving their competitiveness.

## **XVII. CONCLUSIONS**

We expect the banks to maintain their interest margins, albeit with a downward bias consequent to the costly bulk deposits mobilized by them in the last quarter of 2006-07. We maintain our stand as most of the bank's lending are at floating rates and all banks have raised their lending rates in the past few months.

Notwithstanding the steps taken by the public sector banks, fee income levels could at best be maintained while private sector banks are likely to continue their dominance on this front. The trading profits are likely to remain modest in the current year as well.

We expect to see a further improvement in the operating cost structure could deteriorate for public sector banks depending on the accounting standards as regards to pension liabilities (AS15) as they are likely to be more severely impacted as compared to their private sector and foreign counterparts.

Incremental provisions for standard assets for certain categories of assets coupled with provisions on the delinquent assets could increase the overall provisioning requirements. This would however be mitigated by any recoveries from the delinquent assets aided by the buoyant economic conditions. Consequently we expect banks to maintain their asset quality despite a likelihood of rise in slippage during the current year.

Nominal treasury profit should help the banking system maintain net profitability levels, though it may vary across banks. On the back of fresh capital mobilization during the current year, we do not expect any significant weakening in the regulatory capital adequacy ratios as on March 2008 despite the adherence to Basal II norms for most banks.

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