Assessment and Outlook

The Indian financial system remains stable in the face of some fragilities being observed in the global macro-financial environment. The growth is slackening in most parts of the world, even as the risks from global imbalances and sovereign debt crisis in Europe continue to hover. The uncertainties in global environment with persistently high energy and commodity prices have contributed to a slight moderation in India's growth momentum as well. The macroeconomic fundamentals for India, however, continue to stay strong, notwithstanding the prevailing inflationary pressures and concerns on fiscal front.

During the period since the previous Financial Stability Report (FSR) was published in December 2010, Indian financial markets have remained stress free even as the reliance of domestic firms on international sources of finance denominated in foreign currency has been growing. The regulatory arrangements are being strengthened, emphasising a coordinated approach, in line with the current international developments and best practices.

The banking sector continues to be stable, though the structure of the sector - characterised by significantly 'connected' and 'clustered' banks, carries certain inherent risks, as shown by the Network Analysis- one of the newly introduced analytical techniques in this FSR. The Banking Stability Indicator endorses the overall improvement in the stability of banking sector, even though the robust growth in bank credit during 2010-11, is hinting at some early concerns on profitability and asset quality. The various macro-financial stress tests, including the newly introduced ones based on more rigorous computation methodologies; also show that the banking sector remains adequately capitalised and resilient to asset quality shocks and other plausible adverse changes in macroeconomic scenario.

Global Macroeconomic Developments

Slowdown in growth even as the risk scenario improves…but global imbalances remain

1. The global risk scenario has improved during the last six months, though there are signs of a slowdown in growth during 2011 in most countries, including some of the developing economies in Asia. The main factors affecting the global growth are: high food, commodity and energy prices, steps towards fiscal consolidation, sovereign debt problems in the Euro area and high level of government debt in some advanced economies. Also, the main underlying factors behind global imbalances remain largely unaddressed, increasing the uncertainty around the path of global recovery.

Sovereign debt crisis threatening to spill over to other areas

2. The sovereign debt crisis in countries like Greece, Portugal, and Ireland is posing serious challenges for the stability in the entire Euro area. The increasingly high levels of government debt in other advanced countries are also adding to the uncertainty around the fiscal consolidation and its impact on international financial markets. Although the Emerging Market Economies (EMEs) have more comfortable fiscal space and better growth prospects, there are still significant risks on the fiscal front, given the complex inter-play between growth and inflation.

Domestic Macroeconomic Developments

Slight fall in growth rate as management of fiscal position and inflation takes precedence

3. The slackening of global recovery, high oil and commodity prices, deceleration in domestic industrial growth, uncertainty about continuation of strong growth in agricultural sector and impact of monetary policy actions pose downside risks to India's Gross Domestic Product (GDP) growth during 2011-12. The slowdown in growth momentum may affect the quality of the assets of financial sector.

Inflation remains a big challenge, as asset prices stay high

4. The international prices of food, energy and commodities are expected to remain high during 2011-12. Although there has been some decline recently in

international oil prices, this may not help in inflation management as complete pass- through of previous escalations is still to be affected. Inflation is likely to face upward pressure from higher subsidy expenditure of the government and rise in wages and raw material prices. Housing prices have undergone some correction but continue to stay firm. Gold prices continue to increase on the back of strong demand.

Current Account Deficit (CAD) may remain under pressure

5. Recent growth in India's exports may off-set, at least partially, the expected increase in the import bill due to elevated oil and commodity prices. There does not seem to be an impending pressure on the financing of CAD. However, going ahead, as the advanced economies exit from the accommodative monetary policy, there could be some slow down in capital inflows.

Quality and pace of fiscal consolidation remains a concern

6. In the wake of high international commodity and oil prices, the budgetary projections of deficits for 2011-12 are expected to come under pressure. Management of government expenditure, especially subsidies bill, will pose challenges to the process of fiscal consolidation. This could be further accentuated by a tempered growth adversely impacting the revenue collections.

Financial Markets

Improvement in stability of financial markets at global and domestic levels

7. During the last six months, global financial markets have been resilient, overcoming a short phase of heightened volatility caused by the earthquake in Japan and political tensions in Libya and other parts of the Middle East and North Africa (MENA). The forecasted value for Financial Stress Indicator (FSI) for India, a measure to capture the severity of contemporaneous developments as they occur in different market segments and the banking sector, suggests benign conditions in the near term.

Sovereign debt crisis could affect institutions and markets

8. The sovereign debt crisis is threatening to affect some of the bigger economies even as the high deficit and debt levels in Advanced Economies (AEs) like US, UK and Japan could exert further pressure on their sovereign rating outlook. The low economic growth combined with the high levels of debt in these countries is adversely impacting market sentiments. Continued concerns regarding sovereign risk could raise the funding costs of the financial sector and have a negative impact on its balance sheet. Evolving regulatory changes will require financial institutions to raise fresh capital even as they face a wall of refinancing at a time when sovereigns in AEs also have high borrowing programs.

Increasing financialisation of commodity markets adding to asset correlation

9. The sustained demand and growth in EMEs are providing strong impetus to commodity prices but the increasing financialisation of commodity markets might be adding to the volatility in commodity prices. It could also result in an increased correlation between financial and commodity markets, thereby facilitating faster transmission of shocks across markets.

Domestic markets functioned without any stress, with liquidity conditions remaining tight for the banking system

10. Inspite of a sharp turnaround in Government cash balances with the Reserve Bank during the current financial year, liquidity in the system remained in a deficit mode reflecting an increase in liquidity requirements of the economy. The increase is mainly attributable to strong credit demand and high level of currency in circulation. However, the overnight call rates have remained range-bound. The collateralized markets continued to remain the predominant money market segment of the money market. The government bond yields hardened across all maturities. The increase was more pronounced in the short end resulting in a flattening of the yield curve. Rupee has remained range-bound, reflecting a relatively balanced external account and the general weakness experienced by the US dollar during the period.

Increased reliance by Indian firms on foreign funding causing currency mismatches...

11. Availability of alternative channels of funding has reduced the dependence of firms on domestic bank credit over the years. Rising domestic yields are widening the interest rate differentials vis-à-vis AEs, resulting in

a greater access to External Commercial Borrowings (ECB) by Indian firms. This trend is causing a build-up of currency mismatches in their balance sheets. India's International Investment Position (IIP) statistics show that the currency risk exposure of India's non-official sector has increased in the last few years, with an increasing net liability position. This means that the translation risk for the non-official sector arises from a depreciation of the Indian rupee.

...even as refunding risks of corporates escalate due to maturing FCCBs

12. During the period from 2005 to 2008, large amounts were raised through Foreign Currency Convertible Bonds (FCCBs) by many Indian companies with elevated conversion premia. Most of them are nearing maturity by March 2013. Estimates show that a very large proportion of these FCCBs may not get converted into equity thus requiring their refinancing at the much higher interest rates prevalent today.

Portfolio capital flows – evidence of herd behaviour

13. During 2010, Indian capital markets received a significant amount of net portfolio capital flows. These flows tend to be more volatile, though their impact on the domestic macroeconomic situation so far has been limited. While equity markets in India have undergone some downward correction with Foreign Institutional Investors (FIIs) pulling money out, the bond markets have seen incremental flows on account of attractive yields and the recent enhancement of limits for FII investment in corporate and government bonds. An internal study points to tendency of the portfolio capital flows to be 'auto-correlated' thus implying 'herd behaviour', both in good times as well as during times of stress.

Program trading systems in Indian stock markets

14. Encouraging the use of Algorithmic trading and High Frequency Trading (HFT) adds to the efficiency and liquidity of markets but carries some risks too. Indian securities markets have withstood systemic events in the past, without any major disruption. Even as facilities like Smart Order Routing (SOR) are introduced in Indian stock exchanges, events like 'flash crashes' witnessed in US equity markets in May 2010, need to be guarded against.

Financial Institutions

Banking sector maintains good health with robust credit growth hinting towards subtle vulnerabilities

15. The recovery in economic growth during 2010-11 has been accompanied by a strong credit growth and slight decline in Non Performing Assets (NPAs). The banking sector balance sheet increased by 19 per cent during the year ended March 31, 2011, spurred by a robust growth of 22.6 per cent in credit off take. The growth in deposit mobilisation, at around 18 per cent did not keep pace with the growth in credit, the gap being funded through an increasing share of market borrowings. This increased reliance on borrowed funds raised concerns about the liquidity position of banks arising from growing maturity mismatches, in conjunction with a reduction in the share of liquid assets in total assets.

Asset quality, though improved, is a concern due to skewed growth in credit to certain sectors

16. Asset quality improved mainly on the back of the credit growth which outpaced the growth in NPAs. The write-offs of NPAs by banks to cleanse their balance sheets also helped in achieving a lower gross NPA ratio. Even with a broadly diversified credit portfolio, the contribution to the credit growth was disproportionately high for three sectors – retail, commercial real estate and infrastructure. As each of these sectors have a peculiar set of asset quality propositions, the brisk growth in exposure seen during 2010-11 poses some concerns. The asset quality under the priority sector lending, especially agriculture, deteriorated at a faster rate as compared to the overall asset quality, which was a concern.

Banks remain well capitalised, despite a marginal decline in the Capital to Risk-Weighted Assets Ratio (CRAR)

17. The system level CRAR under Basel-II norms stood at 14.3 per cent as at end March 2011 which was well above the regulatory minimum of 9 per cent. There was, however, a slight decline over the CRAR of 14.5 per cent as at end March 2010, largely due to robust credit off take. All the bank groups had CRAR above 12 per cent as at end March 2011 under Basel-II norms.

Profitability helped by robust Net Interest Income (NII)

18. An increase in NII facilitated growth of around 20 per cent in aggregate net profit of the banking system, even with an almost stagnant non-interest income and increase in risk provisions. The public sector banks registered a lower growth in profits – mainly due to reduction in trading profits, increase in provisions towards staff expenses (including those for pension liabilities) and towards impaired assets. Going ahead, with hardening interest rates and the imminent increase in cost of funds, the credit growth is expected to slow down, which could adversely affect the profitability. The hike in savings account interest rate, amortizations of pension liabilities and potentially enhanced provisioning requirements for NPAs may also impact profitability.

Further escalations in Off- Balance Sheet exposures of foreign banks

19. The previous FSR pointed to high levels of activity/ involvement of foreign banks in the use of derivatives. This trend continued during the year. Credit equivalent of the derivative exposures remained low and showed a declining trend even as the notional amounts of such exposures rose as a proportion of balance sheet size. The derivative deals, mainly the (Over the Counter) OTC trades, include deals of the foreign banks with other commercial banks which have systemic implications and therefore need strict vigilance to ensure conformation to regulatory stipulations.

Systemic importance of the insurance sector

20. The fast growth in the insurance sector in the decade since liberalization has further increased the importance of the sector mainly because of the growing inter-linkages of the sector with other financial institutions. The sector, by virtue of the intrinsic nature of the activities, faces risks related to: solvency, investment returns, economic down turns and issues related to 'persistency' though the sector is generally considered to be contributing less to systemic risk than banks.

Regulatory environment

Strengthening the regulatory architecture - coordinated oversight for financial stability

21. The Financial Stability and Development Council (FSDC), chaired by the Finance Minister, has been established to strengthen the institutional framework for coordination among all regulators and the Government. The FSDC is assisted by a Sub-Committee under the Governor of the Reserve Bank, which is expected to evolve as the operative, hands-on body for financial stability in peace times with the FSDC having broad oversight and a central role in crisis times.

Proposed amendments to banking legislations will fortify the regulatory structure

22. Amendments to the banking sector legislations have been proposed with a view to fortifying and making more effective, the regulatory architecture while easing the access of the nationalised banks to capital market. Simultaneously, the Financial Sector Legislative Reforms Commission (FSLRC) has been set up with a mandate to revamp the financial sector laws. There is a case for reviewing the various legislations and recasting them in tune with current policy framework.

Implementation issues remain with migration to the advanced approaches under Basel II

23. Indian banks, at the aggregate level, remain adequately capitalised at present. The progress towards the advanced approaches under Basel II remains on a firm footing, amidst some challenges. The main implementation issues for the migration relate to constraints of data, tools, methodologies and necessary skills for quantification and modelling of risks.

Data and analytical requirements for Basel III will be challenging….

24. As the phase-in period for Basel III measures commences in 2013, the banks will need to gear themselves for the demanding data and analytical requirements for the revised liquidity framework. The position in respect of capital remains comfortable though some individual banks may need capital infusions which could pose some difficulties if the sluggish performance of the equity markets persists. The capital needs of banks will also be impacted due to the unamortised portion of pension liabilities to be absorbed by April 01, 2013 on migration to International Financial Reporting Standards (IFRS).

…as will the calibration of the countercyclical buffers

25. The calibration of the countercyclical buffers proposed under Basel III will require accurate assessment

as to whether the credit growth is excessive and/or is leading to the build-up of systemic risks. The commonly used indicators, including the ratio of credit to GDP, may not be suitable for India and a combination of qualitative judgment and quantitative indicators may be the way forward for assessing the requirement for, extent of and timing of imposition and removal of the buffer.

The supervisory framework for Financial Conglomerates (FCs) is being enhanced…

26. Efforts to improve the supervisory processes for the large and complex financial entities in the country are underway. The criteria for identification of FCs have been strengthened and a revised offsite reporting format has been introduced to improve capturing of the group risk profile. Guidelines on the corporate governance framework and management / monitoring of risks arising of intra-group transactions and exposures are also being finalised.

… even as discussion on a Financial Holding Company model for India is set in motion…

27. A Reserve Bank Working Group has recommended that the Financial Holding Company model should be pursued as the preferred model for the financial sector in India. However, necessary legislative and other changes will be required through discussions with the stakeholders for evolving an optimal structure for such companies under Reserve Bank's regulation.

Gaps in the regulatory framework for NBFCs remain even as the entities in the sector remain closely interconnected

28. Many NBFCs, which are borrowing both from the markets and the banks, have the capability of being over-leveraged and, being deeply interconnected, can pose systemic risks. Differences in regulatory requirements for such entities *vis-à-vis* the banking sector and between NBFCs under the purview of different regulators add to the scope for regulatory arbitrage. There remain gaps and weaknesses in the regulatory perimeter – wealth management activities, structured products, alternative investment funds like hedge funds, PE funds etc., - which need to be addressed. The systemic importance of Government owned NBFCs has grown over the years and the regulatory framework for such entities is being re-examined.

Gaps in regulation permitting cooperative societies to raise funds outside any regulatory ambit need to be addressed

29. Loopholes in the regulatory arrangements in the country permit co-operative societies to raise deposits from members and funds from external sources without being subject to any prudential framework. The entire gamut of issues related to raising of funds, especially from external sources, by these entities needs to be examined.

An analytical prognosis of the network of the Indian banking system suggests significant degree of interconnectedness

30. An analytical framework to assess the network of the Indian banking system reveals that the system is substantially connected and clustered. This intertwined nature of the banking system in any system could leave it vulnerable to domino effects in case of idiosyncratic failure of one or more banks. While the contagion impact is relatively contained due to regulatory limits on interbank exposures, there remains need for continuous monitoring of the interconnectivities in the financial system to identify build up of risks /excesses in the system and to guide policy action to address the same.

Financial Market Infrastructure

Payment and Settlement Systems - Robust functioning…but vulnerabilities from interdependence needs to be monitored …

31. The operational performance of the payment and settlement infrastructure in India continued to be robust though vulnerabilities could emerge from the high degree of integration and inter-relationships among systems, processes and institutions involved in various segments of the payment and settlement systems. The benefits from synergies arising out of such interdependencies comes bundled with risks as stress on credit / liquidity aspects in one segment / institution / process may affect the other parts of the settlement system due to the cross-linkages.

Vulnerabilities in the management of liquidity risks of Central Counterparties (CCPs) need to be addressed

32. The management of liquidity risks faced by the CCPs entails addressing vulnerabilities arising from the quality and range of collateral, quantum of margins and

model risks. There are vulnerabilities in the Indian context arising from dependence on committed backup liquidity for funds and securities from financial institutions for completion of the settlement process (in the case of Clearing Corporation of India Limited, i.e. CCIL) and exposures to the banking sector as collateral is accepted the form of bank deposits, bank guarantees, etc. (in the case of other CCPs). The risks of the failure of a CCP, however unlikely, need to be addressed given the potential collateral damage from such an event. There are, however, no easy solutions given the moral hazard concerns which the provision of central bank liquidity for CCPs entails.

Existing reporting arrangements for OTC derivative markets in India need to be leveraged

33. The OTC markets in India with their skewed participation structures need greater attention towards standardization and introduction of central clearing even as some segments face low volumes making it difficult to mandate guaranteed clearing for these markets. The existing reporting arrangements for OTC markets encompass foreign exchange, interest rate, government securities, corporate bonds and money market instruments. Going forward, there is a need for consolidation and building on the existing reporting arrangements of CCIL while ensuring that the governance issues emanating from CCIL acting as both, a trade repository as well as a CCP, are addressed.

Macro issues facing deposit insurance system in India remain relevant

34. Ensuring the adequacy of the deposit insurance fund, reducing the time taken to reimburse depositors, improving the coverage of the deposit insurance system and broadening the mandate of Deposit Insurance and Credit Guarantee Corporation (DICGC) remain critical issues for strengthening the deposit insurance system in the country. A Working Group is reviewing the issues.

Stress testing

Capital adequacy shows resilience…though profitability gets affected

35. Two new stress testing tools were added to the set of techniques used in the previous FSR. The first of these: Banking Stability Measures in the form of Banking System's Portfolio Multivariate Density (BSMD) approach for analysing financial stability from different combinations of distress dependencies, infers that during the periods of crisis, the systemic risks rise faster than individual risks. The second tool, based on Vector Autoregression (VAR) approach for judging the resilience of banking sector on various macroeconomic shocks by capturing the interaction among macroeconomic variables and banks' stability variables, shows that interest rate had the most significant (negative) impact on slippage ratio of the banks.

36. The resilience of the projected balance sheets of the commercial banks was studied through stress testing, in respect of credit risk, interest rate risk and liquidity risk. Under stress conditions based on NPA shocks, the profitability of the banks was seen to be affected significantly though the capital adequacy position appeared to be reasonably resilient. The study indicates that some banks may face extreme liquidity constraints, under severe stress scenario. Overall, the results of the macro-stress tests using different scenarios, suggested that the banking sector would be able to withstand macroeconomic shocks though the prevailing inflation and interest rate situation is expected to have an adverse effect on the asset quality of banks.