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MONETARY POLICY STATEMENT 2013-14

First Quarter Review of Monetary Policy 2013-14
by Duvvuri Subbarao, Governor, Reserve Bank of India

Macroeconomic and Monetary Developments -
First Quarter Review 2013-14

*First Quarter Review of Monetary Policy 2013-14**

Introduction

Since early May when the Reserve Bank issued its Monetary Policy Statement for 2013-14, global growth has been uneven and slower than initially expected. The tail risks to global recovery had eased in the early part of the year, but that improvement was overtaken by the turmoil in financial markets because of the 'announcement effect' of the likely tapering of quantitative easing (QE) by the US Fed. In advanced economies (AEs), activity has weakened. Emerging and developing economies (EDEs) are slowing, and are also experiencing sell-offs in their financial markets, largely due to the safe haven flight of capital. Market expectations of QE taper and the consequent increase in real interest rates in the US have translated into a rapid appreciation of the US dollar and consequent depreciation of EDE currencies. Commodity prices have generally softened, but the price of crude remains elevated. Although the inflation outlook in AEs is still benign, upside risks remain in several EDEs.

2. On the domestic front, the foreign exchange market came under severe stress starting late May, prompting the Reserve Bank to initiate liquidity tightening measures to contain the volatility. As regards economic activity, risks to growth have increased notwithstanding the robust onset and spread of the monsoon. Industrial production has slumped, with lead indications of declining order books and input price pressures building on rupee depreciation. Meanwhile, depressed global conditions are undermining export performance, even as heightened volatility in capital flows has raised external funding risks. Wholesale price inflation pressures are on the ebb, but retail inflation remains high. Monetary policy going forward will be shaped by the considerations of supporting growth, anchoring inflation expectations and maintaining external sector stability.

3. In the above context, this Statement should be read and understood together with the detailed review in *Macroeconomic and Monetary Developments* released yesterday by the Reserve Bank.

4. This Statement is organised in four Sections: Section I provides an overview of global and domestic macroeconomic developments. Section II sets out the domestic outlook and projections for growth, inflation and monetary aggregates. Section III explains the stance of monetary policy. Section IV specifies the monetary measures.

I. The State of the Economy

Global Economy

5. Global economic activity remains subdued with still elevated downside risks. In the US, incoming data point to a slower recovery in domestic demand and weak export activity. In the UK, recovery is gradually gathering momentum on the back of consumer spending. The euro area continues to be in recession with high unemployment. Japan's economy is returning to positive growth with improved industrial production and retail sales.

6. Among the BRICS countries, although retail sales in China have maintained the impetus of recent months, the manufacturing purchasing managers' index (PMI) and industrial production declined in June. Growth has clearly lost momentum in Brazil, Russia and South Africa.

7. Inflation remains subdued in AEs, but in several EDEs upside pressures persist. In China, inflation quickened in June, although it is expected to stay benign due to weak demand conditions. Inflation dropped sharply in Russia in June due to softening food prices.

* Announced by Dr. Duvvuri Subbarao, Governor, Reserve Bank of India on July 30, 2013 in Mumbai.

8. Non-fuel commodity prices have been easing, reflecting subdued global demand and comfortable supply levels. On the other hand, energy prices have firmed up due to a decline in US crude oil inventories and geo-political tensions in the Middle East.

Domestic Economy

9. Domestic economic activity weakened in Q1 of 2013-14. Lead indicators point to continuing headwinds facing manufacturing and services sector activity.

10. Industrial production remained muted at 0.1 per cent during April-May; in May, there was an absolute decline of 1.6 per cent spread across all constituent sub-sectors, barring electricity generation. Capital goods production continues to contract, reflecting deteriorating investment conditions. Although the manufacturing PMI improved modestly in June, the pace of expansion was anaemic. With the decline in the services sector PMI in June, the composite PMI fell too, suggesting broad-based sluggishness in economic activity.

11. Spurred by the timely arrival of the monsoon and above long period average rainfall so far (17 per cent excess up to July 26, 2013), *kharif* sowing has been significantly higher than a year ago, with total sown area at 74.8 million hectares as on July 26 as against 63.5 million hectares recorded by the same time last year. To date, all regions, except the east and the northeast, have received normal/excess rainfall.

12. The deceleration in new orders growth reported in the Reserve Bank's order books, inventories and capacity utilisation survey (OBICUS) indicates low activity levels in Q1. This is corroborated by the Reserve Bank's industrial outlook survey (IOS) which indicates that the overall business sentiment remained subdued in Q1 and may improve only marginally in Q2. Early results of corporate performance in Q1 suggest that sales growth and profit margins remained subdued.

13. Headline inflation, as measured by the wholesale price index (WPI), edged up slightly to 4.9 per cent in June 2013 after declining for five months on a clip. The pickup was mainly driven by a spurt in food inflation, especially in respect of vegetables and cereals. Fuel inflation declined due to the reduction in coal prices in March 2013, supported by base effects in the case of electricity prices. Non-food manufactured products inflation fell to 2.0 per cent in June, the lowest since December 2009, mainly due to a decline in inflation in respect of chemicals and continuing deflation in metal prices.

14. Retail inflation, as measured by the Consumer Price Index [(CPI) new series], had moderated somewhat during April-May, but it surged close to double digits in June, driven primarily by a sharp increase in food prices.

15. Among other indicators, urban households' inflation expectations, as per the latest round of the Reserve Bank's survey, remained at elevated levels in Q2. Rural wages, which had been rising at an annual average of 20 per cent for 28 months, moderated since January 2013. According to the Reserve Bank's quarterly house price index, increase in house prices also moderated in Q4 of 2012-13.

16. Money supply (M_3), at 12.8 per cent y-o-y on July 12, was close to the indicative trajectory of 13.0 per cent. On the other hand, non-food credit growth at 14.3 per cent was lower than the indicative projection of 15.0 per cent, with the slowdown spread across all major sectors. The Reserve Bank's credit conditions survey shows that overall credit conditions are expected to remain broadly unchanged in Q2, though some tightening is expected in sectors such as construction, infrastructure, commercial real estate and finance.

17. The flow of resources to the commercial sector, from both bank and non-bank sources, at ₹2.6 trillion in 2013-14 so far (up to July 12), was higher than a year ago. While the contribution of domestic non-bank sources declined, there was an increase in resources raised from domestic banks and from abroad, especially

through external commercial borrowings (ECBs) and foreign direct investment (FDI).

18. Liquidity conditions have eased considerably since the May Policy. The average daily net liquidity injection under the liquidity adjustment facility (LAF) declined to ₹828 billion during Q1 from ₹1,078 billion during Q4 of 2012-13. Government balances have been in deficit since June 28 and have bolstered liquidity, thereby significantly reducing the demand for funds under the LAF. The net drawal from the LAF declined significantly during the first week of July. On July 26, it stood at ₹558 billion [including ₹229 billion from the marginal standing facility (MSF)].

19. Following the reduction in the repo rate in May and easing of liquidity conditions, the modal term deposit rate of scheduled commercial banks (SCBs) declined by 5 basis points (bps) during Q1. Although the modal base rate remained unchanged during the quarter, the weighted average lending rate (WALR) on the outstanding rupee loans of SCBs declined by 6 bps during Q1. The WALR for fresh loans, particularly for housing and commercial vehicles sectors, declined significantly during this period.

20. During April-May, the Central Government's key deficit indicators as a proportion to the budget estimates were higher than a year ago, mainly on account of higher plan and capital expenditures, and decline in tax revenues by as much as 7.9 per cent. Up to July 25, 40.8 per cent of the net market borrowings of the Central Government was completed.

21. The CAD moderated to 3.6 per cent of GDP in Q4 of 2012-13, down from 6.5 per cent in Q3, due to a narrowing of the trade deficit. However, for the year 2012-13 as a whole, the CAD was 4.8 per cent of GDP, well above the sustainable level of 2.5 per cent of GDP estimated by the Reserve Bank.

22. In the current year, the trade deficit widened during Q1 over its level a year ago, mainly on account of deteriorating export performance. Financing came by way of higher FDI, net ECBs and accretion to non-resident deposits, with some use of reserves.

23. Beginning late May, following some comments of the US Fed, apprehensions of likely tapering of QE in the US triggered outflows of portfolio investment, particularly from the debt segment. Several measures were instituted to contain the ensuing exchange market volatility and to reverse unidirectional expectations. First, to curb import demand, import of gold on consignment basis was restricted on June 4 and customs duty was raised on June 5. Second, this was followed up on July 8 with further measures, including restricting banks to trade only on behalf of their clients in currency futures/options markets, tightening of exposure norms, and raising margins on currency derivatives to check speculative activities.

24. On July 15, the Reserve Bank put in place additional measures to restore stability to the foreign exchange market. They included raising the MSF rate by 200 bps to 10.25 per cent, restricting the overall access by way of repos under the LAF to ₹750 billion and conducting open market sales of government securities of ₹25 billion on July 18, 2013. As a contingency measure and in anticipation of redemption pressures on mutual funds, the Reserve Bank opened a dedicated Special Repo window for a notified amount of ₹250 billion for liquidity support to mutual funds.

25. On July 22, the Reserve Bank rationalised import of gold by making it incumbent on all nominated banks/entities to ensure that at least one fifth of imported gold is exclusively made available for the purpose of exports. Any import of gold under any type of scheme will have to follow this 20/80 formula. Consequent to this, the earlier instructions banning the import of gold on consignment basis were withdrawn.

26. On July 23, the Reserve Bank modified the liquidity tightening measures by regulating access to LAF by way of repos at each individual bank level and restricting it to 0.5 per cent of the bank's own NDTL. This measure

came into effect from July 24, 2013. The cash reserve ratio (CRR), which banks have to maintain on a fortnightly average basis subject to a daily minimum requirement of 70 per cent, was modified to require banks to maintain a daily minimum of 99 per cent of the requirement.

II. Domestic Outlook and Projections

Growth

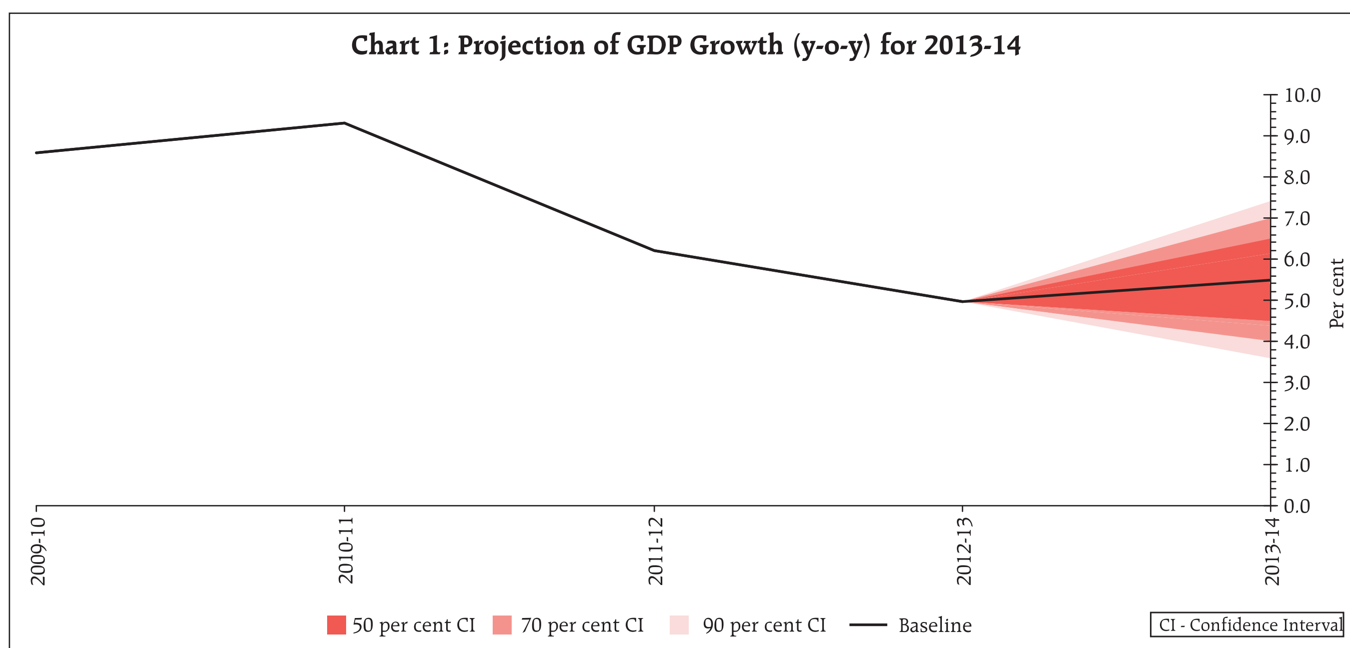
27. In the May Policy, the Reserve Bank projected GDP growth for 2013-14 of 5.7 per cent, conditional upon a normal monsoon returning agricultural growth to its trend level. The outlook for industrial activity, however, was expected to remain subdued, and growth in services and exports was expected to stay sluggish owing to global growth not improving significantly.

28. Activity, both domestic and global, has evolved in line with these expectations. While the onset of the monsoon and its spread have been robust, the persisting weakness in industrial activity has heightened the risks to growth. Moreover, global growth has been tepid, with some signs of loss of momentum in the US and in EDEs on top of the ongoing contraction in the euro area. This has impacted world trade with consequent adverse spillovers on India's exports, manufacturing and services. Over the last one year, the Government has taken several policy initiatives to improve the investment environment. As these initiatives work through the system and are further built upon, the current slowdown could be reversed, returning the economy to a higher growth trajectory. On the basis of the above considerations, the growth projection for 2013-14 is revised downwards from 5.7 per cent to 5.5 per cent (Chart 1).

Inflation

29. In the May Policy, the Reserve Bank indicated that during 2013-14, WPI inflation will be range-bound around 5.5 per cent, with some edging down in the first half and some increase in the second half, mainly on base effects. During Q1 of 2013-14, the inflation trajectory has moved largely in line with these expectations, although some risks to the path of inflation have surfaced in June. The stronger than expected monsoon has not yet softened food inflation as much as it should have. In particular, vegetable prices have been impacted by weather-driven supply disruptions. While the outlook for global non-oil commodity prices remains benign, international crude oil prices are firming up. This is reflected in an upward

Chart 1: Projection of GDP Growth (y-o-y) for 2013-14



adjustment of domestic prices of petroleum products, besides the programmed revisions in diesel prices. The sharp depreciation of the rupee since mid-May is expected to pass through in the months ahead to domestic fuel inflation as well as to non-food manufactured products inflation through its import content. The timing and magnitude of the remaining administered price revisions are a source of uncertainty for the inflation outlook.

30. Keeping in view the domestic demand-supply balance, the outlook for global commodity prices, and on the expectation that spatial and temporal distribution of the monsoon during the rest of the season will be normal, the Reserve Bank will endeavour to condition the evolution of inflation to a level of 5.0 per cent by March 2014, using all instruments at its command (Chart 2).

31. Admittedly, inflation during 2010-13 has been high and persistent. It is important to emphasise that notwithstanding this, during the 2000s as a whole, inflation averaged around 5.4 per cent in terms of the WPI and 5.8 per cent in terms of the CPI, down from its earlier trend rate of about 7.5 per cent for the WPI and about 9.0 per cent for the CPI. Given this record and the empirical evidence on the threshold level of inflation that is conducive for sustained growth, the objective is to contain headline WPI inflation at around 5.0 per cent in the short-term, and 3.0 per cent over the medium-term, consistent with India's broader integration into the global economy.

Monetary Aggregates

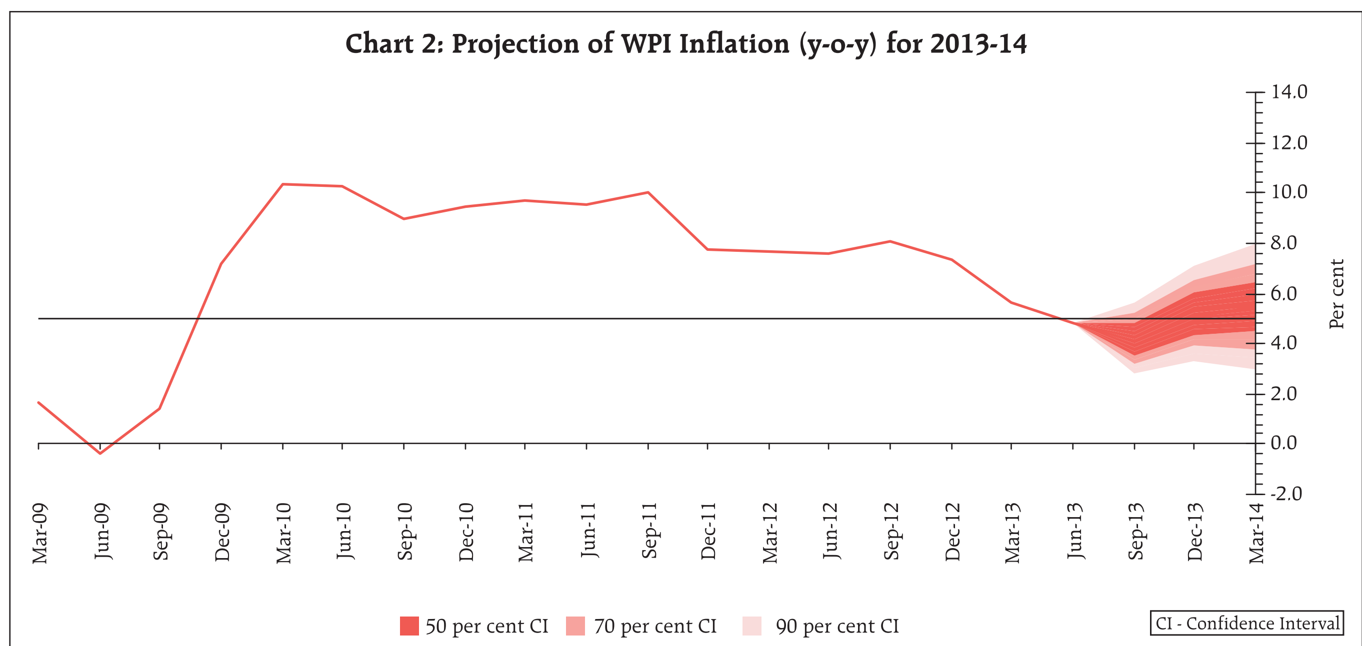
32. With nominal growth remaining broadly at the same level as envisaged in the May Policy, monetary aggregates are expected to move along the projected trajectories. Accordingly, M_3 growth projection for 2013-14 has been retained at 13.0 per cent and aggregate deposit growth at 14.0 per cent. Non-food credit of SCBs is projected to grow at 15.0 per cent. As always, these numbers are indicative projections and not targets.

Risk Factors

33. The macroeconomic outlook for 2013-14 is subject to a number of risks as indicated below.

i. By far, the biggest risk to the macroeconomic outlook stems from the external sector. Financial markets around the world went into a flash turmoil on the perception of an earlier than expected tapering of QE by the US Fed. The rupee

Chart 2: Projection of WPI Inflation (y-o-y) for 2013-14



depreciated in nominal terms by as much as 5.8 per cent between May 22 (the day of the first 'announcement effect') and July 26, consequent on sudden stop and reversal of capital flows in reaction to the prospective change in the US monetary policy stance. It is not clear if financial markets have factored in the full impact of the prospective tapering of QE or whether they will react to every future announcement of tapering. India, with its large CAD and dependence on external flows for financing it, will remain vulnerable to the confidence and sentiment in the global financial markets.

ii. The large CAD, well above the sustainable level of 2.5 per cent of GDP for three years in a row, is a formidable structural risk factor. It has brought the external payments situation under increased stress, reflecting rising external indebtedness and the attendant burden of servicing of external liabilities. Most external vulnerability indicators have deteriorated, eroding the economy's resilience to shocks. The recent measures by the Reserve Bank to restore stability to the foreign exchange market should be used as a window of opportunity to put in place policies to bring the CAD down to sustainable levels. Furthermore, the growing vulnerability in the external sector reinforces the importance of credible fiscal consolidation with accent on both quantity and quality of adjustment.

iii. The investment climate remains weak and risk aversion continues to stall investment plans. The outlook for investment is inhibited by cost and time overruns, high leverage, deteriorating cash flows, erosion of asset quality and muted credit confidence.

iv. An environment of low and stable inflation and well-anchored inflation expectations is necessary to sustain growth in the medium-term. To engender this benign growth-inflation environment, it is critical to ease the supply constraints in the economy, particularly in the food and infrastructure sectors. Without policy efforts to address the deterioration in productivity and competitiveness, the pressures from wage increases and upward revisions in administered prices could weaken growth even further and exacerbate inflation pressures.

III. The Policy Stance

34. Through 2012-13, the Reserve Bank persevered with efforts to address growth risks with a 100 bps reduction in the repo rate, supported by policies to ease credit and liquidity conditions through a 75 bps reduction in the CRR, 100 bps reduction in the SLR and OMO purchases of the order of ₹1.5 trillion.

35. In May this year, the Reserve Bank continued with its easing stance with a reduction in the policy repo rate by a further 25 bps to support growth in the face of gradual moderation of headline inflation. With upside risks to inflation still significant in the near term, however, the Reserve Bank indicated that it saw little space for further policy easing and warned that risks on account of the CAD could warrant a swift reversal of the policy stance. In its Mid-Quarter Review of June, the Reserve Bank paused its policy easing. This policy stance was informed by the need to await a durable receding of inflation and to be prepared for the impact of growing uncertainty in global financial conditions.

36. Keeping in view global and domestic macroeconomic conditions, outlook and risks, the policy stance in this review is guided by the need for continuous vigil and preparedness to pro-actively respond to risks to the economy from external developments, especially those stemming from global financial markets, while managing the trade-off posed by increased downside risks to growth and continuing risks to inflation and inflation expectations.

37. Against this backdrop, the stance of monetary policy is intended to:

- address the risks to macroeconomic stability from external shocks;

- continue to address the heightened risks to growth;
- guard against re-emergence of inflation pressures; and
- manage liquidity conditions to ensure adequate credit flow to the productive sectors of the economy.

IV. Monetary Measures

38. On the basis of the current assessment and in line with the policy stance outlined in Section III, the Reserve Bank announces the following policy measures.

Repo Rate

39. It has been decided to keep the repo rate under the liquidity adjustment facility (LAF) unchanged at 7.25 per cent.

Reverse Repo Rate

40. The reverse repo rate under the LAF, determined with a spread of 100 basis points below the repo rate, stands at 6.25 per cent.

Marginal Standing Facility (MSF) Rate

41. The MSF rate remains unchanged at 300 basis points above the repo rate at 10.25 per cent.

Bank Rate

42. The Bank Rate stands at 10.25 per cent.

Cash Reserve Ratio

43. The cash reserve ratio (CRR) of scheduled banks has been retained at 4.0 per cent of their net demand and time liabilities (NDTL).

Guidance

44. The monetary policy stance over the last two years has predominantly been shaped by the growth-inflation dynamic even as external sector concerns have had a growing influence on policy calibration over the last one year. The current situation – moderating wholesale price inflation, prospects of softening of food inflation consequent on a robust monsoon and decelerating growth – would have provided a reasonable case for continuing on the easing stance. However, India is currently caught in a classic 'impossible trinity' trilemma whereby we are having to forfeit some monetary policy discretion to address external sector concerns. The recent liquidity tightening measures by the Reserve Bank are aimed at checking undue volatility in the foreign exchange market and will be rolled back in a calibrated manner as stability is restored to the foreign exchange market, enabling monetary policy to revert to supporting growth with continuing vigil on inflation. It should be emphasised that the time available now should be used with alacrity to institute structural measures to bring the CAD down to sustainable levels. The Reserve Bank stands ready to use all available instruments and measures at its command to respond proactively and swiftly to any adverse development.

Mid-Quarter Review of Monetary Policy 2013-14

45. The next Mid-Quarter Review of Monetary Policy for 2013-14 will be put out through a press release on Wednesday, September 18, 2013.

Second Quarter Review of Monetary Policy 2013-14

46. The Second Quarter Review of Monetary Policy for 2013-14 is scheduled on Tuesday, October 29, 2013.

Mumbai
July 30, 2013

Macroeconomic and Monetary Developments First Quarter Review 2013-14

Overview

1. *After reducing policy rates by 100 basis points (bps) in 2012-13, the Reserve Bank cut its policy rate further by another 25 bps in May 2013, but paused in its Mid Quarter Review in June 2013. The forward guidance in May and the more cautious monetary policy stance in June substantially reflected concerns with the current account deficit (CAD) and its financing. While monetary policy is largely guided by the growth-inflation dynamics, it is also tempered by considerations of risks of external imbalances. Accordingly, policy initiatives were taken in mid-July to address exchange rate volatility so that it does not risk macroeconomic stability and growth sustainability. The measures taken included capping allocation of funds under LAF for each individual bank to 0.5 per cent of its own NDTL, increasing marginal standing facility (MSF) rate and bank rate by 200 bps each to 10.25 per cent and mopping up some liquidity through open market operations (OMO) sales and stipulating banks to maintain a minimum daily CRR balance of 99 per cent of the average fortnightly requirement.*

2. *Developments in the external sector since the third week of May 2013 brought to fore not just stress in the financial markets and asset prices, but also their impact on other macroeconomic parameters, including growth, public finances and inflation, as also financial stability. The buffers built and the fresh responses during the stress period have helped India to contend with a precipitous situation. However, global financial conditions remain stressed and domestic policy changes have not sufficiently improved business conditions. Growth continues to be slack, while inflation concerns, especially in the form of high consumer price inflation linger. Consequently, policy choices will need to be carefully evaluated and would need to preserve stable macroeconomic and financial conditions while addressing the growth concerns. In this context, structural reforms become important to reduce CAD to sustainable levels and to support growth.*

Global Economic Conditions

Global recovery prospects remain weak

3. *Global growth remained subdued, with improvements in some advanced economies (AEs), especially the US and Japan, getting counterbalanced by slowing growth in key emerging market and developing economies (EMDEs), including China and India. The International Monetary Fund (IMF) in its World Economic Outlook has revised the global growth down to 3.1 per cent in 2013 from 3.3 percent earlier.*

Global commodity price cycle stay benign, but with upside risks to crude prices

4. *With weak global growth, global commodity price inflation is expected to remain contained in the near term. The ongoing deleveraging and slowing growth in China is expected to put further downward pressure on global commodity prices. However, upside risks to global crude oil prices remain from rising geo-political uncertainties in the oil producing regions. Also, the impact of softer commodity prices has been offset in varying degrees for various countries due to depreciation of EMDE currencies vis-à-vis the US dollar.*

Global financial markets have entered into a period of fresh turbulence

5. *Volatility and spillovers from the likely tapering of quantitative easing (QE) have gripped global financial markets since mid-May 2013. Financial markets are re-pricing risks factoring in the inevitability of monetary stimulus getting withdrawn at some stage. The global bond sell off in May and June 2013 has resulted in most currencies depreciating against the US dollar, causing further portfolio outflows across equities and commodities. Going forward, as a baseline case, global interest rates may continue to harden over the medium*

term. This is likely to tighten financial conditions further and episodically keep markets under stress.

Indian Economy: Developments and Outlook

Output

Slow-paced recovery likely to shape later in 2013-14

6. *The Indian economy continued to remain sluggish in Q4 of 2012-13, though it still maintained a pace faster than most of the EMDEs. The growth in the full year, 2012-13, slipped to 5.0 per cent. The persistence in slowdown is reflected in below trend growth for seventh consecutive quarters since Q2 of 2011-12. The slowdown has also turned pervasive with most sectors growing below trend. Leading indicators do not suggest immediate improvement in production activity and a slow-paced recovery is likely to shape only later in 2013-14, supported by good monsoon that could shore up rural demand.*

Aggregate Demand

Improvement in aggregate demand requires overcoming high consumer price inflation and infrastructure bottlenecks

7. *Aggregate demand of the Indian economy during Q4 of 2012-13 remained slack with little improvement in investment activity and deceleration in consumption demand. Private consumption in real terms has decelerated due to persistent high inflation, while investment is hobbled by structural constraints. Corporate results indicate weak sales growth with corporate investment intentions remaining listless. In this situation, key to turning around the economy lies in re-balancing government spending from current to capital expenditures with a view to crowding-in private investment.*

External sector

Reducing CAD and ensuring its financing through stable flows are needed

8. *Even though the current account deficit (CAD) to GDP ratio moderated to 3.8 per cent in Q4 of 2012-13 from its historic high of 6.5 per cent in Q3 of 2012-13, indications are that it may have widened again in Q1 of 2013-14. Going forward, the current account is expected to show improvement with likelihood that gold imports may fall. However, risks to CAD financing have increased due to capital outflows from EMDEs. This has put rupee under pressure. Vulnerability indicators of the external sector have deteriorated. In this milieu, concerted policy reforms are needed to reduce CAD and to improve financing by attracting more stable capital flows to the Indian economy.*

Monetary and Liquidity Conditions

Policy recalibration became necessary with increased macro-financial risks

9. *The Reserve Bank eased monetary policy during 2012-13 and Q1 of 2013-14 while guarding against re-emergence of inflation. The transmission of this easing has reduced lending rates significantly. There was marked easing in liquidity conditions in Q1 of 2013-14, which broadly remained in line with policy objectives. However, the policy was recalibrated and availability and cost of rupee liquidity was tightened in July 2013, with a view to restoring stability to the foreign exchange market. Broad money (M3) growth remained broadly in line with the indicative trajectory. The deceleration in domestic growth and deterioration in asset quality of the banking sector has kept credit growth below the indicative trajectory in Q1 of 2013-14.*

Financial Markets

Contagion from global bond sell off generates stress in Indian markets

10. *The policy statements by the Fed in May 2013 accentuated the global bond sell off. It also made markets jittery, leading to significant volatility in bonds, currencies, commodities and equities in EMDEs. Contagion from markets across Asia spilled over to India. Policy action was taken on a wide front to limit these spillovers. This helped stabilise rupee exchange*

rate, though interest rates increased. The subsequent policy indications by the Fed in July also appear to have temporarily calmed investor sentiments, but the overall situation remains in a state of flux.

Price Situation

Headline inflation moderates but upside risks persist

11. *Moderation of global commodity prices, negative output gap and past monetary policy actions contributed to disinflationary momentum in the headline WPI inflation which fell below 5 per cent by May 2013. Non-food manufactured product inflation declined sharply to its lowest level in the past three years. However, food inflation has risen in May and June 2013 and is putting pressures on general price-level. These pressures could moderate somewhat if the monsoon remains on track during the rest of the season. Meanwhile, consumer price inflation remains stubbornly high and recent currency depreciation and upward revisions in fuel prices have increased upside risks to both wholesale and consumer price inflation.*

Macroeconomic Outlook

Amplifying macro-financial risks warrant cautious monetary policy stance

12. *Recovery in growth may take time and is expected to shape slowly as the year progresses. Moreover, sustainable recovery requires control over consumer price inflation that has continued to hover around double digits for the past 15 months. Going forward, business confidence remains subdued and the latest expectations surveys show a further fall in business sentiments. Meanwhile macro financial risks have amplified with global interest rate cycle starting to turn and causing capital outflows. External sector stress has increased and rupee has depreciated significantly. With recent liquidity tightening measures the Reserve Bank has curbed exchange rate volatility providing a temporary breather. While monetary policy focuses on restoring stability in the currency market it is important to push through structural reforms to support growth. The strategy will succeed only if structural reforms help reduce CAD and augment savings and investment.*

I. Output

With global growth remaining subdued and structural impediments continuing to hinder recovery at home, the downshift in India's growth persisted during Q4 of 2012-13. Domestic policy uncertainties, governance concerns, the impact of earlier monetary tightening and slack external demand conditions, apart from a weak monsoon, had weighed down on the growth process for the year as a whole. This brought down growth to a 10-year low of 5.0 per cent during 2012-13. While moderate improvement in growth during 2013-14 is expected, on the back of good monsoon, the downside risks have increased as a result of the global interest rate cycle starting to turn.

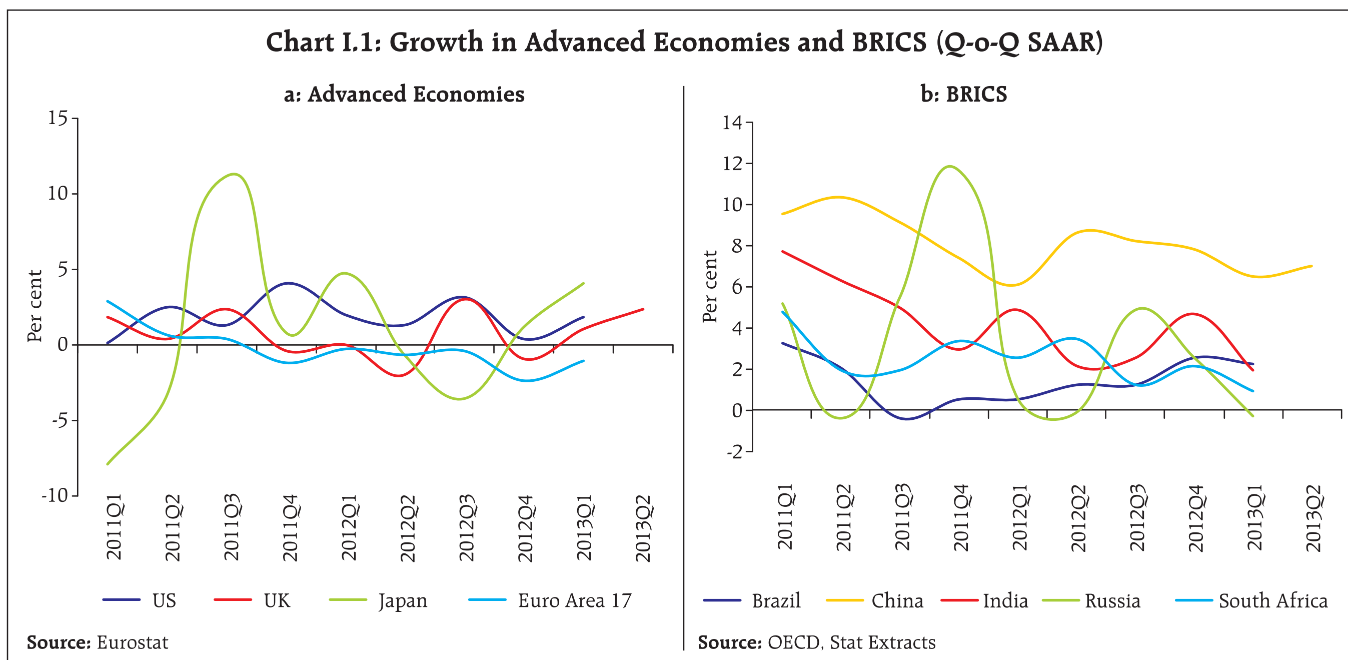
Global recovery prospects remain weak

I.1 Global growth stayed subdued, with improvements in some advanced economies (AEs), especially the US and Japan, getting counterbalanced by slowing growth in key emerging market and developing economies (EMDEs), including China and India. Moreover, the prospects of global recovery remains weak. With the global interest rate cycle turning, volatile financial conditions have emerged that may reduce capital flows to EMDEs. These are likely to affect macro-financial conditions in EMDEs and may protract their current slow growth. Although currently AEs seem to be on a recovery track, the fiscal drag continues to be an inhibiting factor.

I.2 The International Monetary Fund (IMF) in its July 2013 update of the World Economic Outlook (WEO) has projected that global growth will stay subdued at 3.1 per cent in 2013, the same as in the previous year. This marks a downward revision of 0.2 percentage points from its earlier growth forecast made in April 2013. Growth for 2014 has also been revised downward by 0.2 percentage points to 3.8 per cent. The cuts in forecasts for both the years have been sharper for EMDEs, with a significant downgrade of growth projections for Brazil and China. The IMF has projected India to grow at 5.6 per cent in 2013-14 and 6.3 per cent in 2014-15.

I.3 During Q1 of 2013, AEs witnessed a multi-paced recovery. US GDP grew at 1.8 per cent (seasonally adjusted annualised quarter-on-quarter growth rate, q-o-q saar), up from 0.4 per cent growth in Q4 of 2012 (Chart I.1a). Growth came from personal consumption expenditure, private inventory investment and residential fixed investment, while cuts in federal, state

Chart I.1: Growth in Advanced Economies and BRICS (Q-o-Q SAAR)



Source: Eurostat

Source: OECD, Stat Extracts

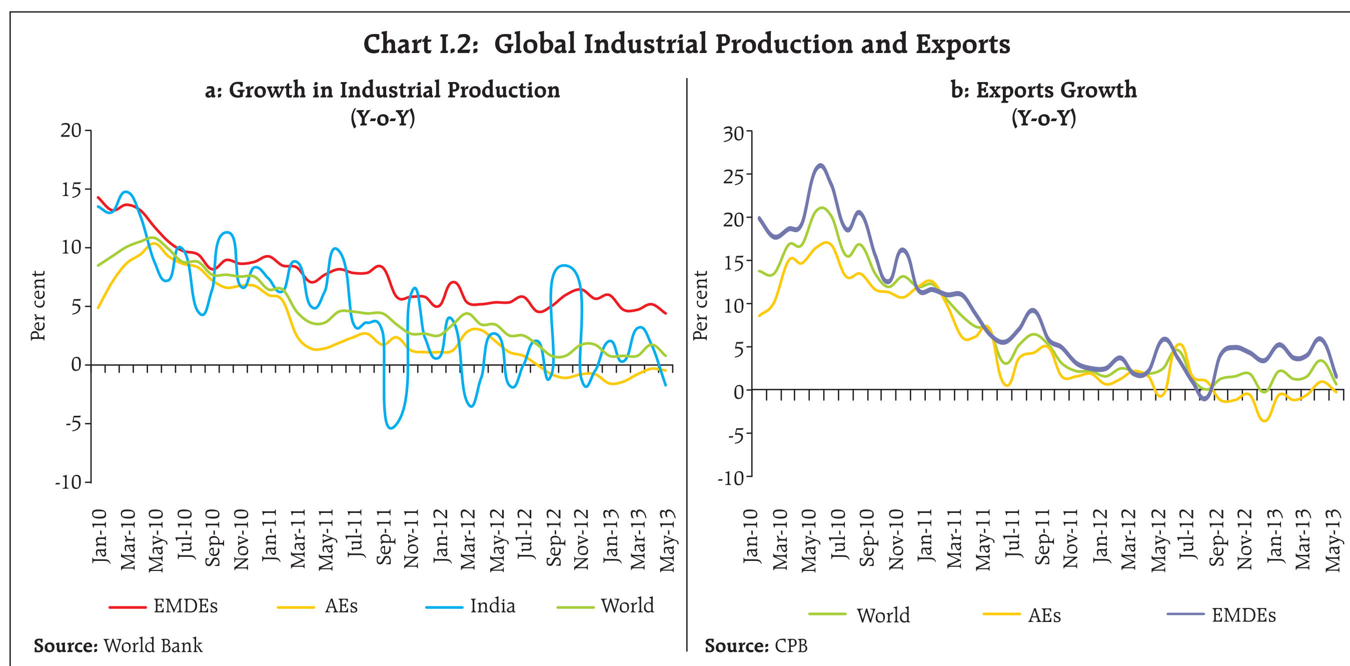
and local government spendings, as also low exports dragged growth down. Japan's economy grew at 4.1 per cent in Q1 2013 (q-o-q saar), the fastest pace among G-7 countries, mainly driven by an aggressive monetary and fiscal stimulus. The UK registered a growth of 2.4 per cent and 1.1 per cent (q-o-q saar) in Q2 and Q1 of 2013, respectively, as against a decline of 0.9 per cent in Q4 of 2012.

I.4 In contrast, the euro area (EU-17) continued to be in recession with continued contraction for the sixth consecutive quarter. Its GDP declined by 1.1 per cent (q-o-q saar) in Q1 of 2013 after a 2.4 per cent decline in the previous quarter. France slipped back into recession in Q1, while Italy and Spain continued in a prolonged contraction mode. Germany managed to avert falling into recession with a meagre positive growth of 0.3 per cent (q-o-q saar) during Q1 of 2013.

I.5 Among EMDEs, growth has slowed across the BRICS nations which in past had been an engine for global recovery. During Q1 of 2013, growth in Brazil slowed to 2.2 per cent (q-o-q saar), down from 2.6 per cent (q-o-q saar) in the previous quarter (Chart I.1b). Russia's GDP contracted in Q1 of 2013. China's GDP growth picked up in Q2 of 2013 to 7.0 per cent (q-o-q saar) from 6.6 per cent in Q1. South Africa slowed to an annualised growth of 0.9 per cent in Q1 of 2013, which was lower than 2.1 per cent in Q4 of 2012.

I.6 Apart from GDP growth, labour market conditions have also diverged in the AEs, with a distinct improvement in the US, but continued dampened conditions in the euro area. Non-farm payroll in the US economy increased by 195,000 jobs in June 2013 and the numbers for the previous two months were also revised upwards significantly. Although the unemployment rate remained unchanged at 7.6 per cent in June due to the improved rate of labour force participation, the overall data suggest that the economy is gaining some traction. However, the unemployment rate in the euro area continues to increase, and touched a new high of 12.2 per cent in May 2013. For some time now, the unemployment rates in Spain and Greece have continued to be anchored around 26 per cent, with their youth unemployment rates at over 55 per cent. Overall, growth and employment have been dented by slow expansion in industrial growth and global trade (Chart I.2).

Chart I.2: Global Industrial Production and Exports



Source: World Bank

Source: CPB

Table I.1: Sector-wise Growth Rates of GDP (2004-05 prices)

(Per cent)

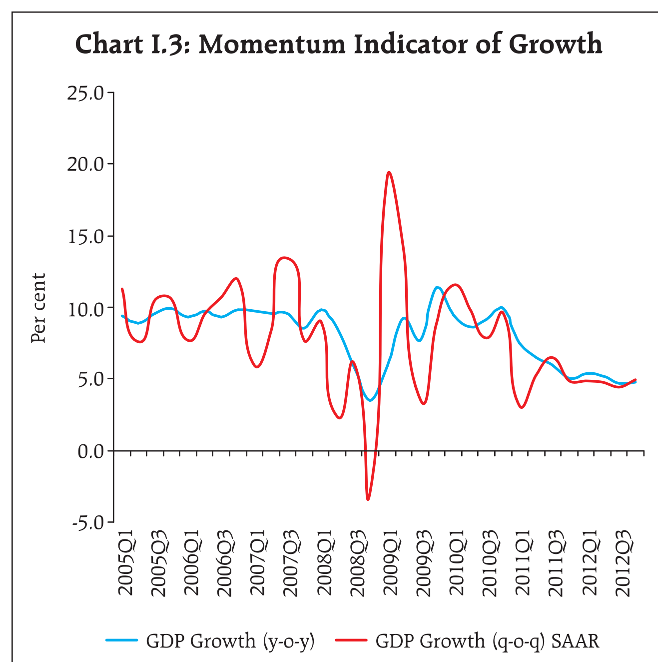
Item	2011-12*	2012-13#	2011-12				2012-13			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11
1. Agriculture, forestry & fishing	**3.6**	**1.9**	**5.4**	**3.2**	**4.1**	**2.0**	**2.9**	**1.7**	**1.8**	**1.4**
2. Industry	**2.7**	**1.2**	**6.5**	**2.7**	**0.9**	**1.0**	**-0.2**	**0.5**	**2.3**	**2.0**
2.1 Mining & quarrying	-0.6	-0.6	-0.4	-5.3	-2.6	5.2	0.4	1.7	-0.7	-3.1
2.2 Manufacturing	2.7	1.0	7.4	3.1	0.7	0.1	-1.0	0.1	2.5	2.6
2.3 Electricity, gas & water supply	6.5	4.2	6.6	8.4	7.7	3.5	6.2	3.2	4.5	2.8
3. Services	**7.9**	**6.8**	**8.3**	**8.2**	**8.1**	**7.0**	**7.6**	**7.1**	**6.2**	**6.3**
3.1 Trade, hotels, transport, storage and communication	7.0	6.4	9.5	7.0	6.9	5.1	6.1	6.8	6.4	6.2
3.2 Financing, insurance, real estate and business services	11.7	8.6	11.6	12.3	11.4	11.3	9.3	8.3	7.8	9.1
3.3 Community, social & personal services	6.0	6.6	3.5	6.5	6.8	6.8	8.9	8.4	5.6	4.0
3.4 Construction	5.6	4.3	3.8	6.5	6.9	5.1	7.0	3.1	2.9	4.4
4. GDP at factor cost (Total 1 to 3)	**6.2**	**5.0**	**7.5**	**6.5**	**6.0**	**5.1**	**5.4**	**5.2**	**4.7**	**4.8**

*: First Revised Estimates. #: Provisional Estimates.
Source: Central Statistics Office.

Slowdown persists in the Indian economy

I.7 India's growth continues to languish. Although India is still growing faster than most EMDEs, the deceleration in growth over the last two years has been marked. The year-on-year (y-o-y) growth, as also the seasonally adjusted growth rate in Q4 of 2012-13, were marginally higher than in the previous quarter, but were still not indicative of recovery setting in (Table I.1 and Chart I.3). The persistence in slowdown is reflected in below-trend growth for the seventh consecutive quarter since Q2 of 2011-12 (Chart I.4).

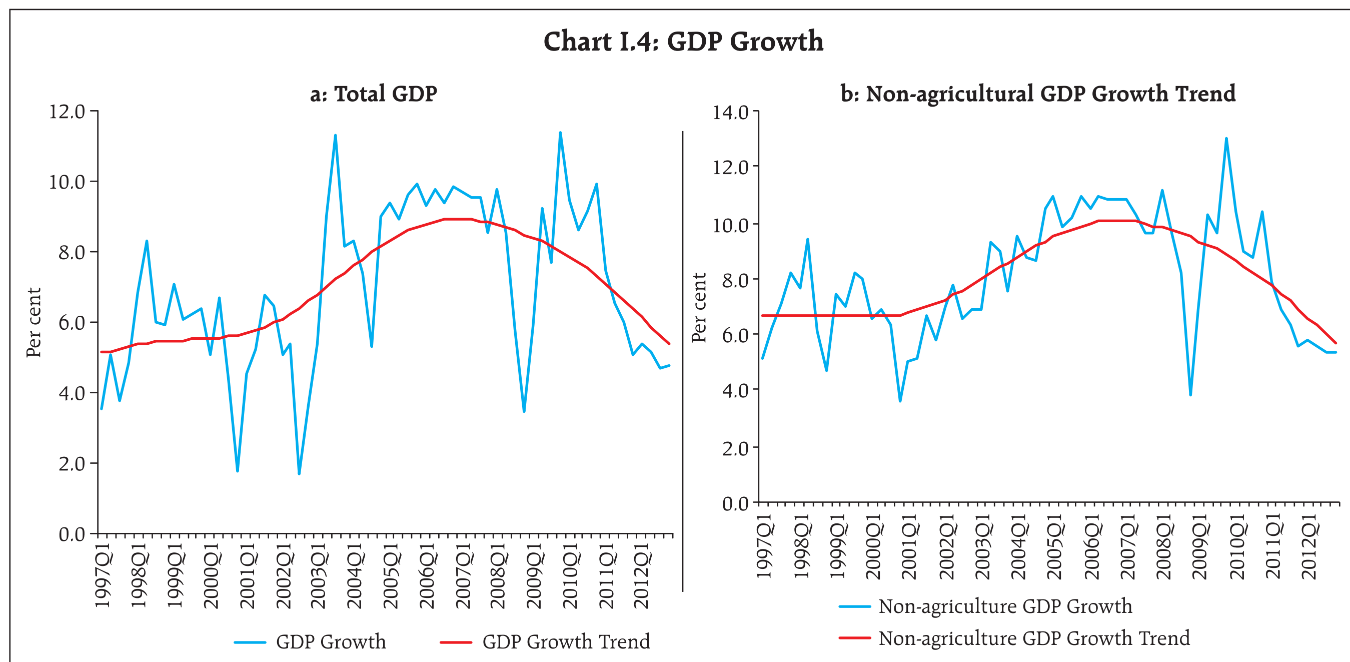
Chart I.3: Momentum Indicator of Growth



I.8 The year 2012-13, as a whole, witnessed a moderated GDP growth of 5.0 per cent – the lowest since 2002-03. Domestic policy uncertainties, governance concerns, the impact of earlier monetary tightening, slack external demand conditions and a weak monsoon, weighed down on the growth process during the year.

Agriculture growth is expected to pick up

I.9 The south-west monsoon of 2013 arrived on time and is forecasted to be normal by the India Meteorological Department (IMD). The progress of the monsoon has also been encouraging, with 29 out of 36 sub-divisions receiving excess or normal rainfall as of July 24, 2013 as against 14 last year. Six of the seven sub-divisions in east and north-east India besides the sub-division of 'Haryana and Chandigarh' have received deficient rainfall so far. However, the temporal and spatial progress of rainfall during the rest of the monsoon season may also influence the overall size of the *kharif* crop. In this context, the IMD forecast of normal rainfall during August 2013 at 96 per cent of the long period average (LPA) augurs well for *kharif* crops. The Reserve Bank's foodgrains' production weighted rainfall index



for the period June 1 - July 24, 2013 indicate that the rainfall was 17 per cent higher than the long period average compared with 24 per cent deficiency in the same period last year. *Kharif* sowing until July 26, 2013 was nearly 18 per cent higher than that of the previous year (Table I.2). It was also somewhat higher than the normal area sown at this point of time. Due to heavy rainfall in the current monsoon season so far, storage level of 85 major reservoirs as on July 25, 2013 was 66 per cent higher than the last 10 years' storage level. Although we are only half way through the monsoon season, it is expected that the performance of the agricultural sector during 2013-14 would be better than last year.

I.10 The current stock of rice and wheat, at 73.95 million tonnes, is lower by around 7 million tonnes than during last year, largely due to lower procurement on account of a decline in production and higher off-take under the public distribution system (PDS) during 2012-13. The higher off-take under PDS is expected to

Table I.2: *Kharif* Production and Sowing

(Area in million hectares and production in million tonnes)

Crop Name	Sowing*		*Kharif* Production			Percentage Change		
	2012	2013	2010	2011	2012	Sowing	Production	
						2013	2011	2012
1	2	3	4	5	6	7	8	9
Foodgrain	34.1	41.9	120.9	131.3	128.2	22.9	8.6	-2.4
Rice	18.4	19.6	80.7	92.8	92.8	6.5	15.0	0.0
Coarse cereals	11.7	14.9	33.1	32.4	29.5	27.4	-2.1	-9.0
Pulses	4.0	7.4	7.1	6.1	5.9	85.0	-14.1	-3.3
Oilseeds	13.8	16.7	21.9	20.7	20.9	21.0	-5.5	1.0
Sugarcane	5.0	4.8	342.4	361.0	339.0	-4.0	5.4	-6.1
Cotton#	9.7	10.5	33.0	35.2	34.0	8.2	6.7	-3.4
Jute and mesta##	0.8	0.8	10.6	11.4	11.3	0.0	7.5	-0.9
All-crops	63.5	74.8	-	-	-	17.8	-	-

* : As on July 26. - : Not available. #: Million bales of 170 kg each. ## : Million bales of 180 kg each.
Source: Ministry of Agriculture, GoI.

help reduce the prices of cereals, which have remained elevated in recent months. The drawdown of foodgrain stocks would also help reduce the carrying cost and ease the strains on the storage capacity. Although the existing stocks of foodgrain are sufficient, the requirements may have to be re-assessed in light of the expected higher off-take under the National Food Security Bill (NFSB), when implemented.

Industrial sector growth remains subdued

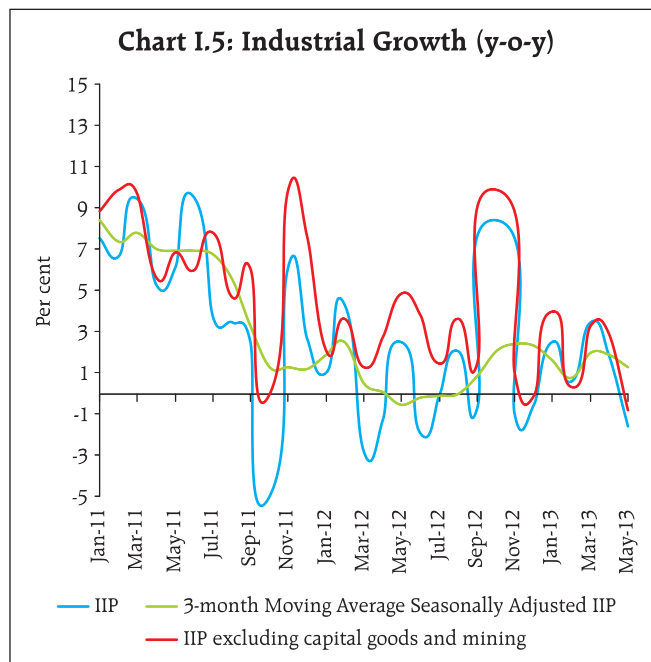
I.11 The Index of Industrial Production (IIP) nearly stagnated during 2012-13, registering a dismal 1.1 per cent growth on a low base of 2.9 per cent in the preceding year. During April-May 2013, the IIP registered a marginal growth of 0.1 per cent as compared with 0.6 per cent during April-May 2012 (Table I.3). The pervasiveness of the slowdown is reflected across a wide range of industrial classifications. The contraction of the mining sector and capital goods continues to affect the overall performance of the industrial sector. Excluding capital goods and mining, the growth of the IIP during April-May 2013 was 1.0 per cent (Chart I.5). Excluding volatile items, the truncated IIP (96 per cent of IIP) growth in April-May 2013 was 0.2 per cent (Chart I.6).

Table I.3: Index of Industrial Production: Sectoral and Use-Based Classification of Industries

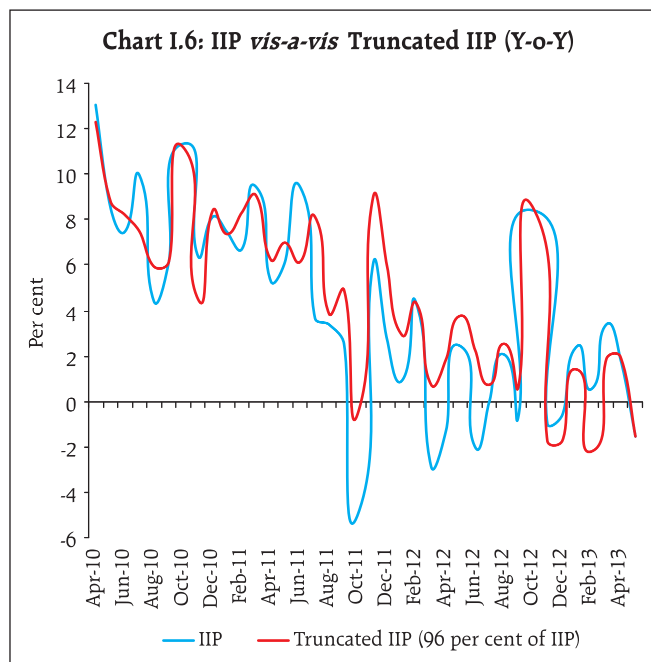
(Per cent)

Industry Group	Weight in the IIP	Growth Rate		
		Apr-Mar 2012-13	April-May	
			2012-13	2013-14P
1	2	3	4	5
Sectoral				
Mining	14.2	-2.4	-1.7	-4.5
Manufacturing	75.5	1.2	0.4	0.1
Electricity	10.3	4.0	5.2	5.3
Use-Based				
Basic Goods	45.7	2.4	3.2	0.7
Capital Goods	8.8	-6.1	-15.2	-1.5
Intermediate Goods	15.7	1.6	0.8	2.1
Consumer Goods (a+b)	29.8	2.4	4.0	-1.0
a) Consumer Durables	8.5	2.0	7.5	-9.6
b) Consumer Non-durables	21.3	2.7	1.1	6.7
General	**100**	**1.1**	**0.6**	**0.1**

Note: P: Provisional
Source: Central Statistics Office.



I.12 Manufacturing sector growth remained almost stagnant during April-May 2013. Important industries such as machinery and equipment, basic metals, fabricated metal products, computing machinery, food products and motor vehicles registered contraction in output during the period.



I.13 Persistent power shortages affected the capacity utilisation of the manufacturing sector. As a result, backlogs of work accumulated in the sector. The growth of power generation has remained at 5.3 per cent during April-May 2013. However, going forward, power generation is expected to accelerate during the year with a normal monsoon and capacity additions, although the supply of coal may remain a constraint.

I.14 As per the use-based classification of industries, with the exception of intermediate goods and consumer non-durables, the growth of all other categories declined during April-May 2013 (Table I.3). The output of consumer durable goods has declined since December 2012, mainly due to a fall in the production of passenger cars and motor-cycles. The contraction of the capital goods sector continued in 2013-14. However, fast-tracking of investment projects is expected to generate higher demand for machinery and construction-related items and is, thus, likely to augment production in the capital goods sector.

Supply bottlenecks constraining core industries

I.15 Core industries continued to be adversely affected by supply bottlenecks and infrastructure constraints, thereby growing only at 2.4 per cent during April-May 2013-14, which is much lower than in the corresponding period of the previous year. While the output of coal, natural gas, fertilisers and crude oil contracted during the period, there was deceleration in the production of electricity, petroleum refinery products and cement (Chart I.7).

I.16 The recent initiatives by the government are expected to somewhat ease supply bottlenecks in the core industrial sector. In particular, the Union Cabinet's approval for setting up an independent regulatory authority for the coal sector is likely to benefit coal-dependent industries such as power, steel and cement. The envisaged changes in the gas pricing policy will incentivise investment in the Indian upstream sector and help boost production. Also, the target of rolling out ₹1 trillion worth of PPP projects in the infrastructure sector in the next six months will provide a boost to industry.

Capacity utilisation increased

I.17 Capacity utilisation (CU), as measured by the 21st Round of the Order Books, Inventories and Capacity Utilisation Survey (OBICUS) of the Reserve Bank, recorded a seasonal increase in Q4 of 2012-13 over the previous quarter (http://www.rbi.org.in/OBICUS21).

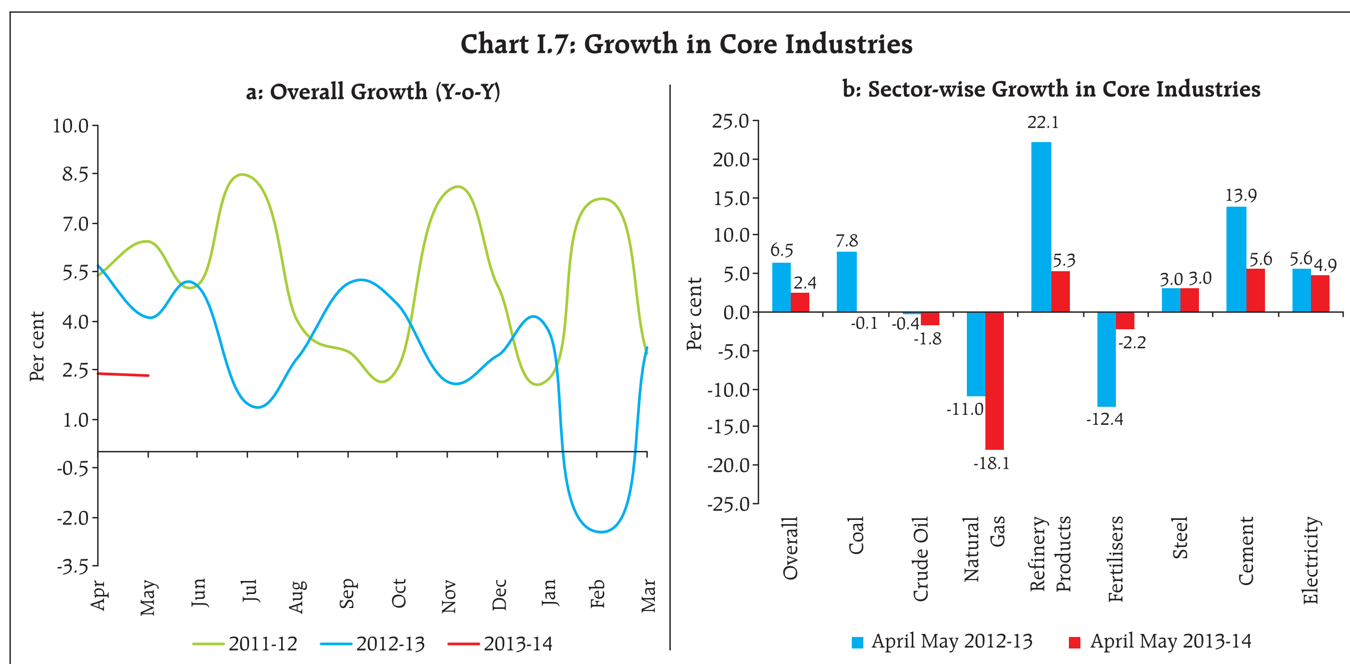
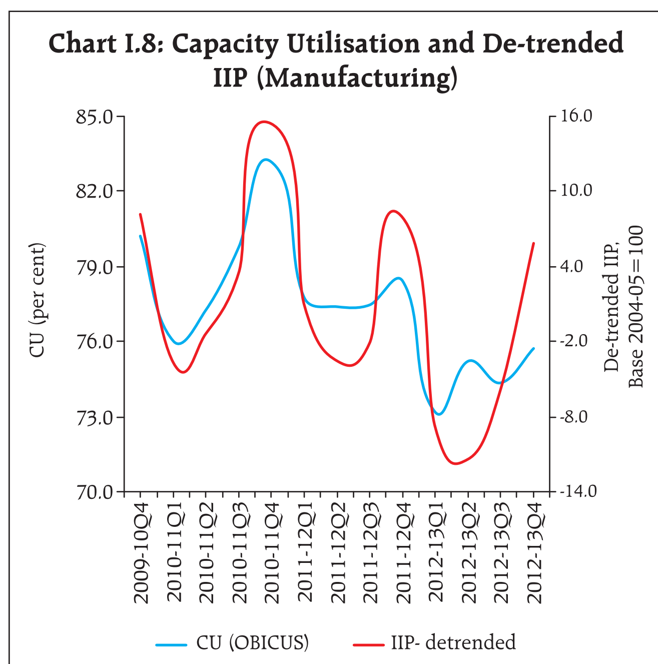


Chart I.7: Growth in Core Industries

Chart I.8: Capacity Utilisation and De-trended IIP (Manufacturing)



However, it remained well below the peaks observed in Q4 of 2010-11 and 2011-12. There is broad co-movement of the CU and de-trended IIP (Chart I.8). Although new orders continued to increase, its growth was lower than in the previous quarter. The raw material inventory to sales ratio, which had been increasing since Q1 of 2012-13, reversed its trend in Q4 of 2012-13, whereas the finished goods inventory to sales ratio increased considerably after reaching its lowest level in the previous quarter.

Services sector signals slowdown in growth

I.18 The services sector recorded the lowest growth in 11 years at 6.8 per cent during 2012-13. Activity in the 'financing, insurance, real estate & business services' and 'trade, hotels, restaurant, transport & communication' sectors decelerated. The decline in lead indicators, such as automobile sales, cargo handled at major ports and civil aviation sector, during April-June 2013 signal a further slowdown in the services sector (Table I.4). The Reserve Bank's services sector composite indicator, which is based on growth in indicators of construction, trade and transport and finance, showed an upturn in Q4 of 2012-13, but indicated a slight fall during April-May 2013 (Chart I.9).

Table I.4: Lead Indicators of Services Sector Activity

(Growth in per cent)

Services Sector Indicators	2010-11	2011-12	2012-13	April-June	
				2012-13	2013-14
1	2	3	4	5	6
Tourist arrivals	10.0	9.7	2.9	1.7	1.8
Cement	4.5	6.7	9.3	13.9#	5.6#
Steel	13.2	10.3	2.5	3.0#	3.0#
Automobile sales	16.8	11.1	2.6	9.8	-2.1
Railway revenue-earning freight traffic	3.8	5.2	4.1	4.8	4.9
Cargo handled at major ports	1.5	-1.6	-2.5	-5.5	-1.0
Civil Aviation					
Domestic cargo traffic	23.8	-4.8	-3.4	2.0*	-6.8*
International cargo traffic	17.7	-1.9	-4.2	-6.0*	-0.2*
International passenger traffic	10.3	7.6	5.5	5.7*	8.3*
Domestic passenger traffic	18.1	15.1	-4.3	8.3*	-0.2*

Note : *: Data refers to April. #: Data refers to April-May.
Source: Ministry of Statistics and Programme Implementation, Ministry of Tourism, Press Information Bureau, Indian Ports Association, SIAM and CMIE.

Employment scenario weakened during 2011-2013

I.19 There has been a continuous decline in employment generation in the eight key sectors over the years. As per the Labour Bureau Survey, there was a significant decline in employment growth during 2012-13 compared with the previous year (Table I.5).

Chart I.9: Services Sector Composite Indicator

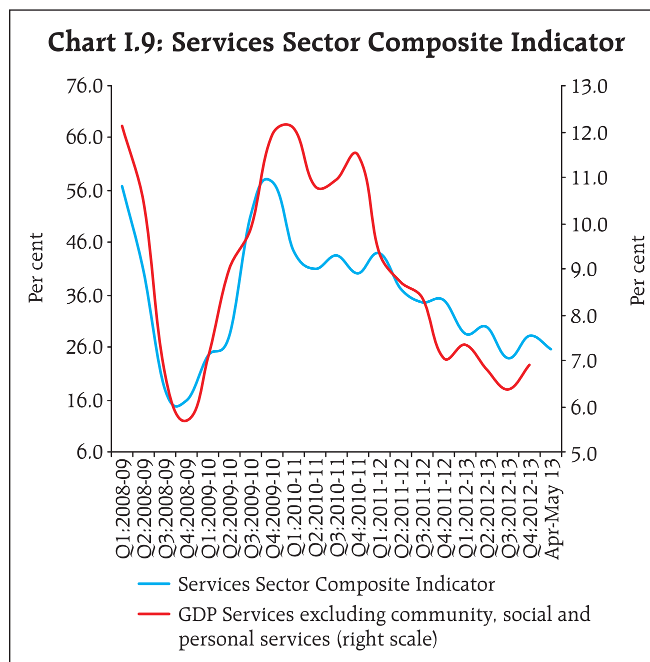


Table I.5: Changes in Employment

(million)

Industry/Group	2009-10	2010-11	2011-12	2012-13
1	2	3	4	5
Textiles, including Apparel	0.06	0.1	0.09	0.14
Leather	0.01	0.03	-0.02	0.01
Metals	0.09	0.09	0.08	0.04
Automobiles	0.08	0.11	0.03	0.02
Gems and Jewellery	0.07	0.00	0.03	0.02
Transport	-0.01	0.00	0.04	0.00
IT/BPO	0.69	0.67	0.58	0.12
Handloom/Power loom	0.07	-0.01	0.00	0.00
Overall	**1.07**	**0.98**	**0.83**	**0.35**

Source: Employment Surveys, Labour Bureau.

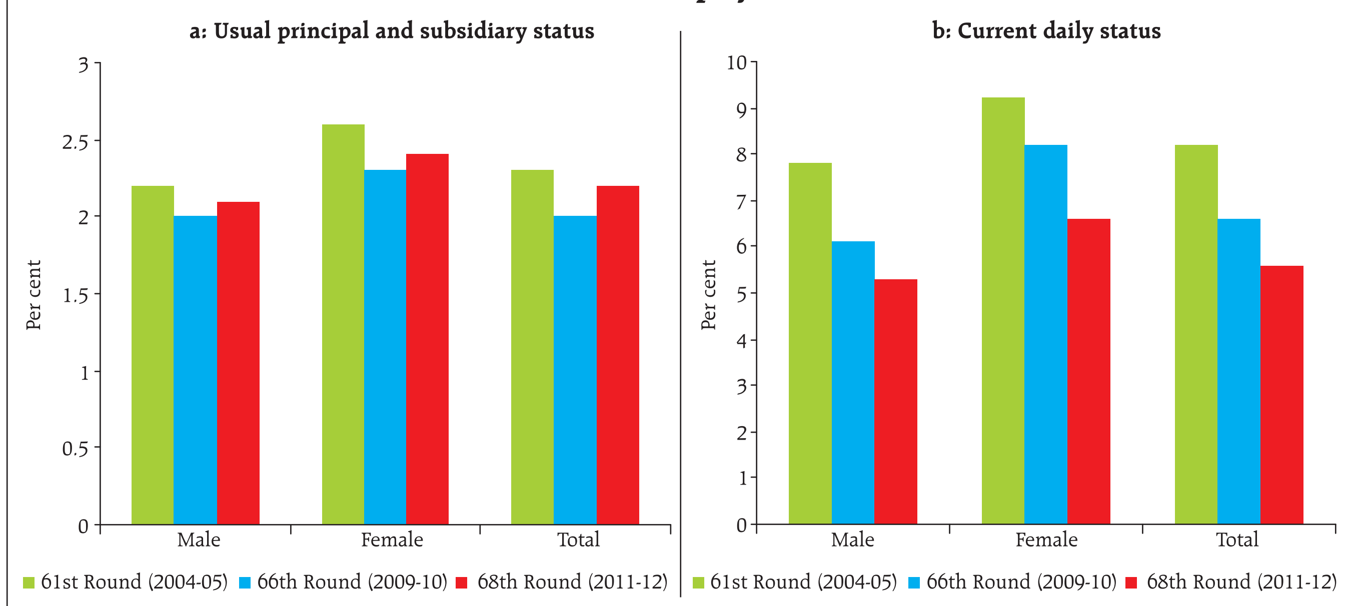
The IT/BPO sector, which has been taking the lead in employment generation, performed badly during 2012-13, reflecting the bearish business sentiments across the globe. However, as reported by the Labour Bureau, during January-March 2013, with the exception of transport, all sectors have shown a rise in employment compared with the same period last year.

I.20 As per the NSSO 68th Round (2011-12), the unemployment rate in terms of usual principal and subsidiary status (UPSS) increased in 2011-12 to 2.2 per cent (Chart I.10a). On a current daily status (CDS) basis, however, the unemployment rate continued its fall from 6.6 per cent in 2009-10 to 5.6 per cent in 2011-12, which reflects an increase in seasonal/contract employment (Chart I.10b). The Report shows that the CDS unemployment rate has decreased at a higher pace for females than males during 2011-12 over 2009-10.

Growth likely to improve at a slow pace

I.21 India's GDP growth is expected to improve in 2013-14, with recovery expected to take shape as the year progresses. The pace of recovery is, however, likely to be slow in view of the structural constraints. Recent policy measures by the government in various segments, especially in the infrastructure sector, are likely to help improve production activity. Timely, normal and well-spread rainfall will have a positive impact on agriculture production, which, in turn, may improve rural demand for industrial goods and services. The improvement in water storage levels in reservoirs due to heavy rainfall would enable the hydro power sector to enhance capacity utilisation. On the global front, the pick-up in growth in the US and Japan is likely to have a positive impact on global trade. The recent rupee depreciation, augurs well for India's exports. However, risks to growth in 2013-14 have increased significantly, with prospects that the global interest rate cycle could turnaround and diminish capital inflows to India.

Chart I.10: Unemployment Rate



II. Aggregate Demand*

Aggregate demand, as reflected on the expenditure side of GDP, remained sluggish during Q4 of 2012-13. Apart from investment, private consumption decelerated, adding to the drag on demand during 2012-13. Depressed private consumption, to a large part, has been the result of high consumer price inflation. Corporate investment intentions also remained languid, reflecting the overall negative business sentiment arising from slack cyclical conditions and structural factors. Corporate sales decelerated during Q4 of 2012-13, while earnings contracted. This, in turn, may have an adverse impact on new investment. In this situation, the key to turning around the economy will be re-balancing government spending from current to capital expenditures with a view to 'crowding-in' private investment.

Aggregate demand continued to remain weak

II.1 The expenditure-side GDP indicates that the aggregate demand of the Indian economy during Q4 of 2012-13 remained slack (Table II.1). Private final consumption expenditure, which is the principal component of GDP at market prices, continued to decelerate during the quarter on the back of weak agricultural production and persistent high consumer price inflation. Even so, it remains the largest contributor to growth in aggregate demand (Table II.2). The growth rate of government final consumption expenditure also moderated during Q4, reflecting fiscal consolidation efforts. Even though the growth rate of fixed investment during Q4 of 2012-13 was slightly higher than in the corresponding quarter of the previous year, aggregate fixed investment in the full year decelerated further.

Table II.1: Expenditure Side GDP (2004-05 prices)

(Per cent)

Item	2011-12@	2012-13#	2011-12				2012-13			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11
Growth Rates										
GDP at market prices	6.3	3.2	8.3	6.4	5.8	5.2	3.4	2.5	4.1	3.0
Total Consumption Expenditure	8.1	3.9	6.9	7.0	9.0	9.3	4.7	4.0	3.8	3.3
(i) Private	8.0	4.0	6.6	6.3	9.2	9.7	4.3	3.5	4.2	3.8
(ii) Government	8.6	3.9	8.4	10.7	8.1	7.6	7.2	6.9	2.2	0.6
Gross Fixed Capital Formation	4.4	1.7	13.9	3.8	-1.7	2.6	-2.2	1.1	4.5	3.4
Change in Stocks	-30.6	73.4	-27.5	-30.4	-32.0	-32.4	69.8	71.7	75.8	76.0
Valuables	6.6	-12.0	16.1	-13.3	8.4	16.0	-20.9	4.3	-6.9	-20.2
Net Exports	-42.5	-17.3	-14.8	-17.7	-82.1	-83.3	-6.7	-21.4	-23.7	-16.4
Relative shares										
Total Consumption Expenditure	70.5	71.0	71.2	71.8	73.7	65.7	72.1	72.8	73.5	65.9
(i) Private	59.2	59.6	60.6	61.2	61.4	54.3	61.1	61.8	61.4	54.7
(ii) Government	11.3	11.3	10.6	10.5	12.3	11.5	11.0	11.0	12.1	11.2
Gross Fixed Capital Formation	33.7	33.2	35.7	35.1	31.8	32.5	33.8	34.6	32.0	32.6
Change in Stocks	2.3	3.8	2.4	2.4	2.2	2.2	3.9	4.0	3.7	3.8
Valuables	2.4	2.0	2.8	2.1	2.2	2.3	2.1	2.2	2.0	1.8
Net Exports	-8.8	-10.0	-9.3	-9.3	-9.5	-7.4	-9.6	-11.0	-11.3	-8.4
Memo:										
GDP at market prices (₹ billion)	56314	58137	13252	13207	14473	15382	13702	13536	15062	15836

@: First Revised Estimates. #: Provisional Estimates.
Source: Central Statistics Office.

* Despite the well-known limitations, expenditure-side GDP data are being used as proxies for components of aggregate demand.

Initiatives have started addressing infrastructure bottlenecks, although progress is slow

II.2 Infrastructure bottlenecks have been a major factor in India's low growth. Project implementations are getting delayed due to delays in land acquisition, forest/environment clearances, insurgency problems in mining belts, geological surprises, contractual issues, etc. As on May 1, 2013, nearly half of 566 central sector projects (of ₹1.5 billion and above) got delayed due to these problems, for which cost overruns are estimated to be around 18.2 per cent.

II.3 To address these issues, the government has taken several initiatives. For speedy clearance of projects, in addition to the Cabinet Committee on Infrastructure (CCI), a Project Monitoring Group (PMG) has been set up by the Prime Minister's Office (PMO) with the objective of resolving hurdles facing mega projects (above ₹10 billion).

II.4 In the power sector, the government has initiated several measures, such as renovation and modernisation of old power plants, improvement of coal and gas supplies, and greater emphasis on power generation from renewable sources. The government has also set up a committee (under the chairmanship of Dr. Vijay Kelkar) to prepare a road map to enhance domestic production of oil & gas.

II.5 With regard to road projects, the response to the PPP mode of road building remained poor. Several projects have not elicited bids. The developers have been facing a severe shortage of equity and, consequently, are unable to raise the required debt. The government has decided to adopt the Engineering, Procurement and Construction (EPC) mode for national highways which are not viable on a PPP basis. However, the Cabinet Committee on Economic Affair's (CCEA) decisions in June 2013 to facilitate harmonious substitution of concessionaire in ongoing and completed National Highway projects and insulating the National Highway Authority of India (NHAI) from heavy financial claims and unnecessary disputes are likely to expedite the implementation of road projects.

II.6 With the cancellation of 2G licences in February 2012, the telecommunications sector has been struggling, with a noticeable decline in investor interest. However, investor interest is expected to improve once the recent decision by the Telecom Commission approving 100 per cent FDI in the sector gets ratified.

Table II.2: Contribution-Weighted Growth Rates of Expenditure-Side GDP (2004-05 Prices)*

(Per cent)

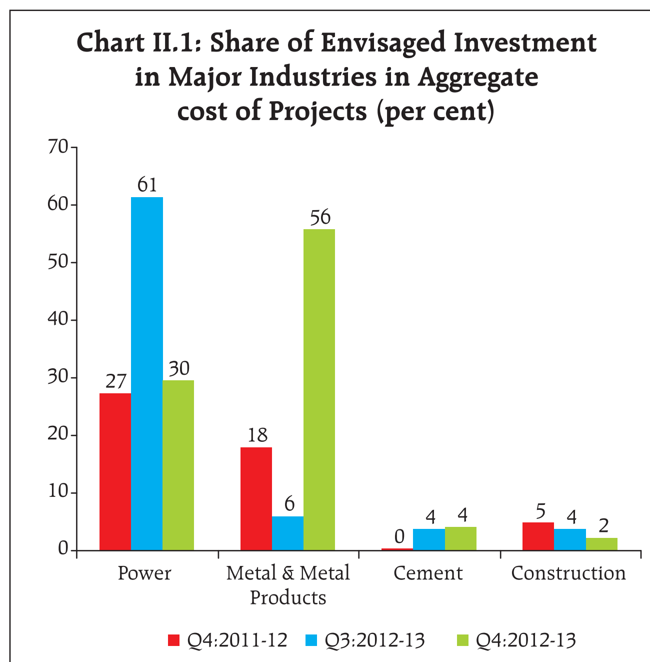
Item	2011-12				2012-13			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
1. Private Final Consumption Expenditure	4.1	3.9	5.4	5.0	2.6	2.2	2.6	2.1
2. Government Final Consumption Expenditure	0.9	1.1	1.0	0.9	0.8	0.7	0.3	0.1
3. Gross Fixed Capital Formation	4.7	1.4	-0.6	0.9	-0.8	0.4	1.4	1.1
4. Change in Stocks	-1.0	-1.1	-1.1	-1.1	1.7	1.7	1.7	1.7
5. Valuables	0.4	-0.3	0.2	0.3	-0.6	0.1	-0.2	-0.5
6. Net Exports	-1.3	-1.5	-4.6	-3.6	-0.6	-2.0	-2.3	-1.2
(i) Exports	4.3	4.3	2.4	3.1	3.0	1.2	-0.9	-0.2
(ii) Imports	5.6	5.8	6.9	6.6	3.6	3.2	1.4	1.1
7. Sum (1 to 6)	7.8	3.4	0.4	2.4	3.0	3.1	3.5	3.2
8. Discrepancies	0.5	3.0	5.4	2.7	0.4	-0.6	0.6	-0.3
9. GDP at Market Prices	8.3	6.4	5.8	5.2	3.4	2.5	4.1	3.0

*: Contribution-weighted growth rate of a component of expenditure-side GDP is obtained as follows: (Y-o-y change in the component ÷ Y-o-y change in GDP at constant market prices) × Y-o-y growth rate of GDP at constant market prices.

Source: Central Statistics Office.

Corporate investment intentions remain subdued

II.7 Corporate investment intentions remain subdued. Additionally, some of the institutionally assisted projects which received sanction in 2010-11 and 2011-12 have been cancelled. The aggregate project cost envisaged from new projects for which assistance was sanctioned by major banks/FIs, aggregated ₹2.0 trillion in 2012-13 and remained almost at the same level as that of the previous year (₹1.9 trillion) but significantly below that in 2010-11 (₹3.8 trillion) (Table II.3). An industry-wise analysis revealed that during Q4 of 2012-13, the share of envisaged expenditure on new projects is the highest in the metal & metal products sector (56.0 per cent), followed by the power industry (30.0 per cent) (Chart II.1).



Sales growth remained sluggish during Q4 of 2012-13

II.8 Sales growth for listed Non-Government Non-Financial (NGNF) companies decelerated further in Q4 of 2012-13 to 4.1 per cent (Table II.4). The decline in sales was more distinct in the case of motor vehicles, electricity generation and supply, iron & steel and real estate. In tandem with the slow growth in sales, net profits went down in Q4 of 2012-13 due to higher employee expenses and lower support from other income. Sequentially (q-o-q), however, net profit

Table II.3: Institutionally Assisted Projects and their Envisaged Cost (Quarter-wise)*

Financial Year		No. of Projects	Project Expenditure (₹ billion)
1		2	3
2010-11	Q1	178	1,139
	Q2	196	1,043
	Q3	157	752
	Q4	166	818
2011-12	Q1	147	749
	Q2	184	452
	Q3	137	462
	Q4	168	253
2012-13	Q1	110	413
	Q2	132	666
	Q3	89	256
	Q4	94	629

Note: Based on data reported by 39 banks/FIs.
*: Data are provisional. Past data has been revised due to subsequent reporting, including the cancellation of projects.

Table II.4: Performance of Non-Government Non-Financial Companies

(Per cent)

	Q4 of 2011-12	Q1 of 2012-13	Q2 of 2012-13	Q3 of 2012-13	Q4 of 2012-13
1	2	3	4	5	6
No. of Companies			**2,419**		
			Growth Rates (y-o-y)		
Sales	15.6	14.0	11.7	9.4	4.1
Value of Production	14.1	13.4	12.4	8.1	4.0
Expenditure, *of which*	16.7	16.4	12.6	8.2	4.7
Raw Materials	16.7	13.6	14.6	9.3	2.6
Staff Cost	14.3	17.7	15.3	13.1	13.5
Power & Fuel	30.6	26.2	20.9	11.0	3.5
Operating Profits (EBITDA)	-0.7	-3.4	11.3	7.9	-0.2
Other Income*	49.4	28.4	49.2	0.3	-1.4
Depreciation	10.7	10.4	10.1	10.3	8.4
Gross Profits (EBIT)	4.0	-2.5	18.9	5.6	-2.7
Interest	40.2	38.4	11.3	17.1	11.1
Tax Provision	1.2	-3.4	11.0	5.1	-2.7
Net Profits (without NOP)	-6.7	-18.5	26.2	-0.7	-9.2
Net Profits	-6.4	-9.7	23.1	24.3	-15.5
			Select Ratios		
Change in stock to Sales #	0.9	0.8	1.4	0.8	0.9
Interest Burden	26.6	32.5	27.2	33.1	30.5
EBITDA to Sales	13.3	12.9	13.2	12.6	12.7
EBIT to Sales	12.6	11.6	12.8	11.3	11.8
Net Profit to Sales	7.1	6.1	7.1	5.8	5.7

#: For companies reporting this item explicitly.
*: Other income excludes extraordinary income/expenditure if reported explicitly.

Table II.5: Performance of Non-Government Non-Financial Companies (Sequential Growth)

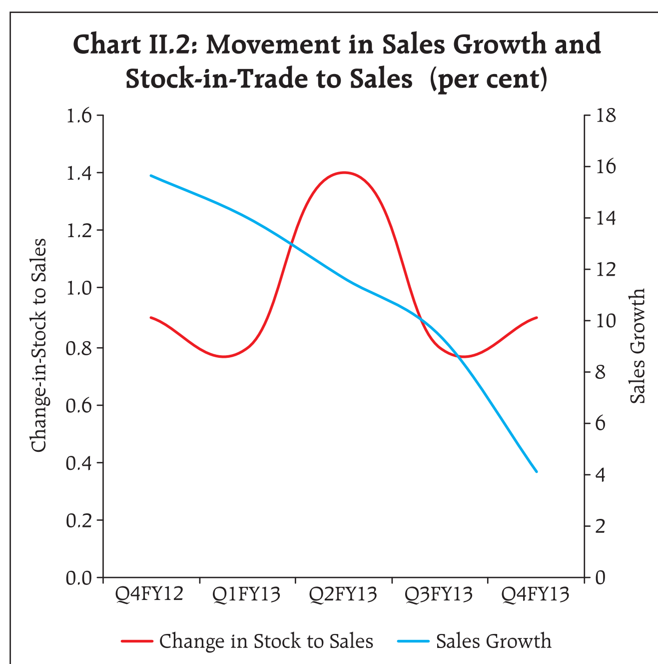
(Q-o-Q, per cent)

Indicator	Number of Companies: 2,419				
	2011-12	2012-13			
	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6
Sales	9.5	-4.5	0.7	3.8	4.4
Value of Production	8.4	-4.6	1.2	3.2	4.4
Expenditure, *of which*	7.7	-4.2	0.9	3.9	4.4
Raw Materials	10.0	-6.1	1.9	3.8	3.0
Staff Cost	2.1	6.0	3.4	1.3	2.4
Power & fuel	3.4	9.7	-3.2	0.1	-2.4
Operating Profits (EBITDA)	13.7	-7.3	3.4	-0.9	4.9
Other Income**	30.3	-22.6	41.1	-27.9	23.2
Depreciation	6.2	-1.7	1.8	3.7	3.1
Gross Profits (EBIT)	19.2	-12.1	11.0	-8.7	9.0
Interest*	7.6	7.3	-7.1	10.9	0.7
Tax Provision	15.3	-0.9	3.4	-11.0	6.5
Net Profits	52.0	-17.8	17.0	-15.0	3.1

*: Some companies report interest on net basis.
**: Other income excludes extraordinary income/expenditure, if reported explicitly.

recorded an improvement in Q4 (Table II.5). Further, profitability in terms of EBITDA and EBIT margins improved marginally in Q4 in comparison with the previous quarter. The net profit margin, however, recorded a marginal decline. Inventory accumulation (as reflected in change in stock-in-trade to sales ratio), which went up in Q2 of 2012-13, has reverted to earlier levels (Chart II.2). Early results for Q1 of 2013-14 suggest that sales growth has decelerated further.

Chart II.2: Movement in Sales Growth and Stock-in-Trade to Sales (per cent)



Corporate leverage has increased gradually

II.9 The leverage of the corporate sector at the aggregate level, as measured by the total borrowing to equity ratio, increased in 2011-12, reversing a gradual and declining trend in the previous two years (Table II.6). Based on the available annual results of 621 non-government non-financial public limited companies, leverage is observed to have increased further in 2012-13.

Fiscal consolidation resumed during 2012-13 mainly through expenditure cutbacks

II.10 The central government restricted its gross fiscal deficit (GFD) to 4.9 per cent of GDP during 2012-13, less

Table II.6: Total borrowing to Equity: 2009-10 to 2011-12

	2009-10	2010-11	2011-12
1	2	3	4
Manufacturing	72.0	68.1	71.7
Of which			
Food products and beverages	112.8	116.4	114.7
Textiles	187.2	191.9	208.2
Coke and refined petroleum	46.2	44.8	46.4
Chemicals and chemical products	61.7	60.4	69.4
Cement and cement products	73.4	45.0	52.5
Iron and steel	112.6	106.7	115.3
Electrical equipment	50.5	48.4	38.9
Machinery	36.5	39.8	53.1
Motor vehicles and accessories	66.5	53.3	52.4
Electricity, gas, steam and air conditioning supply	61.6	70.6	114.6
Construction	89.0	95.5	80.8
Services	62.3	65.7	68.6
Of which			
Transportation and storage	121.3	241.5	338.9
Telecommunications	61.8	87.7	78.9
Computers and related activities	20.8	18.6	19.8
Real estate	70.1	76.1	62.0
All companies	**69.7**	**69.0**	**72.3**
Size by sales			
Large	66.6	65.2	71.5
Medium	79.9	82.4	85.2

Note: Large companies – annual sales above ₹10 billion; Medium companies – annual sales between ₹1 billion and ₹10 billion.

Table II.7: Key Fiscal Indicators

(Per cent to GDP)

Year	Primary Deficit	Revenue Deficit	Gross Fiscal Deficit	Outstanding Liabilities @
1	2	3	4	5
		Centre		
2011-12	2.7	4.4	5.7	51.9
2012-13 PA	1.8 (1.9)	3.6 (3.4)	4.9 (5.1)	51.9#
2013-14 BE	1.5	3.3	4.8	51.1
		States*		
2011-12	0.4	-0.1	1.9	22.3
2012-13 RE	0.8	-0.2	2.3	22.0
2013-14 BE	0.6	-0.4	2.1	21.6
		Combined*		
2011-12	3.3	4.3	7.7	65.5
2012-13 RE	2.9	3.7	7.5	65.8
2013-14 BE	2.2	2.9	6.9	66.1

@: Includes external debt at current exchange rates.

#: Pertains to revised estimates.

*: Data in respect of states pertains to 26 state governments, of which one is Vote on Account.

PA: Provisional Accounts. BE: Budget Estimates.

RE: Revised Estimates.

Note: 1. Figures in parentheses are budget estimates.
2. Combined liabilities of 2013-14 are adjusted for states' investment in Treasury Bills as on July 19, 2013.

Source: Budget documents of central and state governments.

than the budget estimate of 5.1 per cent (Table II.7). The containment in GFD, despite lower tax and non-tax revenues, was achieved mainly through a cutback in plan expenditure. Non-plan expenditure, on the other hand, was higher due to a sharp increase in expenditure on the revenue account. Subsidies on food, fertilisers and petroleum accounted for 2.5 per cent of GDP as against the 1.8 per cent that had been budgeted for the year. Overall, the revenue expenditure as a proportion of GDP was lower than the budget estimate by 0.3 percentage points, although it could not offset the shortfall in revenue receipts, which resulted in a higher revenue deficit.

Tax collection remains weak during 2013-14 so far

II.11 During April-May 2013, key deficits of the Centre as percentages to budget estimates were higher than in the corresponding period of last year. The widening of the revenue deficit and higher capital expenditure resulted in a higher gross fiscal deficit during April-May 2013 than a year ago.

II.12 The revenue deficit as a percentage to budget estimate during April-May 2013 was higher due to both higher revenue expenditure and lower tax revenues. Gross tax revenue in absolute terms declined mainly due to a decline in revenues from corporation tax and union excise duties. The collection of income tax and service tax as percentages to budget estimates were also lower than a year ago.

II.13 Total expenditure, as a percentage of the budget estimate in the first two months (April-May) of 2013-14, was higher than a year ago, mainly due to higher plan and capital expenditure, which registered growth rates of 52.6 per cent and 48.9 per cent, respectively, over April-May 2012. On the other hand, despite higher payments of subsidies, non-plan expenditure in the revenue account, was lower than in the corresponding period of the previous year.

II.14 If the government's revenues fall short of the target due to slowdown in growth, a cutback in expenditure will be required to achieve the budgeted fiscal deficit. It is, therefore, important to contain subsidies and re-prioritise expenditure towards plan and capital expenditures, thereby enhancing the growth prospects of the economy.

State finances expected to remain on the consolidation track

II.15 Despite an increase in the consolidated GFD-GDP ratio in 2012-13 (RE), over the previous year, the GFD-GDP ratio was within the target set by the Thirteenth Finance Commission. The revenue account at the consolidated level recorded a surplus in 2012-13 (RE), *albeit* lower than budgeted.

II.16 The consolidated position of the state governments for 2013-14[1] is budgeted to show an

[1] Based on budget documents of 26 state government for 2013-14 of which one is Vote on Account.

increase in the revenue surplus-GDP ratio and a marginal improvement in the GFD-GDP ratio. The surplus in revenue account would be achieved by a reduction in the revenue expenditure-GDP ratio, while the revenue receipts-GDP ratio is budgeted to remain unchanged from the previous year's level. The expenditure pattern of the states shows that while the development expenditure-GDP ratio is budgeted to decline, the non-development expenditure-GDP ratio is budgeted to increase marginally during 2013-14. However, the capital outlay-GDP ratio is budgeted to be higher in 2013-14 than in 2012-13 (RE).

Combined government finances budgeted to improve in 2013-14

II.17 Data on combined finances show that the revenue deficit and fiscal deficit as ratios to GDP in 2012-13 (RE) were lower by 0.6 percentage points and 0.2 percentage points, respectively, over the previous year. The decline in the combined GFD-GDP ratio was entirely on account of the lower fiscal deficit of the Centre (Table II.7). In 2013-14, the combined fiscal position is budgeted to improve further on account of fiscal plans of both the Centre and the states (Table II.8).

Table II.8: Combined Finances of Central and State Governments*

Item	Per cent to GDP		
	2011-12	2012-13 RE	2013-14 BE
1	2	3	4
1. Total Expenditure	26.4	27.9	27.9
2. Revenue Expenditure	22.5	23.8	23.4
3. Capital Expenditure	3.9	4.2	4.5
Of which: Capital Outlay	3.4	3.7	4.2
4. Non-development Expenditure	10.8	11.0	11.3
5. Development Expenditure	15.3	16.6	16.1
6. Revenue Receipts	18.3	20.0	20.4
i) Tax Revenue (net)	16.0	16.9	17.5
ii) Non-tax Revenue	2.2	3.1	3.0

*: Data in respect of states pertains to 26 state governments.
RE: Revised Estimates. BE: Budget Estimates.
Source: Budget documents of central and state governments.

Need to keep the momentum of the fiscal consolidation and increase government investment in productive sectors

II.18 The government's fiscal consolidation process has contributed to improving the state of public finances in India at a critical juncture. The low collection of both tax and non-tax revenue during 2012-13 complicated the task of reducing fiscal imbalances. Thus, the containment of GFD in 2012-13 was brought about by expenditure compression on plan revenue account and also plan and non-plan capital account. The cuts in union government's capital expenditure were undertaken at a time when private investment had already decelerated. This raised concerns about the quality of fiscal consolidation. It is, therefore, important for the Centre to take steps to contain its non-plan revenue expenditure within the limit set in the Union Budget 2013-14 through subsidy reforms. Staying on the path of fiscal consolidation in the current year, however, remains challenging. Moderation in aggregate demand poses risks to budgetary projections for revenue. The recent exchange rate depreciation has compounded the problems in restraining subsidies. At the present juncture, it is important that the government restrains its subsidy commitments, strikes a judicious balance under its various budgetary heads by increasing investment in the productive sectors so as to crowd-in private investments. Tax reforms also need to be expedited to improve the tax/GDP ratio.

III. The External Sector

India's external sector imbalances have persisted and brought the rupee under pressure. Despite the moderation in the current account deficit (CAD) in Q4 of 2012-13, it remained above the sustainable level. The trade gap widened during Q1 of 2013-14 compared with Q1 of 2012-13. Exports contracted in Q1, while gold imports increased significantly. With uptrend in US yields, portfolio outflows since mid-May 2013 have caused the rupee to depreciate sharply against the US dollar. This was, however, broadly in line with other EMDE currencies, which also weakened as financial markets across the globe re-priced risks. Going forward, the CAD is expected to moderate in 2013-14. However, volatile markets and the potential tapering of quantitative easing in the US pose a risk to CAD financing. External sector policies would need to be carefully calibrated over the short to medium term with a view to containing the CAD within manageable levels and financing it through more stable flows.

Global trade remains subdued

III.1 With global growth remaining weak, world trade has remained subdued. The exports of many EMDEs, *viz.*, Brazil, Russia, Malaysia and Indonesia, have contracted in recent months (Table III.1). The subdued trend in Chinese export growth in May and June 2013, coupled with signs of its economic activity slowing, has further dimmed the prospects of global trade expansion.

III.2 India followed the trend of major EMDEs with a decline in its exports during Q1 of 2013. Improving export growth during 2013-14 will remain a challenge given the subdued prospects of global trade expansion. The IMF, in its July 2013 update of the WEO, has lowered the growth projection of world trade volume for 2013 by 0.5 percentage points to 3.1 per cent.

Trade deficit continues to be a concern in Q1 of 2013-14

III.3 Trends in exports and imports in Q1 of 2013-14 suggest a widening of the merchandise trade deficit. The trade deficit widened from US$ 42.2 billion in Q1 of 2012-13 to US$ 50.2 billion in Q1 of 2013-14, mainly on account of a sharp increase in gold imports. Reflecting global demand conditions, exports contracted in May and June 2013 after recording growth for five consecutive months (since December 2012). The engineering goods, gems & jewellery, electronics and iron ore sectors were the main contributors to the decline in exports in Q1 of 2013-14 (Chart III.1).

III.4 In contrast, imports grew by 6.0 per cent in Q1 of 2013-14 as against a decline of 5.7 per cent in Q1 of 2012-13. Gold imports have almost doubled from US$9.2 billion in Q1 of 2012-13 to US$ 17.9 billion in Q1 of 2013-14. Notwithstanding a fall of 5.7 per cent in international crude oil prices (Indian basket) in Q1 of 2013-14 (y-o-y), POL imports grew by 6.4 per cent. Non-oil non-gold imports continued to show contraction, reflecting subdued domestic growth conditions. Apart from gold and POL, the rise in imports of pearls, precious & semi-precious stones, non-ferrous metals and electronic goods also contributed to higher imports in Q1 of 2013-14 (Table III.2).

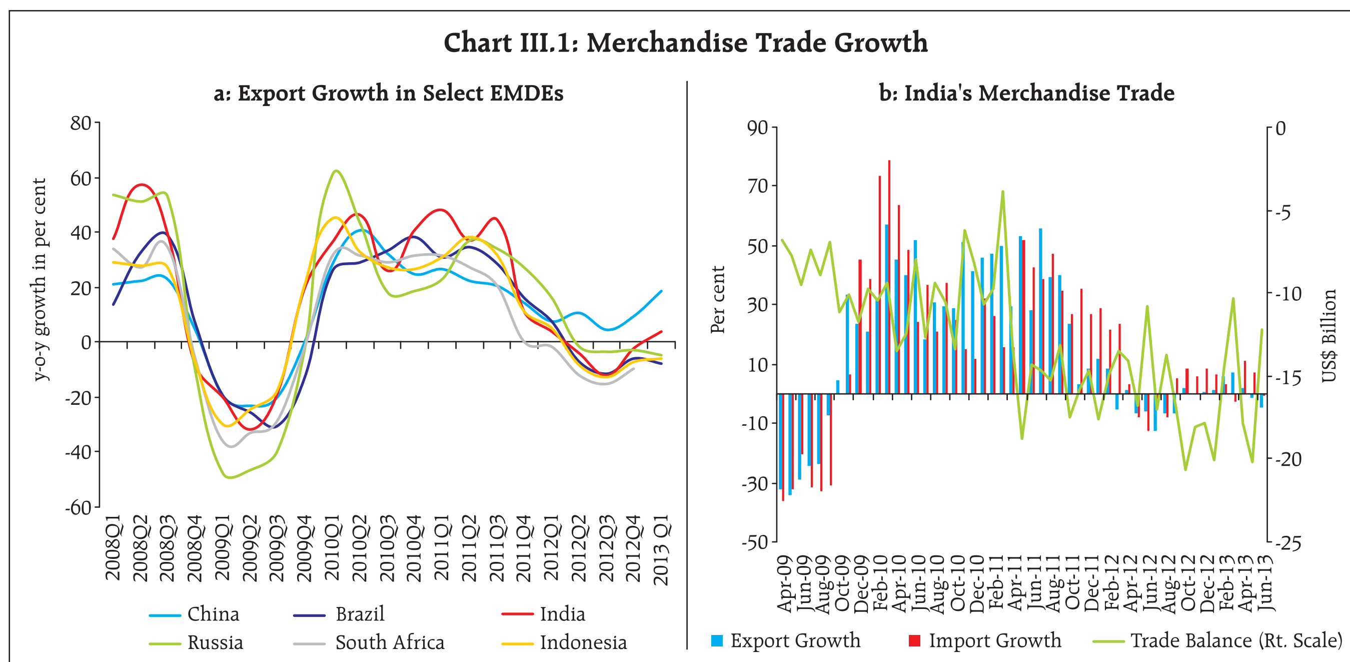
Table III.1: Country-wise Merchandise Export Growth

(Per cent)

	2012				2013		
	Q1	Q2	Q3	Q4	Q1	Apr	May
1	2	3	4	5	6	7	8
Brazil	7.5	-7.4	-11.6	-6.1	-7.7	5.4	-6.0
Hong Kong	-1.1	2.1	4.3	7.4	4.0	9.0	..
China	7.6	10.5	4.5	9.4	18.4	14.7	1.0
Euro area	-3.0	-12.5	-12.1	-3.4	-3.2	2.5	..
India	4.0	-4.0	-8.5	0.7	4.7	1.7	-1.1
Indonesia	5.3	-8.1	-12.9	-7.2	-6.1	-5.2	..
Malaysia	3.5	-0.4	-4.7	0.7	-3.2	-3.3	-5.8
Russia	16.3	-1.5	-3.6	-3.2	-4.9	-2.3	..
Singapore	6.0	-0.6	-5.9	-0.1	-6.8	2.7	1.6
Thailand	-2.9	0.7	-6.4	16.1	4.4	4.2	..
UK	2.5	-3.6	0.3	-2.9	-3.9	1.2	..
US	8.7	5.7	1.1	2.7	0.5	1.8	..

Source: International Financial Statistics, IMF and respective statistical agencies.

Chart III.1: Merchandise Trade Growth



CAD narrowed significantly in Q4 of 2012-13

III.5 The current account deficit (CAD) moderated sharply to 3.6 per cent of GDP in Q4 of 2012-13 from 6.5 per cent in Q3 (4.4 per cent of GDP in Q4 of 2011-12). This was owing to the narrowing of the merchandise trade deficit underpinned by a pick-up in exports and a decline in imports (BoP basis) in Q4. However, net service exports remained subdued in Q4. The moderation in net secondary income compared with Q4 of 2011-12 mainly reflected a fall in net private remittances from abroad. Further, there was a

Table III.2: India's Merchandise Trade

(US$ billion)

Item	April–March				April-June			
	2011-12		2012-13 P		2012-13		2013-14	
	Value	Growth	Value	Growth	Value	Growth	Value	Growth
1	2	3	4	5	6	7	8	9
Exports	306.0	21.8	300.6	-1.8	73.5	-4.0	72.5	-1.4
Of which: Oil	56.0	35.1	60.0	7.1	13.0	-15.2	13.2	1.6
Non-oil	249.9	19.2	240.6	-3.7	60.4	-1.2	59.2	-2.0
Gold	6.7	10.9	6.5	-3.3	1.6	-3.1	1.4	-13.6
Non-oil Non-gold	243.2	19.5	234.1	-3.8	58.8	-1.1	57.8	-1.7
Imports	489.3	32.3	491.5	0.4	115.7	-5.7	122.6	6.0
Of which: Oil	155.0	46.2	169.4	9.3	39.4	-0.2	41.9	6.4
Non-oil	334.4	26.7	322.1	-3.7	76.4	-8.3	80.8	5.8
Gold	56.5	39.3	53.8	-4.7	9.2	-42.6	17.9	93.5
Non-oil Non-gold	277.9	24.5	268.3	-3.4	67.1	-0.1	62.9	-6.3
Trade Deficit	-183.4		-190.9		-42.2		-50.2	
Of which: Oil	-98.9		-109.4		-26.3		-28.6	
Non-oil	-84.4		-81.5		-15.9		-21.5	
Non-oil Non-gold	-34.7		-34.2		-8.3		-5.1	

Source: DGCI&S.

significant outflow on account of income payments, reflecting growing liability-servicing obligations (Table III.3).

III.6 Despite the moderation in the CAD in Q4, the overall CAD during 2012-13 at 4.8 per cent of GDP was far above the sustainable level (Table III.3). Trends in trade data suggest that the CAD may remain high in Q1 of 2013-14. However, in subsequent quarters, the CAD is expected to improve, since the import demand for gold may moderate. The global price of gold has declined sharply, partly due to US dollar appreciation and signs of recovery in the US economy. With the end of the gold super-cycle, the speculative demand for gold is likely to decline. Besides, various measures have been undertaken domestically to curb import demand for gold, that *inter alia* include (i) a hike in customs duty to 8 per cent and (ii) measures towards rationalisation of gold imports by both nominated agencies and banks.

III.7 In particular, on July 22, 2013, all nominated banks / agencies were instructed to ensure that at least one fifth of every lot of import of gold (in any form/ purity) is retained in customs bonded warehouses for the purpose of export and fresh imports of gold is permitted only after at least 75 per cent of the remaining in the customs bonded warehouse are gold exported. This new measure replaced the earlier restrictions on import of gold on consignment basis and opening letters of credit subject to 100 per cent cash margin. To some extent, the recently launched inflation-linked bonds may also wean away investors who use gold as a hedge against inflation. If the current recovery in the US and Japan continues, it may help improve India's exports to these destinations. The combined influence of these factors may augur well for India's CAD during 2013-14.

Capital flows became volatile

III.8 Although net capital flows moderated in Q4 of 2012-13, they were adequate to finance the CAD, and

Table III.3: Major Items of India's Balance of Payments

(US $ billion)

	2011-12 (PR)	2012-13 (P)	2012-13			
			Q1 (PR)	Q2 (PR)	Q3 (PR)	Q4 (P)
1	2	3	4	5	6	7
1. Goods Exports	309.8	306.6	75.0	72.6	74.2	84.8
2. Goods Imports	499.5	502.2	118.9	120.4	132.6	130.4
3. Trade Balance (1-2)	-189.7	-195.7	-43.8	-47.8	-58.4	-45.6
4. Services Exports	140.9	145.7	35.8	35.0	37.1	37.8
5. Services Imports	76.9	80.8	20.8	18.7	20.4	20.9
6. Net Services (4-5)	64.0	64.9	15.0	16.3	16.6	17.0
7. Goods & Services Balances (3+6)	-125.7	-130.7	-28.8	-31.5	-41.7	-28.7
8. Primary Income (Net)	-16.0	-21.5	-4.9	-5.6	-5.8	-5.2
9. Secondary Income (Net)	63.5	64.4	16.8	16.1	15.7	15.8
10. Net Income (8+9)	47.5	42.9	11.9	10.5	9.9	10.6
11. Current Account Balance (7+10)	-78.2	-87.8	-16.9	-21.0	-31.9	-18.1
12. Capital Account Balance	-0.1	-0.3	-0.2	-0.2	0.02	0.2
13. Financial Account Balance	80.7	85.4	16.1	21.0	30.8	17.6
of which: Change in Reserves	12.8	-3.8	-0.5	0.2	-0.8	-2.7
14. Errors & Omissions -(11+12+13)	-2.4	2.7	1.1	0.2	1.1	0.3
Memo: As a ratio to GDP						
15. Trade Balance	-10.1	-10.6	-10.2	-11.4	-12.0	-9.0
16. Net Services	3.3	3.5	3.5	3.9	3.4	3.3
17. Net Income	2.5	2.3	2.8	2.5	2.0	2.1
18. Current Account Balance	-4.2	-4.8	-4.0	-5.0	-6.5	-3.6
19. Capital and Financial Account, Net (Excl. changes in reserves)	3.6	4.8	3.8	4.9	6.5	4.0

Note: Total of sub-components may not tally with aggregate due to rounding off.
P: Preliminary; PR: Partially Revised.

Table III.4: Disaggregated Items of Financial Account

(US$ billion)

	2011-12 (P)	2012-13 (P)	2012-13			
			Q1 (PR)	Q2 (PR)	Q3 (PR)	Q4 (P)
1	2	2	3	4	5	6
1. Direct Investment (net)	**22.1**	**19.8**	**3.8**	**8.2**	**2.1**	**5.7**
1.a Direct Investment to India	33.0	26.9	5.9	9.5	4.3	7.2
1.b Direct Investment by India	-10.9	-7.1	-2.1	-1.4	-2.2	-1.4
2. Portfolio Investment	**16.6**	**26.7**	**-2.0**	**7.6**	**9.7**	**11.3**
2.a Portfolio Investment in India	16.8	27.6	-1.7	7.9	9.8	11.5
2.b Portfolio Investment by India	-0.2	-0.9	-0.3	-0.3	-0.1	-0.2
3. Financial Derivatives & Employee Stock Options	**-**	**-2.3**	**-0.6**	**-0.5**	**-0.4**	**-0.9**
4. Other Investment	**29.2**	**45.2**	**15.4**	**5.6**	**20.0**	**4.2**
4.a Other equity (ADRs/GDRs)	0.6	0.2	0.1	0.1	0.0	0.0
4.b Currency and deposits	12.1	15.3	6.4	3.5	2.6	2.8
Deposit-taking corporations, except the central bank: (NRI Deposits)	11.9	14.8	6.6	2.8	2.7	2.8
4.c Loans*	16.8	10.7	3.5	3.0	5.7	-1.6
4.c.i Loans to India	15.7	11.1	3.5	3.3	5.9	-1.6
Deposit-taking corporations, except the central bank	4.1	1.3	3.0	2.0	2.7	-6.3
General government (External Assistance)	2.5	1.3	0.1	0.1	0.4	0.6
Other sectors (ECBs)	9.1	8.6	0.4	1.2	2.9	4.1
4.c.ii Loans by India	1.0	-0.4	0.1	-0.3	-0.2	0.0
General government (External Assistance)	-0.2	-0.3	-0.1	-0.1	-0.1	-0.1
Other sectors (ECBs)	1.2	-0.1	0.1	-0.3	-0.1	0.1
4.d Trade credit and advances	6.7	21.7	5.4	4.1	7.7	4.5
4.e Other accounts receivable/payable	-6.9	-2.7	-0.1	-5.1	4.0	-1.5
5. Reserve assets	**12.8**	**-3.8**	**-0.5**	**0.2**	**-0.8**	**-2.7**
Financial Account (1+2+3+4)	**80.7**	**85.4**	**16.1**	**21.0**	**30.8**	**17.6**

Note: Total of sub-components may not tally with aggregate due to rounding off.
P: Preliminary; PR: Partially Revised.
*: Includes External Assistance, ECBs, non-NRI Banking Capital and short term trade credit.

indeed there was net accretion of US$ 2.7 billion in India's foreign exchange reserves during this period. The lower net capital flows in Q4 of 2012-13 were mainly due to higher repayments of short-term trade credit and overseas borrowings by banks compared with Q3. Net FDI flows were, however, significantly higher in Q4 of 2012-13 than in the preceding quarter (Table III.4).

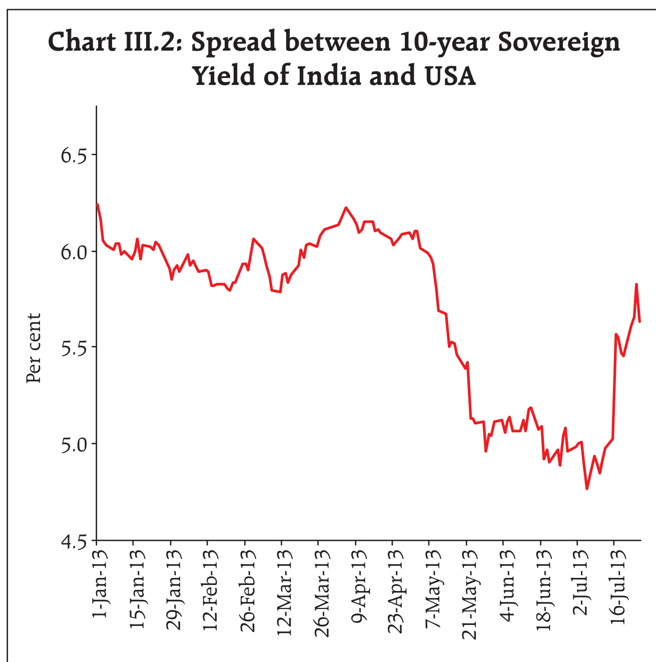
III.9 Trends to date in 2013-14 suggest an uptrend in capital flows in the form of FDI and NRI deposits, while ECBs showed a decline as compared with previous quarter (Table III.5). Net FII flows were substantial until the third week of May 2013, followed by a significant outflow in the subsequent period. Since the last week of May 2013, there was a net outflow of US$ 12.1 billion on account of FIIs (till July 18). The reversal of FII flows from the domestic market was mainly evident in the debt segment. The outflows of FIIs from the domestic debt market was led by the global bond sell-offs on Fed signals that raised the prospects of global interest rates

Table III.5: Trend in Capital Flows

(US$ billion)

	2012-13 (Monthly Average)				2013-14 Apr-May
	Q1	Q2	Q3	Q4	
1	2	3	4	5	6
FDI in India	2.0	3.2	1.4	2.4	2.7
FDI by India	0.7	0.5	0.7	0.5	0.3
FIIs	-0.6	2.6	3.3	3.8	-0.2#
ADRs/GDRs	0.03	0.03	0.0	0.0	0.0
ECBs	0.1	0.4	1.0	1.4	0.8
NRI Deposits	2.2	0.9	0.9	0.9	1.5

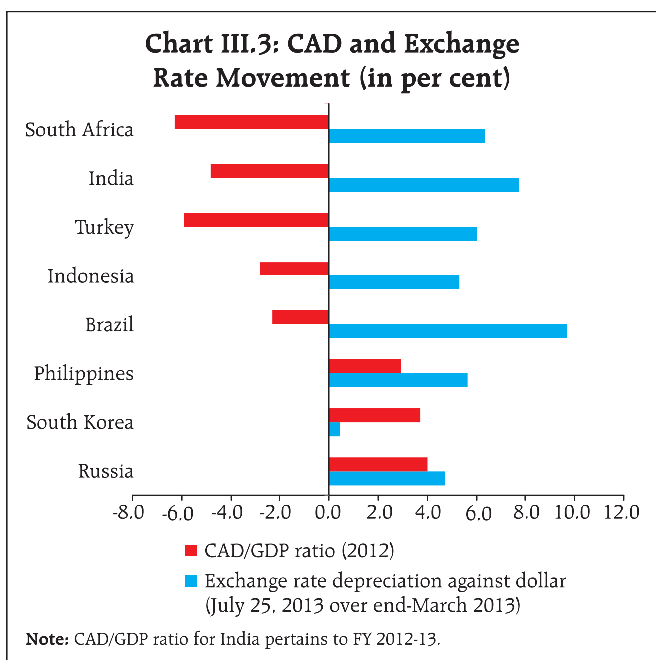
#: Apr-Jun 2013



hardening, shifts in yield spreads and the elevated cost of hedging a volatile rupee (Chart III.2).

Rupee depreciated significantly in Q1 of 2013-14

III.10 In line with most EMDEs, the Indian rupee depreciated by around 9 per cent during Q1 of 2013-14 (Chart III.3). The Rupee appreciated in April 2013, but



the trend reversed from the start of May, with dollar gaining strength on better growth prospects. Wider trade deficit and rising gold imports also put pressure on the rupee. Since the Fed Chairman's May 22, 2013, testimony the rupee depreciated significantly (by 7.5 per cent) till July 15 as global investors began unwinding their risky positions in emerging markets, anticipating that the US Fed could begin tapering its asset purchases. The dollar strengthening against major currencies, coupled with widening trade deficit drove the rupee to a new low of ₹61.05 against the dollar on July 8, 2013.

III.11 The Reserve Bank's measures on July 15, 2013 to address exchange rate volatility helped stabilise the rupee subsequently. The government's announcement on July 16, 2013 proposing to liberalise FDI in single brand retail, petroleum and natural gas, defence production and some other sectors also improved sentiments and work towards bring some stability to the rupee.

III.12 In terms of the real exchange rate, as at the end of Q1 of 2013-14, the 6-currency and 36-currency REER showed depreciation of 9.0 per cent and 7.9 per cent, respectively, over March 2013, reflecting weakening of the rupee in nominal terms (Table III.6).

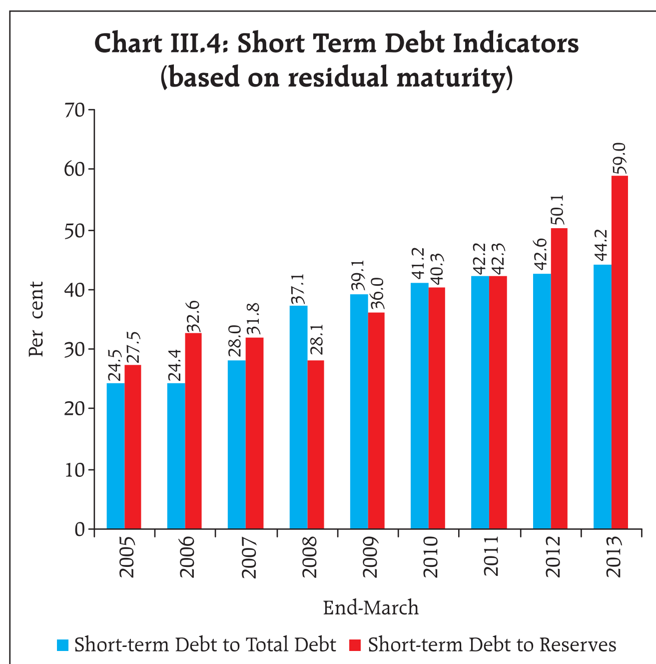
External debt rose further in Q4 of 2012-13

III.13 The widening CAD, financed through higher debt flows, resulted in a significant rise in India's external

Table III.6: Nominal and Real Effective Exchange Rates: Trade-Based (Base: 2004-05=100)

	Index July 19, 2013 (P)	y-o-y Variation (Average) 2012-13	FY Variation (July 19, 2013) over March 2013
1	2	3	4
36- REER	87.72	-6.7	-7.7
36-NEER	72.39	-10.4	-8.0
6-REER	96.85	-5.8	-9.3
6-NEER	69.14	-10.3	-9.5
₹/US$ (over end-March)	59.80	-11.9	-9.0

NEER: Nominal Effective Exchange Rate.
REER: Real Effective Exchange Rate. P: Provisional.
Note: Rise in indices indicates appreciation of the rupee and vice versa.



debt during 2012-13 (Chart III.4). India's external debt stood at US$ 390 billion at end-March 2013. There has been a sizeable rise in external commercial borrowings (ECBs) and rupee-denominated non-resident Indian deposits. Short-term debts, on residual maturity basis have surged by about US$ 25 billion in 2012-13 (Table III.7). In view of the rise in external debt and shortening maturities, there is a need to keep a close vigil on external debt levels and its components, especially private corporate debt. In this milieu, the Reserve Bank has proposed to levy capital and provisioning requirements for corporates that have unhedged foreign currency exposure and issued draft guidelines for the same.

Table III.7: India's External Debt

(US$ billion)

Item	End-Mar 2011 (PR)	End-Mar 2012 (PR)	End-Dec 2012 (PR)	End-Mar 2013 (P)	Variation (end-Mar 2013 over end-Dec 2012) Per cent
1	2	3	4	5	6
1. Multilateral	48.5	50.5	51.6	51.6	0.0
2. Bilateral	25.7	26.9	26.4	25.1	-4.9
3. IMF	6.3	6.2	6.1	5.96	-2.5
4. Trade Credit (above 1 year)	18.6	19.1	18.6	17.7	-4.7
5. ECBs	88.5	104.8	112.7	120.9	7.2
6. NRI Deposits	51.7	58.6	67.6	70.8	4.8
7. Rupee Debt	1.6	1.4	1.3	1.3	0.3
8. Long-term (1 to 7)	240.9	267.3	284.3	293.3	3.2
9. Short-term (Original Maturity)	65.0	78.2	93.3	96.7	3.6
10. Short-term (Residual Maturity) #	129.1	147.4	166.1	172.3	3.7
Total (8+9)	**305.9**	**345.5**	**377.6**	**390.0**	**3.3**

PR: Partially Revised, P: Provisional, #: RBI Estimate.
Note: Growth rates are based on data up to 3 decimal points.

Vulnerability indicators show further worsening

III.14 With rising debt and deceleration in GDP growth, external sector vulnerability increased in 2012-13 compared with the previous year. India's external debt to GDP ratio increased to 21.2 per cent at end-March 2013 from 19.7 per cent at end-March 2012. Moreover, the ratio of short-term debt (both original and residual maturity) to total external debt increased further at end-March 2013. The ratio of reserves to total debt deteriorated through 2012-13 and stood at 74.9 per cent by the end of March 2013. Reflecting widening CAD, the net international investment position (IIP) as a ratio to GDP worsened from (–)14 per cent at end-March 2012 to (–)16.7 per cent at end-March 2013 (Table III.8).

Table III.8: External Sector Vulnerability Indicators

(per cent)

Indicator	End-Mar 2011	End-Mar 2012	End-Mar 2013
1	2	3	4
1. Ratio of Total Debt to GDP	17.5	19.7	21.2
2. Ratio of Short-term to Total Debt (Original Maturity)	21.2	22.6	24.8
3. Ratio of Short-term to Total Debt (Residual Maturity)#	42.2	42.6	44.2
4. Ratio of Concessional Debt to Total Debt	15.5	13.9	11.7
5. Ratio of Reserves to Total Debt	99.7	85.2	74.9
6. Ratio of Short-term Debt to Reserves	21.3	26.6	33.1
7. Ratio of Short-term Debt (Residual Maturity) to Reserves#	42.3	50.1	59.0
8. Reserves Cover of Imports (in months)	9.5	7.1	7.0
9. Debt-Service Ratio (Debt Service Payments to Current Receipts)	4.4	6.0	5.9
10. External Debt (US$ billion)	305.9	345.5	390.0
11. International Investment Position (IIP) (US$ billion)	-207.0	-249.5	-307.3
12. IIP/GDP ratio	-11.9	-14.0	-16.7

RBI Estimate

CAD may moderate in 2013-14, but risks to its financing remain

III.15 The CAD narrowed somewhat in Q4, but it remained above the sustainable level. It is likely that the widening trade deficit in Q1 of 2013-14 compared with the corresponding period of the previous year may manifest in a wider CAD in the quarter. However, the CAD could moderate over subsequent quarters if gold imports show significant contraction, global crude oil prices stay low and exports get some support from global recovery. Nevertheless, the CAD is likely to stay significantly higher than the sustainable level of 2.5 per cent. As such, a strategy aiming at its reduction and at the same time ensuring its financing with stable and non-debt resources, such as FDI will be necessary. It is also important to remove structural impediments constraining India's export competitiveness and to sustain non-debt-creating flows over the medium term.

III.16 There are certain global risks that call for appropriate policy attention. International crude oil prices, though showing a downtrend since February 2013, would largely be impacted by the outlook on global growth, geo-political uncertainties and supply-side factors. High remittances underpinned by significant depreciation of the rupee in recent months and anticipated recovery in source countries may attenuate concerns relating to financing the CAD. However, the most important risk is that at some stage, exit from accommodative monetary policy in the US may tighten global liquidity, with implications for capital flows to EMDEs, including India. The resulting volatile capital flows could impede smooth financing of the CAD in 2013-14. In this context, continued policy reforms assume utmost importance to ensure a conducive economic and business environment to attract more stable capital flows to the Indian economy.

IV. Monetary and Liquidity Conditions

With moderation in headline inflation, the Reserve Bank eased the repo rate by 25 basis points in May 2013 on top of a 100 bps rate cut during 2012-13. During Q1 of 2013-14, liquidity conditions improved considerably and broad money growth broadly remained in line with the indicative trajectory. Credit growth decelerated with the slack in economic activity and deterioration in asset quality. The Reserve Bank took a slew of measures during July 2013 with a view to alter monetary and liquidity conditions and thereby to restore stability in the forex market. Going forward, the monetary policy will be conditioned by the need to maintain stable macro-economic environment by moving towards attaining external and internal balance and to support growth, while anchoring inflation expectations.

The Reserve Bank undertakes monetary policy measures to curb forex volatility

IV.1 The stance of the Reserve Bank's monetary policy for 2013-14 has been shaped to address risks to growth and guard against re-emergence of inflation while maintaining overall macro-financial stability. On the back of empirical evidence that inflation below threshold level is conducive to sustained growth, the Reserve Bank has emphasised low and stable inflation in promoting growth over the long term. In 2012-13, after frontloading a 50 bps policy rate reduction, the Reserve Bank strived to address sluggish credit growth and tight liquidity conditions with a series of calibrated measures that included cuts in the CRR and SLR and ₹1.5 trillion in outright OMO purchases, besides large accommodation provided through LAF repos. With headline inflation moderating, the Reserve Bank reduced the repo rate by 25 bps in May 2013, over and above the 50 bps reduction in Q4 of 2012-13. With capital outflows, wide current account deficit and high consumer price inflation the Reserve Bank kept the repo rate unchanged in the mid-quarter review of the monetary policy, 2013-14 (Table IV.1) subsequently, in order to restore stability in the forex market, the Reserve Bank has taken several measures since mid-July 2013, which, include: (i) hike in Marginal Standing Facility rate/Bank Rate; (ii) restriction on banks' access to funds under LAF repo;

Table IV.1: Movements in Key Policy Variables

(per cent)

Effective since	Reverse Repo Rate	Repo Rate	Marginal Standing Facility@	Cash Reserve Ratio*	Statutory Liquidity Ratio*
1	2	3	4	5	6
May 03, 2011	6.25 (+0.50)	7.25 (+0.50)	8.25 (+0.50)	6.00	24
June 16, 2011	6.50 (+0.25)	7.50 (+0.25)	8.50 (+0.25)	6.00	24
July 26, 2011	7.00 (+0.50)	8.00 (+0.50)	9.00 (+0.50)	6.00	24
September 16, 2011	7.25 (+0.25)	8.25 (+0.25)	9.25 (+0.25)	6.00	24
October 25, 2011	7.50 (+0.25)	8.50 (+0.25)	9.50 (+0.25)	6.00	24
January 28, 2012	7.50	8.50	9.50	5.50 (-0.50)	24
March 10, 2012	7.50	8.50	9.50	4.75 (-0.75)	24
April 17, 2012	7.00 (-0.50)	8.00 (-0.50)	9.00 (-0.50)	4.75	24
August 11, 2012	7.00	8.00	9.00	4.75	23 (-1.00)
September 22, 2012	7.00	8.00	9.00	4.50 (-0.25)	23
November 03, 2012	7.00	8.00	9.00	4.25 (-0.25)	23
January 29, 2013	6.75 (-0.25)	7.75 (-0.25)	8.75 (-0.25)	4.25	23
February 09, 2013	6.75	7.75	8.75	4.00 (-0.25)	23
March 19, 2013	6.50 (-0.25)	7.50 (-0.25)	8.50 (-0.25)	4.00	23
May 03, 2013	6.25 (-0.25)	7.25 (-0.25)	8.25 (-0.25)	4.00	23
July 15, 2013	6.25	7.25	10.25 (+2.00)	4.00	23

*: Per cent of net demand and time liabilities. @: With effect from Feb 13, 2012 Bank Rate was aligned to MSF rate.
Note: Figures in parentheses indicate changes in percentage points.

(iii) OMO sales; (iv) maintenance of minimum daily CRR balances by SCBs at 99 per cent of the requirement; (v) capping of PDs' access to LAF at 100 per cent of their individual net owned funds; and (vi) restrictions on gold import.

IV.2 Cumulatively, there has been a 125 bps reduction in the policy rate since the start of 2012-13. The transmission of monetary easing enabled the Weighted Average Lending Rates (WALR) based on all borrowal accounts to decline by 41 bps during 2012-13 (Table IV.2). The modal deposit rate and the modal base rate of the banks declined by 11 bps and 50 bps, respectively. More recent data suggest that the WALR of fresh rupee loans sanctioned by reporting banks declined considerably during April-June 2013. The softening of rates on fresh loans were visible in the commercial vehicle segment and housing loans under both personal and commercial segments.

IV.3 During Q1 of 2013-14, with the increase in the government's spending, liquidity conditions eased. Moreover, the Reserve Bank conducted two OMO purchase auctions during the first quarter, injecting liquidity to the tune of ₹165 billion. An increase in the currency in circulation and in banks' excess balances maintained with the Reserve Bank led to the withdrawal of liquidity from the banking system during the quarter (Chart IV.1(a) and (b)).

Liquidity conditions eased in Q1 of 2013-14

IV.4 Liquidity condition improved in April 2013, which was followed by a marginal increase in the liquidity deficit during May 2013 mainly on account of an increase in the currency in circulation. Liquidity conditions again improved in June 2013, with the liquidity deficit staying within the Reserve Bank's comfort zone of (–1) per cent of NDTL, despite quarter-end advance tax outflows from the banking system. Banks' recourse to liquidity from the Reserve Bank's LAF window also moderated as credit growth decelerated. Consequently, the incremental credit-deposit ratio has declined in Q1 of 2013-14 and the gap between deposit and credit has closed (Chart IV.2).

IV.5 Reflecting the comfortable liquidity conditions in Q1 of 2013-14, SCBs took recourse to MSF on only four occasions during the quarter and borrowed around ₹20 billion.

Table IV.2: Deposit and Lending Rates of Banks

(Per cent)

Items	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	June-13
1	2	3	4	5	6	7
1. Domestic Deposit Rate (1-3 year tenor)						
i) Public Sector Banks	9.00-9.75	8.75-9.50	8.50-9.30	8.50-9.10	8.75-9.10	8.00-9.10
ii) Private Sector Banks	8.00-10.50	8.00-10.00	8.00-9.75	8.00-9.75	8.00-9.65	8.50-9.50
iii) Foreign banks	3.50-9.75	3.50-9.75	3.50-9.75	3.50-9.75	3.50-9.60	3.60-9.88
Modal Deposit Rate of SCBs (all tenors)	***7.42***	***7.40***	***7.29***	***7.33***	***7.31***	***7.26***
2. Base Rate						
i) Public Sector Banks	10.00-10.75	10.00-10.50	9.75-10.50	9.75-10.50	9.70-10.25	9.70-10.25
ii) Private Sector Banks	10.00-11.25	9.75-11.25	9.75-11.25	9.70-11.25	9.70-11.25	9.60-11.25
iii) Foreign Banks	7.38-11.85	7.38-11.85	7.25-11.75	7.20-11.75	7.20-14.50	7.20-14.00
Modal Base Rate of SCBs	***10.75***	***10.50***	***10.50***	***10.50***	***10.25***	***10.25***
3. Weighted Average Lending Rate (WALR)*						
i) Public Sector Banks	12.65	12.36	12.29	12.19	12.14	12.06
ii) Private Sector Banks	12.31	12.42	12.32	12.14	12.13	12.01
iii) Foreign Banks	11.86	12.00	11.64	11.51	12.10	12.24
WALR of SCBs	***12.54***	***12.35***	***12.26***	***12.14***	***12.13***	***12.07***

*: Based on Loan outstanding as on end-quarter.
Note: Data on WALR are provisional.

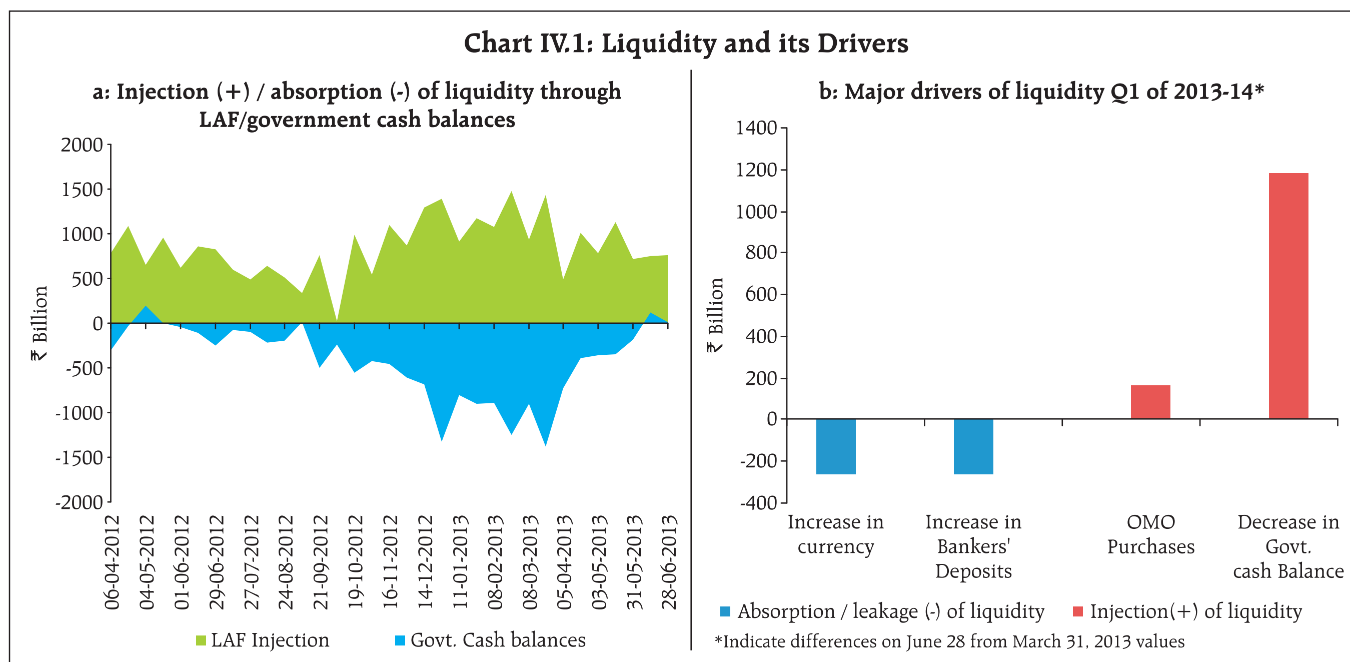


Chart IV.1: Liquidity and its Drivers

IV.6 However, global financial market developments following the signalling on likely tapering of QE in the US brought new risks to the fore, prompting monetary policy to recalibrate towards addressing them. The Fed signals triggered outflows of portfolio investment, particularly from the debt segment. This has led to significant depreciation of the rupee since end-May 2013.

IV.7 In face of rupee volatility the Reserve Bank announced measures on July 15, 2013 to restore stability to the foreign exchange market that had effects on the inter-bank liquidity. The MSF rate was re-calibrated at 300 basis points above the policy repo rate under the LAF. Further, the overall allocation of funds under LAF was capped at 1.0 per cent of the Net Demand and Time Liabilities (NDTL) of the banking

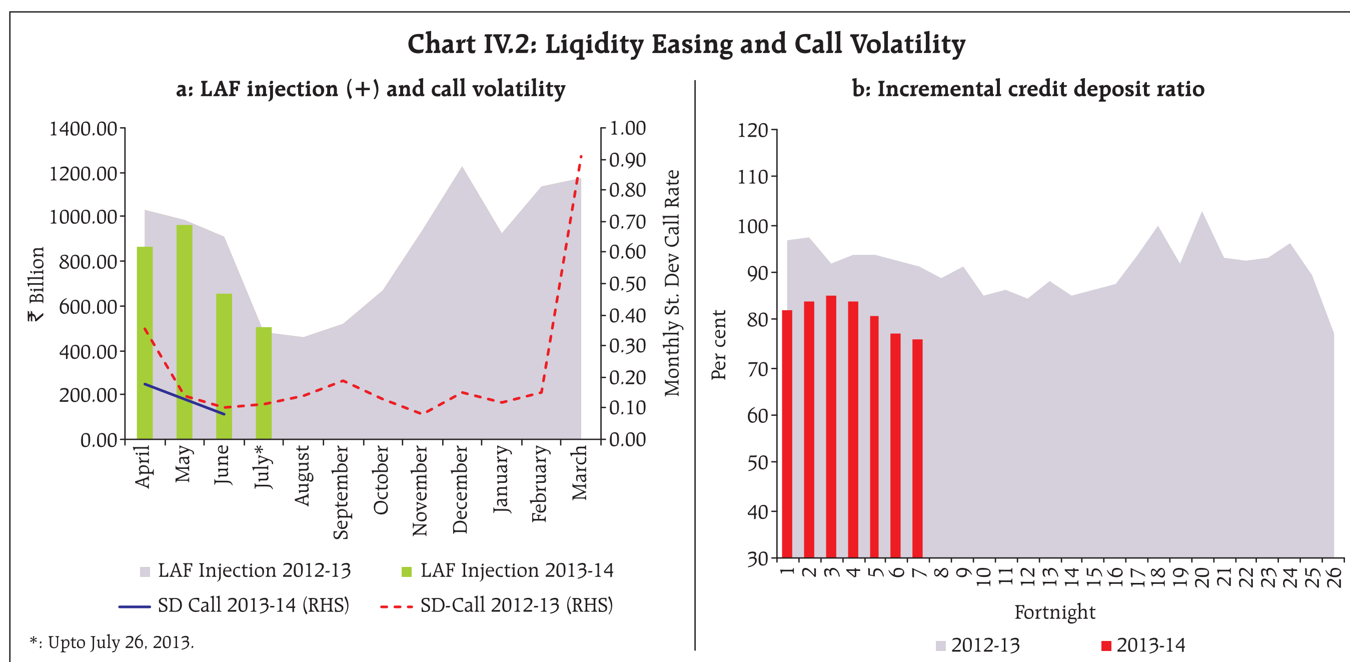


Chart IV.2: Liqidity Easing and Call Volatility

system, with the cap reckoned at ₹750 billion. The Reserve Bank also conducted open market sales of G-secs withdrawing liquidity to the tune of ₹25 billion on July 18, 2013.

IV.8 While the above set of measures had a restraining effect on volatility with a concomitant stabilising effect on the exchange rate, based on a review of these measures, and an assessment of the liquidity and overall market conditions going forward, it was decided on July 23, 2013 to modify the liquidity tightening measures. The modified norms have set the overall limit for access to LAF by each individual bank at 0.5 per cent of its own NDTL outstanding as on the last Friday of the second preceding fortnight effective from July 24, 2013. Moreover, effective from the first day of the fortnight beginning from July 27, 2013 banks will be required to maintain a minimum daily CRR balance of 99 per cent of the average fortnightly requirement.

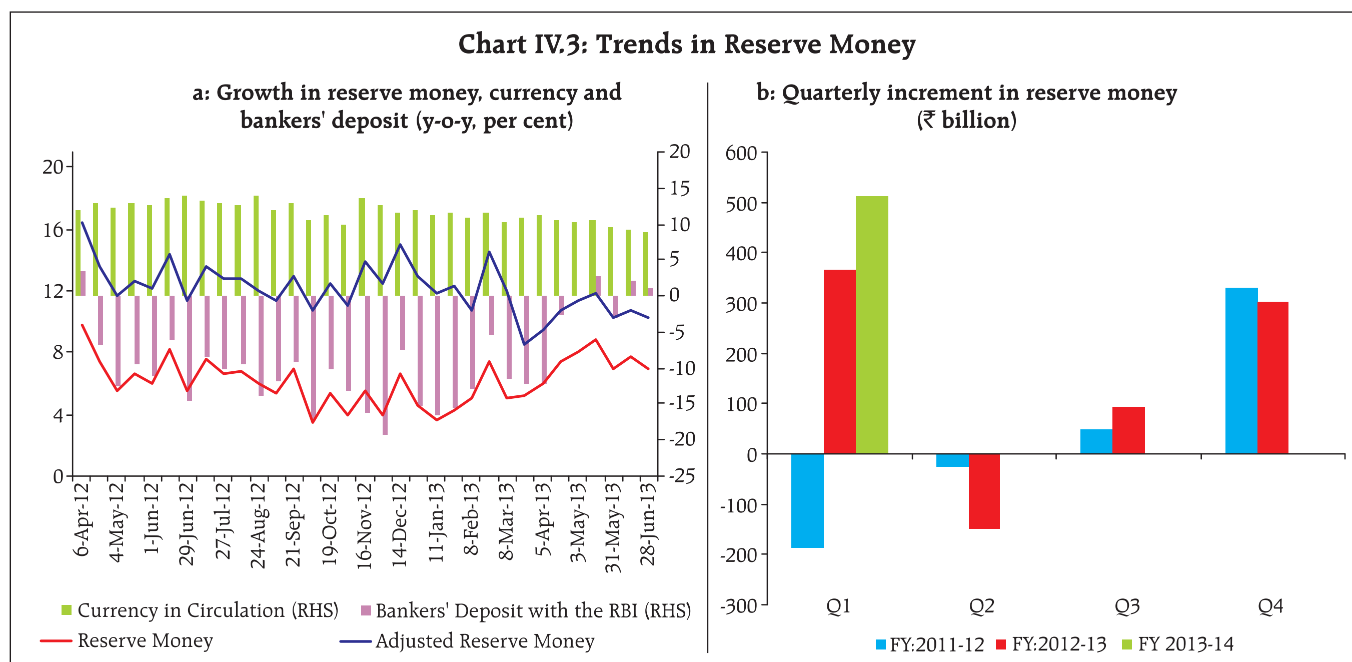
Reserve money adjusted for CRR changes grew at a reasonable pace

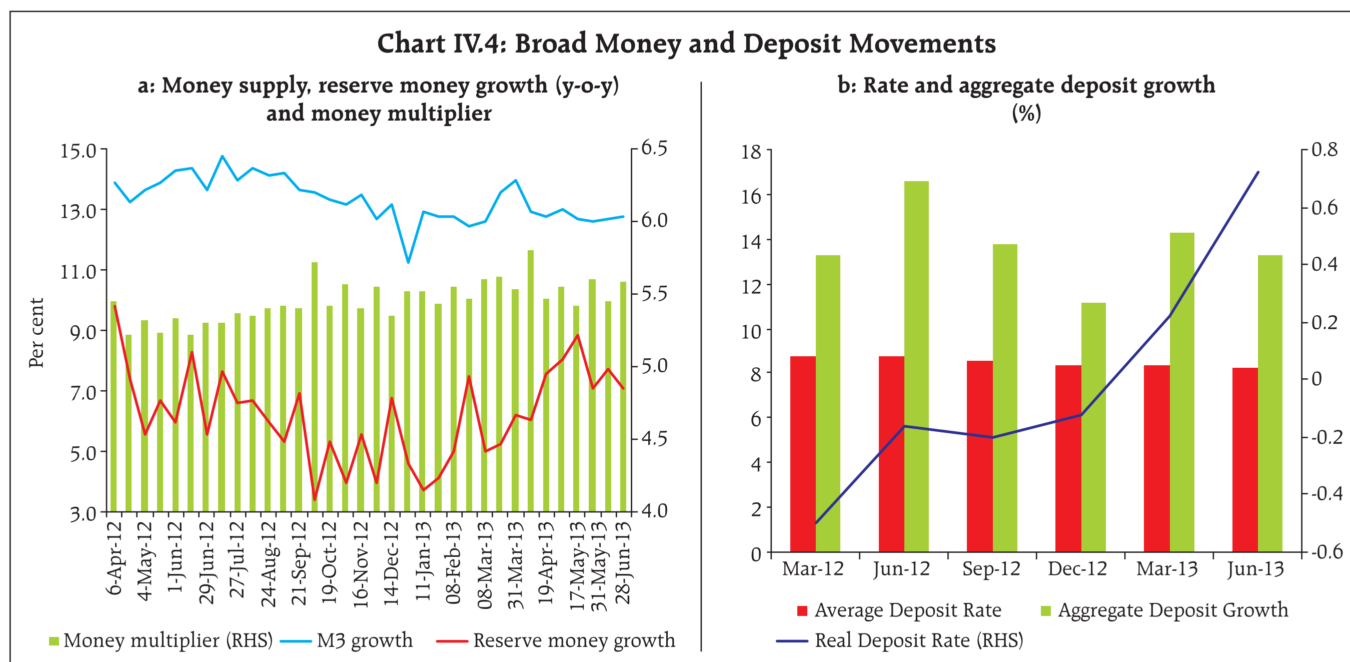
IV.9 During Q1 of 2013-14, y-o-y growth of reserve money picked up and was at 7.0 per cent compared with 5.6 per cent in Q1 of the previous financial year. Growth in currency in circulation decelerated, reflecting the impact of the economic slowdown. Bankers' deposits with the Reserve Bank, after having a negative y-o-y growth for 2012-13 mainly because of CRR cuts, recorded a low but positive y-o-y growth in Q1 of 2013-14. The reserve money, adjusted for the CRR changes, recorded a y-o-y growth at 10.2 per cent in Q1 of 2013-14 (Chart IV.3).

IV.10 On the sources side, the path of reserve money was influenced by both developments in the net domestic asset (NDA) and net foreign assets (NFA). In Q1, the Reserve Bank's net credit to the Centre increased because of the decline in the government's cash balances. However, this increase was matched by a decline in the LAF, which partially offset reserve money growth. The NFA, adjusted for revaluation, recorded a marginal decline over the quarter. On the components side, the expansion was matched by an increase in currency in circulation and in bankers' deposits.

Broad money growth remained broadly in line with indicative trajectory

IV.11 The y-o-y M_3 growth at 12.8 per cent was broadly in line with the indicative trajectory of 13.0





per cent for the 2013-14 (Chart IV.4). On the components side, a deceleration was observed in both the currency with the public and aggregate deposits. On the sources side, there was a marked deceleration in bank credit to the commercial sector as well as net bank credit to the government.

IV.12 The aggregate deposit growth, which generally decelerated during 2012-13 on account of near-zero real interest rates, continued to decelerate in Q1 of 2013-14 even with the increase in WPI-adjusted real interest rates on deposits. During Q1 of 2013-14, the modal deposit rate of banks declined marginally by 5 bps, following a reduction in the repo rate and easing of liquidity conditions. The large increase in import of gold during Q1 of 2013-14 could indicate that some part of household savings was channelised to purchase the yellow metal, taking advantage of its lower prices. Time deposits, the largest component of aggregate deposits, decelerated further in Q1 of 2013-14 compared with the previous year (Table IV.3 and Chart IV.5).

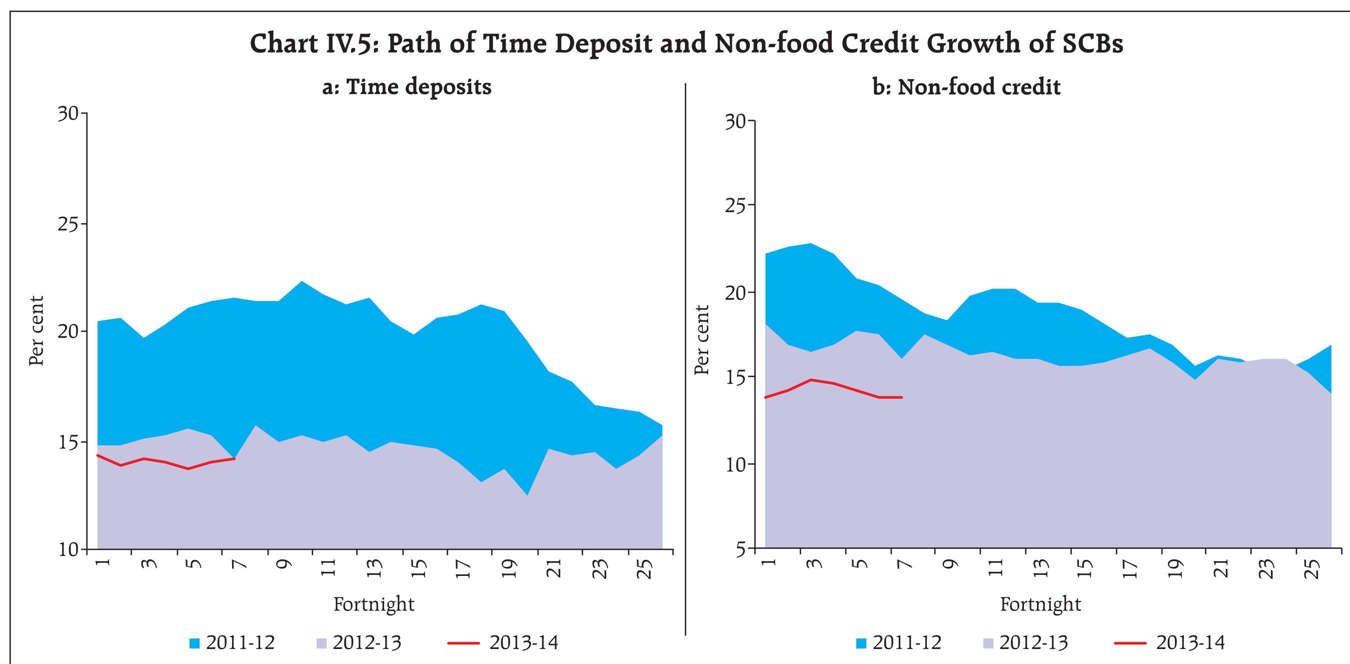
IV.13 Despite a comfortable liquidity situation and a marginal decline in WALR during Q1 of 2013-14, SCBs' non-food credit growth remained below the Reserve Bank's indicative trajectory. On the demand side, the deceleration in domestic growth adversely affected the demand for credit in India. The deterioration in credit

Table IV.3: Monetary Indicators

Item	Outstanding Amount (₹ billion) 12-July-13	FY variations (per cent)		Y-o-Y variations (per cent)	
		2012-13	2013-14	13-July-12	12-July-13
1	2	3	4	5	6
Reserve Money (M_0)*	**15,364.3**	**3.8**	**1.4**	**9.6**	**3.8**
Reserve Money (Adjusted)*		**3.6**	**1.3**	**15.7**	**7.1**
Broad Money (M_3)	**87,567.9**	**5.4**	**4.5**	**14.8**	**12.8**
Main Components of M_3					
Currency with the Public	11,801.6	5.4	3.1	13.2	9.5
Aggregate Deposits	75,661.3	5.4	4.6	15.0	13.3
of which:					
Demand Deposits	7,392.1	-6.0	-1.0	7.1	10.6
Time Deposits	68,269.1	6.8	5.2	15.9	13.6
Main Sources of M_3					
Net Bank Credit to Government	29,737.5	8.1	9.8	20.0	16.0
Bank Credit to Commercial Sector	58,003.5	2.9	2.4	18.0	13.7
Net Foreign Assets of the Banking Sector	17,236.8	4.7	5.3	14.7	6.6

Note: 1. Data are provisional.
2. *: Data for Reserve Money pertain to July 19, 2013.

Chart IV.5: Path of Time Deposit and Non-food Credit Growth of SCBs



quality, on the other hand, impeded the supply of domestic credit (Table IV.4). The deceleration was observed across all bank groups, being high for PSBs and private sector banks, which jointly account for above 90 per cent of the SCB credit.

Risk aversion impacting credit, as asset quality concerns persist

IV.14 Besides sluggish demand, a major factor that could have led to the low credit growth of public sector banks (PSBs) over the past quarters relates to deterioration in their asset quality. Asset quality indicators of the banking sector, which had suffered significantly during 2011-12, worsened in 2012-13. Although data indicate worsening asset quality across bank groups during 2012-13, it continued to be led by public sector banks (PSBs), which account for the major portion of bank advances (Table IV.5) Deterioration in both asset quality and in macroeconomic conditions resulted in risk aversion in the banking sector.

Sectoral deployment of credit indicates deceleration across most sectors

IV.15 An analysis of the sectoral deployment of credit based on data from select banks (which cover 95 per cent of total non-food credit extended by all SCBs) for June 2013 reveals that deceleration in credit growth was observed in all major sectors (*viz.*, agriculture,

Table IV.4: Credit Flow from Scheduled Commercial Banks (in ₹ billion)

Item	As on July 12, 2013 Outstanding	Variation (y-o-y)			
		As on July 13, 2012		As on July 12, 2013	
Bank Credit	Amount	Amount	Per cent	Amount	Per cent
1	2	3	4	5	6
1 Public Sector Banks*	39,175.8	4,900.6	16.5	4,581.7	13.2
2 Foreign Banks	2,794.1	406.5	19.9	344.3	14.1
3 Private Sector Banks	10,546.5	1,607.1	21.6	1,508.9	16.7
4 All Scheduled Com. Banks@	53,983.8	7,115.9	17.7	6,724.0	14.2

*: Excluding RRBs in public sector banks. @: Including RRBs.
Note: Data as on July 12, 2013 are provisional.

Table IV.5: Bank Group Wise Asset Quality Indicators

	End March	All Banks	Foreign Banks	New Private Sector Banks	Old Private Sector Banks	Public Sector Banks
1	2	3	4	5	6	7
Gross NPAs to Gross Advances (%)	Mar-12	2.9	2.7	2.2	1.8	3.2
	Dec-12	3.7	2.9	2.0	2.2	4.2
	Mar-13	3.4	3.0	1.9	1.9	3.8
Net NPAs to Net Advances (%)	Mar-12	1.2	0.6	0.4	0.6	1.5
	Dec-12	1.7	1.0	0.5	0.9	2.1
	Mar-13	1.5	1.0	0.3	0.6	1.8
Restructured Std. Asset to Gross Advances (%)	Mar-12	4.7	0.1	1.1	3.5	5.7
	Dec-12	5.9	0.2	1.1	4.1	7.4
	Mar-13	5.7	0.1	1.2	3.8	7.1
CRAR	Mar-12	14.2	16.8	16.7	14.1	13.2
	Dec-12	13.5	17.2	17.1	13.4	12.0
	Mar-13	13.8	17.5	17.5	13.7	12.4
Slippage Ratio (%)	Mar-12	2.6	2.3	1.2	1.1	2.9
	Dec-12	2.9	1.9	1.4	1.5	3.3
	Mar-13	2.8	1.6	1.2	1.4	3.2

industry and services), except for personal loans. The y-o-y bank credit growth to industry moderated to 14.1 per cent in June 2013 from 20.7 per cent in June 2012. Deceleration in credit growth to industry was observed in all the major sub-sectors, barring food processing, textiles, leather & leather products, cement & cement products and infrastructure. Credit growth to industry excluding infrastructure was much lower, at 11.7 per cent in June 2013 compared with 22.4 per cent a year ago.

IV.16 During 2013-14 so far (up to July 12, 2013), the estimated total flow of financial resources from banks and non-banks, including external sources, to the commercial sector was slightly higher compared with the same period last year. Despite a decline in non-SLR investments by banks the flow of resources from banks was marginally higher due to increase in non-food credit by SCBs. Flow of resources from foreign sources was higher due to external commercial borrowings / FCCBs and higher foreign direct investment to India. The domestic non-bank sources declined on account of decrease in net issuance of CPs subscribed by non-banks, total gross accommodation by four Reserve Bank regulated AIFIs and net-investment by LIC (Table IV.6).

Table IV.6: Resource Flow to the Commercial Sector

(₹ billion)

	April-March		April 1 to July 12	
	2011-12	2012-13	2012-13	2013-14
1	2	3	4	5
A. Adjusted Non-Food Bank Credit (NFC)	**6,773**	**6,849**	**1,030**	**1,093**
i) Non-Food Credit	6,527	6,335	927	1,207
of which: petroleum and fertiliser credit	*116*	*141*	*-84*	*-114 &*
ii) Non-SLR Investment by SCBs	246	514	104	-113
B. Flow from Non-Banks (B1+B2)	**5,383**	**7,335**	**1,502**	**1,517**
B1. Domestic Sources	**3,079**	**4,212**	**1,267**	**1,134**
1. Public issues by non-financial entities	145	119	5	9 &
2. Gross private placements by non-financial entities	558	1,038 P	-	-
3. Net issuance of CPs subscribed to by non-banks	36	52	744	658
4. Net Credit by housing finance companies	539	859	60	87 &
5. Total gross accommodation by 4 RBI-regulated AIFIs: NABARD, NHB, SIDBI & EXIM Bank	469	515	36	-32 *
6. Systemically important non-deposit taking NBFCs (net of bank credit)	912	1,188	360	405 &
7. LIC's net investment in corporate debt, infrastructure and social sector	419	441	62	7 &
B2. Foreign Sources	**2,304**	**3,123**	**235**	**383**
1. External Commercial Borrowings/FCCBs	421	466	14	88 &
2. ADR/GDR Issues, excluding banks and financial institutions	27	10	0	0 &
3. Short-term credit from abroad	306	1,177	-	-
4. Foreign Direct Investment to India	1,550	1,470	221	295 &
C. Total Flow of Resources (A+B)	**12,156**	**14,184**	**2,532**	**2,610**
Memo:				
Net resource mobilisation by Mutual Funds through Debt (non-Gilt) Schemes	-185	830	195	411 &

Note: *: Up to June 2013 &: Upto May 2013 -: Not Available P : Provisional

Monetary policy to aim at stable macro-financial conditions

IV.17 The Reserve Bank, through its monetary policy, has been aiming to achieve a low and stable inflation environment that is conducive to growth. In this endeavour, during 2012-13 the Reserve Bank reduced the repo rate by 100 bps and injected liquidity through CRR and SLR cuts as also through OMOs. In continuation of its stance, the Reserve Bank in May 2013 reduced the repo rate by 25 bps and injected liquidity through OMOs during the first quarter of 2013-14. The transmission of the rate easing lowered nominal lending rates significantly in 2012-13. However, global currency market movements in June-July 2013 have prompted a re-calibration of monetary policy. Going forward, the Reserve Bank will endeavour to actively manage liquidity to reinforce monetary transmission that is consistent with the growth-inflation balance and macro-financial stability. It will also endeavour to maintain stable conditions by moving towards attaining external and internal balance.

V. Financial Markets

Global financial markets have experienced renewed turbulence, especially since the latter half of May 2013, following the Fed's signalling on tapering off of quantitative easing. Taking the cue that the global interest rate cycle may reverse, financial markets witnessed bond sell-offs across the globe. Financial markets in EMDEs came under intense pressure as the sell-off led to portfolio outflows from emerging markets, including India. Consequently, yields hardened and exchange rates depreciated against the US dollar. The Reserve Banks's policy intervention helped curb rupee volatility but money markets rates firmed up. The primary market witnessed an improvement in resource mobilisation during the quarter. However, the risk of volatile and tight financial conditions arising ahead remains.

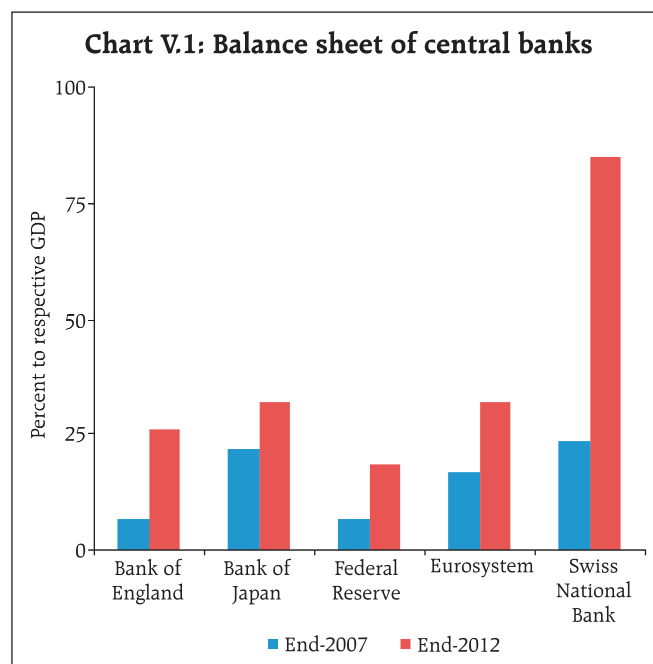
Spillovers from the Fed's forward guidance on exit from QE brings global financial markets under stress

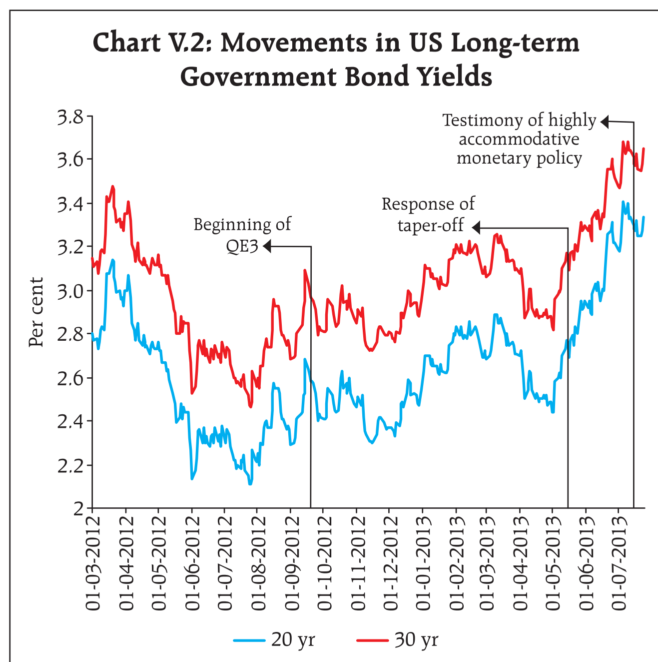
V.1 During 2012 and early 2013, global bond and equity markets had significantly rallied following central banks' massive quantitative easing (QE) programmes in advanced economies. Though global growth remained sluggish, the risk appetite improved and the markets aggressively priced the perceived reduction in risks. However, during Q1 of 2013-14, particularly in May and June, the global financial markets experienced renewed turbulence. This followed the signalling by the Chairman of the US Federal Reserve on May 22, 2013 that the Fed may taper off its asset purchase programme if economic conditions improve rapidly. The signal was followed by a more explicit forward guidance by the Fed Chairman on June 19, 2013 on moderating its asset purchases starting later this year and, in measured steps, unwinding the QE by mid-2014. The subsequent statement by the Fed of a 'highly accommodative' monetary policy in July appears to have calmed the market to a large extent.

V.2 It may be observed in this context that the balance sheets of central banks in advanced economies have expanded significantly since the inception of the crisis in 2007 (Chart V.1). Therefore, the Fed's signal of an exit from QE raised the prospects of the global interest cycle turning thus posing the prospects of significant losses on existing bond holdings. Consequently, there was a large sell-off in US treasuries as well as bonds all over the globe. Asian markets came under intense pressure as the bond sell-off was accompanied by the reverse flight of capital back into the US. While bond markets in the US had started pricing the exit from ultra-easy monetary policy even before the Fed signalling (Chart V.2), the yields in EMDEs rose sharply following the testimony (Chart V.3a).

V.3 In the euro area, the Cyprus crisis receded following the bail-out in March 2013 and gold sales in April 2013. Portugal, however, emerged as a troubled spot during Q1 of 2013-14, raising fresh doubts whether the improved terms for sovereign borrowings for Spain and Italy could be sustained. Portugal's sovereign debt is seen rising over the next three years and refinancing difficulties are expected to recur. Euro area periphery bond spreads also widened (Chart V.3b). The ECB President commented that the central bank "will stay accommodative for the foreseeable future" and that it was open to "all other possible instruments", adding

Chart V.1: Balance sheet of central banks



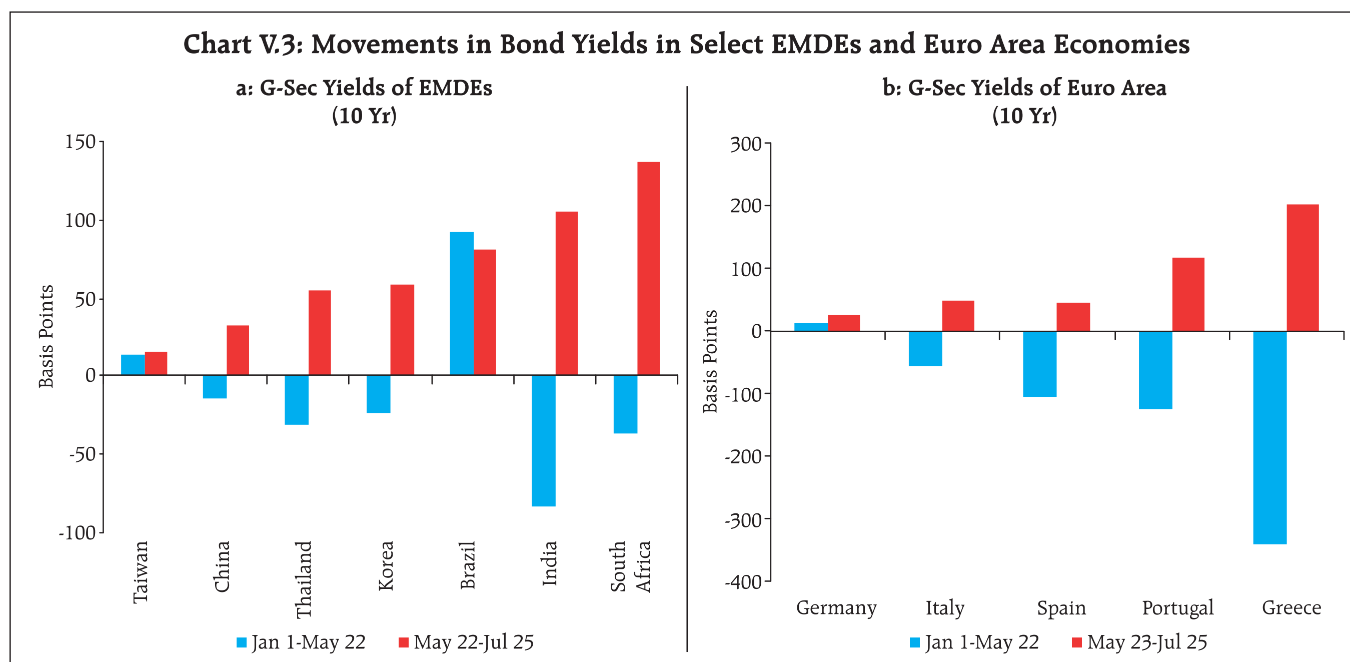


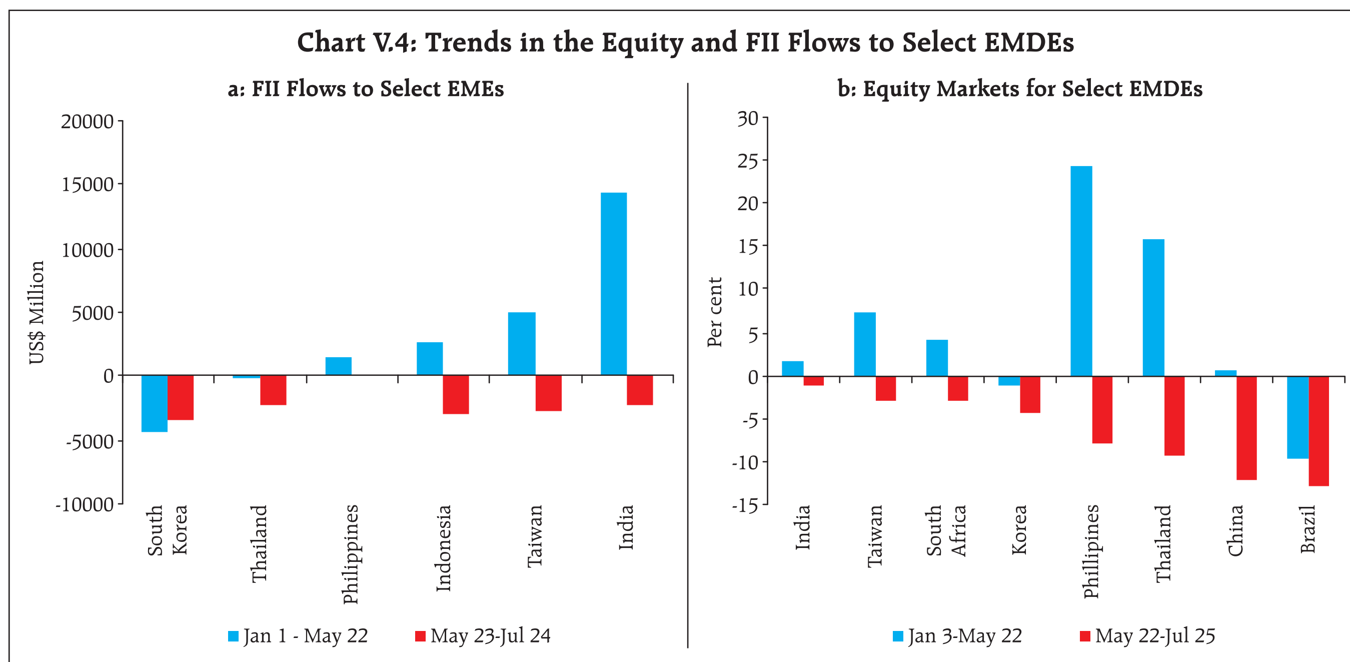
that an exit from accommodative policy remained "distant". This helped in calming markets. However, the euro area sovereign debt and banking sector fragilities remain an important risk for global financial stability.

V.4 As portfolio capital, especially in bond markets, witnessed outflows from EMDEs, their currencies came under severe pressure. This, in turn, added to the sell-offs in the equity markets by global investors, especially in EMDE markets. The liquidity crunch in the Chinese inter-bank markets also adversely impacted the sentiments across equity markets in Asia and the Pacific region (Chart V.4).

Rupee depreciates in response to Fed announcements

V.5 Following the Fed Chairman's response on May 22, 2013, the rupee depreciated by 5.8 per cent until July 26, 2013. The rupee touched an all-time low of 61.05 against the dollar on July 8, 2013, when Reserve Bank instructed authorised dealers to stop taking proprietary trading in currency futures or exchange-traded currency options markets. While speculative positions on the exchange came down as a result, the OTC segment of the foreign exchange market continued to face volatility. The rupee depreciation since May 22 had touched 7.5 per cent by July 15, 2013. Faced with large volatility, the Reserve Bank stepped in on July 15, 2013 to address it through liquidity monetary measures. It also took additional measures on July 23, 2013. These measures imparted stability. Subsequent to the measures, the rupee has appreciated 1.9 per cent against the US dollar till July 26, 2013.

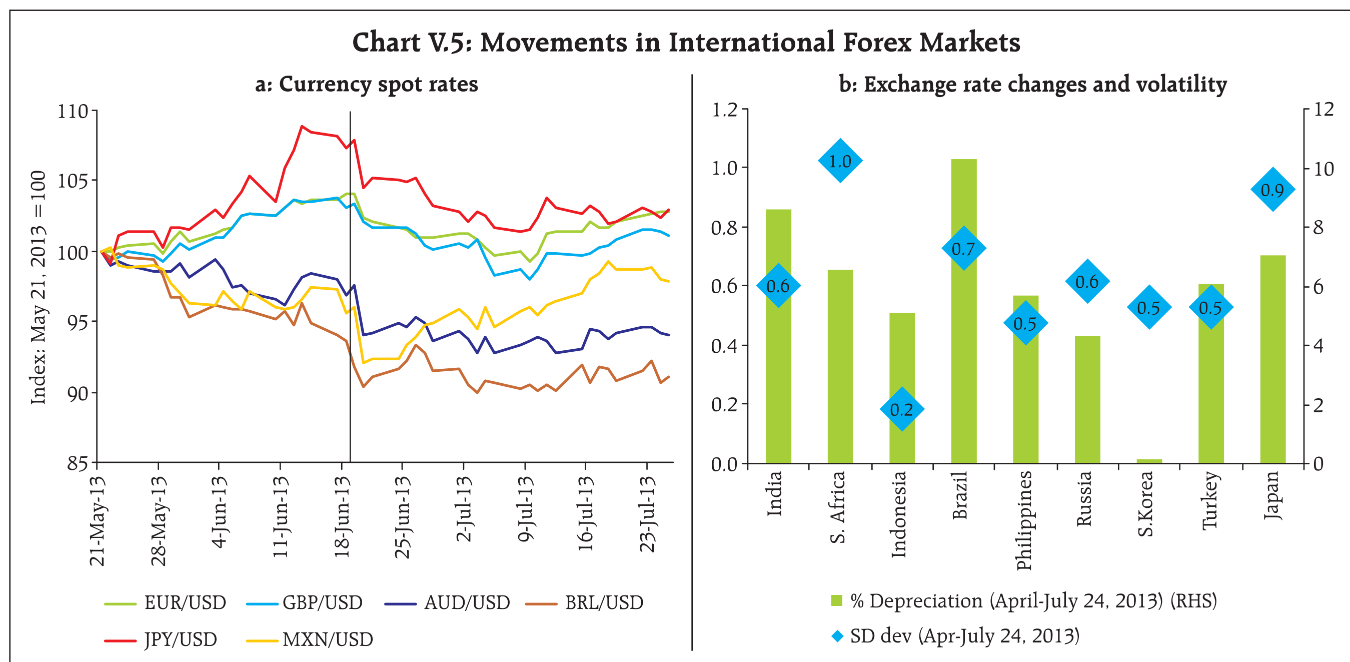




V.6 Other EMDE currencies also depreciated considerably after the Fed announcement, including those for countries with current account surpluses (Chart V.5). During 2013-14 (up to July 24, 2013), the currency depreciation was highest in case of Brazil, followed by India and South Africa. The South African Rand witnessed the highest volatility followed by Brazilian Real, Russian Rouble and Indian Rupee.

Domestic markets respond to liquidity tightening measures

V.7 Subsequent to the measures taken on July 15, 2013, which were unanticipated for the market, G-sec yields and corporate bond yields firmed up. Overnight rates, after an initial jump, subsided. Liquidity tightened and amidst tighter liquidity, the Reserve Bank

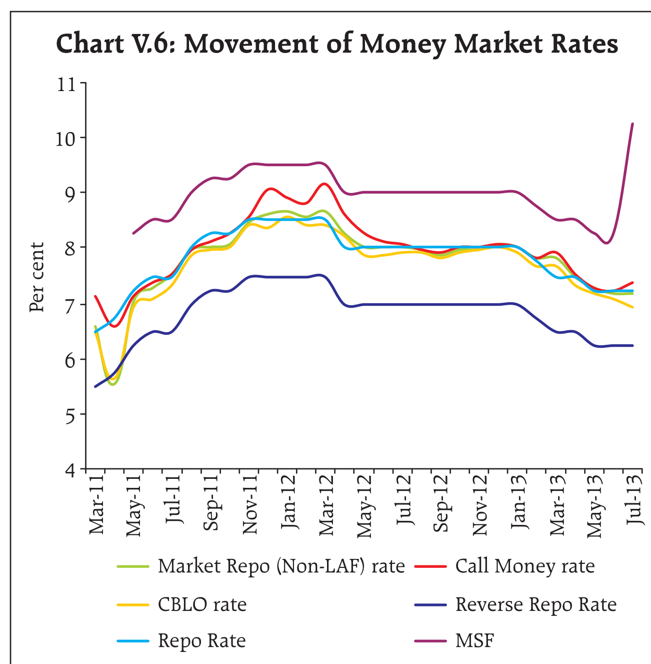


announced a Special Repo window for a notified amount of ₹250 billion to enable banks to lend to mutual funds. In addition, the borrowing limit below the stipulated SLR requirement under the MSF was raised from 2.0 per cent of NDTL to 2.5 per cent of NDTL for a temporary period, with the higher MSF limit of 0.5 per cent being available only for the Special Repo window. The Reserve Bank conducted the OMO sale auction of G-secs for ₹120 billion on July 18, 2013. However, given the bidding pattern and the market yields, it accepted bids for ₹25 billion only.

V.8 The situation in the money market was quite comfortable during the first half of July 2013. However, the measures taken by the Reserve Bank on July 15 and July 23, 2013 to contain exchange rate volatility impacted the money market. The call rate, which stood at 7.21 per cent prior to the Reserve Bank's policy measures on July 15, 2013, initially increased to 8.53 per cent on July 16, 2013 but subsequently came down to 7.14 per cent on July 23, 2013. However, announcement of additional measures by Reserve Bank on July 23, 2013 led to hardening of call rate to around 9.05 per cent on July 24, 2013. The rates in the collateralised segment also hardened as a result of these measures, with the CBLO rate increasing to 8.68 per cent on July 24, 2013. CD and CP rates also hardened. It subsequently reverted to the level prior to the measures.

V.9 Earlier, the money markets in India remained orderly during Q1 of 2013-14, with the call rates hovering within the corridor set by the reverse repo and the MSF rate and remaining close to the policy (Repo) rate. Reflecting a moderate easing of liquidity, the daily weighted average call rate declined to 7.53 per cent during April 2013 from 7.90 per cent during March 2013. The reduction in the repo rate in the Annual Monetary Policy Statement, 2013-14 (May 3, 2013) pushed the average call money rate further down to 7.29 per cent during May 2013. During June 2013, the call rate declined further to 7.24 per cent, reflecting an improvement in the liquidity conditions (Chart V.6).

Chart V.6: Movement of Money Market Rates



V.10 The rates in the collateralised segments (*i.e.*, CBLO and market repo) moved in tandem with the call rate, but generally remained below it during Q1 of 2013-14. The collateralised segment continued to remain the predominant part of the overnight money market; its share increased to around 84 per cent during Q1 of 2013-14 from 81 per cent during Q4 of 2012-13.

V.11 Given the lower demand for funds, the average gross fortnightly issuance of CDs amounted to ₹333 billion in 2012-13 compared with ₹384 billion during 2011-12. The average gross fortnightly issuance of CDs during Q1 of 2013-14 stood at ₹340 billion. Accordingly, the outstanding amount of CDs, which was ₹4,252 billion at end-June 2012, decreased to around ₹3,645 billion at end-June 2013. Given the reduction in banks' preference for bulk deposits, the weighted average effective interest rate (WAEIR) of CDs also declined to 8.19 per cent as on June 28, 2013 from 9.30 per cent as on June 29, 2012 (Table V.1).

V.12 During 2012-13, the average fortnightly gross issuance of commercial papers (CPs) stood at around ₹319 billion as against the average gross issuance of ₹244 billion during 2011-12. The average fortnightly

Table V.1: Average Daily Volume in Domestic Financial Markets

(in ₹ billion)

Month	Money Market						Bond Market		Forex Inter Bank (US $ bn)	Stock Market #
	LAF	Call Money	Market Repo	CBLO	Commercial Paper*	Certificate of Deposits*	G-Sec	Corporate Bond#		
1	2	3	4	5	6	7	8	9	10	11
June 12	-913	152	180	376	1258	4252	258	30	19	117
Sep 12	-517	143	185	502	1706	3572	260	36	21	143
Dec 12	-1231	142	147	398	1818	3328	197	28	19	145
Mar 13	-1173	186	221	462	1093	3896	307	43	23	133
Apr 13	-863	201	274	590	1575	3860	443	62	22	124
May 13	-960	161	306	487	1732	3609	839	55	21	128
June 13	-657	155	245	616	1356	3645	428	44	21	124
July 13@	-528	153	255	792	1694**	-	-	47	17##	122

*: Outstanding position. #: Average daily turnover in BSE and NSE. @: upto July 25, 2013. **: Fortnight ended July 15, 2013. ## : Upto July 12, 2013.
Note: In column 2, (-) ve sign indicates injection of liquidity into the system.

gross issuance of CPs during Q1 of 2013-14 stood at ₹338 billion.

V.13 The outstanding amount of CPs issued by corporates, which was around ₹1,258 billion as of end-June 2012, increased to around ₹1,356 billion as of end-June 2013. The weighted average discount rate (WADR) in respect of aggregate CP issuances decreased to 8.54 per cent at end-June 2013 from 10.10 per cent at end-June 2012. 'Leasing and Finance' and 'manufacturing companies' remained the major issuers of CPs.

Yields harden following the Fed's response

V.14 During the period April-May 2013, the G-sec yields softened, taking cues from (i) a lower reading of CPI and WPI numbers for March and April, (ii) softening of international commodity prices and (iii) the decision to reduce withholding tax on FII interest income on G-secs to 5 per cent from 20 per cent, although S&P's decision to re-affirm the negative rating outlook on India put some pressure on bond yields (Chart V.7).

V.15 Yields started hardening towards end-May 2013 as part of the global bond sell-off that followed the Fed Chairman's response in May 2013 and subsequent forward guidance in June 2013. The 10-year generic yield hardened from 7.12 per cent on May 24, 2013 to 7.60 per cent by July 15, 2013 (Chart V.8).

V.16 In response to the measures announced by the Reserve Bank on July 15, 2013, bond yields hardened further. The 10-year generic G-sec yields increased by over 50 basis points to close at 8.13 per cent on July 16, 2013. The measures taken by the Reserve Bank on July 23, 2013 led to further hardening of yields, with the 10-year generic yield standing at 8.46 per cent on July 24, 2013. However, the yields fell sharply on July 25, 2013. The 10-year yield declined by 23 basis points after the Reserve Banks' signals for higher short-term rates

Chart V.7: Yield curves for Government Securities

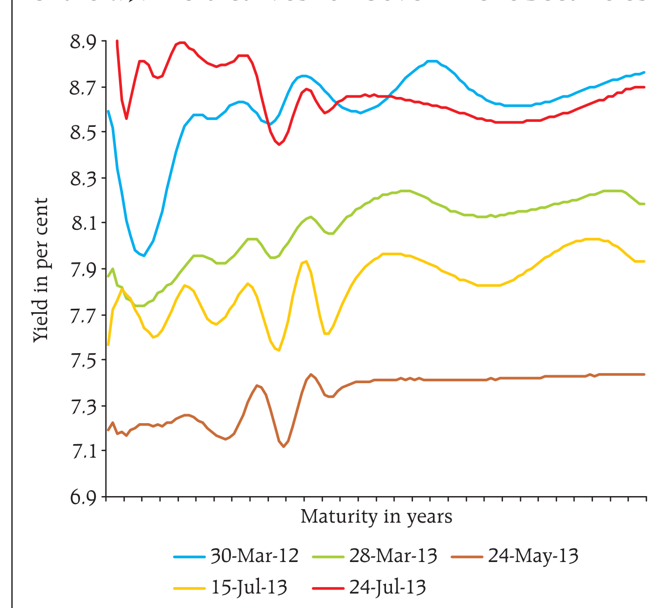
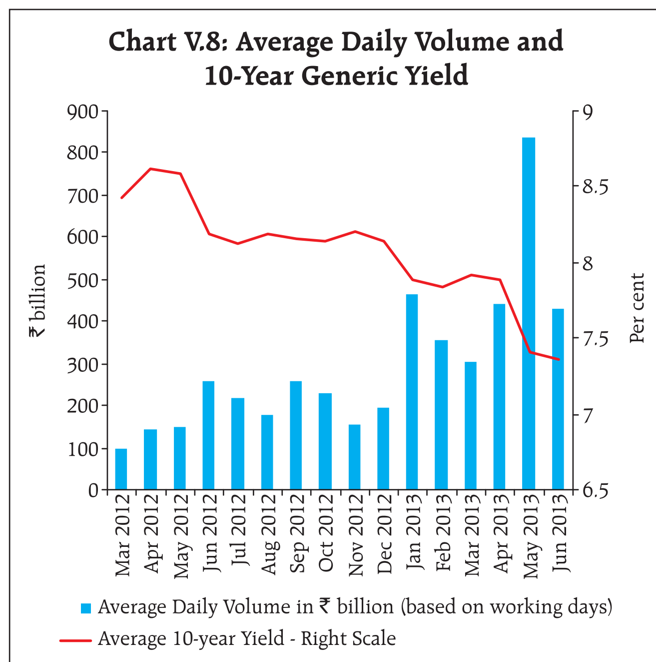


Chart V.8: Average Daily Volume and 10-Year Generic Yield



and as market perceived the Reserve Bank's action as working to bring stability to the rupee exchange rate.

V.17 The average daily trading volume of central government securities in the secondary market increased to around ₹570 billion during Q1 of 2013-14 from ₹376 billion during Q4 of 2012-13. The traded volume in G-secs generally varied inversely with G-sec yields.

V.18 The gross market borrowings of the central government through dated securities during 2013-14 were to the tune of ₹2,100 billion (net borrowings of ₹1,972 billion) up to July 26, 2013 compared with ₹2,340 billion (net borrowings of ₹1,594 billion) during the corresponding period of the previous year. The weighted average maturity of the dated securities increased to 14.96 years from 13.62 years during the corresponding period of the previous year. The weighted average yield during the primary auctions eased to 7.64 per cent from 8.52 per cent during the corresponding period of the previous year. The weighted average yield during the primary auctions eased to 7.64 per cent from 8.52 per cent during the corresponding period of the previous year (Table V.2). The bid-cover ratio stood in the range of 1.41-6.09 as against 1.47-3.59 during the corresponding period of the previous year. The government availed of ways and means advances (WMA) on three occasions up to end-June 2013. As on July 16, 2013 the outstanding WMA position of the government was ₹3.06 billion.

Table V.2: Issuances of Central and State Government Dated Securities*

Item	2012-13	2013-14
1	2	3
Central Government		
Gross amount raised (₹ billion)	1880	1650
Devolvement on primary dealers (₹ billion)	11.95	Nil
Bid-cover ratio (range)	1.47-3.59	2.38-6.08
Weighted average maturity (years)	13.38	14.92
Weighted average yield (per cent)	8.57	7.57**
State Government		
Gross amount raised (₹ billion)	310.9	379.1
Cut-off yield range (Per cent)	8.80-9.31	7.57-8.51
Weighted average yield (Per cent)	9.07	7.92

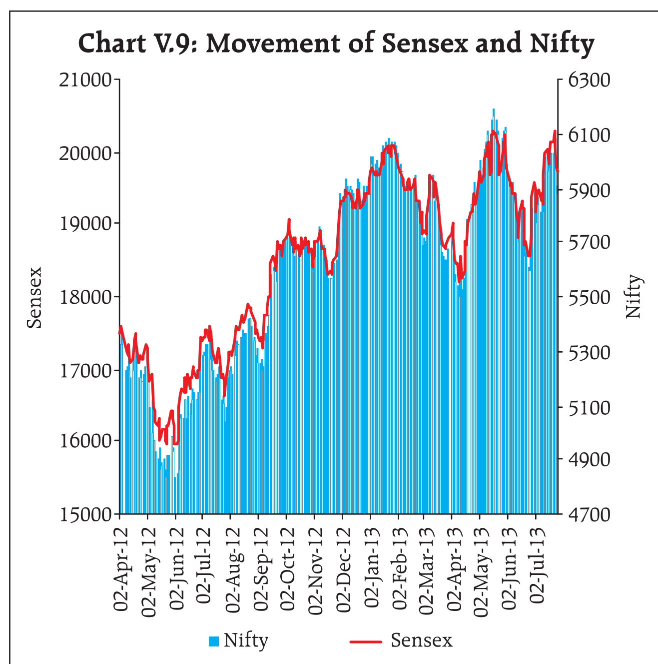
* Up till July 3, 2013. Includes Inflation-Indexed Bond (IIB) issuances.

V.19 During 2013-14 (up to July 16, 2013), 18 states have raised ₹401.2 billion on a gross basis (net amount of ₹252.3 billion) compared with ₹419.8 billion (net amount of ₹369.6 billion) raised by 20 states during the corresponding period of the previous year. The weighted average yield eased to 7.98 per cent up to July 16, 2013 from 9.01 per cent during the corresponding period of the previous year.

V.20 The yields on auction of Treasury Bills showed a declining trend till the middle of the quarter ending June 2013, but started hardening subsequent to the Fed Chairman's response in May 2013. Yields on Treasury Bills went up significantly (by 352 bps and 291 bps for 91-day and 364-day treasury bills, respectively) subsequent to the liquidity tightening measures announced by the Reserve Bank in mid-July 2013.

Domestic equity markets record marginal increase amid global uncertainties

V.21 During the financial year 2013-14 (up to July 26, 2013), the BSE Sensex and CNX Nifty recorded gains of 4.8 per cent and 3.6 per cent, respectively (Chart V.9). The stock market recorded significant gains at the



beginning of the quarter due to sustained FII buying and easing of concerns about the twin deficits due to moderation in commodity prices. However, the market pared some of its earlier gains in June 2013 due mainly to worries over capital outflows arising from the signals of gradual tapering of monetary stimulus by the US Fed and weak industrial output data of the domestic economy. Other ancillary factors such as the weak growth outlook for China, the persistent weakness of the rupee *vis-à-vis* the US dollar and net sales by FIIs reinforced the pressures.

V.22 In response to the measures announced by the Reserve Bank on July 15, 2013, the BSE Sensex declined by over 180 points (0.9 per cent) on July 16, 2013. The BSE Bankex was among the worst hit, declining by nearly 5 per cent. Reflecting the impact of July 23 measures, the BSE Bankex declined by 590 points (4.6 per cent) on July 24, while the drop in the Sensex was over 200 points (1.04 per cent).

V.23 During Q1 of 2013-14, FIIs made net sales of ₹90 billion in the capital market (both equity and debt) as against net investment of ₹19 billion during Q1 of 2012-13. In the equity market, FIIs made net investments

Table V.3: Institutional Investment in Equity and Debt Market

(₹ billion)

	Equity Market	Debt Market	Total
1	2	3	4
FII			
Q1 2012-13	-6.6	25.3	18.7
Q2 2012-13	397.5	44.6	442.1
Q3 2012-13	455.4	96.1	551.5
Q4 2012-13	560.1	148.7	708.9
Q1 2013-14*	152.9	-243.3	-90.3
Q2 2013-14@	-61.6	-126.9	-188.4
Mutual Funds			
Q1 2012-13	-6.4	1389.8	1383.4
Q2 2012-13	-68.2	835.7	767.5
Q3 2012-13	-76.2	1033.9	957.8
Q4 2012-13	-76.7	1488.5	1411.7
Q1 2013-14	-52.0	1427.7	1375.7
Q2 2013-14#	-9.4	-23.7	-33.1

*: Data up to June 27, 2013. @: Data upto July 24, 2013.
#: Data upto July 23, 2013.
Source: SEBI.

of ₹153 billion in Q1 of 2013-14 as against net sales of ₹7 billion during Q1 of the previous year, while in the debt market, FIIs made net sales of ₹243 billion in Q1 of 2013-14 as against net investment of ₹25 billion in Q1 of the previous year (Table V.3). However, after the response of the US Fed Chairman on May 22, 2013, both debt and equity markets recorded net outflows amounting to ₹522 billion and ₹116 billion, respectively, between May 22 and July 24, 2013.

V.24 Mutual funds, on the other hand, made net investments of ₹1,376 billion during Q1 2013-14 in the capital market (both equity and debt) compared with ₹1,383 billion during Q1 of the previous year. Mutual funds, however, made net sales of ₹52 billion in the equity market compared with net sales of ₹6 billion during Q1 of the previous year. But they remained net buyers in the debt market.

V.25 Equity market volatility, measured by NSE's VIX index, which was subdued during a major part of 2012-13, witnessed a marginal increase in the first quarter of 2013-14 (Chart V.10).

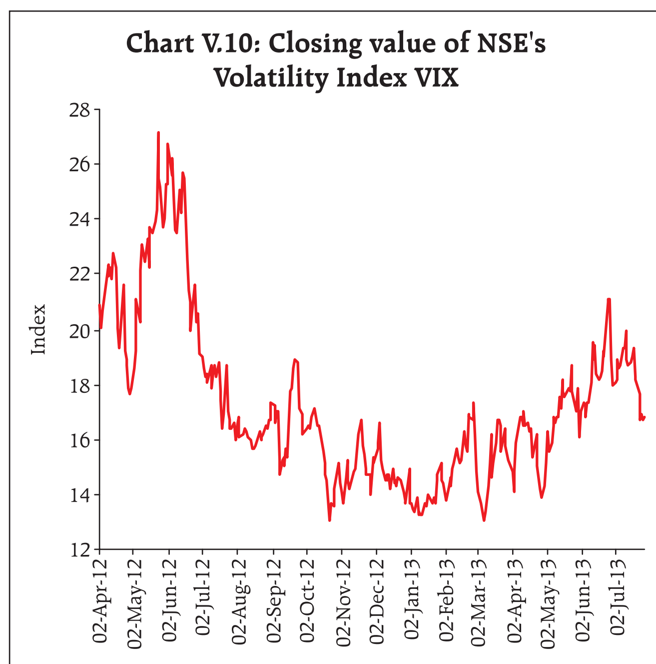


Table V.4: Primary Market Trends

(₹ billion)

Category	2012-13 (Apr-Mar)	2012-13 (Apr-June)	2013-14 (Apr-June)
1	2	3	4
a. Public Issue (i) + (ii)	**219**	**4***	**11***
i) Public Issue (Equity)	65	4*	9*
of which: IPOs	65	4*	9*
FPOs	0	0*	0*
ii) Public Issue (Debt)	154	0*	1*
b. Rights Issue	89	1*	0*
Total Equity Issues (i+b)	**155**	**4***	**9***
c. Euro Issues (ADR/GDR)	10	2	1
d. Mutual Fund Mobilisation (net)	765	-4995	956
i) Private Sector	638	-3985	774
ii) Public Sector	127	-1010	182
e. Private Placement in Corporate Debt market	3615	475*	756*
f. QIP	160	0.3*	32*

Source: SEBI.
*: Data upto May.

Healthcare and FMCG continued to outperform the Sensex

V.26 During Q1 of 2013-14, the BSE healthcare and FMCG sectors continued to outperform the benchmark BSE Sensex. Indices of these sectors recorded increase of 10 per cent and 9 per cent, respectively, compared with an increase of 3 per cent in the BSE Sensex. However, a large segment of the market underperformed the benchmark index: realty, consumer durables, metals and IT were the worst performing indices.

Improvements in resource mobilisation from the primary market

V.27 During April-May 2013, the total resource mobilisation from the primary equity market more than doubled to ₹9.3 billion compared with ₹3.9 billion mobilised during April-May 2012 (Table V.4). The higher resource mobilisation in equity was due to a recovery in the secondary market and the floatation of a mega issue in May 2013. Resource mobilisation *via* the private placement route continued its growth momentum. During April-May 2013, mobilisation through private placements increased by nearly 59 per cent to ₹756 billion as compared to ₹475 billion in the corresponding period last year. Led by private sector mutual funds, resources mobilised by mutual funds during April-June 2013 also registered an increase to ₹956 billion as against net sales of ₹4,995 billion during April-June 2012.

House prices remain at elevated levels

V.28 The y-o-y growth in the Reserve Bank house price index was around 19 per cent in Q4 of 2012-13. The q-o-q increase remained moderate at 2.1 per cent. On a y-o-y basis, the increase has been the highest in Kolkata, whereas it witnessed a decline in Kanpur. During the past four years, the index of house prices has increased by over 110 per cent (up to Q4:2012-13) (Table V.5).

Risks to financial conditions remain from spillovers and slowing growth

V.29 Although the immediate risks to the euro area appear to have receded, the early signs of recovery in the US are posing fresh challenges for policymakers. As the evidence over the past couple of months suggests, the challenges of communicating an exit from unconventional monetary policy exist as such signals can lead to spillovers with consequences of heightened volatility and possibilities of markets overshooting. In

Table V.5: House Price Indices (Base - Q4: 2008-09=100)

Quarter	Mumbai	Delhi	Bengaluru	Ahmedabad	Lucknow	Kolkata	Chennai *	Jaipur	Kanpur	All-India
1	2	3	4	5	6	7	8	9	10	11
Q1:2011-12	191.6	152.8	116.9	152.3	149.3	157.0	106.3	161.1	135.4	152.0
Q2:2011-12	206.1	153.0	116.0	162.8	159.2	159.0	113.9	165.1	138.3	157.8
Q3:2011-12	191.7	168.6	146.1	171.8	172.3	155.0	120.3	163.5	140.0	164.1
Q4:2011-12	224.7	195.3	140.6	177.2	169.7	158.4	117.0	164.4	148.7	176.9
Q1:2012-13	231.8	217.3	140.2	176.6	179.4	204.2	133.9	171.9	144.9	188.6
Q2:2012-13	232.4	225.2	143.0	183.4	208.9	226.9	129.5	177.7	135.8	194.3
Q3:2012-13	248.5	247.8	147.9	187.8	221.6	247.3	149.2	179.4	117.0	206.8
Q4:2012-13	248.6	259.2	148.3	193.5	218.8	258.6	148.0	194.0	116.9	211.2
Growth in per cent										
y-o-y	10.6	32.7	5.5	9.2	28.9	63.3	26.5	18.0	-21.4	19.4
q-o-q	0.0	4.6	0.3	3.0	-1.3	4.6	-0.8	8.1	-0.1	2.1

*Chennai index is based on both residential and commercial properties.
All-India index is a weighted average of city indices; weights based on population proportion.

turn, this poses newer challenges for policymaking in EMDEs. It, therefore, becomes important for EMDEs to ensure adequate buffers and hedges in order to manage such sharp and sudden risks.

V.30 While the slew of measures taken over the past several months on the domestic front provide comfort, the balance of risks still appears to be on the downside, with weaknesses in corporate and banks' balance sheets feeding into each other. Weaknesses in the macro-financial environment are also adding to the pressures. The balance sheet effects from slowing growth can impact the evolving financial market conditions. It is, therefore, important to continuously monitor these risks and take preventive policy actions to ride over this downside.

VI. Price Situation

Lower global commodity prices, a negative output gap and past monetary policy actions contributed to a decline in headline wholesale price index (WPI) inflation to below 5 per cent in Q1 of 2013-14. Non-food manufactured product inflation also came down sharply to its lowest level in the past three years. Food inflation increased again in May and June 2013, putting pressures on the general price level. It could moderate somewhat if the monsoon remains on track during the rest of the season. However, the recent currency depreciation and upward pressure on fuel prices due to geo-political uncertainties pose upside risks to inflation. Near double-digit consumer price inflation also remains a major concern.

Inflation remains moderate in advanced and some emerging economies

VI.1 Inflation pressures eased in advanced economies (AEs) and some emerging market and developing economies (EMDEs) during Q2 of 2013. In most AEs, inflation remained at low levels due to subdued demand and a correction in energy prices. Consumer price inflation in OECD countries was 1.8 per cent in June 2013, lower than the average of 2.3 per cent during 2012. In view of the subdued recovery and benign inflationary pressures, central banks in AEs continued with an accommodative monetary policy stance to support recovery. The European Central Bank reduced the policy rate by 25 basis points to 0.50 per cent against the backdrop of contracting output, high unemployment rate and depreciation in exchange rate *vis-à-vis* the US dollar (Table VI.1).

VI.2 Unlike AEs, mixed inflation trends appeared from EMDEs. In China inflation edged up to 2.7 per cent in June 2013 from 2.1 per cent in May. Similar upward pressures were seen in the case of Russia and Brazil. Most of the EMDEs kept their policy rate on hold, with Brazil and Indonesia being notable exceptions, which raised the policy rate on inflation concerns. Some decline in commodity prices in the wake of the withdrawal of stimulus measures and uneven recovery in major regions of the world pose a downside risk. However, a significant upside risk is expected from the recent currency depreciation in several countries with respect to the US dollar as well as geo-political tensions that could lead to further pressure on energy prices.

Global commodity prices eased in Q2 of 2013, but crude oil prices rebounded in recent weeks

VI.3 The moderation in global commodity prices witnessed in Q1 of 2013 continued in Q2. The IMF commodity price index declined by about 2.0 per cent during the first six months of the year (Chart VI.1). The moderation was driven by improved supply prospects in most commodities and weak demand conditions on account of growth slowdown, especially in EMDEs. Despite the benign trends, the pass-through of commodity price correction to domestic inflation was partly abated by the recent appreciation of the US dollar across different currencies.

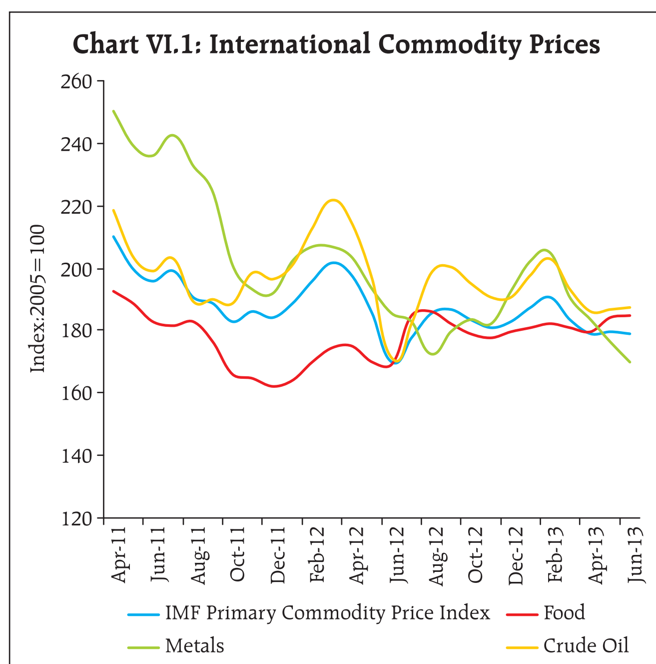
VI.4 Global crude oil prices generally trended down in Q2 of 2013 on account of weak demand, build-up of stocks and improvements in supply. After increasing to US$ 119 per barrel in early February 2013, the Brent crude oil spot price fell to a low of US$ 97 per barrel in mid-April and then recovered to an average of US$ 103 per barrel in May and June. The US Energy Information Administration (EIA) had recently projected that the Brent crude oil spot price would average US$ 102 per barrel over the second half of 2013 conditional on the absence of disruptions to energy markets arising from the recent geo-political unrest. However, Brent oil prices rose to over US$ 108 in July 2013 as the escalating political crisis in Egypt increased fears that it could affect the rest of West Asia and disrupt world crude supplies.

VI.5 Metal prices declined on concerns about the moderation in global demand, particularly from China. The FAO Food Price Index declined marginally in May

Table VI.1: Global Inflation and Policy Rates

Country/Region	Key Policy Rate	Policy Rate (as on July 26, 2013)	Changes in Policy Rates (basis points)		CPI Inflation (Y-o-Y, per cent)	
			Sep 2009 to Dec 2011	Jan 2012 to Jul 2013	Jun-12	Jun-13
1	2	3	4	5	6	7
Advanced Economies						
Australia	Cash Rate	2.75 (May 8, 2013)	125	(-) 150	1.2#	2.4#
Canada	Overnight Rate	1.00 (Sep. 8, 2010)	75	0	1.5	1.2
Euro area	Interest Rate on Main Refinancing Operations	0.50 (May. 08, 2013)	0	(-) 50	2.4	1.6
Israel	Key Rate	1.25 ((Jun 1, 2013)	225	(-) 150	1.0	2.0
Japan	Uncollateralised Overnight Call Rate	0.0 to 0.10* (Oct. 5, 2010)	(-) 10	0	-0.1	0.2
Korea	Base Rate	2.50 (May 9, 2013)	125	(-) 75	2.2	1.0
UK	Official Bank Rate	0.50 (Mar. 5, 2009)	0	0	2.4	2.9
US	Federal Funds Rate	0.0 to 0.25* (Dec. 16, 2008)	0	0	1.7	1.8
Emerging and Developing Economies						
Brazil	Selic Rate	8.50 (Jul 11, 2013)	225	(-) 250	4.9	6.7
China	Benchmark 1-year Deposit Rate	3.00 (Jul. 6, 2012)	125	(-) 50	2.2	2.7
	Benchmark 1-year Lending Rate	6.00 (Jul. 6, 2012)	125 (600)	(-)56 (-)150		
India	Repo Rate	7.25 (Mar. 19, 2013)	375 (100)	(-)125 (-200)	9.9	9.9
Indonesia	BI Rate	6.50 (Jul.11, 2013)	(-) 50	50	4.5	5.9
Philippines	Reverse Repurchase Rate	3.50 (Oct. 25, 2012)	50	(-) 100	2.8	2.8
	Repurchase Rate	5.50 (Oct. 25, 2012)	50	(-) 100		
Russia	Refinancing Rate	8.25 (Sep. 14, 2012)	(-) 275	25	4.3	6.9
South Africa	Repo Rate	5.00 (Jul. 20, 2012)	(-) 150	(-) 50	5.5	5.5
Thailand	1-day Repurchase Rate	2.50 (May 29, 2013)	200	(-) 75	2.6	2.3

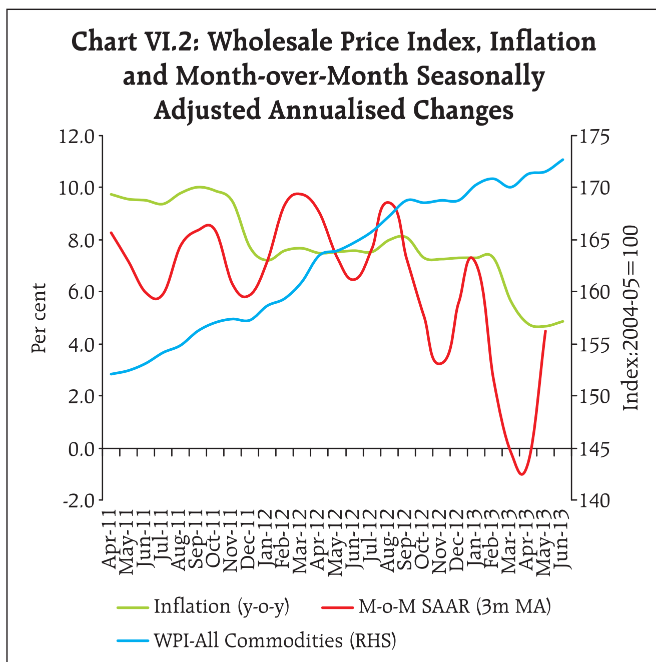
*: Change is worked out from the minimum point of target range. #: Q2 (Apr-Jun)
Note: Figures in parentheses in Column (3) indicate the effective dates when the policy rates were last revised. Figures in parentheses in Columns (4), and (5) indicate the variation in the cash reserve ratio during the period. For India, data on inflation pertain to New CPI (Combined: rural + urban)
Source: Websites of respective central banks/statistical agencies.

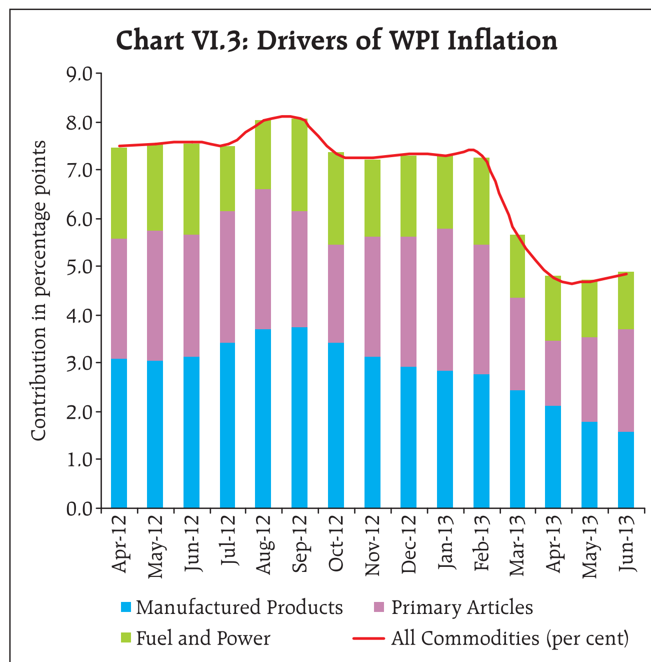


and June, reflecting supply conditions in cereals, sugar and oil and fats. Going forward, the path of global commodity prices would largely depend on growth prospects in emerging and developing Asia, particularly China. Further, the recent global developments and overall macroeconomic conditions do not indicate any substantial rise in the oil and non-fuel segment of commodity prices, which is broadly in line with the baseline assumption for inflation forecast for 2013 across several central banks. However, commodity prices, especially oil prices, continue to remain vulnerable to short-term supply disturbances.

Domestic headline inflation declines below 5 per cent

VI.6 Headline inflation, as measured by year-on-year changes in the Wholesale Price Index (WPI), declined



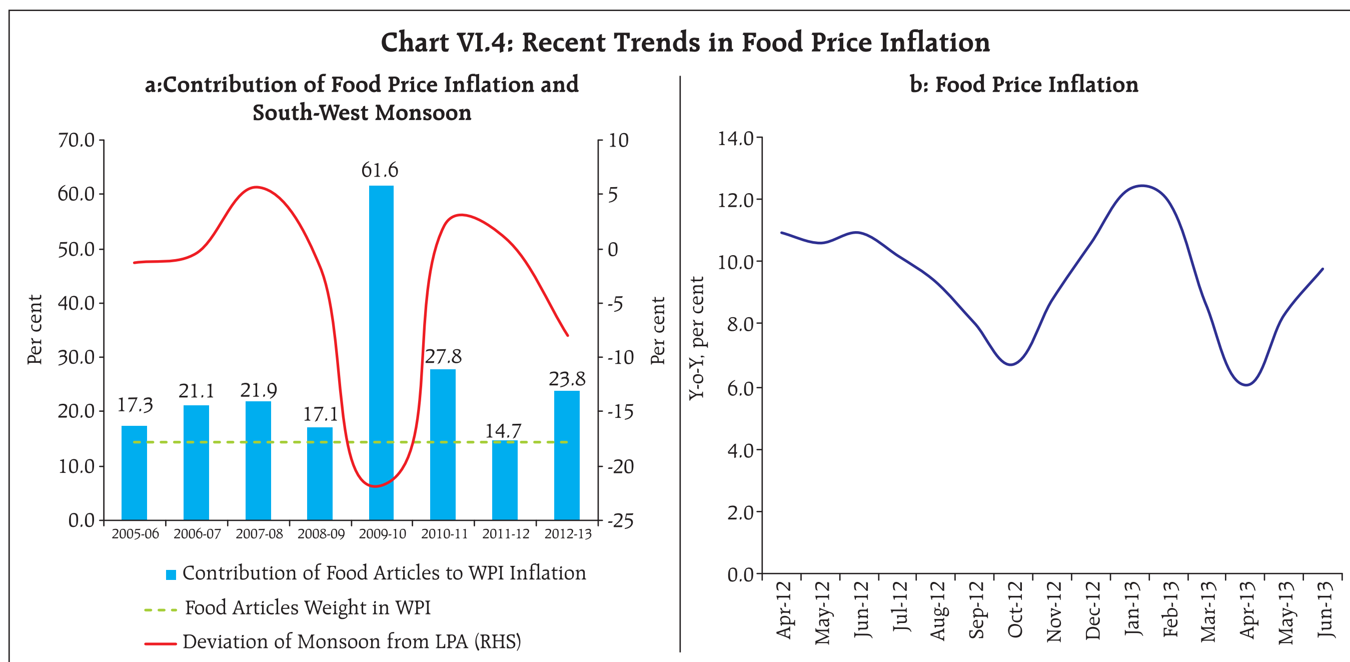


to 4.7 per cent (provisional) in May 2013 before edging up to 4.9 per cent in June 2013 on account of an uptick in food and fuel prices (Chart VI.2). Average inflation during Q1 of 2013-14 at 4.8 per cent remained significantly lower than the average inflation of 7.5 per cent during Q1 of 2012-13 and 7.4 per cent during the year 2012-13. The seasonally adjusted month-over-month (annualised) changes in the WPI (3-month moving average) (m-o-m saar), turned negative in the recent period, but returned to positive territory in June 2013, pointing to a turnaround in the momentum.

VI.7 On the whole, headline inflation exhibited a softening bias during Q1 of 2013-14, driven by all three major sub-groups, *viz.*, primary articles, fuel and power and manufactured products (Chart VI.3). The major contribution, however, came from the non-food manufactured products group, with inflation in this segment declining sharply to 2.0 per cent (by June 2013) and reaching its lowest level in the past three years. This was partly facilitated by lower international commodity prices, leading to benefits from lower imported inflation. The deceleration in growth to below the potential level also translated into weak demand conditions, contributing to moderation in inflation.

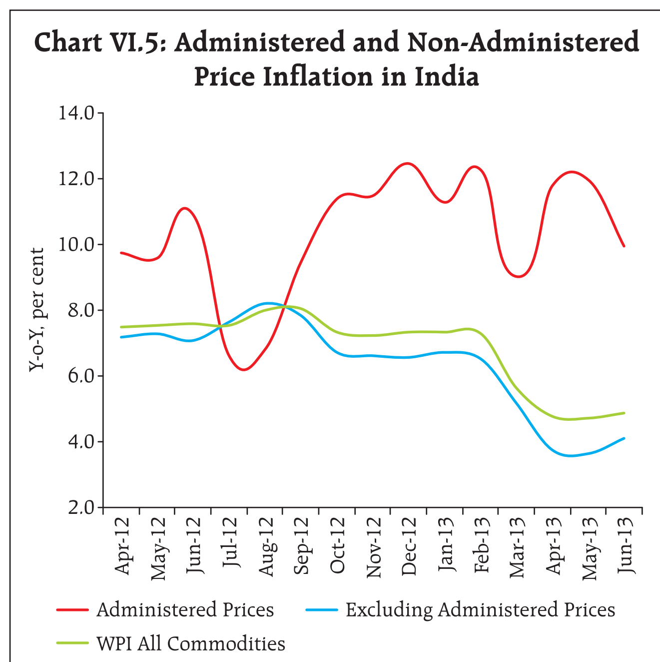
Food prices increased in recent months, but good monsoon may contain price rise

VI.8 Food price inflation has been a major driver of headline inflation in recent years (Chart VI.4a). High input costs, rising wages and inelastic supply responses to demand led to higher food price inflation. The delayed monsoon with a skewed spatial distribution contributed to high food inflation during most part of 2012-13. Food articles inflation, however, receded sharply from 12.3 per cent in January 2013 to 6.1 per cent in April 2013 reflecting improved supply conditions and arrival of *rabi* crops. A surge in the prices of vegetables, cereals and 'eggs, meat and fish' led to a reversal of trend during May and June 2013 (Chart VI.4b). Going forward, the satisfactory progress of monsoon so far has boosted the prospects for improved foodgrain production for the current year. The increases in Minimum Support Prices (MSPs) for *kharif* food crops for 2013-14 work out to an average of 4.1 per cent (using WPI weights). This is significantly lower than the average increase of 16.3 per cent during 2007-08 to 2012-13. The lower order increase in MSPs this year could also ease some of the pressures on food inflation, although several other structural impediments still continue to put pressure on food prices.



Revisions in administered prices restrict the moderation in inflation

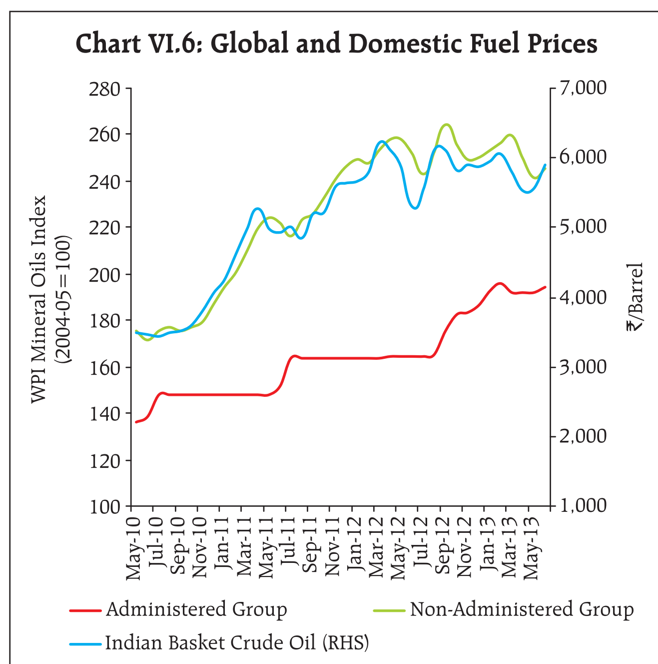
VI.9 The revisions in administered prices, particularly of diesel and electricity, led to a pick-up in inflation for administered price items during April-May 2013 (Chart VI.5). These revisions reflect both lagged pass-through of past increases in global prices as well as increases in input costs. Given these adjustments in administered prices, the moderation in overall inflation remained constrained. Inflation for the non-administered price group was much lower at 4.1 per cent compared with the headline inflation of 4.9 per cent for June 2013. Given the increase in global crude oil prices and rupee depreciation in recent weeks, further increases in administered prices could become inevitable which could lead to higher inflation readings.



Fuel inflation is driven by global oil prices and administered price revisions

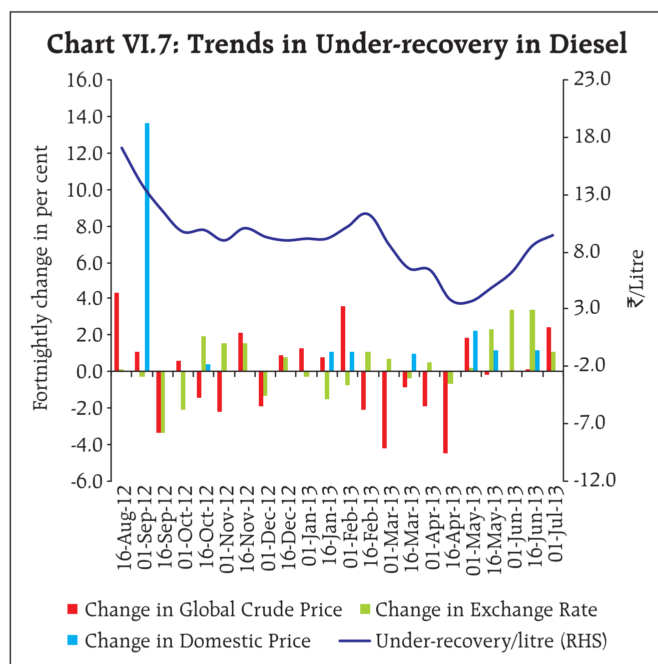
VI.10 The moderation in international oil prices during Q1 of 2013-14 led to some decline in the prices of freely priced fuel products. This was reflected in a decline in fuel inflation to a 40-month low of 7.1 per cent in June 2013. The revision in the administered prices of diesel in a staggered manner, however, partly offset the impact of lower oil prices. Even though the gap between administered and non-administered products under the mineral oils group declined in the recent period, it remains significant (Chart VI.6). The depreciation of the rupee as well as the firming up of global crude prices following the political uncertainties in the Middle East led to some increase in the prices of freely priced fuel products in June–July 2013.

Chart VI.6: Global and Domestic Fuel Prices



VI.11 During 2012-13, the total reported under-recoveries of the oil marketing companies (OMCs) was ₹1.61 trillion, of which 57 per cent was on account of diesel. Since September 2012, under-recoveries declined significantly, driven both by lower global crude prices and administered price revisions (Chart VI.7). During the initial months of 2013-14, falling global crude prices and a relatively stable exchange rate led to a significant decline in the extent of under-recoveries. Since mid-May 2013, however, the depreciation in the exchange rate and the increase in global crude oil prices offset the moderating impact of staggered increases in domestic prices. The per-litre under-recovery for OMCs from the sale of subsidised diesel increased to ₹9.5 per litre effective July 16, 2013, from a low of ₹3.7 per litre during the second fortnight of May 2013.

Chart VI.7: Trends in Under-recovery in Diesel

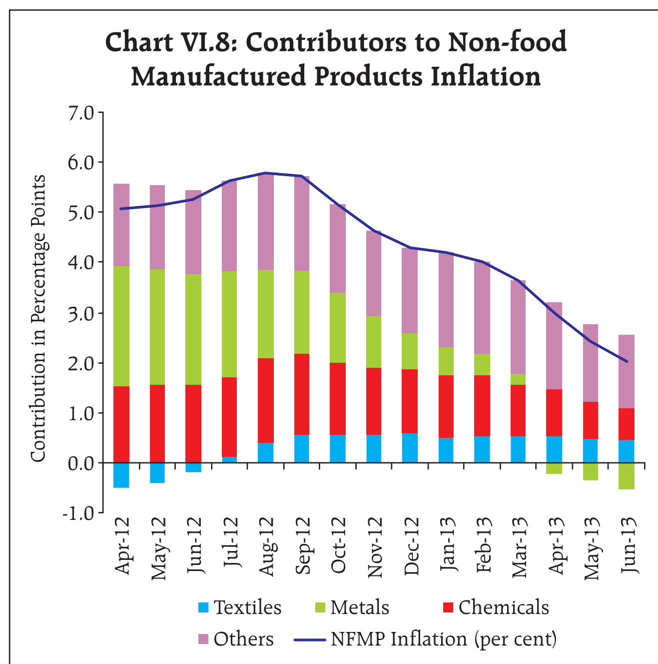


VI.12 Coal India has revised upwards the prices of coal from May 28, 2013, which could lead to an increase in input cost pressures for coal-consuming industries. Given the problems in the coal sector in terms of availability of coal, the government approved the proposal to set up an independent regulatory authority for the coal sector and also approved the introduction of the Coal Regulatory Authority Bill, 2013 in Parliament. This is expected to remove constraints in the sector and ensure improved supply and better clarity in pricing.

VI.13 Several State Electricity Boards (SEBs) revised their prices upwards in May 2013, which led to a 13 per cent increase in the electricity price index in the WPI. Further increases in electricity prices cannot be ruled out, as the increase in coal prices could lead to input price pressures. Further, the government has approved the recommendations of the Rangarajan Committee on natural gas pricing, according to which, domestic natural gas prices would be based on competitive international prices from April 2014. This could lead to increases in costs of production for gas-based power and fertiliser plants. The impact on inflation, however, could depend on how end-user prices are adjusted in line with increasing costs.

Generalised inflationary pressures ease, as the output gap remains negative

VI.14 The non-food manufactured products (NFMP) inflation, which is seen as an indicator of generalised inflationary pressures, declined significantly in recent months to reach 2.0 per cent by June 2013, largely driven by a decline in inflation in the metals and chemicals groups (Chart VI.8). Global metal prices have declined significantly in recent months, leading to a

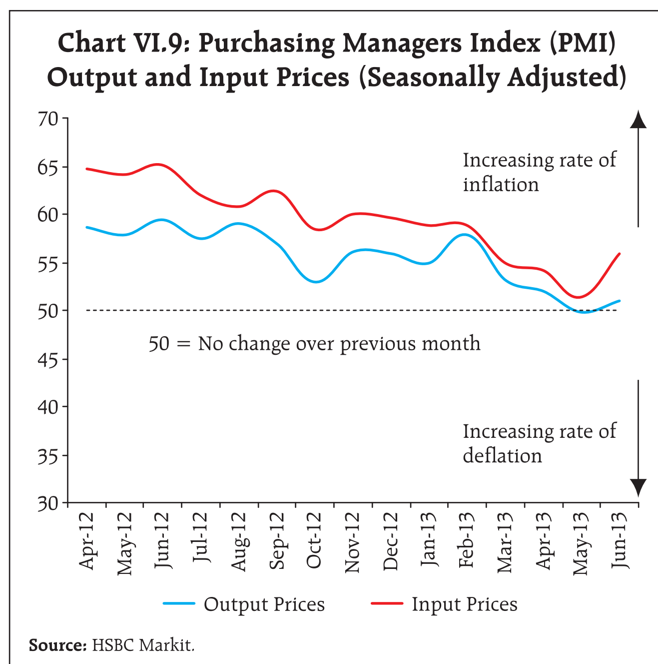


decline in domestic prices, even after accounting for the impact of rupee depreciation.

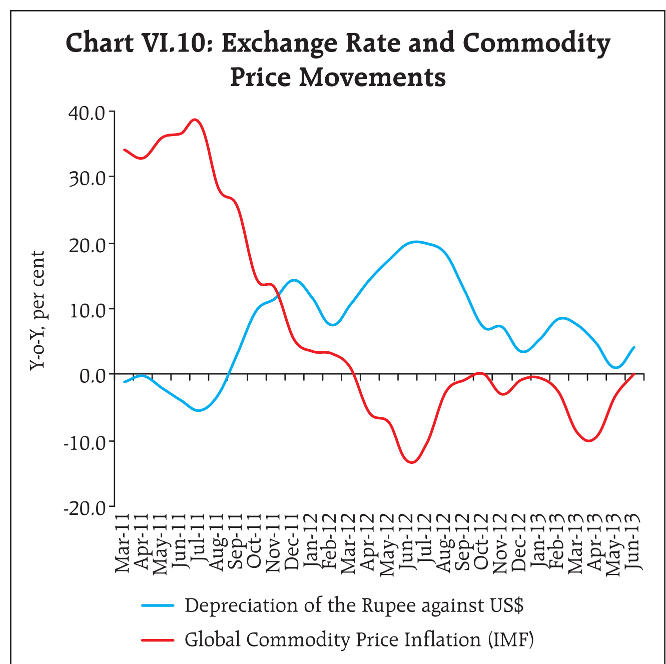
VI.15 Along with declining input cost pressures, demand conditions also remained weak, leading to lower pricing power of the firms. The Purchasing Managers Index (PMI) for manufacturing indicates that both input costs and output price pressures had ebbed in recent months (Chart VI.9). The PMI for output price declined to below 50 in May 2013, indicating a contraction in output prices. However, the PMI for input price exhibited a sharp turnaround in June 2013, reflecting the impact of rupee depreciation.

Pass-through of exchange rate depreciation could offset benefits from falling commodity prices

VI.16 Global commodity prices have exhibited negative inflation since March 2012. The impact of this on domestic inflation, however, remained muted, as the exchange rate depreciation acted as an offsetting factor (Chart VI.10). In the case of crude oil, the recent firming of global prices along with rupee depreciation pass-through could lead to higher domestic fuel prices. In terms of empirical estimates, while the pass-through of rupee depreciation has come down over period, the impact of the recent depreciation of the rupee on WPI inflation could still be significant. Recent estimates indicate that a 10 per cent depreciation could lead to about 1.0 percentage point increase in the WPI inflation. However, the exact impact could be conditional on a number of factors including how administered prices are adjusted in line with changes in rupee cost of imports and the pricing power of firms.



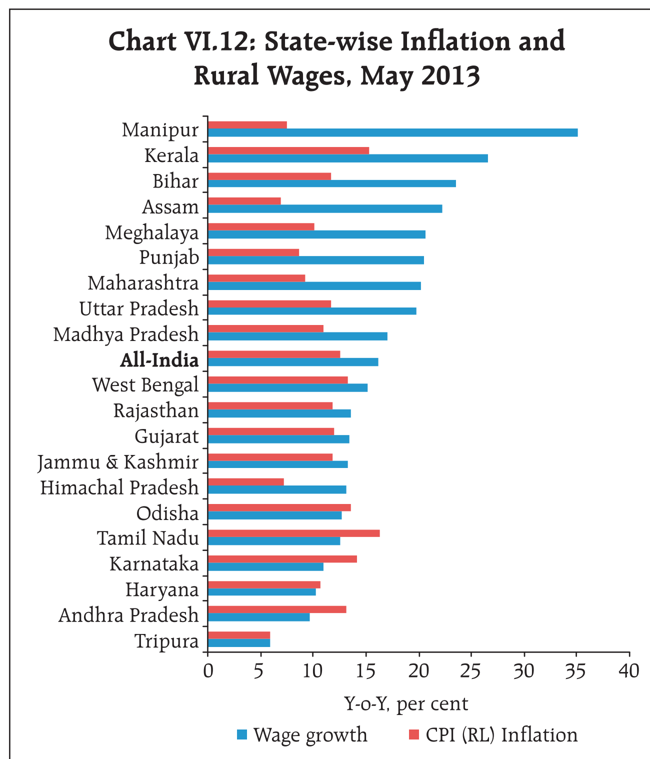
Source: HSBC Markit.



Real wage growth moderates in the recent period, driven by higher inflation in rural areas

VI.17 Rural wages, which were growing at over 20 per cent (y-o-y) during 2010-12, grew at a slower pace during 2012-13, but still remain in the high double digits. A significant pick-up in rural inflation in recent months contributed to a faster decline in real wage growth (Chart VI.11). There is, however, significant variation in wages and inflation across states (Chart VI.12).

Chart VI.12: State-wise Inflation and Rural Wages, May 2013



Divergence between WPI and CPI inflation remains wide

VI.18 The Consumer Price Index (CPI-combined: rural + urban) inflation remained close to double digits compared with WPI inflation, which fell below 5 per cent during Q1 of 2013-14 (Chart VI.13). This further widened the gap between WPI and CPI inflation. From the compilation point of view, the CPI and the WPI differ on several counts, such as coverage of commodity/ service, weighting diagram, the stage at which price quotations are collected, associated market (*i.e.*, wholesale market, retail market) and base year.

VI.19 The difference between wholesale and retail price levels can largely be attributed to trade and transports margins and taxes across states. In the case of market integration the price pressures should reflect identically in the wholesale and retail markets as movements in wholesale prices should translate to the retail market with some lag. However, supply-demand gap at the regional level, could lead to greater pressures on retail

Chart VI.11: Rural Wages and Inflation

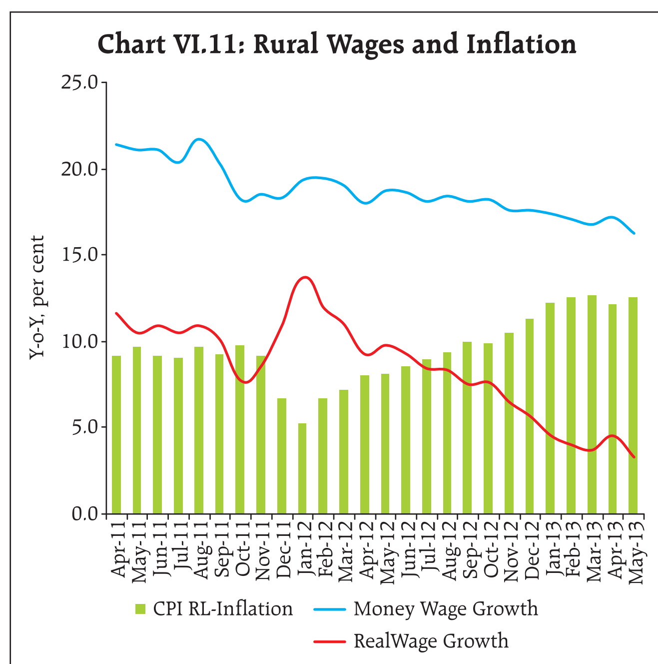
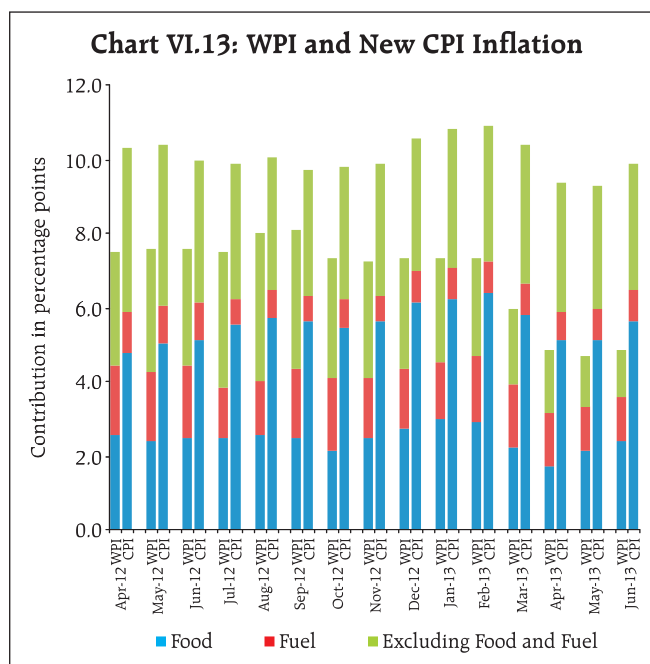


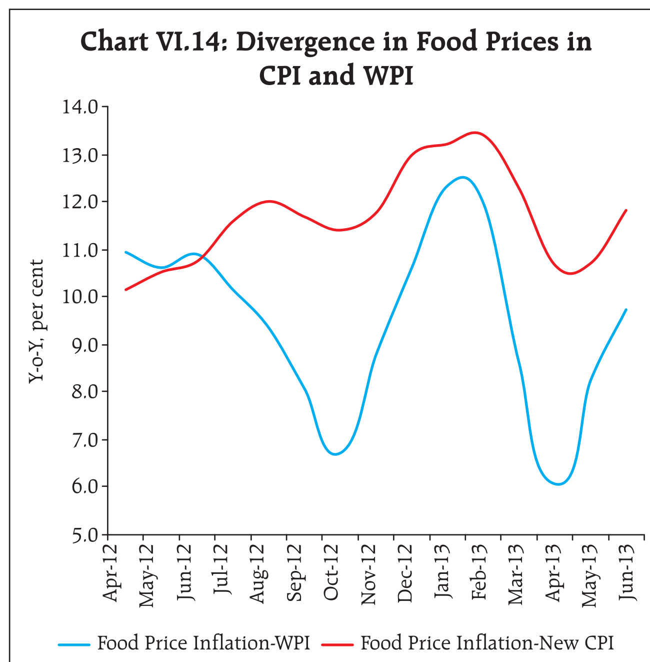
Chart VI.13: WPI and New CPI Inflation



prices than in the wholesale market. This requires improving the current state of supply chain management to provide better market access to farmers, storage facilities and transportation.

Divergence in wholesale and retail inflation remains high in some food items

VI.20 Apart from the divergence attributed to weights and commodities, there has been a divergence in price movements at the commodity group levels. Food price inflation in the WPI moderated at a faster rate than in CPI during February-April 2013 (Chart VI.14). The sharper moderation in the WPI food inflation was due to a decline in inflation of fruits and vegetables along with some softening in the inflation of cereals and pulses, except in May and June 2013. In the CPI, inflation in cereals and pulses remained high, with some moderation in inflation in vegetables and fruits during the same period.



Headline inflation has moderated, but upside risks persist

VI.21 The moderation in headline inflation during Q1 of 2013-14 was on account of declining international commodity prices, negative output gap and past monetary policy actions. The pick-up in headline WPI and CPI inflation in June 2013 suggest that inflation remains a concern even as the non-food manufactured products inflation has recorded a sharp decline to a low of 2.0 per cent. Moreover, CPI inflation rules close to double digit. While slow growth is likely to keep demand conditions largely subdued, risks persist from the recent exchange rate depreciation and the pick-up in global commodity prices, especially of crude oil. These risks underscore the need for continuous vigil and monitoring on the inflation front.

VII. Macroeconomic Outlook

Going forward, macroeconomic outcomes crucially hinge on evolving macro-financial conditions and domestic policy response. These conditions worsened during Q1 of 2013-14 as financial volatilities, which were set off from signals that the global interest rate cycle may start to turn, disrupted capital inflows to the EMDEs. If these trends amplify, there may be a risk to both growth recovery and inflation moderation. Business confidence remains low, as is evident from recent expectations surveys. Growth is expected to pick only slowly as the year progresses. While headline inflation has moderated, high consumer price inflation remains a concern. While recent measures to address exchange rate volatility have provided a temporary breather, it is important that structural reforms are pushed through to support growth revival and reduce CAD.

Recovery may take time, although growth is expected to improve as the year progresses

VII.1 After two years of deceleration, growth appears to be stabilising. Growth in Q4 of 2012-13 was broadly the same as in the previous quarter. Early indications for Q1 of 2013-14 suggest that the recovery is yet to shape in the economy. IIP growth stagnated during April-May 2013 recording a growth of 0.1 per cent. The contraction in May has been large on a seasonally adjusted basis. However, there are emerging signs that the downturn could be getting contained. Agricultural prospects for 2013-14 are encouraging given the good monsoon so far. Revival in mining and manufacturing will take some more time but some improvement is likely later in the year. The robust rural demand on the back of a good monsoon is likely to render some support. Meanwhile, the deceleration in services sector activity has added to the growth worries and lead indicators for the services sector suggest that services activity remains weak.

VII.2 The well-distributed rainfall so far, that has been excess or normal in all regions except Haryana, east and north east, raises the prospects of improved agricultural growth and a pick-up in demand for consumer goods. The increase in the water storage levels in the reservoirs would also enable the hydro-power sector to enhance their capacity utilisation and contribute to improved electricity output. However, growth revival would require a pick-up in a range of services activities that fall under construction and 'trade, hotels, transport and communications'. Overall, revival will not materialise until stable policy and regulatory regimes supportive of industrial activity are firmly in place and the envisaged plans to remove structural bottlenecks are quickly and fully implemented.

Sustainable recovery requires control over consumer price inflation

VII.3 India's consumer price inflation has been hovering around the double digits for 15 consecutive months. Such high inflation is a source of internal and external disequilibrium. It causes real consumption demand to fall along with lowering of household savings that provide the bulk of financial surpluses to support private and public investments. High consumer price inflation does not help public finances either as it puts pressure for larger fiscal subsidies. As domestic savings get eroded, it widens the external gap reflected in the CAD. High inflation also means large inflation differential *vis-à-vis* global trading partners which then makes the economy vulnerable to currency pressures. India's current macroeconomic deterioration to a large extent, reflects the three years of high inflation, which is well above the threshold at which it turns detrimental to growth. While the fall in headline WPI inflation affords some comfort, it is important to bring consumer price inflation under control.

VII.4 Going forward, inflation risks remain. The recent rupee depreciation of about 9 per cent in Q1 of 2013-14 is likely to put some fresh pressure on domestic inflation as pass-through occurs. Fuel under-recoveries have risen sharply due to the exchange rate depreciation and domestic price rigidities. Given the wide CAD, it is important to keep fiscal deficits under check. Therefore, it is necessary to pass on increases and

Table VII.1: Business Expectations Surveys

Period Index	NCAER- Business Confidence Index July 2013#	FICCI Overall Business Confidence Index Q4:2012-13	Dun & Bradstreet Business Optimism Index Q3: 2013	CII Business Confidence Index Q1: 2013-14
1	2	3	4	5
Current level of the Index	117.7	57.4	130.6	51.2
Index as per previous survey	114.1	61.2	141.6	51.3
Index level one year back	126.6	60.3	136.1	55.0
% change (q-on-q) sequential	3.2	-6.2	-7.8	-0.2
% change (y-on-y)	-7.0	-4.8	-4.0	-6.9

to be released.

adjust administered prices in the energy sector, including coal and electricity. However, in the short-run it poses challenges for inflation management.

Surveys show business confidence continues to weaken

VII.5 Recent surveys on business expectations show that business confidence has weakened further. There has been moderation on a y-o-y and q-o-q basis in the key indices that capture business prospects (Table VII.1). According to the FICCI survey, stiff global economic outlook, weak demand and the cost of credit continue to be concerns. The Dunn and Bradstreet Business Confidence Index declined by 7.8 per cent compared to the previous quarter due to uncertainty in economic outlook, both external and domestic, and constrained pricing power due to weak demand. According to CII, economic and political instability, high levels of corruption and infrastructure and institutional shortages are the three top concerns of firms. The latest NCAER survey shows some improvement on a q-o-q basis, but a decline on a y-o-y basis. While the seasonally adjusted HSBC Markit Purchasing Managers' Index (PMI) for manufacturing improved marginally during June 2013, the PMI for services declined although it remained in expansionary mode. The input and output price indices for both the sectors increased.

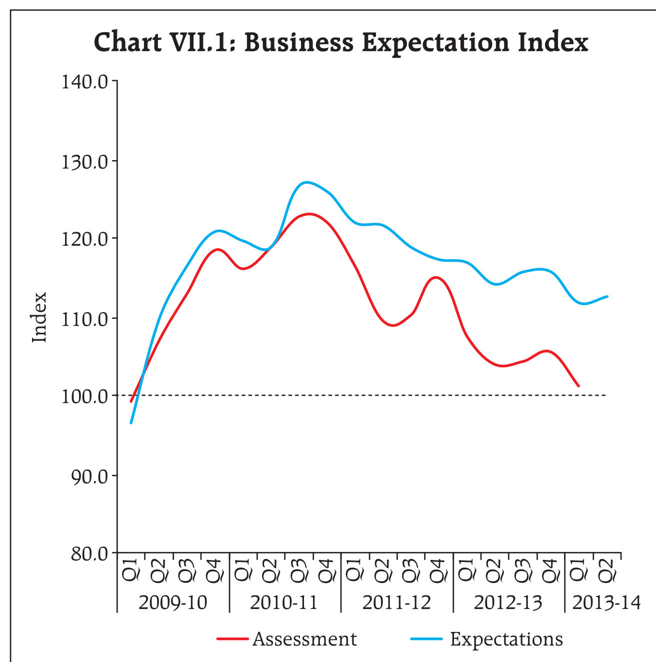
Business expectations remain weak

VII.6 The 62nd Round of the Industrial Outlook Survey (http://www.rbi.org.in/IOS62) conducted during Q1 of 2013-14 showed a weakening of business sentiments with the Business Expectations Index (BEI) for Q1 of 2013-14 touching the lowest level in the past three financial years. However, the index showed improvement for Q2 of 2012-13 (Chart VII.1).

VII.7 An analysis of the net responses among various components of demand conditions shows that sentiments on production, order books, capacity utilisation and exports dropped substantially, whereas the sentiments on imports remained broadly unchanged. However, their outlook for Q2 of 2013-14 shows slightly improved optimism.

VII.8 The results also pointed to deterioration in the overall financial situation which dropped for Q1 of 2013-14 but showed improved optimism for Q2 of

Chart VII.1: Business Expectation Index



2013-14. Although the cost of external finance is perceived to rise, the percentage of respondents expecting this rise has been declining since Q4 of 2011-12. Sentiments remained broadly unchanged for availability of finance. While the cost of raw material is expected to rise, there is a marginal drop in sentiments for rise in selling price in Q2 of 2013-14. The perception on profit margins continued to remain in negative terrain, but showed some improvement for Q2 of 2013-14 (Table VII.2).

Consumer confidence on current situation remains weak, although optimism about the future improves

VII.9 The 13th Round of the Consumer Confidence Survey (http://www.rbi.org.in/CCS13) conducted by the Reserve Bank in June 2013 indicated subdued consumer confidence with the Current Situations Index (CSI) remaining at the same level as in the previous quarter. However, Future Expectations Index (FEI) indicates some improvement in consumer confidence, with an increase in positive perceptions on income and employment (Chart VII.2). The CSI and FEI have been estimated based on current and future perceptions of economic conditions, household circumstances, income, spending, price level and employment situation.

External agencies revise India's growth projections downwards

VII.10 Most external agencies have revised India's growth projections downwards. These include the International Monetary Fund (IMF), the World Bank, the Organisation for Economic Co-operation and Development (OECD) and the Asian Development Bank (ADB). The external agencies' growth projections range between 5.3 and 6.7 per cent (Table VII.3).

Table VII.2 : Reserve Bank's Industrial Outlook Survey

Parameter	Optimistic Response	Net Response[1]								
		Jul -Sep		Oct-Dec		Jan-Mar		Apr-Jun		Jul-Sep
		2012		2012		2012		2013		2013
		E	A	E	A	E	A	E	A	E
1	2	3	4	5	6	7	8	9	10	11
1. Overall Business Situation	Better	30.6	16.1	32.2	17.2	37.5	18.4	29.6	12.8	30.0
2. Overall Financial Situation	Better	23.6	12.2	25.8	12.7	27.0	11.8	21.9	9.5	24.1
3. Production	Increase	33.6	18.8	35.7	18.6	37.1	18.6	24.4	9.8	28.5
4. Order Books	Increase	29.9	12.0	30.3	12.9	29.8	14.0	22.3	9.7	25.3
5. Capacity Utilisation	Increase	18.4	6.3	20.0	5.7	21.7	7.8	11.7	2.3	15.9
6. Exports	Increase	20.5	10.0	18.0	9.3	18.4	10.8	16.7	8.6	18.6
7. Imports	Increase	15.5	9.8	14.0	8.8	13.5	8.3	11.9	8.0	11.2
8. Employment in the Company	Increase	12.3	8.3	13.3	6.7	10.3	5.5	8.0	3.2	7.7
9. Availability of Finance (from internal accruals)*	Improve						12.1	18.7	10.8	17.2
10. Availability of finance (from banks and other sources)*	Improve						13.4	15.3	12.1	15.2
11. Availability of finance (from overseas)*	Improve						3.4	6.3	5.0	7.0
12. Cost of External Finance	Decrease	-24.0	-27.4	-20.6	-24.4	-18.1	-17.6	-14.3	-14.5	-12.4
13. Cost of Raw Material	Decrease	-51.4	-59.6	-48.6	-50.7	-45.0	-53.5	-45.6	-49.9	-43.4
14. Selling Price	Increase	18.8	18.5	17.3	10.2	15.8	9.1	14.9	7.3	12.1
15. Profit Margin	Increase	-3.6	-15.1	-1.3	-16.7	-2.0	-15.3	-4.9	-18.4	-3.7

[1] *Net response* is the percentage difference between the *optimistic* (positive) and *pessimistic* (negative) responses; responses indicating status quo (no change) are not reckoned. Higher 'net response' indicates higher level of optimism and *vice versa*.

*: These questions are newly added by splitting the questions on availability of finance (both internal and external sources) in the 61st Round (Jan-Mar 2013).

E: Responses for Expectation quarter A: Responses for Assessment quarter

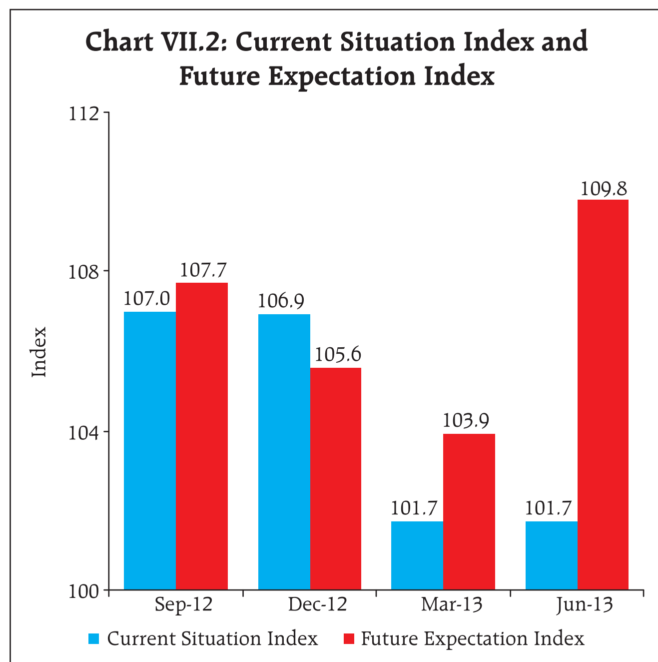


Table VII.3: Agencies' Projections for 2013-14

Agency	Latest Projection		Earlier Projection	
	Real GDP Growth (per cent)	Month/Year	Real GDP Growth (per cent)	Month/Year
1	2	3	4	5
Finance Ministry	6.1 to 6.7	Feb. 2013	-	-
PMEAC	6.4	Apr. 2013	-	-
IMF	5.6	July 2013	5.8	Apr. 2013
World Bank	5.7	Jun. 2013	6.1	Apr. 2013
OECD*	5.3	May. 2013	5.9	Dec. 2012
ADB	5.8	Jul. 2013	6.0	Apr. 2013
NCAER	6.2	May. 2013	6.2	Jan. 2013

* GDP at market prices.

Survey of Professional Forecasters indicates expectations of higher growth during 2013-14[1]

VII.11 The Reserve Bank's 24th Round of the Survey of Professional Forecasters outside the Reserve Bank (http://www.rbi.org.in/SPF24) expects recovery in growth from 5.0 per cent during 2012-13 to 5.7 per cent during 2013-14. Growth is expected to rise further to 6.5 per cent in 2014-15. Average WPI inflation is expected to moderate to 5.3 per cent during 2013-14. The twin deficits are also expected to improve during 2013-14 (Table VII.4).

Inflation Expectations Survey of Households

VII.12 The latest round of the Inflation Expectations Survey of Households (IESH Round 32) (http://www.rbi.org.in/IESH32), conducted across 5,000 households

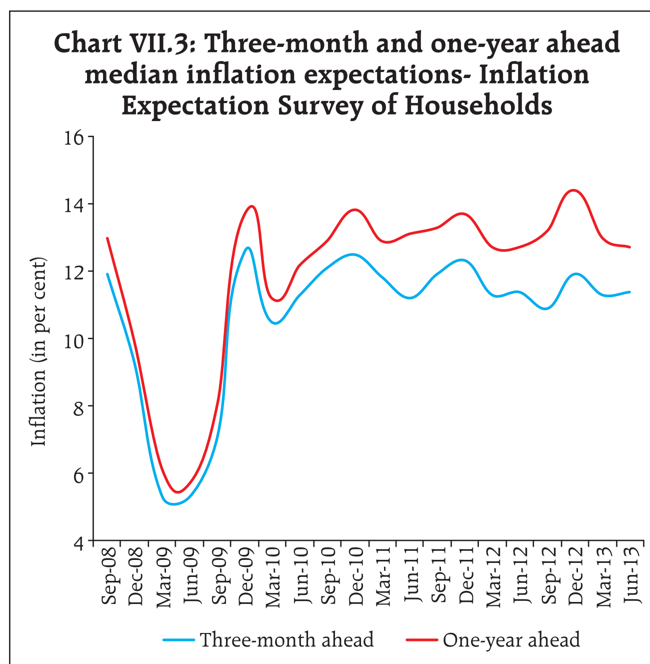
Table VII.4: Median Forecasts of Select Macroeconomic Indicators by Professional Forecasters 2013-14 and 2014-15

	Actual 2012-13	Annual forecasts				Quarterly Forecast									
		2013-14		2014-15		2013-14								2014-15	
						Q1		Q2		Q3		Q4		Q1	
		E	L	E	L	E	L	E	L	E	L	E	L	E	L
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Real GDP growth rate at factor cost (%)	5.0	6.0	5.7	-	6.5	5.5	5.0	5.8	5.4	6.2	6.1	6.4	6.2	-	6.1
a. Agriculture & Allied Activities	1.9	3.0	3.0	-	3.0	2.7	2.5	3.0	3.1	3.3	3.5	3.0	3.3	-	3.0
b. Industry	1.2	4.4	3.6	-	5.5	3.7	3.0	4.1	3.7	4.4	4.0	4.7	3.8	-	4.6
c. Services	6.8	7.1	7.1	-	7.6	6.8	6.4	7.0	6.8	7.4	7.2	7.7	7.4	-	7.5
2. Gross Domestic Saving (% of GDP at current market price)	-	30.0	30.3	-	31.3	-	-	-	-	-	-	-	-	-	-
3. Average WPI-Inflation (%)	7.4	6.5	5.3	-	5.7	-	-	6.0	4.8	6.5	5.4	6.8	5.5	-	5.6
4. Exchange Rate (₹/US$ end period)	54.4	-	-	-	-	-	-	54.8	60.0	54.4	59.5	54.0	59.5	-	59.5
5. 10-year Central Govt. Securities Yield (% end period)	8.0	7.7	7.4	-	7.0	-	-	-	-	-	-	-	-	-	-
6. Export (growth rate in %)!	-1.0	8.7	4.4	-	9.0	-	-	-	-	-	-	-	-	-	-
7. Import (growth rate in %)!	0.5	7.4	3.9	-	7.0	-	-	-	-	-	-	-	-	-	-
8. Trade Balance (US$ billion)	-195.7	-	-	-	-	-48.6	-50.6	-52.0	-50.0	-59.6	-55.2	-56.6	-47.6	-	-55.0
9. Current Account Deficit (% of GDP)	4.8	4.5	4.4	-	3.9	-	-	-	-	-	-	-	-	-	-
10. Central Government Fiscal Deficit (% of GDP)	4.9	5.0	4.8	-	4.7	-	-	-	-	-	-	-	-	-	-

E: Previous Round Projection. L: Latest Round Projection. - : Not Available. !: US$ on BoP basis
Note: Latest round refers to 24th Round for the quarter ended June 2013, while Previous Round refers to the 23rd Round for the quarter ended March 2013.
Source: Survey of Professional Forecasters, First Quarter 2013-14.

[1] The forecasts reflect the views of professional forecasters and not of the Reserve Bank.

in 16 cities and 7 occupational classes during June 2013, indicates that the three-month ahead and one-year ahead median inflation expectations remain at similar levels as in the previous quarter (Chart VII.3). However, the proportion of respondents expecting a price increase *'more than current rate'* in the one-year ahead period has diminished for all product groups (food products, non-food products, household durables, housing and cost of services). In the case of the three-month ahead period, those proportions have marginally diminished for food products and cost of services.



Amplifying macro-financial risks warrant a cautious monetary policy stance

VII.13 Although headline inflation has receded in Q1 of 2013-14 and the CAD has moderated during Q4 of 2012-13, macro-financial risks increased distinctly during Q1 of 2013-14. Faced with exchange market pressures, the Reserve Bank responded in July 2013 with measures designed to curtail rupee liquidity with a view to curb the volatility in the rupee exchange rate. The immediate reaction of the measures has been rupee positive.

VII.14 However, macro-financial risks could still amplify further under a number of possible developments. First, financial market conditions could tighten further with, or in anticipation of, partial withdrawal of monetary stimulus in AEs. This, in turn, could trigger further portfolio shifts of capital from EMDEs to AEs and magnify the impact. Second, recovery in AEs could falter again with fiscal multipliers feeding through to slacken growth on the back of expenditure cuts and tax increases. Third, growth in key EMDEs, especially China, could slow further if rising inflation and financial sector fragilities force monetary prudence. Fourth, global trade deceleration may get extended if global growth slows again. Fifth, if domestic growth continues to decelerate, it could have a spiraling effect on the fiscal deficit, as revenues will fall. This could pose risk to macroeconomic and financial stability, especially if wider fiscal deficit spills over to the current account gap. Sixth, fiscal deficit could widen if the exchange rate pass-through is constrained by holding back administered price revisions. Seventh, sustained high consumer price inflation could slow real demand and savings in the economy. Finally, political uncertainties could rise as part of the electoral cycle, which could affect the macroeconomy through different channels.

VII.15 Macroeconomic conditions have distinctly weakened during Q1 of 2013-14. There is no evidence yet of recovery in growth even as headline inflation has moderated. Consumer price inflation, especially food inflation, remains high, although a good monsoon should help in this regard. Business confidence remains low, as is evident from recent expectations surveys. The external sector is under stress. While recent liquidity tightening measures instituted by the Reserve Bank to curb volatility in the exchange rate provide at best some breathing time, it is important to push through structural reforms necessary to inspire the trust and confidence of both domestic and foreign investors. The priority for monetary policy now is to restore stability in the currency market so that macro-financial conditions remain supportive of growth. This strategy will succeed only if reinforced by structural reforms to reduce the CAD and step up savings and investment.

SPEECHES

Reserve Bank as a Knowledge Institution
Duvvuri Subbarao

Central Banking in Emerging Economies: Emerging Challenges
Duvvuri Subbarao

Credit Information Companies: Seeking New Frontiers
K. C. Chakrabarty

Compliance Function in Banks: Back to the Basics
K. C. Chakrabarty

Frauds in the Banking Sector: Causes, Concerns and Cures
K. C. Chakrabarty

Financing Strategies for Urban Infrastructure: Trends and Challenges
Harun R. Khan

Internationalisation and Integration of Asian Capital Markets:
Expanded Role for Asian Currencies including the Renminbi
G. Padmanabhan

Conference of Principal Code Compliance Officers /
Chairmen of Regional Rural Banks: Inaugural Address
Deepali Pant Joshi

National Seminar on Consumer Protection –
Agenda for Inclusive Growth
Deepali Pant Joshi

*Reserve Bank as a Knowledge Institution**

Duvvuri Subbarao

1. Delighted to be participating in the Golden Jubilee of RBSC.

- Over the last 50 years, RBSC has established a formidable reputation for the quality of its training programmes, innovations in training techniques and for its commitment to be moving up the learning curve.
- The RBSC can take pride in having trained generations of RBI staff who are known for their subject matter expertise, professional integrity, and value based conduct.
- This is a tribute to the past chairmen of the Governing Council, Principals, faculty and staff of the College over the last 50 years.
- On the occasion of the college's Golden Jubilee, I am privileged and delighted to place on record our homage to their contribution.
- In particular, I want to acknowledge the past principals of the college who are present at the celebrations today:

  1. Shri R. C. Mody
  2. Shri O. P. Sodhani
  3. Shri P. K. Biswas
  4. Shri S. Venkataraman
  5. Shri T. R. Devarajan
  6. Shri M. Jesudasan
  7. Smt. Chitra Chandramouliswaran
  8. Shri S. Karuppasamy
  9. Dr. J. Sadakkadulla
  10. Ms. Uma Subramanian (present Principal)

- Some past principals who are not able to be present here today are the following:

  11. Shri K. K. Mukherjee
  12. Shri K. N. V. Nair
  13. Shri K. Hariharan
  14. Shri K. Sivaraman
  15. Shri S. Ganesh

Looking Ahead – Goals and Aspirations

2. Golden Jubilee is an occasion to celebrate past achievements; equally it is an occasion to look ahead to the challenges and to redefine goals and renew aspirations.

Looking ahead by looking back

3. What I want to do in my comments is to look ahead by looking back and give some broad contours of the Reserve Bank's goals and aspirations which in turn should inform the role and responsibilities of RBSC.

Central Banking is Changing

4. Over the last five years, the world has gone through an extraordinary financial and economic crisis. Central banks have been blamed for getting the world into the crisis. They are also being praised for getting the world out of the crisis. This is not the occasion to debate the faults or celebrate the heroics of central banks.

5. All I want to do on this occasion is to acknowledge that as a result of the impact of the global financial crisis and the follow on euro zone crisis, central banking around the world is changing in dramatic ways.

- Vigorous debates

* Governor's Speaking Notes delivered at the Golden Jubilee Celebration Function of the Reserve Bank Staff College, Chennai, July 3, 2013.

- about autonomy and accountability of central banks
- the mandate they must pursue with regard to monetary policy
- their mandate beyond monetary policy

- Debate playing out in different ways in different countries.
- Debate playing out here in India too.
- We know for sure that there will be changes in central banking everywhere; there will be changes here in India too.
- What those changes will be is not clear.

RBI - Knowledge Institution

6. How should the Reserve Bank manage that change?

- In one sentence – "by becoming a knowledge institution".

7. If someone challenged me: What is a knowledge institution?

8. Cannot define. But I can explain it.

- Hierarchy of learning:
- **Data → Information → Knowledge → Wisdom**

9. So, how do we become a knowledge institution?

- By becoming a storehouse of knowledge. Accumulate knowledge
- Necessary but not sufficient

10. Knowledge Institution – Sufficient Condition

i. Use that knowledge to achieve your goals. Knowledge → Wisdom

ii. In doing so, your conduct and action must be based on values and ethics.

Focus of My Comments

11. Characteristics or attributes that the Reserve Bank must acquire to progress on the path to being a knowledge institution.

12. 1st Attribute: Managing Monetary and Regulatory Policies in a Globalising World

- Global Financial Crisis (GFC) and the eurozone crisis have demonstrated the uncertainties and dilemmas of macroeconomic management in a globalising world.
- Before the crisis – we thought we were decoupled. Crisis proved that to be wrong.
- Virtually every country affected by the crisis. If there is one country that should not have been affected, it is India. Among large EMEs, India least integrated into the world. Shows the power of globalisation.
- Does it mean we are paying too high a price for globalisation? Does it mean we opt out of globalisation?
- No. Perish the thought.
- Globalisation is a double edged sword. Immense opportunities. Ruthless challenges.
- India benefitted from globalisation. Great Moderation – benign global environment. India's growth acceleration is due to Great Moderation.
- India also paid the cost of globalisation. India being impacted by the crisis – example of costs of globalisation
- Manage globalisation - minimise the costs.

  - maximise the benefits.

13. **Managing Globalisation in Monetary Policy**

How do we manage globalisation in making our policy?

- Earlier monetary policy by looking at just the domestic situation. Credit policy documents in the 1970s, 80s, 90s – no reference to external situation.

- That has changed in a fundamental way.
- Because of India's integration, external developments impact our domestic macroeconomic situation in complex, uncertain and capricious ways.
- Now in making our policy, we need to take external developments into account. Our policy documents contain an important section on global developments.

Example 1: Great Exit

- Prospect of the Great Exit – US Fed tapering off its QE.
- If you analyse – Fed did not say anything new. But markets reacted.
- Managing globalisation means we need to understand how market participants react to global developments. And how that impacts our economic and financial conditions. And what should be policy response?

Example 2: Basel III

14. Example from regulatory domain

- Basel III -started implementing w.e.f. April 1, 2013.
- Why do we have to implement Basel III?
- Argument: Advance Economies (AE) banks that misbehaved. It's they which had to be set right. It's they that require higher capital standards.
- Argument is flawed. Our banks are operating abroad. Foreign banks are coming to operate in India.
- India cannot be an outlier.
- Admittedly, higher capital requirements and tighter regulation will make credit costlier.
- But the cost of not implementing Basel III greater than the cost of implementing it. Indeed, the cost-benefit calculus could be positive.

15. **1st Attribute:** Knowledge institution – manage both economic and regulatory policies in a globalising environment

- Understand global developments
- Analyse implications for domestic economy
- Frame policies in that context

16. 2nd Attribute: Knowledge institution – make intelligent, mature, balanced judgement

- After all the debate, all the analysis, policy decision is a matter of judgment.
- Operating at the bridge from knowledge to wisdom.

17. Example 1: Monetary Policy Decision

- Monetary policy decision (calibrate interest rate).
- Managing the crisis *vs.* managing the recovery.
- Crisis: What was important was not what you did, but that you did something at regular intervals.
- Recovery – calibration was very important.
- *Chakravyuh* in *Mahabharata*: Getting in was easy. Getting out was difficult.

18. Post-Crisis: Applying judgement in treading the growth-inflation balance: If we alter interest rates, what impact will it have on inflation? On growth? Transmission. Criticism of RBI.

19. Example 2: Deposit Insurance

- During the crisis – UK banks insured all their deposits

- Pressure on us to do the same
- Can we afford it? Will it not set off a panic?

20. Example 3: Costs and Benefits to Regulation

- Tighter regulations – safe financial system but also a dysfunctional financial system.
- Excessive or premature tightening can mean loss of growth and welfare.
- Excessively loose regulation can result in financial instability.
- Drawing the right balance requires fine judgement.
- Ability to make the right judgment is a key attribute of a knowledge institution.

21. **2nd Attribute**: Ability to make intelligent, mature and balanced judgment.

22. **3rd Attribute: Be open minded. No dogma. Galileo and the Church**

- By far the most famous and high profile example of dogma in the history of science is the conflict between Galileo and the Church.
- Church refused to accept the heliocentric view of the universe against the prevailing geocentric view of the universe.
- No dogma means when new evidence that invalidates prevailing view comes in, we are willing to change our view and accept the new proposition (Thomas Kuhn– Paradigm Shift).
- Galileo himself was not fully correct because he believed in a stationary sun.

23. Example: Corporates into the banking sector

Why are you allowing corporates into the banking sector?

- True, they have not been allowed so far.
- True, rules in this regard around the world are different.
- After extensive consultation, due deliberation and careful consideration, we have decided to allow corporates into the banking sector.
- Why?
    - Corporates have been allowed entry into other financial service sectors.
    - Corporates have a long and credible record of building and nurturing new businesses in highly regulated sectors like telecom, power, airports.
    - Corporates can bring in capital, leverage on their business experience and management expertise.
    - Innovative ideas for financial inclusion.
- Arguments against
    - Scope for connected lending, using public trust for private gain.
    - Opportunities for regulatory arbitrage and for contagion of risk across the financial system.
    - Concentration of economic power and influence.
- Safeguards (endogenous and exogenous) against self-centred business practices and self-dealing.

24. **3rd Attribute**: Be open minded.

4th Attribute: Learning Institution

25. Knowledge institution has to be a learning institution

- You learn something every day (ICICI girl)

Example

- Rogoff and Reinhart "This Time is Different"
- Studied 800 years of history of financial crisis
- Every time a crisis has occurred – economists and policy makers have said: "This time is different."
- Yet over 800 years, the origins of all financial crises can be traced to the same fundamental causes.
- This is a controversial and contentious debate.
- Without taking a position on this, I want to emphasise that a knowledge institution tries to distil lessons from every experience.

Example 2: Humility

- At the same time, a knowledge institution must have humility: We have to admit that we can't control everything.
- Instead of believing that the world must behave according to what our theories say, we have to take the work as given and try to fit theories into that.
- Known unknowns. We have to accept them as they are without any presumption about superior knowledge.
  - Einstein: Propounded the theory of relativity.
  - All his life couldn't reconcile to the probabilistic nature Implied by quantum mechanics.
  - "God doesn't play dice"
  - Neils Bohr: Stop telling God what he can or cannot do.

26. 4th Attribute: Knowledge institution is conscious that it is forever on a learning curve.

5th Attribute: Generate knowledge

27. Knowledge institution has to generate knowledge

- Research
- I've asked Research Department to publish papers of international standards.
- RBI – Public Policy Institution – We generate not esoteric knowledge but knowledge based on what we learn from experience.
- That should be our comparative advantage
- It's here that our knowledge generation differs from that in natural sciences.
- In natural sciences, knowledge progression is a two way street
  - Knowledge advances in both directions.
  - From empirical findings to theory, and from theory to empirical findings.
  - Michelson Morley experiment that velocity of light is constant led to the theory of relativity. Progression from experience to theory.
  - Search for Higgs Boson triggered by prediction of quantum theory. Progression from theory to experience.

- In public policy, learning is only one way street – from real world to knowledge

- Other attributes of learning
  - (i) Shuns group think (risk managers who dissented were silenced) – Plurality of views. Minority voices and opinion are heard and considered with respect
  - (ii) Internal Communication is very important
    - Thematic Video Conferences in RBI
    - Should be a two way learning process

- Great learning experience. Some staff, especially younger staff, ask searching questions.

(iii) No working in silos. Cross fertilisation of ideas from across disciplines and departments.

(iv) Capacity to deal with complexity and Uncertainty

- Conant-Ashby Theorem from cybernetics
- Every regulator of a system must have a model of the system it seeks to regulate

28. **5th Attribute**: Environment for generating knowledge

6th Attribute: Open, communicative and consultative

29. Knowledge institutions – Open, communicative and consultative

- Power of central bank communication is striking
- Fed – after 9/11: "The Federal Reserve System is open and operating. The discount window is open to meet liquidity needs.
- Those two banal sentences had remarkable calming effect on US and world financial markets. Announcement effect is stunning.
- Mario Draghi "Whatever it takes" Prevented what many thought was an imminent collapse of the euro.
- During the crisis – RBI communicated about uncertainty but also preparedness to act. Calming effect.

  "The Reserve Bank is committed to maintaining financial stability and flexible liquidity management using all policy instruments."
- You might think these are routine, vacuous statements devoid of any content. Can be incredibly effective in restoring calm.

30. Dilemma in communication – How much do we communicate?

- Two views about it.
- First view: If you have something negative, don't say it because it can have self-reinforcing negative impact.
- Mothers across cultures and across time: "If you don't have anything nice to say, don't say it."
- Alternative view: "Say it as it is. You must present the true picture."
  - Example: Bernanke: Results of banking stress tests.
  - If the central bank has credibility, communication can be effective. Our own experience supports this view.
  - Forward guidance on monetary policy – struggle with nuancing it
  - 'Little space for further monetary policy easing'. Governor doesn't know English.
  - Paradox here – Monetary Policy forward guidance most needed by market when there is uncertainty.
  - But that is also the time when you are least able to give definitive guidance.
- Communication is a double edged sword. It can lead to wrong interpretations and unintended consequences. Recent statements from the US Fed on tapering of the QE.

31. Communication should not be one way. We should also listen.

- Town Hall Meetings (at least once every year. Chandigarh, Jaipur, Pondicherry)

- June 29 – on illegal, unlawful financial schemes -Ponzi, multi-level marketing schemes – cheating people.
- Media Conferences
- Post-policy teleconference
- Pre-policy consultations
- Consultative: Discussion Papers on policy initiatives. On new bank licences, on subsidiarisation of foreign banks, deregulating interest on savings bank deposits, white label ATMs, risk based supervision.

32. 6th Attribute: Open minded, communicative and consultative.

7th Attribute: Outreach

33. Knowledge Institution – Effort at outreach – to get exposed to the real world.

- Reserve Bank cannot function in an ivory tower.
- Growth, inflation, interest rates and exchange rates are not mere statistics. They impact people's everyday lives.
- Outreach programme to listen and understand. To explain.
- Chennai – town hall meeting (3 years ago on the steps of the Egmore Museum)
  - inflation (middle aged people)
  - growth (young people)
- Village immersion programme for DRs
  - how do the poor live?
  - how do they manage their finances?
- Frontline Managers Conference
  - BC : BM makes me wait in the line
  - humiliated in front of clients.
- You learn stuff that meetings, seminars, conferences and reports do not give you.

34. 7th Attribute: Outreach. Understand the world for which we make policy.

8th Attribute: Takes Accountability Seriously

35. Knowledge institution – takes accountability seriously

- As RBI, we jealously guard our autonomy
- "RBI is independent". We know public interest. No one should interfere.
- But the autonomy that we assert so vehemently has to be earned. Not demanded. Need to earn by rendering accountability.
- We are an unelected body of officials making public policy with enormous implications for people's everyday lives.
- Accountable for results – explain growth, inflation
- Open to be challenged
- Governor to go before the Standing Committee of the Parliament

36. **8th Attribute**: Takes accountability seriously.

9th Attribute: Think Positive

37. Knowledge Institution – Think Positive

- Executive of a shoe company to explore the demand for shoes
- Nobody wears shoes. No demand.
- Rival Company: Nobody wears shoes. Enormous demand.

38. **9th Attribute**: Think positive.

10th Attribute: Values and Ethics

39. Values and ethics (Prof. Dipankar Gupta)

- Sensitivity – inflation and the poor

- Humility – Financial markets are misbehaving
- Compassion
- Always uphold larger public interest

40. **The Difficulty of Being Good**

- Every character in *Mahabharata* is morally flawed in some sense or the other. Every episode raises a moral debate about "What is *dharma*?"
- *Draupadi* to *Yudhistara* : Whom did you lose first?
- *Bhishma's* silence – Did his dharma become hostage to the abiding sense of loyalty to the king?
- Knowledge institution – upholding *dharma*

41. Ten attributes of a knowledge institution. Not comprehensive. Not a unique listing.

42. RBI has come a long way. Becoming a knowledge institution is not an event but a process.

Remind ourselves of the challenge and opportunity of becoming a knowledge institution.

43. RBSC – will be the prime lever of the Reserve Bank's journey to become a knowledge institution.

44. My privilege to be at this knowledge institution when RBI celebrated its platinum jubilee in 2009-10 and when the RBSC is celebrating its Golden Jubilee in 2012-13.

*Central Banking in Emerging Economies: Emerging Challenges**

Duvvuri Subbarao

First of all, my thanks to the European Economics and Financial Centre for inviting me to speak at the *Distinguished Speakers Seminar.* It is an honour to which attach a lot of value.

Central Banks - Triumph and Tribulation

2. In the years before the crisis, central bankers were a triumphant lot. The Great Moderation that they took credit for brought steady growth and low inflation in advanced economies, and rapid growth and stable inflation in emerging market economies (EMEs). This benign macroeconomic environment generated a consensus around the view that the best practice in central banking was the pursuit of a single objective (price stability) by means of a single instrument (the short-term policy interest rate). Central bankers thought they had discovered the holy grail.

3. It turns out they had declared victory too soon. In the event, the crisis challenged the old theology of single target central banking. It also showed up the failure of central banks to correct for the rapidly growing global imbalances and to keep regulation in pace with financial innovation. Indeed, some even argue that the extended period of steady growth and low inflation blindsided central banks from seeing the festering financial instability brewing in the underbelly of the global financial system.

4. The crisis has unleashed a vigorous debate on what lessons central banks should take away from the crisis, and how they should respond to them. This debate has thrown up some important questions: (i) Should central banks persist with pure inflation targeting? (ii) If not, should their objective function also include real sector variables? (iii) What is the role of central banks in preventing asset price bubbles? (iv) What should be their responsibility in regard to financial stability? (v) Are there synergies in the central bank being also the regulator and supervisor of banks? (vi) Will responsibility for financial stability compromise their autonomy? (vii) What should be the institutional arrangement for coordination among regulators and the government?

5. That indeed is a long list of questions. Even as there are no definitive answers yet, several advanced economy governments have gone ahead with redesigning their regulatory architectures, in the process redefining the mandates of their central banks.

Central Banking in EMEs

6. Are central banks in EMEs struggling with the same questions? In a broad sense yes, although both the questions and answers are slightly different in their case. To understand why, a bit of context is necessary.

7. Central banks in EMEs have historically differed from the advanced economy central bank model in an important way. Their mandates have typically extended beyond price stability to supporting growth and to external sector management. They also have responsibility, in varying forms and degrees, for financial stability. In addition, many of them have a development mandate - of building institutions, deepening financial markets, modernising financial sector infrastructures and furthering financial inclusion.

Think Global, Act Local

8. Given this difference, there was no settled view in EMEs about the optimal institutional design for their central banks. In the years before the crisis, there was a growing view that the way forward for EME central banks lay in embracing the minimalist model of the advanced economy central bank. Now, with that minimalist model itself unravelling, there is a rethink among EMEs on whether that is the best way forward.

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* Speech delivered by Dr. Duvvuri Subbarao, Governor, Reserve Bank of India at the European Economics and Financial Centre, London on July 17, 2013.

They are sensitive to the fact that the issues in the global debate are relevant to them; but they also realise that they have to adapt the lessons of the crisis to their specific macroeconomic and institutional contexts.

9. What are the challenges confronting EME central banks as they embark on this task? What are the emerging issues? This is what I want to focus on. In particular, I will address five specific issues.

I. Treading the Growth-Inflation Knife-Edge

10. Managing the growth-inflation balance is a particularly complex challenge in EMEs for a number of reasons. By far the most important is the fact that in EMEs, supply shocks, especially in the food and fuel sectors, have historically been important drivers of inflation. How should monetary policy respond to such supply shock driven episodes of inflation?

11. Text book economics tells us that if the supply shock is temporary, monetary policy need not react to it; on the other hand, if the supply shock is structural in nature, it can lead to generalised inflation - in the first round by the higher input costs, and in the second round through its impact on inflation expectations and wage bargaining. In the presence of excess demand relative to supply, the generalisation of inflation could be rapid unless prevented through a forward looking anti-inflationary monetary policy stance. In short, when supply shocks impact the core component of inflation, monetary policy should respond. Determining whether the supply shock is temporary or structural is a frequent challenge that EME central banks confront. There is a possibility here of both type I and type II errors[2], and either type of error can be costly in terms of foregone growth and loss of welfare.

12. Another important reason why managing the growth-inflation balance in EMEs is a bigger challenge is because of their relatively higher poverty levels. Inflation, as we all know, is a regressive tax, and it hurts the poor the most. On the other hand, the most effective way of reducing poverty is through higher growth. But higher growth is sustainable only in an environment of price stability. Drawing the right balance between combating inflation and supporting growth is a complex challenge that EME central banks face.

13. Estimating the potential output is another factor that complicates the management of the growth-inflation balance in EMEs. This is a difficult task everywhere, but is particularly difficult in EMEs because of large under utilised capacity coexisting with supply constraints. Consequently, it is difficult to get an accurate estimate of the output gap and of the excess demand embodied in it, making the challenge of monetary policy calibration that much more complex.

14. I could go on with several other examples to illustrate how the growth-inflation dynamics in EMEs are structurally and analytically different from those in advanced economies. The short point is that EME central banks have to tread the growth-inflation knife edge with much greater judgement and caution than advanced economy central banks because of the several known unknowns and many unknown unknowns.

II. Central Banking in a Globalising World Managing the Impossible Trinity

15. Let me move on to the second issue, about how globalisation has complicated macroeconomic management for EME central banks, as indeed demonstrated by the crisis.

16. As the crisis erupted, it spread ferociously from the sub-prime US markets to financial markets around the world, demonstrating the interconnectedness of national financial systems and the spillover impact of external developments on domestic policy actions. Importantly, central banks found that sentiment and confidence were remarkably correlated across countries.

17. In a globalising world, external developments interact with the domestic economy in complex,

[1] Type 1: No monetary policy response to a shock that turns out to be structural.
Type 2: Aggressive monetary policy response to a shock that turns out to be temporary.

uncertain, and even capricious ways. EME central banks have to deepen their understanding of these interactions. Some of the channels through which cross-border transmission occurs are quite familiar - global prices, including commodity price movements; synchronisation of business cycles; capital flows; strong comovement of asset prices; exchange rates of key international currencies; and interest rate policies of central banks. Some of the transmission channels are less familiar. For example, the crisis has shown that even differences in regulatory regimes can trigger arbitrage-based action and dilute the efficacy of domestic policies.

Impossible Trinity

18. The best way to understand the challenge of monetary policy formulation in a globalising world is through the 'impossible trinity' trilemma. This trilemma asserts that a country cannot simultaneously maintain all three policy goals of free capital flows, a fixed exchange rate and an independent monetary policy.

19. Given the 'impossible trinity' trilemma, countries have made different choices. The most common choice, typical across advanced economies, is to give up on a fixed exchange rate so as to run an open economy with an independent monetary policy. On the other hand, economies that adopt a hard peg give up on the independence of monetary policy. Examples include the currency boards set up by Hong Kong and, for a time, Argentina.

20. In contrast to advanced economies which opt for corner solutions, emerging economies here typically opted for middle solutions, giving up on some flexibility on each of the variables to maximise overall macroeconomic advantage.

India's Approach to the Impossible Trinity

21. In India too, we have opted for a middle solution on the 'impossible trinity' whose contours are the following: (i) We let our exchange rate be largely market determined, but intervene in the market to smooth excess volatility and/or to prevent disruptions to macroeconomic stability; (ii) Our capital account is only partly open; while foreigners enjoy mostly unfettered access to our equity markets, access to debt markets is restricted; there are limits to the quantum of funds resident corporates and individuals can take out for investment abroad, but the limits are quite liberal; and (iii) Because of the liberalisation on the exchange rate and capital account fronts, some monetary policy independence is forefeited. What the middle solution also implies is that we have to guard on all the three fronts with the relative emphasis across the three pillars shifting according to our macroeconomic situation.

Managing Capital Flows

22. What does the impossible trinity mean in practical terms? Let us examine this in terms of capital flows. EMEs, especially those with current account deficits (CAD), need capital flows. In an ideal world, they will want capital flows just about sufficient to finance their CADs; also they will typically prefer equity flows over debt flows and long term flows over short term flows. But in the real world, countries seldom find themselves in such a sweet spot; capital flows are either too much or too little.

23. Not only are capital flows too much or too little, they are also volatile. They respond to both push and pull factors. The important push factors are the monetary stance of advanced economy central banks which determines the liquidity in the global system and the need of investors for asset diversification. The pull factors that have influenced capital flows are the promise of growth in EMEs, their stable and credible policy environments and improved governance.

24. Over the last decade, EMEs have had to contend with both volatile inflows and outflows, with the problem often reversing direction rather abruptly. Let me sketch this out briefly to give you a flavour of the challenge that EMEs confront in managing their capital accounts.

25. The years before the crisis – the period of the Great Moderation – saw EMEs receiving large capital inflows, much more than they needed. This was driven by both push and pull factors. EME currencies appreciated sharply, out of line with fundamentals, denting their competitiveness and pressuring asset prices. EMEs responded to this surge either by capital controls or intervention in the forex market or both. Experience shows that no matter how EMEs responded, no option was totally benign.

26. The capital inflow problem turned abruptly into an outflow problem with the outbreak of the financial crisis in September 2008. Unnerved by the extreme uncertainty, global investors fled from emerging economies to return to safe havens. The sudden exit put downward pressure on their currencies, and this time round they had to intervene in the foreign exchange market to contain the depreciation of the exchange rates.

27. The capital flow problem has become more complex in recent years not only because of its intensity but also because of its increased volatility. The quantitative easing policies of advanced economy central banks have left the global system awash with liquidity. Much of it has flown into EMEs, posing the familiar problem of capital surges. But because the global system has switched between risk-on and risk-off rather frequently and swiftly, EMEs have also become vulnerable to sudden stops and reversal of capital flows.

28. I have gone at length to describe the developments over the last nearly ten years to give a flavour of the problem EME central banks face on account of global uncertainties. What this demonstrates is that globalisation is a powerful phenomenon. It offers immense opportunities, but also poses formidable challenges. The challenge for EMEs is to learn to maximise the benefits and minimise the costs of globalisation. In particular, EME central banks have to learn to factor in global spillovers into their domestic policies.

III. Are EMEs Seeing a Return of Fiscal Dominance of Monetary Policy?

29. The third issue I want to address in the context of emerging economy central banks is whether they are seeing a return of fiscal dominance of monetary policy.

30. This question has surfaced with vigour in the context of the euro zone crisis. The ECB claims that its bond purchase programme is aimed at restoring liquidity and improving monetary transmission. But many analysts believe that this is a thinly veiled attempt to shore up sovereign borrowing and that the ECB is actually acquiescing in fiscal dominance. Although this tension between the central bank mandate and sovereign debt sustainability is playing out in Europe, it is not new; nor is it unique to Europe.

31. The eighty odd years since the Great Depression saw a famous rivalry between monetary and fiscal policy for dominance. For at least three decades after the Great Depression, Keynes' intellectual legacy ruled; governments borrowed as much as they wanted and at the price they wanted without worrying about the implications of debt build-up, and central banks had willy-nilly acquiesced in this profligacy.

32. This trend began to reverse as a result of very influential work during the 1960s by Milton Friedman and others arguing that inflation is a monetary phenomenon always and everywhere, and that output gains from debt financed public expenditure will not only be temporary, but also eventually inflationary. Supportive evidence for this came from the repeated episodes of stagflation during the 1970s, which saw a baffling combination of unemployment and inflation. The belief that continued fiscal deficits are clearly not sustainable gained ground during the 1980s especially as countries integrated into the global system, and fiscally irresponsible economies realised that the world capital markets penalised them by demanding higher premia.

33. The trend since the mid-1990s has been for a growing number of countries to adopt fiscal rules

placing limits on deficits and/or debt, and also prohibiting primary financing of debt by the central banks. One of the broad outcomes of this effort has been that central banks found themselves able to conduct monetary policy free of fiscal compulsions and in a predictable fiscal framework.

34. That happy state of affairs ended in the aftermath of the crisis, and fears about fiscal dominance of monetary policy have resurfaced.

Monetary and Fiscal Policies in India

35. As in many economies, in India too, monetary policy was dominated by fiscal considerations during the 1970s and the 1980s. Large and growing fiscal deficits ended up being financed by the Reserve Bank which ultimately resulted in inflation. Following the global trend, we too put in place a fiscal responsibility legislation - the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 - with ceilings on deficit and debt ratios and provisions prohibiting primary financing of government debt by the central bank. The Government's commitment to the FRBM mandate during 2003-08 afforded the Reserve Bank the necessary space to implement monetary policy aimed at low and stable inflation.

36. Like elsewhere in the world, both monetary and fiscal policies were eased in India too in response to the crisis. In particular, this meant interrupting the fiscal consolidation process enjoined by the FRBM Act. However, even as the crisis started unwinding and inflation rose sharply to double-digits, the government persisted with an expansionary fiscal stance.

37. By far the biggest concern stemming from the large fiscal deficit, especially from the Reserve Bank's perspective, is that it adds to aggregate demand and thereby to inflation pressures. By crowding out the private sector, the fiscal deficit could also inhibit, if not impair, monetary policy transmission to the private sector. Credible fiscal consolidation is, therefore, a necessary pre-condition for stabilising inflation and securing non-inflationary growth.

38. Over the last one year, the Government embraced fiscal consolidation with commendable resolve. The fiscal deficit for the last fiscal year (2012/13), at 4.9 per cent of GDP, was better than earlier projected and it clearly enhanced the credibility of the Government's current year (2013/14) fiscal deficit target of 4.8 per cent of GDP.

39. Economies will be best served if governments ensure that their central banks are able to conduct monetary policy independently and free of fiscal compulsions. This will require, among other things, responsible and credible fiscal consolidation.

IV. The Role of Central Banks in Safeguarding Financial Stability

40. Let me now move to the next issue - financial stability. Indeed, some of the most forceful lessons of the crisis are in this area of financial stability.

41. Note that the crisis erupted during a period of extraordinary price stability and macroeconomic stability. What this told us is that price stability and macroeconomic stability do not guarantee financial stability. We also learnt that no country is an island. Although the crisis originated in advanced economies, emerging economies too were affected, indeed by much more than they had thought possible. The contagion brought home a simple message. In a rapidly globalising world, national and international financial stability are interlinked. They are really two sides of the same coin.

42. Another important lesson we learnt is that financial markets are not self correcting. Indeed in the pre-crisis years, a consensus was building around the view that modern risk management has increased the resilience of the financial sector, and that any excess would self correct in good time. The crisis proved that to be wrong. As we unlearnt that, we also learnt some new lessons - that it is difficult to detect signs of pressure building up in the system in real time, that the financial sector can contain pressure for a longer time than we think possible, and as a consequence, when the inevitable implosion takes

place, it can be quite disastrous, or even catastrophic. We learnt that it is difficult to predict the precise nature of the implosion. For example, in the pre-crisis years, even the few who sensed stress building up in the system, thought there would be a currency crisis; in the event the implosion took the form of a financial sector crisis.

43. There were other lessons too. That a collection of rational financial institutions does not necessarily make a rational financial sector. In other words, rational behaviour at the individual institutional level does not aggregate to collective rationality because of the fallacy of composition. Financial institutions are notoriously prone to herd behaviour. They have a strong collective tendency to over expose themselves to the same type of risk during an upturn, and become overly risk averse during a downturn which can lead the whole system on a downward spiral of risk aversion, market seizure and instability.

44. These lessons from the crisis have triggered a vigorous debate on whether financial stability should be made an explicit mandate of central banks. There are powerful arguments for why central banks should be at the centre of safeguarding financial stability. Let me list a few important ones.

i. Generally, monetary policy and financial stability are mutually supportive. This inter-dependency between the two dimensions suggests that the central bank, with inherent responsibility for monetary policy, should also be entrusted the responsibility for financial stability so that it can take a holistic view of policy options by factoring in costs and benefits in both dimensions.

ii. That the central bank should have the responsibility for monetary policy is unquestioned. Because banks are the conduits through which monetary policy decisions are transmitted to the real economy, it is synergistic to entrust the responsibility for microprudential supervision of banks also to the central bank. And if the central bank is the microprudential supervisor, there is a strong case for it to have responsibility for regulation of systemic risk at the macro level.

iii. By far the strongest argument in favour of entrusting the financial stability responsibility to the central bank is that it is unquestionably the lender of last resort (LoLR) for the financial system. A central bank can discharge its LoLR function more efficiently if its mandate extends beyond merely monitoring financial institutions to taking preventive action. This becomes possible if the central bank is also in charge of financial stability.

45. On the issue of financial stability, even as the lessons of the crisis are clear, the policy responses to those lessons are not yet clear. There are some common trends, but there are also variations across countries on the precise manner in which they are redesigning their regulatory architectures, the additional responsibilities they are assigning to their central banks and the coordination bodies that they are setting up.

46. Are the concerns of EMEs in regard to financial stability any different from those of advanced economies? Admittedly, financial instability is costly everywhere, including in EMEs. Indeed, financial stability is a necessary pre-condition for securing growth. Nevertheless, the cost-benefit calculus for EMEs of tighter regulation in order to safeguard financial stability can be quite different from that of advanced economies. This is because EMEs are in a higher growth phase with higher credit elasticity of GDP than advanced economies. Increase in the cost of credit on account of tighter regulation can inhibit their pace of growth. EMEs therefore need to strike the right balance between preventing financial instability and supporting growth. Experience shows that managing this challenge is more a question of good judgement than analytical skill.

V. Communication as a Central Bank Policy Tool Opportunities and Risks

47. Hours after the September 2001 terrorist attacks, the US Federal Reserve put out a two sentence statement: "The Federal Reserve System is open and operating. The discount window is open to meet liquidity needs."

48. Those two seemingly banal sentences had a remarkable calming effect on the US, and by extension, on the global financial markets. The 'announcement effect' was simply stunning.

49. Again Mario Draghi's famous words that the ECB will do "whatever it takes" to save the euro prevented, more than anything else, what many thought was an imminent collapse of the euro.

50. Both the above are emphatic examples of the potency of central bank communication. Given this power, one would have thought that central banks would have more actively resorted to communication as a vehicle to further their policy objectives. On the contrary, they used to be quite reticent, believing that their policies must speak for themselves, and that any overt attempt to communicate could be misleading or distortionary.

51. Over the last two decades, however, this overly rigid attitude has gradually yielded to open and transparent communication as central banks have come to realise its positive impact. This shift in central bank theology from deliberate obscurity to greater transparency actually reflects a shift in the theory of monetary policy. Up until the early 1990s, monetary policy was strongly influenced by Nobel Laureate Robert Lucas' argument that monetary policy affected real variables, like growth, only if the policy changes were unanticipated. This encouraged obscurity over openness and clarity. However, lost in the message was that monetary policy always affected nominal variables like inflation even if fully anticipated. In the 1980s, two economists, also Nobel winners, Finn Kydland and Ed Prescott, argued that fully transparent rules rather than discretionary policy changes were more efficient and credible. This was the beginning of the push towards rules over discretion and greater central bank transparency.

52. The most eloquent illustration of this shift towards transparency is the change in the communication strategy of the US Fed. Hard as it might be to imagine from today's perspective, prior to 1994, the US Fed was not even announcing the target Fed Funds Rate; the market was expected to infer the rate from the timing, sequencing and magnitude of its open market operations. In sharp contrast, today the Fed not only announces the rate but also gives a clear indication of future policy trajectory. Indeed, it is standard practice for central banks these days to indicate the policy rates, the rationale behind the policy action, the expected outcomes, and oftentimes forward guidance on future policy actions.

53. Sometimes, instead of being a vehicle for policy, communication can be the policy itself. This issue came into sharp focus in the debate surrounding the quantitative easing (QE) policies of the US Federal Reserve. Against the QE policies, there is an influential view that after the policy interest rate has been brought to the zero lower bound, nothing else needs to be done except for the central bank to say that it will keep interest rates low in the future too. It is argued that this communication, just by itself, would encourage people to borrow more and spend, bailing the economy out of recession.

54. But this idea of topping up monetary easing with communication may not always work. People may not believe that the central bank will keep its promise of low interest rates. Even if they believe the central bank, they may not still borrow since what they may be trying to do is to get out of debt rather than get into further debt as is the case today.

55. So, how do central banks improve their credibility? By tying their promise of low interest rates to specific quantitative real sector variables? The US Federal Reserve has recently led the way in this direction by saying that it will keep interest rates low as long as the unemployment rate remains above 6.5 per cent, and in the process, is willing to tolerate inflation slightly above its long-run target. Another way of reinforcing this promise of low interest rates is the idea of shifting from targeting inflation to targeting nominal GDP.

56. Is communication an equally potent policy tool for EME central banks? How effectively are they using communication as a policy tool? Although I have not made an exhaustive study, it would be fairly accurate to say that they too are learning to use communication constructively, both as a vehicle for policy and sometimes as the policy itself. Let me give an illustration from the crisis period.

57. In the pre-crisis years, it was intellectually fashionable to subscribe to the 'decoupling' hypothesis which held that even if advanced economies went into a downturn, EMEs would not be affected because of their improved policy framework, robust external reserves and resilient banking systems. Yet the crisis affected virtually all EMEs, denting the credibility of the decoupling hypothesis. EME central banks found that transparently communicating why and how they were affected by the crisis, notwithstanding the decoupling hypothesis, actually helped assuage concerns and revive market confidence.

58. In the post-crisis period, the major way in which EME central banks have used communication is in giving forward guidance on monetary policy.

59. In the Reserve Bank too, we have started the practice of giving forward guidance on monetary policy. Because of its potential impact, we pay much more attention to the language and nuancing of the 'forward guidance' paragraphs than other parts of the statement. Our experience in this regard has been quite positive. Nevertheless, we face some challenges. Let me give you a flavour of that.

60. Forward guidance is always conditional. The dilemma then is how precisely the conditionality is to be communicated, and how to ensure that the market does not ignore the conditionality and interpret the guidance as an irrevocable commitment. Conversely, how does the central bank ensure that it does not become hostage to its guidance?

61. Also, the more uncertain the situation, the greater the need for guidance. But also, the more uncertain the situation, the more difficult it is to give definitive guidance. For example, when the forward outlook is uncertain, we are not able to precisely define the conditions under which the guidance holds and the conditions under which we may have to deviate from it. When we are not forthcoming on specifying the conditions, the market starts speculating on them, thereby raising the 'noise' to message ratio.

62. Despite these challenges, in the Reserve Bank, our experience with greater openness has been quite positive. We found that effective communication can be a powerful tool provided the central bank has credibility.

63. As their financial sectors get deeper and more sophisticated, EME central banks can usefully leverage on communication to enhance their policy effectiveness. To do so, however, they have to improve their policy credibility as well as capacity levels.

Conclusion

64. Central banks and central bankers have been at the heart of the global financial crisis. They have been blamed for policies and actions that got the world into the crisis; they have also been praised for leading from the front in getting the world out of the crisis. I believe this is fair critique - central banks have been a part of the problem and a part of the solution.

65. As we emerge out of the crisis, central banks have their task cut out for them: to distil the lessons of the crisis, translate them into concrete reform measures and get cracking on implementing them. I believe this involves central banks changing in important ways both in terms of what they do and how they do it.

66. The challenge of post-crisis transformation is not only different but also sharper for EME central banks because of their different macroeconomic and institutional contexts. EME central banks need also to learn to manage policy making in a globalising environment. They need to learn from the best in the world, but adapt that learning to the demands and context of their economies. They need to be constantly pushing the envelope, be at the frontiers of domain knowledge, oftentimes reinvent it, but all the time remain sensitive to their core concerns.

*Credit Information Companies: Seeking New Frontiers**

K. C. Chakrabarty

Dr. Richard Fiddis, Managing Director – Strategic Markets, Experian; Mr. Vikram Narayan and Mr. Mohan Jayaraman, Managing Directors, Experian Credit Information Company of India Pvt. Ltd.; senior members from the financial services industry; delegates to the conference; members of the print and electronic media; ladies and gentlemen. It is a pleasure to be here this morning to deliver the inaugural address at the Experian India Conclave 2013. As you know, this Conclave has been organised by Experian, one of the leading credit bureaus with operations spread across 19 countries. The Credit Information Companies (CICs) have been in India for around a decade now and I believe it would be appropriate that in today's address, I focus not just on the role which the CICs like Experian have played in India, but also dwell on the next higher level the CICs should aspire to achieve through innovative practices, capability enhancement and improved efficiency. This would also be in line with the theme of the conference: The Next Frontier for Innovation, Competition and Productivity.

2. Our society transformed itself from an agrarian society to an industrial society and is, now, getting transformed into a knowledge society. An essential ingredient for sustenance of a knowledge society is widespread information literacy. I believe that the CICs have an important role to play in dissemination of awareness about credit information. The ability of CICs to effectively perform this role will determine the future growth of the CIC business and that of individual companies within this industry. I would also be dwelling upon the information literacy function of CICs during my address today.

3. The credit information services have witnessed impressive growth over the last two decades. I understand that between 1990 and 2011 the number of credit bureaus in the world has tripled. While the Asian crisis in the late 1990s triggered the growth of bureaus in Asia, Eastern Europe saw significant activity in early 2000s and the Middle East and Africa in the late 2000s. A recent survey showed that 134 countries across the globe either had a credit bureau or a credit registry at the end of 2011.

Value of a robust information infrastructure in an economy

4. The World Bank's "Ease of Doing Business Report 2012", mentions that there is a strong linkage between depth of credit information index and credit penetration. Credit information index is influenced by the institutional mechanisms in an economy for gathering and disseminating credit information. Public registries and credit bureaus play a very important role in boosting the information infrastructure. Key developed economies like the US and UK demonstrate a strong and mature credit bureau environment.

5. In developing economies, lending, especially to retail, is, in a large measure, made possible by credit bureaus, which perform the vital task of collating and distributing reliable credit information to the underwriter. As you all know, reports from the bureau contain information about the payment behaviour of consumers and commercial entities, including data on timely fulfilment or delinquency behaviour pertaining to financial obligations. Let me emphasise that credit bureaus can serve at a micro as well as at a macro level. While at a micro level they help credit underwriters make an informed decision about a credit applicant, on a macro level, they assist the senior management understand the broad credit market tendencies and also help the banks benchmark their performance

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against the industry on various dimensions such as sourcing, portfolio quality, delinquency, *etc.* At the level of a regulator, bureaus can play a pivotal role in providing insights that can drive effective policy changes. They can also provide important inputs for the banking supervisors in monitoring systemic risks. A further use of the bureau at a regulatory level may be to analyse appropriate capital and provisioning strategies for banks and, in particular, to assess whether current capital and provisioning regulations match up to actual risks. At the level of the society, as I mentioned a little while ago, the CICs have to work towards making individuals and financial entities credit information literate. This would involve generating awareness about the importance of credit history and the need for maintaining a healthy credit record.

6. Credit bureaus also provide other benefits for both borrowers and lenders. For example, if borrowers know that lenders have access to their credit histories, they would have a greater incentive to repay loans to maintain access to credit in the future. A 2010 World Bank study indicates that half of all customers would be more likely to pay their bills on time if they knew that those payments were reported to credit bureaus. Further, borrowers who have established a good credit record with a credit bureau may gain bargaining power for the terms of credit. Information sharing between lenders reveals borrowers' debt exposure to all participating lenders, thereby generating a view about their aggregate indebtedness.

7. Lending in emerging economies like India, while presenting unique opportunities, also brings in attendant challenges. While India has a large work force and an increasingly affluent middle class with rising disposable incomes, the extent of credit penetration is still quite low compared to global standards. One of the key reasons for this is the information asymmetry between the lender and the borrower. Lenders have limited financial information and cannot undertake automatic screening. Average loan amounts are also curtailed to address this information risk. Contract enforcement and repossession norms are certain other issues that plague lender confidence and, thus, in the process, hinder credit off-take. It is in this context that the role of the CICs assumes significance. The CICs should help identify the credit worthy people in the system. Based on the information that they have, the CICs should develop appropriate analytics, help lubricate the credit market and facilitate the provision of credit to the people who, otherwise, don't get credit from the formal financial system. The purpose of having CICs in the system would be best served when the credit needs of deserving people are met in a timely manner and at a reasonable cost.

8. For lenders, credit bureaus' collection and transformation of borrower information into a credit score also helps reduce transaction costs associated with lending by providing a standardised benchmark that a lender may use to judge a borrower's creditworthiness. This can also help in cutting down the turnover time in processing credit requests, thereby promoting operational efficiency. In fact, banks and the CICs have a symbiotic relationship where both can help each others' business processes and, thereby, improve their respective efficiencies.

Positive and Negative Data Sharing

9. Credit history data can be broadly categorised as: negative data and positive data. The negative reporting includes information pertaining to unfulfilled financial obligations such as defaults, amounts in arrears, court judgments, and other adverse information. Typically, these serve as inputs for generating a black list. Positive data, on the contrary, contains information on an individual's open and closed accounts and this repayment history can be used to create and classify credit profiles of borrowers. Similarly, banks can identify premium borrowers and provide more customised service to them. According to Doing Business survey data, approximately 70 per cent of all

bureaus and registries surveyed provide both positive and negative data, often referred to as "comprehensive credit reporting" or "full-file credit reporting."

10. Research has shown that full-file reporting has significant benefits over negative data. In simulation exercises carried out in some countries, the approval rates have increased by up to 88 per cent when using full file reporting.

11. The Reserve Bank has been rather proactive in adopting some of the global best practices of positive data sharing right from the inception. Even mature bureau markets like Brazil and Australia have started witnessing a move towards a limited positive data sharing environment only as late as 2013. Several other jurisdictions have also started evaluating the possibility of increasing the scope of credit reporting.

History of Credit Reporting in India

12. We have seen significant progress in strengthening the credit infrastructure in India since the advent of the first credit information bureau about a decade ago. The Credit Information Companies (Regulation) Act, 2005 (CICRA) was introduced to provide for the regulation of credit information companies and to facilitate efficient distribution of credit. Further, the entry of Foreign Investors, *i.e.*, companies with an established track record of running credit information bureaus in well regulated environments was permitted. With the realisation that competition will bring better technology and efficiency in the system, four companies were issued 'in-principle' approval to set up CICs.

Indian Experience of Credit Reporting

13. Let me now briefly allude to some of the key patterns of bureau usage in India during the first decade of their existence. The bureau data has been primarily used in the retail segment, especially while approving credit cards, personal loans, home loans and auto loans. A major chunk of this has been accounted for by the private banks and foreign banks, with the public sector banks only recently starting to use them in a significant way. The credit reports have been the main product of use by banks. The banks have predominantly used inputs from the CICs during loan origination or for the occasional portfolio review and the use of value added products and services has been marginal and only recently started gaining importance.

Key Challenges facing Credit Information Companies

14. Let me now highlight some of the common challenges facing CICs today. If the CICs have to seize the opportunities that the future holds for them, they need to overcome these challenges and come up with effective solutions, particularly to the problems concerning the quality of available data.

(i) Accuracy of Data

The quality of the credit reports and other products given to credit institutions is dependent on the consistency and quality of the data reported by financial institutions. In fact, reliable and accurate data is the foundation on which the edifice of a successful CIC business can be erected. Submission of inaccurate and incomplete data to CICs is a common occurrence which, in turn, leads to inaccuracies in the credit reports and resultant consumer disputes. Credit Institutions should put in place mechanisms to improve the quality of data captured in their source systems which will not only improve their own operations but, in turn, also translate into improved data submission. The issue of furnishing of timely and accurate credit information on their borrowers by the credit institutions has been engaging the attention of the Reserve Bank of India. As you might be aware, the Reserve Bank has set up a Committee under the Chairmanship of Shri Aditya Puri, Managing Director, HDFC Bank Ltd. to examine the available formats for furnishing of credit information by credit institutions to the CICs in respect of different sectors. Additionally,

the Committee's mandate also includes suggesting best practices for the guidance of credit institutions in respect of usage of credit information as a part of their credit appraisal process.

(ii) Need for maintenance of up-to-date data

The CICRA mandates that the data should be submitted by credit institutions on a monthly basis. While most of the Scheduled Commercial Banks, large NBFCs and Housing Finance Companies are submitting data on a monthly basis, the co-operative banks and smaller NBFCs submit data intermittently. The use of CIC inputs during the credit appraisal process at lending institutions can only be effective if the data is up-to-date.

(iii) Complete Data

The CICRA mandates that credit information pertaining to all credit facilities should be reported. However, evidence suggests that due to limitations of use of technology in banking systems, entire data, often, does not get reported. Further, for certain banks, data gets rejected due to lack of proper identifiers like PAN, Passport, Voter ID, driving licence, *etc.* The incompleteness of data is observed not only in old or previously opened accounts but also in new accounts across various credit institutions. These gaps in data could lead to certain credit facilities not appearing in an individual's credit report, thus giving an inaccurate picture of his indebtedness/credit worthiness and, thereby, failing to achieve the very objectives for which the CICs exist. In order to ensure completeness of credit data, it is essential that data is collected on a regular and comprehensive basis from all institutions performing the lending function. This includes not just the commercial banks, but also the NBFCs, RRBs, co-operatives, including urban co-operative banks and rural co-operatives, *etc.* The ability of CICs to bring together all the pieces of the jigsaw would determine the utility of the resultant credit information. I again see a major role for the CICs here as they can assist banks in data quality diagnostics and data improvement based on their expertise.

I would like to emphasise that the job of CICs is not just to act as a collector and distributor of data. Instead, they need to fulfil the mandate of being a perpetuator of information literacy by processing the data collected from various sources into credible and usable credit information and by helping the users of information, both lenders and borrowers, to integrate this information into their decision making processes.

The CICs, I understand, receive raw credit data and provide processed credit reports only to entities that are enlisted as their members I have a fundamental question with regard to this practice. What if the customer has never sought any credit facility from the enlisted members of that CIC or, else, has a good credit history with them. The customer would, then, have a good credit report even when he might have been a defaulter elsewhere. A pertinent question to ask, therefore, is what is being done to address the issue of sharing of information across the CICs. I understand that in the mature markets like the US, there are institutions that generate credit reports about an individual by accessing databases maintained by all the three major CICs present there. I believe we would need to work out a similar mechanism if the objective of having CICs has to be fully served and the credit intermediation process in India has to become efficient. Let me emphasise that ownership of credit data should not be the basis of competitive advantage among CICs. Instead, innovations in the way the data is used and the value added services that CICs may provide based on the processed information ought

to be the basis for seeking competitive advantage in this industry.

Another basic issue that needs attention is the availability of a unique identifier for individuals. We have instructed our banks to assign unique IDs to all their customers for easy identification and monitoring. I must admit, however, that the progress has been far from satisfactory. The magnitude of the problem gets further accentuated when it is considered on a system wide basis, especially when one takes into cognizance alternative sources of finance for individuals/ companies in the shadow banking space. I believe that unless the individuals/entities are recognised with a unique identifier, for example, an Aadhaar (for individuals) or a Legal Entity Identifier (for entities), a work in progress under G-20 mandate at present, there would always be a shadow of doubt over the quality and accuracy of the credit reports and, consequently, a cause for discomfort for the lenders in using them for credit decision making. I would solicit your wholehearted support for the success of the initiatives of the Government and regulators towards introduction of a unique identifier through Aadhaar and the Legal Entity Identifier, as and when the latter becomes operational.

(iv) Consumer disputes

Another very important challenge for the sector is handling the consumer grievance. It is incumbent upon CICs to put in place a responsive public grievance redressal mechanism for swift and transparent redressal of grievances. In accordance with the CICRA, the credit information company can make correction, deletion or addition to the credit information only after such correction, deletion or addition has been certified as correct by the concerned credit institution. It is essential that both CICs and banks address consumer complaints in a swift, comprehensive and time bound manner as this would have repercussions for the potential borrower in accessing timely credit. Though the source of the data is the lending institution, CICs also need to adopt a proactive approach by taking up customer complaints with these institutions and working towards their expeditious resolution.

Way Forward

15. With a decade having passed since the setting up of the first credit bureau in India, the time is appropriate for the industry to debate on how to take the business forward and how to ensure that it delivers on its critical mandate in the coming days. For me, the future for the CICs lies in greater innovation and offering more value added services. Leveraging on the data available with them, the CICs need to create and customise reports as per the needs of its user groups. As part of this, the CICs could give reports on industry sectors, geographic areas and also issue triggers/warnings to lenders on likely credit events. The CICs would progressively need to enlarge their information database by bringing more and more customer segments under their fold. Thus, besides focussing on individuals, midsize and large corporates, they must make efforts to build information on the credit histories of SMEs, NGOs, Charities, Not-for profit organisations, *etc.* In preparation for providing value-added services, the CICs would need to build elaborate databases on additional information not directly linked to the credit information. Other than broad basing their information system so as to include data from utility companies, retailers, *etc.*, CICs may need to collate specific information like details of mortgaged assets, previous defaults, recoveries, write-offs, involvement in frauds or other criminal activities, *etc.* The value-added services by the CICs based on classified information mentioned above, would support more advanced risk management capabilities at the lending institutions.

16. I believe that data available at CICs can be effectively used by banks and financial institutions to assist in credit risk management at various stages across their customer's life cycle. Its use in customer acquisition and customer monitoring has been quite prevalent. With regard to customer acquisition, with technological advancement, the stage is getting primed for multi-bureau decision making. For credit exposures above certain threshold, reports from multiple bureaus could be considered while underwriting. At the monitoring stage, CICs can furnish a 360 degree view of customers, thereby enabling portfolio risk assessment and early warning triggers to identify and address delinquency. Further, at the collection stage, CICs can help entities in reaching their not so easily contactable base, thereby improving recoveries.

17. From a strategic perspective, CICs, which represent the collective aggregates of the banking industry, can be a useful source of benchmarking performance with respect to peer categories or the segment as a whole. CICs can also provide a geographical profiling of credit growth and delinquency that can help banks in deciding their expansion or consolidation strategy.

18. In the commercial segment, the use of the bureaus has not been to the same extent as in the consumer banking domain. SMEs are a big growth driver of any economy accounting for a majority of jobs and exports. Inadequate credit flow has been one of the factors constraining the growth of the SME sector. One of the reasons for banks' reluctance to lend to this group is the unavailability of reliable information for banks to assess the creditworthiness of SME units. In fact, contrary to popular perception, the levels of impairment in case of SME borrowers are far lesser than that in case of other larger borrowers. Hence, there is a strong case for providing greater credit to this business segment. Here, I see a significant role for the CICs in building an information base on SMEs and assisting banks in their credit decision making. I would urge the CICs to take urgent steps to bridge this information void and help facilitate flow of credit to SMEs, which would provide an impetus to the overall economic growth environment.

Identity Fraud – An Emerging Threat and Role of the CICs in combating it

19. According to the Norton Cybercrime Report 2011 more than two thirds of online adults (69 percent) have been a victim of cybercrime in their lifetime, and every second 14 adults become a victim of cybercrime, resulting in more than one million cybercrime victims every day. The situation is equally alarming in India. Fraud, especially in the banking domain, assumes great significance due to the associated reputational and monetary losses. Incidence of frauds can severly dent the confidence in the financial system, particularly at a time when we are trying to use technology as the medium to bring more and more of the excluded masses into the formal financial system. Fraudsters employ innovative ways of impersonating others using altered KYC documents. They also apply for credit at multiple banks at the same time by exploiting vulnerabilities in banks' systems and processes. Alternately, fraudsters can also apply for credit from the same bank at multiple locations assuming different identities.

20. While guidelines around KYC norms have been strengthened and the banks are being encouraged to provide unique customer IDs at the institutional level, the credit bureaus have capabilities to play an important role in preventing such frauds by providing a holistic view of the individual and highlighting the different variations of ID information, as provided to different credit providers. Also, data sharing mechanism amongst banks can help in identifying serial fraudsters by picking up inter-temporal and inter-bank inconsistencies of application data to provide an early warning mechanism to identify potential risk cases.

21. Further, in a robust KYC system, banks could consider using multi-database checks on an individual's identity at the time of underwriting that encompases different identifier databases like UID, PAN, Voter ID,

Passport, *etc.* This will help in rooting out many cases of identity frauds through fraudulent documentation.

22. From a consumer's perspective, CICs hold key information on the enquiries made towards obtaining credit. If a fraudster assumes someone's identity and applies for credit across institutions, this information can be transmitted to individual banks as triggers or warning signals. I foresee that the next wave of innovation would be around developing tools and analytics in preventing frauds arising from identity thefts and I am glad to note that the conference has devoted a session for deliberating on the issue of frauds.

Role of Alternate Data Sources as supplement to banking data

23. The current banking policy places a lot of emphasis on financial inclusion. A key enabler tying up with the theme of financial inclusion is the information infrastructure and decisioning architecture necessary to bridge the information asymmetry divide for individuals who are first-time borrowers from the banking system. In order to reach out to individuals who never had any access to traditional banking channels or who have no credit footprint, some indicator of payment behaviour demonstrated by such individuals in their day-to-day lives need to be analysed during the process of underwriting. This could be the payment of utility bills such as water or electricity, telecom bill repayment, rental payments, healthcare payments, *etc.* These data sources are, typically, called alternate data which are supplements for banking repayment data. With alternate data, the coverage of people with some kind of payment history increases. Including alternative payment data is an effective method to build or restore/rebuild a good credit history, something which the industry could consider in the future as it evolves further and matures in terms of competitiveness and customer sensitivity.

24. From this perspective, low-score is always better than no score – Unscoreable persons are almost always rejected by mainstream lenders when applying for credit. For such people, many of whom might actually be credit-worthy, the sole recourse would be to borrow from the money lenders. By virtue of being scoreable, a person greatly improves his/her chance of entering the credit mainstream. Regulators across the globe have started acknowledging the role of alternate data sources in improving financial inclusion and, hence, bureaus in those geographies have started collecting non-traditional, non-credit data to augment the banking data.

Conclusion

25. Before I conclude, I must reemphasize that the Credit Information Companies have a herculean responsibility towards developing a vibrant credit market and spreading consumers' awareness about the importance of credit and its responsible use. Consumers need to be sensitised through awareness campaigns about the importance of credit information reports as a means for knowing their financial liabilities and about its importance in determining their credit worthiness. This is especially important for the young population who are new to the credit market. To my mind, the key deliverable for the CICs in the coming days would be to facilitate a smoother credit decision making process and, thereby, bring down the cost of financial transactions and credit intermediation in the banking/financial system for the benefit of the masses, especially for the retail and SME segments. A major spin-off benefit for the banking industry would be in terms of better quality of credit portfolio.

26. I believe that the next wave of financial innovation would be around providing financial services to a large section of the unbanked population. This would require presence of the necessary tools, techniques, processes, technology, infrastructure and enabling regulations. As most of the target population would be first time credit seekers, it would require an aggregation of information on credit proxies on these individuals. Scoring and

evaluation techniques will follow. Banks, Insurance and Telecom companies will do well in making the best use of the presence of existing CICs in India, during their credit appraisal processes. CICs should, on their part, continuously remain engaged in innovation to support these entities at multiple levels through various value added services and products encompassing their customer's entire life cycle.

27. From the day's schedule, I observe that several technical sessions are lined up around improving the credit information mechanism and increasing its usage. I hope today's Conclave helps in generating awareness and throws up practical ideas on the subject. I am hopeful that committed entities like Experian, through their linkage with the overseas parents and also backed by experience gained in matured markets, would be able to bring in technical knowhow and expertise into India and, in the process, ensure availability of easier, quicker and cheaper credit for the people at the bottom of the pyramid. I once again thank the organisers for inviting me and giving me an opportunity to share my thoughts with you. I wish the conference deliberations all success.

Thank you!

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*Compliance Function in Banks: Back to the Basics**

K. C. Chakrabarty

Mr. S. N. Ananthasubramanian, President, Institute of Company Secretaries of India (ICSI); Mr. Allen Pereira, Director, National Institute of Bank Management (NIBM); Dr. R. Bhaskaran, Chief Executive Officer, Indian Institute of Banking & Finance (IIBF); Mr. S. S. Mundra, CMD, Bank of Baroda; Mr. M. V. Tanksale, CMD, Central Bank of India; other dignitaries, ladies and gentlemen. I am pleased to be amidst you today on the occasion of launch of two new certificate courses by the IIBF *viz.*, Certified Banking Compliance Professional course jointly with the ICSI and Certified Bank Trainer course jointly with NIBM. Human resource management and compliance are two of the major support functions in banks and hence, the courses being launched today are of vital importance for augmenting the skill sets of the bank employees in the respective areas. I am particularly happy to be present here today as the launch of the course on compliance is a sort of a dream come true, a dream which I had shared with the Dr. Bhaskaran when I was the CMD at Punjab National Bank.

2. As you know, all the three institutions involved in evolving the two courses being launched today can boast of an outstanding pedigree. While ICSI is the professional body responsible for developing and regulating the profession of Company Secretaries in India, IIBF has been continuously supporting the cause of development of professionally qualified and competent bankers and finance professionals since its establishment in 1928. NIBM is an autonomous institution established by the Reserve Bank of India with a mandate to play a proactive role as a "think-tank" in the banking system. It is, indeed, commendable that these institutions of excellence have decided to collaborate and leverage their respective strengths to jointly offer programmes/courses to meet the needs of the banking industry and I congratulate all the three institutions on this initiative.

3. I observe that these courses have two distinct components - An examination followed by short class room learning. I also understand that IIBF has developed reading material for these certificate programmes, which should provide useful inputs for the candidates. The Certified Bank Trainer course comprises of two papers – Human Resource Management and Training. As we all know, the Indian banking system today stands at the cusp of an explosive growth. This growth has to be essentially supported by a matching supply of suitably trained manpower. It is in this context that training of the banking personnel assumes great significance. With the evolution of new age banking, even the trainers have to be adequately equipped to deal with new technology and evolving policies. This course attempts to hone the skills of the faculty to enable them to be more effective as trainers. I observe that the Certified Banking Compliance Professional course also comprises of two papers – Risk, Regulation & Governance and Compliance in Banks. After going through the structure of both the courses, I am happy to note that they are very well conceptualised and will assist in strengthening the two crucial functions in banks, *i.e.,* training and compliance.

4. Though we all agree that both issues hold equal importance for banks, my observation is that Human Resources Management is a more glamorous subject and people are more interested in discussing it. It is precisely for this reason that, today, I have chosen to speak on the other topic – Compliance, which is considered a rather drab and uninteresting topic and is restricted to cursory Board Room discussions. I intend to share my perspectives on the significance of the compliance function in banks and its evolution in the Indian context. During my talk today, I would also delve on the need for banks to follow the basic compliance principles in order to overcome the challenges posed

* Inaugural address by Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at the launch of certificate programmes on Compliance Function and Training on July 12, 2013 in Mumbai. Assistance provided by Shri R. Kesavan in preparation of this address is gratefully acknowledged.

by the ever-growing complexities of modern day banking.

What does Compliance mean?

5. Before I head into the subject proper, it would be appropriate to understand the import, impact and intent of the term "compliance". The Merriam-Webster Dictionary defines "compliance" as "(a) the act or process of complying with a desire, demand, proposal, regimen or coercion, (b) conformity in fulfilling official requirements." In banking parlance, compliance alludes to adherence to a set of laws, regulations, rules, practices, related Self-Regulatory Organisation (SRO) standards, and codes of conduct applicable to the various banking activities. To my mind, banking compliance can be broadly segregated in three parts-

a) Internal compliance, including SRO standards
b) Regulatory Compliance
c) Legal Compliance.

The internal compliance means adherence to the internal policies formulated by the Board based on which an internal governance framework would have been laid down. Thus, internal compliance would be applicable to all employees of the bank. The regulatory and legal compliance, on the other hand, is applicable to the bank as a whole – the institution itself would be responsible for ensuring adherence to the extant regulatory instructions and above all, for abiding by the laws of the land, both in letter and spirit.

Why compliance function in banks is important?

6. Let me now turn to the significance of the compliance function in banks. We all agree that laws, customs and codes are meant to bring in a semblance of order and uniformity in conduct of the various stakeholders. Compliance to these ensures orderliness and reduces overall systemic vulnerability. For this, it is imperative that the regulated entities are willing to commit themselves to the laws of the land and comply with the regulations, including self regulations. In securing compliance, regulators have adopted different strategies ranging from codification of laws, rules and regulations (prescriptive), to periodical meetings with the subjects (review mechanism). If, however, one or more of the regulated entities are observed to be non-compliant with the regulations, the supervisory authorities might need to resort to coercive techniques to ensure conformity with the regulations. Thus, fundamentally, whether forced or voluntary, compliance is an essential pre-condition for ensuring order and preventing chaos in systems.

7. Compliance is a theme that pervades all spheres of banking functions. Bankers deal with complicated legal, regulatory and supervisory issues all the time, transcending various spheres of banking operations. It is in this context that a dedicated framework for overseeing the implementation of directions/guidelines issued by the regulator/supervisor is required in the banks. The objective of the compliance function is to minimise the deviations; or when they actually do occur, to ensure that there is a process to promptly respond to and redress the anomalies.

A Few Posers ...

8. The overall responsibility for ensuring compliance is with the Banks' Top Managements although the compliance responsibilities are spread across various functional lines and business locations. I would like to ask a few basic questions here – how does the Top Management satisfy itself that all rules and regulations are being complied with? Is it declaration based? What I mean is whether under your internal procedure, the branch manager merely confirms to the Regional Manager/Zonal Manager that all functions are being performed as per the prescribed rigor; the Regional Manager/Zonal Manager accepts the same and, in turn, makes a similar declaration to the Head Office, which, ultimately, certifies the same to the Compliance department? Are such declarations taken on face value or is there an internal system of checking the actual veracity of that declaration. In other words, is the compliance process action-based and not merely declaration-based?

9. The Reserve Bank of India has issued comprehensive guidelines requiring banks, among others, to develop function-wise compliance manuals. I would like to

know how many banks have developed comprehensive compliance manuals and whether an internal process has been instituted to ensure that the manuals are duly adhered to by the business lines.

10. Another issue that I would like to highlight is that of the rank of the compliance officer. I wonder how a less than sufficiently enabled lower level official of the rank of DGM/AGM can effectively interact with GMs, EDs or CMDs to implement or enforce compliance. The Reserve Bank guidelines on "fit and proper" criteria, which are borne out of the need to establish high standards of corporate governance, categorically mandate that only a senior executive should be appointed as the compliance officer by banks.

11. Let me pose another question here: do banks consider compliance as a cost centre or a revenue generating channel? Answer to that is very obvious. Compliance is treated as a cost and the business verticals consider it more of an impediment than a necessity. I would like to emphasise here that compliance with the prescribed standards, codes, rules and regulations improves the Corporate Governance in banks. The role of the compliance function is to ensure that the rules/regulations are appropriately incorporated in bank's internal processes and that each functionary, right from the top to the bottom, appreciates the value of compliance. It is important for the senior executives as well as the line functionaries to realise that compliance failures may lead to serious implications for them, for the business as well as for the system as a whole. In a sense, the need for compliance can, effectively, be equated to the frictional force which, though impedes the progress a bit, is still necessary for movement. Compliance works more as a lubricant which oils the business machinery and keeps it going.

Is compliance a recent phenomenon?

12. Compliance activity has been in existence ever since the first regulation or law was enacted. After all, you cannot have a law/regulation without an attendant requirement to comply with it. The compliance activity, in earlier times, was integrated with other systems and processes within the banks; however, with banking becoming more complex, the compliance has evolved as an independent function in banks. Let me briefly recount how the compliance function in banks has evolved in the recent history. The Reserve Bank of India introduced a system of "Compliance Officer" in banks way back in August 1992, based on the recommendations of the Committee on Frauds and Malpractices in Banks (Ghosh Committee). The role of compliance officers came into sharper focus since 1995 when the General Manager in charge of Audit and Inspection was made responsible for the compliance functions with a requirement for periodic reporting or certification on compliance functions directly to the CMD. However, it was gradually recognised that the circumference of compliance functions in banks needed to be not only enlarged, but very clearly defined, especially in a scenario where successive Annual Financial Inspection Reports prepared by the banking supervisor highlighted a bevy of compliance deficiencies. The Reserve Bank's recognition of the need and importance of compliance functions received a further impetus after Basel Committee on Banking Supervision (BCBS) issued the High Level Paper on Compliance Risk and the Compliance Function in Banks in April 2005. These principles formed the basic groundwork for our own work on issuing rigors for compliance functions in banks, in the year 2007.

What is the scope of the compliance process?

13. Banks in India primarily operate under the provisions of the Banking Regulation Act. However, there are several other enactments such as the Reserve Bank of India Act, Foreign Exchange Management Act (FEMA), Income Tax Act and Prevention of Money Laundering Act (PMLA) which impact the business of banking. The banks in India have to comply with periodic regulations and directions issued by the Reserve Bank of India, the primary regulator. Further, as Indian Banks are expanding geographically across the borders, they also need to adhere to local laws and regulations applicable in the overseas jurisdictions. There are also industry standards and codes set by BCSBI, FIMMDA, FEDAI and IBA which need to be

followed by the banks. With most of the banks having turned public and having been listed on the stock exchanges, they also need to adhere to the listing and disclosure requirements. Also, as banks are undertaking other business/functions such as bancassurance, cross selling of mutual funds, wealth management, *etc.* they need to adhere to the guidelines issued by other regulators like IRDA, SEBI, PFRDA, *etc.* I understand that there are about 54 legislations that impact banking business and all of them need some sort of compliance. The compliance function, very often, extends beyond what is legally binding and embraces broader standards of integrity and ethical conduct.

14. Compliance function not just encompasses the banks' standalone operations but also includes various Para-banking functions, which are conducted within the wider banking group. Consequently, there is a critical need for the management of compliance risk as a Group level risk under an enterprise wide risk management framework.

What is the fall-out of non-compliance?

15. The non-fulfillment of compliance responsibilities is likely to bring to the fore various risks that may have potentially debilitating effects on the bank. The BCBS paper defines *Compliance risk as "the risk of legal or regulatory sanctions, material financial loss, or loss to reputation a bank may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and codes of conduct applicable to its banking activities".* The compliance area is, thus, critically important in identifying, evaluating, and addressing legal and reputational risks. The penalties imposed by regulators/supervisors, including the RBI, on regulated entities for non-compliance of directions, rules and statutory requirements and the associated "name and shame" that these penalties bring in their wake, are a manifestation of the compliance risk facing banks. These also have ramifications on the perception of the masses about the institutions so penalised. In fact, one of the key functions of the compliance department has to be information dissemination, whereby instances of compliance failures are quickly circulated among the staff along with preventive instructions, especially with an eye on preventing future frauds/mishaps and other manifestations of compliance risk.

What are the essential ingredients of an effective compliance framework?

16. Let me now turn to what I believe constitutes the basic building blocks of an effective compliance framework. These are: (i) Compliance Policy; (ii) Compliance Structure; (iii) Compliance Manual/ checklist; (iv) Compliance Personnel; and (v) Compliance Audit. The compliance process involves identifying the level of compliance risk in each business line, products & processes, suitably advising the operational functionaries and formulating instructions for mitigation of such risk. The integrity of the compliance process would depend upon how well the compliance architecture has been built up within the organisation and whether there is clear identification of responsibility and accountability for the compliance function. If we can get the above basics right, probably the foundation of an effective compliance framework would have been well laid.

17. The role of compliance officers is extremely important to ensure evolution of an appropriate risk mitigation plan by bank Boards. During pre-screening of prospective products and services, compliance function provides vital inputs on possible breaches of regulatory guidelines. Documentation deficiencies, very often, plague the operational efficiency of banks and this could well be the case for compliance function too. In this regard, it is important that regular updates are carried out to the Compliance manuals and detailed check lists are prepared, which will ensure availability of an itemised inventory of "dos and don'ts" which can be followed by every new incumbent in the compliance hierarchy and also help in building institutional memory. Further, in order that the compliance process attains its desired objectives, it is imperative that the Compliance and Audit functions act in a coordinated manner.

18. However, let me state that all banks need not have a uniform internal compliance structure. the Reserve

Bank's compliance guidelines clearly recognise the differences among the banks with regard to their scale of operations, their risk profiles and organisational structures and, therefore, allow freedom to the management to organise their compliance function best suited to their individual requirements. However, I would like to add a word of caution here. In an ever changing competitive scenario, what we may not do as bankers today may not be such a remote possibility tomorrow and, therefore, the compliance officers have to not only be aware of present set of regulations but also be able to foresee possible impediments to operations going forward. Same is the case with compliance structures, which need to retain flexibility and adaptability to stay in sync with the evolving business environment.

Is there a conflict of interest between the broad operational mandate of banks and the compliance function?

19. Compliance teams are invariably caught in a bind over whether to overlook certain rigours of regulation to facilitate the business or to enforce them zealously. A significant underpinning that can help solve this dilemma is the extent of independence that the compliance officers enjoy. It is imperative that the compliance officers enjoy complete independence so that they can fearlessly put forth their apprehensions on probable compliance deficiencies and pitfalls in various business lines. Towards this end, RBI has prescribed that the remuneration of compliance officers should be independent of the business lines they are responsible for and should be more in alignment with the bank's overall financial performance. A proactive system of testing for compliance on various points to obviate influences from business lines, enabling direct reporting of compliance aspects by Compliance Heads to Boards of banks, *etc.* are some of the means to ensure the independence of the compliance function.

What is the role of the Top Managements of banks in compliance?

20. Above arguments possibly point to a predominant role for dedicated compliance units in banks. This, however, does not undermine the role of the Top Management in the compliance function. Top Management in banks have a very critical role in ensuring compliance. This was one of the main planks on which the BCBS document articulated its stance on the inter-relationship between compliance functions and corporate governance. Attainment of high standards of compliance underscores the ability of the management to remain accountable and responsible all the time, which is an essential tenet of corporate governance, especially since the process has to be rolled out at the top for employees down below to emulate. The most effective corporate culture emphasising standards of honesty and integrity is one in which the Board of directors and senior management lead by example. Besides, there has to be an active channel of two-way communication that can transmit the Top Management's compliance ethos down the hierarchical levels and carry back feedback from the lower level in order to progressively improve bank's compliance processes.

Would theoretical education help in improving compliance process?

21. While compliance officers often have the prior experience of working in live, operational environments, a sound theoretical grounding in terms of knowledge of laws and statutes and familiarity with the roles and responsibilities can definitely be an added advantage. It is in this context that courses such as the one being launched today could go a long way in educating compliance functionaries on essential aspects of legal compliance, creating documentation related awareness and, in the process, ironing out the chinks in the compliance armour. More than anything else, compliance officers need to know the realms in which they operate, the scope of their functions and how limited or expansive their interaction and reach should be. In sum, they should be aware of when to report and what to report to their respective Boards/Management Committees on compliance failures and then take it forward to the banking regulator and supervisor. Their role is also of moral suasion in convincing Boards to be

guided by prudent compliance policies which can, at times, be dragged in different directions by forces of competition, market demands, general business needs and ambitions. It is perfectly desirable to prevent a compliance failure upfront, rather than report the same after the occurrence of a potentially damaging event. Compliance staff should have fair knowledge of law, accountancy and information technology along with adequate practical experience in various business lines and audit/inspection functions to enable them to carry out their duties effectively. In order to keep the compliance staff up-to-date with developments in the areas of banking laws, rules and standards, regular and systematic education/training in areas such as new products and services introduced in the banking industry, corporate governance, risk management and supervisory practices, *etc.* are necessary.

Conclusion

22. To conclude, I would emphasise that each bank must develop a robust compliance system with a well documented compliance policy clearly outlining the compliance philosophy of the bank, role and set up of the compliance department, composition of its staff and their specific responsibilities. For the compliance policy to be effective, it is important that the policy is driven by the risk profile of businesses and their stated risk appetite. For the long term stability and survival of the bank, it is important that a healthy compliance culture is developed and percolated down to the lowest level functionaries in the bank. If we follow the basic tenets of compliance, the risk of manifestation of compliance failure would be minimised. We agree that compliance is costly and will involve expenditure, but let me remind you that, in the final analysis, it is non compliance which would prove costly and may endanger the very survival of the institution.

23. The compliance function is acquiring increasing importance in banks on account of growing regulatory complexity and also creating a demand for competent banking compliance professionals. In view of the constantly evolving legal/regulatory framework, those already working in this area also need to continuously update their knowledge base and skill sets to remain relevant. I believe that the certificate course being launched today would help create a cadre of suitably trained banking compliance professionals. It is also heartening to note that the course would not only be open to bankers who have completed CAIIB but also to the members of ICSI. Given the fact that legal knowledge is essential in ensuring proper compliance, having company secretaries, who are well versed with various laws, as compliance officers would imply having in place the right persons for the right job.

24. Policies and products alone cannot ensure success in banking performance. The performance of banks depends on the quality of staff, their professional competence and also the compliance culture in the bank. This has to be nurtured and kept updated through training and other knowledge management efforts. Banks need a battery of in-house professional trainers to spearhead these efforts and it is here that the Certified Bank Trainer course would come in handy. Since we need a multitude of professional trainers to take forward the task of competence building and to provide mentorship to the bank staff, I feel the scope for this course is also phenomenal.

25. I hope, both the bankers and the ICSI members, realise the potential benefits that these two courses offer and make their optimum use. I believe that these courses have tremendous value in today's business environment, where the quality of manpower and the compliance culture of banks are two areas that can give competitive advantage to banks, besides contributing to the strength and resilience of individual banks and the entire financial system. I once again congratulate all the three Institutes for their efforts towards launching these two courses at an appropriate time, and wish them all success in their future academic endeavors.

Thank you!

*Frauds in the Banking Sector: Causes, Concerns and Cures**

K. C. Chakrabarty

Dr. Rana Kapoor, President, ASSOCHAM and MD & CEO, Yes Bank; Shri M. J. Joseph, Additional Secretary and Chief Vigilance Officer, Ministry of Corporate Affairs, Ms. Preeti Malhotra, Chairperson, ASSOCHAM National Council for Corporate Affairs; senior members from the financial services industry; delegates to the conference; members of the print and electronic media; ladies and gentlemen. It is a pleasure to be here this morning to deliver the inaugural address at the National Conference on "Financial Frauds – Risk & Prevention."

2. We all know that fraud, and more so, the financial frauds have been in existence for a very long time. Some may be surprised, but, it is interesting to note that Kautilya, in his famous treatise "Arthashastra" penned down around 300 BC, painted a very graphic detail of what we, in modern times, term as 'fraud'. Kautilya describes forty ways of embezzlement, some of which are: "what is realised earlier is entered later on; what is realised later is entered earlier; what ought to be realised is not realised; what is hard to realise is shown as realised; what is collected is shown as not collected; what has not been collected is shown as collected; what is collected in part is entered as collected in full; what is collected in full is entered as collected in part; what is collected is of one sort, while what is entered is of another sort." As you would all agree, some of the above actions continue to be the *modus operandi* adopted in many instances of financial fraud that have hit the headlines in recent times. This shows that very little has changed over such a long period in the basics of fraud and brings me to the question why has ASSOCHAM now been forced to devote an entire day for deliberating the issue.

3. Statistics quoted in a recent report by the Association of Certified Fraud Examiners' (ACFE) 2012 titled "*Report to the Nation on Occupational Fraud and Abuse*" may have some answers. The report has estimated that a typical organisation loses 5 per cent of its revenues to fraud each year and cumulative annual fraud loss globally during 2011 could have been of the order of more than US$ 3.5 trillion. The amount involved in the frauds reported by the banking sector in India has more than quadrupled from ₹2,038 crore during 2009-10 to ₹8,646 crore during 2012-13. Similarly, another report has estimated the losses of the Indian insurance companies at a whopping ₹30,401 crore in the year 2011 due to various frauds which have taken place in the life and general insurance segments. The losses work out to about nine per cent of the total estimated size of the insurance industry in 2011. Enron, Worldcom and more recently, the Libor manipulation scandals, have caused major upheavals in western nations and their impact has been felt not only in the individual institutions or countries but across the global financial system. India too has witnessed a spate of fraudulent activities in the corporate sector over the last decade in the form of Satyam, Reebok, Adidas, *etc.* The ACFE report further mentions that as in the previous years, banking and financial services industry continues to be among the most commonly victimised sectors as far as fraud is concerned. What the above statistics reveal is that the frequency, volume and the gravity of instances of fraud across various sectors, particularly in the financial sector, has gone up tremendously over the past few years. With the sweeping changes in the scope and magnitude of banking transactions witnessed in the past few decades, the emergence of hybrid financial products, the increasing trend of cross border financial transactions and the dynamics of real-time fund

* Inaugural address by Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India on July 26,2013 during the National Conference on Financial Fraud organised by ASSOCHAM at New Delhi. Assistance provided by Ms. Parvathy V. Sundaram and Shri R. K. Sharma is gratefully acknowledged.

movement and transformation, the vulnerability of the system to the menace of fraud has become higher than ever before. Against this backdrop, in my address today, I intend to primarily focus on the trend of frauds in the banking sector, the causative factors, share my concerns as the banking supervisor and highlight the touchstones of a robust fraud risk management and control framework in banks.

Definition of Fraud

4. Before I proceed any further, let us revisit the definition of the term 'Fraud.' Fraud can loosely be defined as "any behavior by which one person intends to gain a dishonest advantage over another". In other words, fraud is an act or omission which is intended to cause wrongful gain to one person and wrongful loss to the other, either by way of concealment of facts or otherwise. Fraud, under Section 17 of the Indian Contract Act, 1872, includes any of the following acts committed by a party to a contract, or with his connivance, or by his agents, with intent to deceive another party thereto or his agent, or to induce him to enter into the contract:

- the suggestion as a fact, of that which is not true, by one who does not believe it to be true;
- the active concealment of a fact by one having knowledge or belief of the fact;
- a promise made without any intention of performing it;
- any other act fitted to deceive;
- any such act or omission as the law specially declares to be fraudulent.

5. The Reserve Bank had, *per se*, not defined the term 'fraud' in its guidelines on Frauds. A definition of fraud was, however, suggested in the context of electronic banking in the Report of RBI Working Group on Information Security, Electronic Banking, Technology Risk Management and Cyber Frauds, which reads as under:

'A deliberate act of omission or commission by any person, carried out in the course of a banking transaction or in the books of accounts maintained manually or under computer system in banks, resulting into wrongful gain to any person for a temporary period or otherwise, with or without any monetary loss to the bank'.

Frauds in the banking sector: Some statistics

6. Though the RBI had not given a specific definition of the term, it has, for quite some time now, been monitoring the nature, volume and magnitude of frauds in certain sections of the financial sector that fall under its jurisdiction. The reporting of fraud cases by banks was prescribed by the RBI way back in July 1970. In 2005-06, the prescription of reporting of fraud cases was extended to urban cooperative banks and deposit taking NBFCs registered with the RBI. In March 2012, NBFC-ND-SIs (systemically important, non-deposit taking NBFCs) having asset base of ₹100 crore and above were also brought under the reporting requirements. While online reporting and monitoring of fraud cases by the banks has been in place since May 2004, the reporting by UCBs and NBFCs is still in manual format.

7. A comparative picture (Table 1) of total number of fraud cases and amount involved as on March 31, 2013 for scheduled commercial banks, NBFCs, Urban Cooperative banks, and Financial Institutions is as under:

Table 1: No. of frauds cases reported by RBI regulated entities

(No. of cases in absolute terms and amount involved in ₹ crore)

Category	No. of Cases	Amount Involved
Commercial Banks	169190	29910.12
NBFCs	935	154.78
UCBs	6345	1057.03
FIs	77	279.08
	176547	31401.01

8. As is evident from the above table, the cumulative number of frauds reported by the banking sector and the total amount involved in these fraud cases have a major share in the frauds reported by all entities under RBI's supervisory jurisdiction. A year-wise break up of fraud cases reported by the banking sector together with the amount involved is given in Table 2 below:

Table 2: Year-wise no. and amount of fraud cases in the banking sector

(No. of cases in absolute terms and amount involved in ₹ crore)

Year	No. of cases	Total Amount
2009-10	24791	2037.81
2010-11	19827	3832.08
2011-12	14735	4491.54
2012-13	13293	8646.00
Total frauds reported as of March 2013	169190	29910.12

9. It may be observed that while the number of fraud cases has shown a decreasing trend from 24,791 cases in 2009-10 to 13,293 cases in 2012-13 *i.e.*, a decline of 46.37 per cent, the amount involved has increased substantially from ₹2,037.81 crore to ₹8,646 crore *i.e.* an increase of 324.27 per cent. A granular analysis reveals that nearly 80 per cent of all fraud cases involved amounts less than ₹one lakh while on an aggregated basis, the amount involved in such cases was only around 2 per cent of the total amount involved. Similarly, the large value fraud cases involving amount of ₹50 crore and above, has also increased more than tenfold from 3 cases in FY 2009-10 (involving an amount of ₹404.13 crore) to 45 cases in FY 2013 (involving an amount of ₹5,334.75 crore) (Annex 1). Further, a bank group wise analysis of frauds reveals that while the private sector and the foreign bank groups accounted for a majority of frauds by number (82.5 per cent), the public sector banks (including SBI Group) accounted for nearly 83 per cent of total amount involved in all reported frauds (Table 3 below).

Table 3: Bank Group wise fraud cases

(No. of cases in absolute terms and amount involved in ₹ Crore)

Bank Group	No. of cases	% to Total Cases	Amount Involved	% to Total Amount
Nationalised Banks including SBI Group	29653	17.53	24828.01	83.01
Old Pvt. Sector Banks	2271	1.34	1707.71	5.71
New Pvt. Sector Banks	91060	53.82	2140.48	7.16
Sub Total (Private Banks)	93331	55.16	3848.19	12.87
Foreign Banks	46206	27.31	1233.92	4.12
Total	169190	100	29910.12	100

A bank group wise distribution of fraud cases in terms of amount involved and details of year wise closure of fraud cases is also enclosed at Annex 2 and 3 respectively.

10. While the sheer number of frauds and the amount involved, when seen in isolation, may appear overwhelming, it is important to view the incidence of frauds in the banking sector in the context of the massive increase in the number of deposit and credit accounts in banks and the staggering volume and value of transactions that are processed by the banks every day. To put things in perspective, let me quote some statistics again. The number of deposit accounts in the banks over the last ten years (between end 2002 and end 2012) has gone up from ₹43.99 crore to ₹90.32 crore while the number of loan accounts in the same period has also more than doubled from ₹5.64 crore to ₹13.08 crore. A quick estimate puts the average number of all transactions that happen every day in the banking system at approximately ₹10 crore, which is enormous. The number of frauds per million banking transactions was about 0.4, which is not a very high figure. Likewise, besides increase in the number of brick and mortar branches, additional service delivery points like ATMs and Point of Sale (POS) terminals have also gone up significantly. While the number of ATM machines has grown from 34,789 in March 2008 to 1,14,014 in March 2013, the number of POS terminals has also more than doubled (from 4,23,667 to 8,45,653) during the same period. The point I am trying to drive home here is that on a standalone basis the quantum of frauds, both in terms

of number and amount involved, may appear to be very high, but when one weighs it against the sheer magnitude of accounts and transactions handled by the banking system, they are not alarming.

Category of Frauds

11. Broadly, the frauds reported by banks can be divided into three main sub-groups:

a. Technology related

b. KYC related (mainly in deposit accounts)

c. Advances related

A closer examination of the reported fraud cases has revealed that around 65 per cent of the total fraud cases reported by banks were technology related frauds (covering frauds committed through/at internet banking channel, ATMs and other alternate payment channels like credit/debit/prepaid cards) while the advances portfolio accounted for a major proportion (64 per cent) of the total amount involved in frauds. Table 4 below shows that relatively large value advances related frauds (> ₹ 1 crore) have increased both in terms of number and amount involved over the last four years.

Technology Related Frauds

12. The substantially larger proportion of technology related frauds by number is only expected as there has been a remarkable shift in the service delivery model with greater technology integration in the financial services sector. Banks are increasingly nudging their customers to adopt newer service delivery platforms like mobile, internet and social media, for enhanced efficiency and cost-cutting. But while banks' customers have become tech-savvy and started using online banking services and products, evidence suggests that even fraudsters are devising newer ways of perpetrating frauds by exploiting the loopholes in technology systems and processes. There have been several instances of low value frauds wherein the fraudsters have employed hostile software programmes or malware attacks, phishing, Vishing (voicemail), SMSishing (text messages), Whaling (targeted phishing on High Networth Individuals) techniques apart from stealing confidential data to perpetrate frauds. Bank group-wise detail of the number of technology related fraud cases with the amount involved therein over the last 4 years is as under in Table 5.

13. The predominance of the new private sector banks and the foreign banks in the number of technology related frauds is intuitive as they lead the technology enabled service delivery in the Indian banking sector. From the above it is evident that though the incidence of cyber frauds is extremely high, the

Table 4: Bank Group wise Advance Related Frauds
(₹1 Crore & above in value)

(No. of cases in absolute terms and amount involved in ₹ Crore)

Bank Group	2009-10		2010-11		2011-12		2012-13		Cumulative total (As at end March 2013)	
	No. of cases	Amount Involved	No. of cases	Amount Involved	No. of cases	Amount Involved	No. of cases	Amount Involved	No. of cases	Amount Involved
Nationalised Banks including SBI Group	152	736.14	201	1820.12	228	2961.45	309	6078.43	1792	14577.28
Old Private Sector Banks	16	99.10	20	289.31	14	63.31	12	49.87	149	767.75
New Private Sector Banks	10	63.38	18	234.18	12	75.68	24	67.47	363	1068.18
Sub-total	26	162.48	38	523.49	26	138.98	36	117.34	512	1835.93
Foreign Banks	4	45.26	3	33.20	19	83.51	4	16.75	456	277.05
Grand Total	182	943.87	242	2376.81	273	3183.94	349	6212.51	2760	16690.26

Table 5: Bank Group wise Technology Related Frauds

(No. of cases in absolute terms and amount involved in ₹ Crore)

Bank Group	2009-10		2010-11		2011-12		2012-13		Cumulative total (As at end March 2013)	
	No. of cases	Amount involved	No. of cases	Amount involved	No. of cases	Amount involved	No. of cases	Amount involved	No. of cases	Amount involved
Nationalised Banks including SBI Group	118	1.82	143	3.39	172	7.26	190	9.85	824	25.60
Old Private Sector Banks	9	0.15	4	0.46	9	0.06	6	1.09	55	2.30
New Private Sector Banks	14387	34.53	9638	21.41	6552	16.54	3408	33.97	74321	183.48
Sub Total	14396	34.68	9642	21.87	6561	16.6	3414	35.06	75200	211.38
Foreign Banks	5273	26.88	4486	14.77	3315	14.60	5161	22.45	36455	145.95
Grand Total	19787	63.38	14271	40.03	10048	38.46	8765	67.36	111655	357.33

actual amount involved is generally very low. However, let me emphasise that while the amounts involved may be small from banks' perspective, these are significant from the viewpoint of individuals, who are victims of such frauds. The small value of frauds, therefore, cannot be a comfort to the banks. The banks must realise that the community that uses online banking services is a very powerful group capable of launching scathing attacks using the social media, which can irreparably tarnish the reputation of banks. It is, therefore, in banks' own interest to ensure that they are constantly on the guard and up to the challenge of providing a secure environment for customers to conduct banking transactions. For this purpose, the banks would need to constantly monitor the typology of the fraudulent activities in such transactions and regularly review and update the existing security features to prevent easy manipulation by hackers, skimmers, phishers, *etc.* With cyber attack becoming more frequent, the RBI has advised banks in February 2013 to introduce certain minimum checks and balances like introduction of two factor authentication in case of 'card not present' transactions, converting all strip based cards to chip based cards for better security, issuing debit and credit cards only for domestic usage unless sought specifically by the customer, putting threshold limit on international usage of debit/credit cards, constant review of the pattern of card transactions in coordination with customers, sending SMS alerts in respect of card transactions *etc.*, to minimise the impact of such attacks on banks as well as customers.

14. The electronic modes of payment like NEFT and RTGS have gained traction due to their almost real time impact and also comparatively lower cost. These transactions are generally undertaken remotely, through internet banking, by using specific ID and password provided to the users. Though, it is the responsibility of the user to ensure that his unique ID and password are properly secured and do not get misused due to his laxity, the banks, on their part, should also ensure that these payment channels are safe and secure. Towards this end, RBI has advised banks to introduce preventive measures such as putting a cap on the value/number of beneficiaries, introducing system of issuing alert on inclusion of additional beneficiary, velocity checks on number of transactions effected per day/per beneficiary, considering introduction of digital signature for large value payments, capturing internet protocol check as an additional validation check for any transaction, *etc.*

15. I am sure many of you have heard of recent instances of frauds by way of replication of data

contained in genuine debit/credit cards onto duplicate cards. Without getting into much detail, it is sufficient to say that the banks need to improve the peripheral and system security in ATM locations and, at the same time, educate their customers about using their payment cards with due caution. Similarly, cases of circulation of fraudulent e-mails and sms messages conveying winning of prize money have become matter of common occurrence in recent times. Many a times, gullible people fall prey to such e-mails and pay money in designated accounts, which is then quickly siphoned off through ATMs located in far flung areas of the country. For this purpose, the fraudsters generally use deposit accounts in banks with lax KYC drills or accounts which remain inoperative for long. Banks, therefore, not only need to caution their customers to guard against such temptations for easy money but should also ensure that deposit accounts maintained with them are fully KYC compliant. In fact, inadequacy of KYC drill would render any subsequent investigation process meaningless. The banks should also have a system of generating alerts to monitor transactions in accounts which are inoperative for long or where transactions are not in conformity with general trend and customer risk profile. The Reserve Bank as a part of its financial literacy programme, constantly seeks to caution the general public through print media, electronic media and on its web site not to get enamored by the false promises made in such e-mails.

16. I would like to reiterate here that though the amount involved in technology related frauds may not appear to be menacing when viewed in the backdrop of the total value of daily transactions and overall business prolife of the Indian banks, any dent in the confidence of the stakeholders in the banking system will result in huge reputational and operational risks for the banks, adversely affect public perception and undermine faith in the financial system. If the banks are not able to proactively manage the technology risks in their delivery systems, they may have to face litigations on customer protection and also incur the wrath of the regulators and customer interest groups. Apart from enlisting active co-operation from their technology vendors, banks must look to build a close rapport with other banks, investigative agencies and regulators to ensure that there is prompt and coordinated exchange of information, whenever required. With the spread of mobile banking, banks would also need to closely engage with the telecom service providers for reducing the technology related fraud risk. Banks could also consider seeking insurance coverage as a risk transfer tool and a mitigant for the financial losses arising from technology induced fraudulent customer transactions.

Frauds in Banks' Advances Portfolio

17. As I mentioned earlier, frauds related to the advances portfolio accounts for the largest share of the total amount involved in frauds in the banking sector. Increase in the cases of large value fraud (involving amount of ₹50 crore and above) in accounts financed under consortium or multiple banking arrangements involving even more than 10 banks at times, is a newly emerging, but unwelcome trend in the banking sector. Another point that needs to be highlighted here is that public sector banks account for a substantial chunk of the total amount involved in such cases.

18. Another glaring issue in this context is the considerable delay in declaration of frauds by various banks in cases of consortium/multiple financing. We have on occasions observed more than 12-15 months lag in declaration of the same case as fraud by different banks, which not only enables the borrower to defraud the banking system to a larger extent, but also allows him considerable time to erase the money trail and queer the pitch for the investigative agencies.

19. Our analysis has highlighted that majority of the credit related frauds are on account of deficient appraisal system, poor post disbursement supervision and inadequate follow up. The absence of an orderly

system of information sharing among the lender banks further exacerbates the problem. The laxity in post disbursement supervision and inadequacy of follow up of advances portfolio by banks is clearly underlined by the fact that majority of the fraud cases come to light only during the recovery process initiated after the accounts have been classified as NPA. Quite often the banks are confronted with the fact that the title deeds are not genuine or that the borrowers had availed multiple finance against the same property. Although, RBI has advised banks to ensure proper exchange of information between lenders on the borrowers financed under multiple banking arrangements/consortium arrangements, cases of multiple financing against the same security are still reported to us indicating utter disregard in conforming to the basic safeguards. The Reserve Bank has also advised banks to subject the title deeds in respect of securities charged to them to legal audit periodically so that cases of multiple financing may be detected in the initial stages itself. Due diligence on other professionals like Chartered Accountants, valuers and advocates involved in the loan assessment and sanctioning processes is also an essential safeguard as there have been instances where some of these professionals have also facilitated the perpetration of frauds by colluding with the borrowers to fabricate fudged financial statements, inflated security valuation reports, defective search reports for title deeds of mortgaged property, based on which banks have been led to overestimate the funding requirements and security cover for the same.

20. In the context of advance related frauds, I wish to raise a fundamental issue for wider public debate. At what stage should the banks declare a loan account as fraud? Should diversion of funds be a basis for defining a borrowal account as fraud? In my opinion, so long as the borrower does not dispute that he owes money to the bank, it may not be termed as 'fraud.' I believe there is a good enough reason to revisit the definition of 'fraud' in the banking context.

Fixing of Staff Accountability

21. Another area demanding urgent attention of banks is fixing of staff accountability. Our analysis has revealed that this is a neglected area so far as public sector banks are concerned. The general trend in such cases is to include a large number of officials in the probe so that the investigation is both delayed and diluted. Even in instances where investigations are concluded, there is a tendency to hold only the junior level officials involved in post disbursement supervision accountable and ignore the lapses on the part of higher officials who were involved in sanctioning of the advances, unless of course, the case becomes a high profile one or if some personal vengeance is involved. Our experience is that the accountability examinations do not comment on lapses of sanctioning officials even while the fraudulent intentions of the borrower might have been overlooked by the sanctioning officials *ab initio*. I have heard arguments such as how can the Board or the Top Management be expected to conduct post disbursal supervision? It can, at best, create a structure that ensures that the post disbursal supervision is properly conducted. I can accept the argument to a certain extent but if the structure created by the Board/Top Management fails to do its job properly, who should be held accountable? The limited point that I want to make is, if the Board/Senior Management does not have the time to conduct post disbursal supervision, why not delegate the sanction authority also to a lower level.

22. I have another issue regarding fixing of staff accountability in advance related fraud cases. We have observed that in the same case of consortium/multiple financing, while staff accountability is established in a few banks, in several others, the banks do not find any staff involvement. To me, this defies logic. How can the banks shift the onus of conducting due diligence on the consortium leader and blindly follow whatever the latter does?

23. I believe there is a pressing need to probe staff accountability in a fair and objective manner and take it to its logical conclusion. This is necessary to instill a sense of responsibility amongst the officials for complying with the laid down procedures. Many a times, the internal investigation is put on hold when the probe is handed over to external investigation agencies. The completion of internal probe would also assist in prompt investigation by the law enforcement agencies and the perpetrators of fraud can be brought to book. Our analysis also shows that the law enforcement agencies are, at times, reluctant to accept the cases for probe, either on technical grounds or other constraints, due to which precious time is lost in initiating the probe leading to consequential dilution in quality of evidence, increased complexity in tracking money trails and deterioration in enforceable collateral.

24. While it is important that the probing and fixing of staff accountability be done in all seriousness, I also wish to add a note of caution here. We all know that the banks are in the business of taking risk and consequently, there may be occasions when the risk crystallizes and bank suffers losses on some of their credit decisions. Herein lies a need to differentiate between the losses which the bank suffers in its normal course of business and those which might have resulted from fraudulent actions. While fixing accountability, there would be a need to categorically establish *mala fide* intention/malfeasance on the part of the erring employee involved in fraud cases so that the other officials do not become wary of sanctioning even good credit proposals.

Expectations of the Supervisor

25. Good Corporate Governance serves as a very important factor in control of fraudulent activities. RBI has clearly indicated that fraud risk management, fraud monitoring and fraud investigation function must be owned by the bank's CEO, Audit Committee of the Board and, in respect of large value frauds, the Special Committee of the Board. The role of the Chairmen and Managing Directors(CMDs)/Chief Executive Officers (CEOs), Audit Committee of the Board and the Special Committee of the Board in evolving robust fraud risk management systems and in implementing effective fraud risk mitigating measures is of paramount importance. They are responsible for effective investigation of fraud cases and prompt, accurate reporting to appropriate regulatory and law enforcement authorities. The Boards of the banks/ACB should ensure periodical review of the procedures and processes to ensure that the bank's interests are not impacted adversely due to loopholes in their policy guidelines. It is imperative that the Top Management puts in place targeted fraud awareness training for its employees focusing on prevention and detection of fraud.

26. It is a matter of concern that the audit systems prevalent in banks have not proved effective in detecting fraud cases due to factors like inadequacy of time allotted for audit, inefficient sampling of transactions to be checked during audit, lack of trained personnel with the required aptitude for audit work, *etc.* Providing individuals a means to report suspicious activity is a critical part of an anti-fraud programme. Towards this end, a system of protected disclosure scheme has been evolved which is regulated by CVC in case of public sector banks and RBI in case of private and foreign banks. The Reserve Bank has also advised private and foreign banks operating in India to upgrade their internal vigilance mechanism to the same level as is applicable in case of public sector banks in terms of CVC guidelines in the matter.

27. Information sharing is a vital fraud prevention and alert mechanism. On its part, The Reserve Bank promptly shares information with all banks detailing the *modus operandi* of fraud cases reported by any bank together with details of the entities involved in the perpetration of such frauds in the form of

confidential caution advices. This also serves to encourage periodic review of existing guidelines, identify loopholes on the basis of caution advice, if any, and initiate corrective steps. The Reserve Bank has also issued instructions requiring banks to report negligence or involvement of entities like Chartered Accountants, valuers and advocates resulting in perpetration of frauds, to their professional oversight bodies for appropriate deterrent action.

28. Today, most banks have put in place a system of checking the credit history of the borrower through credit information companies like the CIBIL. Considering that fraudulent borrowers could still seek credit from the banking system even after defrauding one bank, it may be worthwhile to consider setting up a fraud registry on the lines of credit information bureau. This, coupled with stringent deterrents such as prohibition of banking facilities to fraudulent borrowers, may serve as a strong antidote to the malaise.

Conclusion

29. The impact of frauds on entities like banks, which are engaged in financial activities, is more significant as their operations involve intermediation of funds. The economic cost of frauds can be huge in terms of likely disruption in the working of the markets, financial institutions, and the payment system. Besides, frauds can have a potentially debilitating effect on confidence in the banking system and may damage the integrity and stability of the economy. It can bring down banks, undermine the central bank's supervisory role and even create social unrest, discontent and political upheavals. The vulnerability of banks to fraud has been heightened by technological advancements in recent times.

30. I would like to recapitulate some of the key issues that I have sought to highlight in my address today:

- While the number of frauds reported each year is actually coming down, the amount involved is going up substantially. The increase in amount involved is largely attributable to the few large value advance related frauds that come to light each year. The small value technology related and other transactional frauds, as a proportion to the number of daily banking transactions, are very miniscule and are manageable.
- The large value advance related frauds, which pose a significant challenge to all stakeholders, are mainly concentrated in the public sector banks.
- While there is a pressing need to overhaul the system of monitoring, control, supervision and follow up of advances related frauds, their incidence in public sector banks in a large measure can also be trailed to comparatively poor corporate governance standards and lack of firm resolve by the Board and the Top Management in fighting this menace.
- There is a need to improve exchange of information between all stakeholders to instill and maintain financial discipline among the users of funds and prevent negative information arbitrage to the detriment of the system.
- Board oversight of the audit processes and the internal systems and control must be able to identify vulnerable areas, raise red flags and plug loopholes quickly and effectively.
- There are considerable delays in reporting frauds to appropriate authorities, conducting investigation and fixing of accountability, which in effect leads to shielding of the main culprit while the blame is shifted to the junior level officials. This trend needs to be curbed immediately. Close liaison must be maintained with investigating agencies and courts to ensure timely completion of investigations and closure of cases.

- Society should demand stringent action against the perpetrators of financial frauds and should socially ostracize them.
- Banking system should collectively ensure that the fraudsters do not have access to banking facilities.

31. To sum up, I would like to emphasise that the advantages of technology, communication and accessibility of data must be leveraged to put in place a system wide fraud mitigation mission. Any house is only as strong as its foundation and as weather proof as its insulation. It is necessary, therefore, that a strong foundation is built by leveraging robust IT systems, framing effective policies and procedures, laying down strict compliance processes, setting high integrity standards, developing efficient monitoring capabilities and initiating strict punitive action against the culprits in a time bound manner. It is also imperative that we insulate ourselves from unscrupulous activities by strengthening the fraud detection, mitigation and control mechanism through prompt identification, investigation and exchange of information. This is necessary not just for the safety of banks but for ensuring the stability and resilience of the overall financial system and sustaining the confidence that various stakeholders have in its strength and integrity. To my mind, in improved Governance standards in the public sector banks and greater commitment by the Board and Top Management in fighting the scourge of fraud lies the 'holy grail' of success.

I thank ASSOCHAM for inviting me to the inaugural session of this conference and wish the conference deliberations a grand success.

Thank you!

Annex 1

Year wise fraud cases reported by commercial banks

(As on March 31, 2013)

(No. of cases in absolute terms and amount involved in ₹ Crore)

Amt Involved	< ₹1 lakh		> 1 lakh and up to ₹1 crore		> ₹1 cr and up to ₹50 crore		> ₹50 crore		Total Fraud cases	
FY (Apr-Mar)	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**
Pre- 2004	2292	4.24	819	96.65	613	2951.64	13	1244.26	3737	4296.80
2004-05	7553	12.50	2407	287.32	111	584.89	1	53.57	10072	938.29
2005-06	11395	18.63	2334	290.20	192	1009.23	2	135.47	13923	1453.53
2006-07	20415	31.22	3048	325.02	158	791.17	1	78.45	23622	1225.86
2007-08	17691	30.25	3381	383.98	177	662.31	-	-	21249	1076.54
2008-09	19485	33.85	4239	442.94	214	1129.56	3	305.33	23941	1911.68
2009-10	20072	30.36	4494	474.04	222	1129.28	3	404.13	24791	2037.81
2010-11	15284	26.09	4250	494.64	277	1515.15	16	1796.20	19827	3832.08
2011-12	10638	19.05	3751	509.17	327	2113.23	19	1850.08	14735	4491.54
2012-13	9060	22.11	3816	491.13	372	2798.00	45	5334.75	13293	8646.00
Total	133885	228.31	32539	3795.10	2663	14684.46	103	11202.25	169190	29910.12

Annex 2

Bank Group wise fraud cases reported

(As on March 31, 2013)

(No. of cases in absolute terms and amount involved in ₹ Crore)

Amt Involved	< ₹1 lakh		> 1 lakh and up to ₹1 crore		> ₹1 cr and up to ₹50 crore		> ₹50 crore		Total Fraud cases	
Bank Group	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**	**No. of cases**	**Total Amount**
Nationalised Banks including SBI Group	7622	31.97	19753	2847.11	2184	11867.24	94	10081.69	29653	24828.01
Old Pvt. Sector Banks	622	2.38	1463	225.09	181	1001.56	5	478.68	2271	1707.71
New Pvt. Sector Banks	83850	112.36	6984	510.18	225	1445.82	1	72.11	91060	2140.47
Sub Total (Private Banks)	84472	114.74	8447	735.27	406	2447.38	6	550.79	93331	3848.19
Foreign Banks	41791	81.60	4339	212.72	73	369.84	3	569.76	46206	1233.92
Grand Total	133885	228.31	32539	3795.10	2663	14684.46	103	11202.25	169190	29910.12

Annex 3
Year wise details of fraud cases closed

(No. of cases in absolute terms and amount involved in ₹ Crore)

Amt Involved	< ₹1 lakh		> 1 lakh and up to ₹1 crore		> ₹1 cr and up to ₹50 crore		> ₹50 crore		Total Fraud cases	
FY (Apr-Mar)	No. of cases	Total Amount	No. of cases	Total Amount	No. of cases	Total Amount	No. of cases	Total Amount	No. of cases	Total Amount
Pre-2004	1661	2.85	568	36.33	11	94.64	1	85.66	2241	219.48
2004-05	6047	8.47	470	33.27	13	99.68	-	-	6530	141.42
2005-06	11611	9.47	154	10.86	11	75.93	1	55.28	11777	151.54
2006-07	14291	9.46	248	17.53	4	34.30	-	-	14543	61.29
2007-08	12861	11.23	374	26.79	3	32.05	-	-	13238	70.07
2008-09	6796	9.25	420	20.84	10	49.28	-	-	7226	79.37
2009-10	5828	8.99	636	38.03	4	21.18	-	-	6468	68.20
2010-11	13526	13.47	649	42.88	7	14.26	-	-	14182	70.61
2011-12	38330	23.58	756	49.80	10	33.04	-	-	39096	106.42
2012-13	11198	8.45	556	35.83	14	78.51	-	-	11768	122.79
Total	122149	105.22	4831	312.16	87	532.87	2	140.94	127069	1091.18

*Financing Strategies for Urban Infrastructure: Trends and Challenges**

Harun R Khan

I. Introduction

1. It is my great pleasure to be here for the opening session of this conference where so many stakeholders – the Government (central, state and local), the financiers, the rating agencies and the academia – have come together to deliberate on an important subject that is fast gaining significance. I am thankful to the Centre for Advanced Financial Research and Learning (CAFRAL) and, in particular Smt. Usha Thorat, Director, CAFRAL for taking this initiative and giving me this opportunity to deliver the inaugural address. There is no doubt that urbanisation is increasing at a rapid pace, every year, everyday and every moment. And if at all, India and Indian cities have to cope up with the pace of urbanisation and support the high growth momentum in the medium to long run, we will have to address the various challenges linked to provision of quality public services in our urban centres to ensure sufficient and sustainable funding for the same.

2. Even though urban infrastructure financing does not directly concern the Reserve Bank except for prescribing the prudential and foreign exchange management related regulations for infrastructure financing including for the urban infrastructure, it has on its own initiative taken active interest in sensitising the market on the need for addressing the funding requirements of the Urban Local Bodies (ULBs). The Reserve Bank being the banker and the debt manager to the state governments organises a meeting of all the State Finance Secretaries on an annual basis to discuss issues which are relevant for the State's overall fiscal position; often issues related to municipal finances have also been discussed. In addition, the Reserve Bank at the behest of the Thirteenth Finance Commission (ThFC) had undertaken a Development Research Group (DRG) study (Pethe *et al*, 2009) on the issue of strengthening federal decentralisation that essentially provided a micro design of grants for local bodies (both urban and local) and their devolution across the States. This was later mimicked to some extent by the ThFC. At the instance of the Reserve Bank, the first ever comprehensive study on "Municipal Finance in India – An Assessment", (Mohanty *et al.* 2007) was also undertaken and the study had made some important policy recommendations. This study was also presented before the ThFC.

3. For today's presentation, I would like to start by giving a brief overview on the importance of urbanisation in the context of overall growth and the size of investment that is required to fund the urban infrastructure services (section II). Then I would briefly deal with the existing private financing strategies for urban infrastructure – both debt and equity – along with the associated issues (section III). This will be followed by section IV that would essentially list the various urban infrastructure financing institutions. In section V, I would touch upon various challenges and strategies in financing urban infrastructure, followed by the concluding remarks in section VI.

II. Urbanisation: The Current Pace and the Future Needs

4. Presently, India is at the cusp of rapid urbanisation and the extent of urbanisation is accelerating at a rapid pace. Census data 2011 reveals that about 31 per cent (377 million) of Indian population live in urban areas. The share of persons living in urban areas rose by 3.35

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per cent in the decade 2001 to 2011 as against only 2.10 per cent in the decade 1991 to 2001. In the coming years, the intensity of India's urbanisation will be immense. As against one state currently (Tamil Nadu), about 5 states are going to be more than 50 per cent urbanised by 2030 as per McKinsey estimates (2010). The process of urbanisation in India is mostly characterised by dramatic increase in the number of large cities. In 1951, there were only five metropolitan cities (with population of over 1 million), *i.e.*, Kolkata, Mumbai, Chennai, Hyderabad, and Delhi. Their number increased to 12 in 1981, 35 in 2001 and 53 in 2011 and is further expected to be about 68 in 2030. At least two of them (Mumbai and Delhi) will be among the five largest cities in the world by 2030. In terms of both population and GDP, many Indian cities will become larger than many countries today. For instance, Mumbai Metropolitan Region's GDP is projected to reach US$ 265 billion by 2030, larger than the GDP of many countries today, including Portugal, Colombia, and Malaysia. In parallel many smaller towns are growing faster than mega cities and Tier 2 cities adding more private sector jobs than the metropolises, partly due to higher size of informal sector and lower real estate prices (Gupta, 2013). Urban areas, in general have emerged as huge magnets for jobs. Work force added in urban areas has grown at 44 per cent during 2001-11 over the previous decade as against 12 per cent in rural areas over the same period.

5. Urbanisation in India has become an irreversible process, and an important determinant of national economic growth and poverty reduction. Urbanisation and growth are infact two-way linked. While urbanisation is an inevitable outcome of the faster rates of growth, it is also a process that leads to growth. It is quite evident from the urbanisation pattern in India that the rate of development is clearly related to the rate of urbanisation. Generally, states with higher gross state domestic product (GSDP) have higher levels of urban population. Advanced states in India, such as, Gujarat, Maharashtra, Tamil Nadu and Karnataka are significantly more urbanised than Bihar, Odisha and Assam. Looking at the urban sector's contribution to GDP, it has risen from about 38 per cent in 1970-71 to 63 per cent in 2009-10 and around 70 per cent at present while employing only 27 per cent of the work force. The top 100 large cities in India produce 42 per cent of GDP with 16 per cent population and just 0.24 per cent of land area. In the coming decades, the urban sector will play a more critical role in the structural transformation of the Indian economy and in sustaining the high rates of economic growth.

6. Hence, it is crucial that India's urban sector and the cities provide quality infrastructure and services at affordable costs. This would be essential to give a competitive edge to the economic activities these cities host so as to realise India's full growth potential. It is imperative that urbanisation has to be central to India's strategy of achieving faster and more inclusive growth because as economic activities and habitations get clustered in and around urban areas, it stimulates economic efficiencies while simultaneously providing more employment opportunities. Urbanisation facilitates greater entrepreneurship and more productive employment as compared with what is possible in rural areas. It, thereby, enables faster inclusion of more people in the process of economic growth. The rural-urban linkages in India are really strong and realisation of the potential of urbanisation can accelerate the rural sector also. Increased urbanisation leads to greater demand for products of rural areas and larger remittances from cities to villages. There is enough evidence to suggest that rising standards of living in India's urban areas in the post-reform period have also positively impacted the rural economy.

7. For sustaining this fast pace of urbanisation, apart from generating adequate employment opportunities,

what is urgently required is improving the service delivery of civic amenities. This is all the more critical considering that the cities and towns of India are visibly deficient at present in providing quality services even to the existing population. For example, as per 2011 census only 70.6 per cent of urban population are covered by individual connections for water supply. Duration of water supply in Indian cities ranges from one to six hours. As per the 12th Plan estimates, public transport accounts for only 27 per cent of urban transport in India. Even a partial sewerage network is absent in 4861 cities and towns in India. The Technical Group on the Estimation of Housing Shortage of the Ministry of Housing and Urban Poverty Alleviation (Chairman: Amitav Kundu, 2006) has projected the total shortage of dwelling units in urban areas in 2012 to be 18.78 million.

8. Urbanisation being efficient and potentially job-creating, India needs to fully leverage the economic opportunity of urbanisation. Such leveraging would, however, be dependent on planned and properly guided urbanisation. Bad strains of unplanned urbanisation were seen in the 1980s/1990s in some of the Latin American countries where rapid urbanisation without a corresponding stepping up of infrastructure construction had led to a steep deterioration in quality of life. India is facing a similar challenge. Accordingly, the ability to manage urbanisation and prepare cities for their new role is one of the major issues facing India's planners today. The growth momentum cannot be sustained if urbanisation is not accommodated and facilitated. The cities of India will have to provide a receptive environment for innovation and productivity enhancement which can foster faster growth of the Indian economy and make room for large migration from rural areas to higher-productive sectors in urban areas. For all this, a comprehensive framework of urban policy and planning associated with a significant step up in investment in urban areas is needed.

9. Given this massive requirement for the urban sector, one needs to examine whether all the stakeholders are in a position to deliver the desired outcomes. Here I would like to focus rather narrowly on one critical aspect, *i.e.*, finance. The size of the municipal fiscal sector in India is very small, especially in relation to the public services these bodies are mandated to deliver and also as compared to many developing nations. The total municipal revenue in India accounts for about 0.75 per cent of the country's GDP as against a figure of 4.5 per cent for Poland, 5 per cent for Brazil and 6 per cent for South Africa. In terms of both revenue and expenditure, the ULBs account for only about two to three per cent of the combined revenue and expenditure of Central Government, State Governments and ULBs. This is in contrast to the situation in advanced countries where local bodies normally account for 20 to 35 per cent of the total government expenditure. As per McKinsey estimates (2010), India spends only US$17 per capita annually on urban capital investment as compared with US$116 per capita in China, US$127 in South Africa and US$391 in the United Kingdom. Furthermore, there are significant differences across Tier 1 to Tier 4 cities. Of this small share of urban investment that India undertakes, contribution of debt and private-sector financial participation is even miniscule. Traditionally they have contributed less than 5 per cent of overall urban investment although for specific metro projects at times the share remains very high.

10. Based on the extent of urbanisation and the basic service standard norms and correcting for the service deficiencies in Indian cities, studies have estimated the likely investment requirements for urban infrastructure. Let me mention a few. The McKinsey Study (2010) on Indian urbanisation projects a capital investment need of US$ 1.2 trillion over the 20-year period 2011-2030 with the majority of capital spending in cities to go to transportation and affordable housing. At this rate,

India has to boost its annual per capita urban capital spending eightfold from US$ 17 to US$ 134. The Report of the High Powered Expert Committee (HPEC) on Indian Urban Infrastructure and Services (Chairperson: Isher Judge Ahluwalia, 2011) projects investment for urban infrastructure over the 20-year period from 2012 to 2031 at ₹ 39,200 billion (about US$ 870 billion). Given the gross neglect of the urban sector in the past and the resultant service deficiencies in Indian cities, the HPEC estimates that approximately one-third of the total investment is required to address the unmet demand for these services. Even at this high projected rate of investment, by 2021 (till 2030), annual investment will amount to 1.14 per cent of GDP, up from the current 0.7 per cent of GDP[1]. While all these projections of urban financing needs differ among various analysts, the crux is that financing needs are huge in the coming years and a large part of investment in the coming decades has to be incurred to compensate for the cumulative gap of urban service delivery over the past so many years.

III. Current Private Financing Strategies and Issues

11. Traditionally, urban infrastructure has generally been financed either through budgetary allocations or through ULBs' own internal revenue generation. However, with public funds falling short of urban sector's investment requirements, ULBs have looked for alternative private sources of financing. On the debt side, these include issuing municipal bonds, pooled finance mechanism as well as term loans. On the equity side, emphasis has been on Public Private Partnerships (PPPs), both to obtain the finance as well as to improve delivery methods.

Municipal Bonds

12. Many developed and developing countries have relied extensively on municipal bond market. In particular, the US has been the world's largest market for municipal securities. In 2011, there were about one million different municipal bonds outstanding and they totalled US$ 3.7 trillion. Though the issuances slowed down post global financial crisis, mainly due to sharp decline in the credit rating of municipal bond insurers who had incurred heavy losses in CDOs/other structured products, they appeared to have rebounded in 2010 (US Securities and Exchange Commission, 2012). In contrast, the municipal bond market in India, *albeit* more than a decade and a half old, is still in a nascent stage. Bangalore Mahanagara Palike was the first ULB to have raised resources through private placement of municipal bonds in 1997 and Ahmadabad Municipal Corporation was the first to make a public offering in 1998. It was also the first municipal bond without a state government guarantee. Since 1997, only 28 municipal bond issues have taken place in India, which have included taxable and tax-free bonds and pooled financing issues, mobilising funds to the tune of nearly ₹30 billion. Most of these have been private placements rather than public offers. A look at the trend in the value of municipal bond issues since 1997 suggests that the value of municipal bond issuances that were on a rise till 2005 has seen a sharp fall since then and there has been very few issuances since 2007 and practically no issue after 2010. The most preferred pattern has been tax free bonds (close to 50 per cent of municipal bonds, both in number as well as value), followed by taxable municipal bonds and, lastly, pooled finance bonds. The tenors of the issues have varied, being mostly in the range of five to 10 years; project-specific pooled issues have had a tenor of 15 years. The subscribers mainly include banks, corporations, individuals, companies, trusts, funds, associations, Financial Institutions (FIs) and non-resident Indians. Majority of the municipal bond issues have been used to fund water supply and sewerage projects followed by road works. This is possibly because user charges or tariffs in such infrastructure projects are easier to

[1] McKinsey estimates aim at increasing urban infrastructure spending from an average of 0.7 per cent of GDP annually today to about 2 percent of GDP a year in 2030.

enforce and the amount and frequency of expected revenues can be predicted reasonably.

13. The size of the municipal bond market today is limited and distributed over a few strong municipalities of Ahmedabad, Nasik, Nagpur, *etc.* On the positive side, most of the municipal bonds issued so far were not backed by government guarantee proving that local governments can access the capital market to finance efficient delivery of civic services. It may be noted that despite urban local bodies having weak finances in India, none of the municipal bond issues have defaulted in repayment to date. Also, as part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Government of India has also taken initiatives to promote this route via assigning credit ratings on a regular basis for municipal corporations and municipal councils for the 65 JNNURM cities. The credit ratings released by the Union Ministry of Urban Development as on November 2012 suggested that 36 (around 55 per cent) of them were found to be in the investment grade. Very few ULBs, however, appear to be planning for market borrowing as a source of finance for them. Under the City Development Plans submitted under JNNURM, only about one-third of them intend to raise funds through market borrowing as part of their investment plans. This indicates that although bond financing is feasible for ULBs there are constraints affecting both the supply as well as demand for capital (Vaidya, 2009; Pradhan, 2006).The possible reasons are as follows:

(i) Even after having investment grade ratings, ULBs do not have easy and cheap access to finance as they are still considered to be riskier than the corporates with same rating. Development of municipal bond market is significantly linked to the financial position of states as most of the ULBs largely depend upon the devolution of resources and grants from the State governments. In case the financial position of States is not perceived to be sustainable, it may lead to unpredictability of transfers from State governments to ULBs and hence may impact outlook of financial position of ULBs. In other words, credit rating of an ULB to a large extent depends on the State's financial position.

(ii) The budgeting and accounting systems of ULBs still lack transparency, except in a few big ULBs. This leaves scope for misappropriation of assets and misleading picture of income and expenditure of ULBs. This also affects rating process of rating agencies.

(iii) Another key issue is liquidity of the secondary bond market to trade municipal bonds in India. An active secondary trading market is almost non-existent in India.

(iv) It has been observed from the experience of bond issuances by ULBs that due to poor project evaluation and lack of specialised project management support, ULBs have not been able to use the mobilised resources through bonds effectively. Some such municipalities include Ahmedabad and Nashik. These inadequacies, in terms of financial as well as physical planning, lead to high cost of capital for ULBs and, thus, losses arising out of interest payments.

(v) There is no specific statute which governs the insolvency aspect of ULBs like the corporates. Thus, an absence of well-defined legal remedy against ULBs might be deterring the investors to subscribe to municipal bonds (World Bank, 2011; Chattopadhayay, 2006).

14. Thus, on the whole, municipal bonds have so far played a limited role as a source of finance for funding urban infrastructure projects. In India, just one per cent of the total ULB contribution is funded by municipal bonds as against about 10 per cent in the United States. Most emerging market economies (EMEs) have also attempted to establish functioning municipal bond

market by strengthening capital markets as well as promoting efficient management of local governments. It is, however, relevant to note that development of municipal bond market has taken a long time in most of these countries. It had taken USA about 100 years to develop a bond market. Hence, instead of getting discouraged, efforts should continue in removing the roadblocks to developing an efficient municipal bond market in India.

Pooled Finance

15. The idea behind pooled finance is that since small and medium ULBs are not able to access capital markets directly on the strength of their own balance sheets, and the cost of transactions also act as a barrier, pooled financing mechanisms can play an important role. These encourage, on the one hand, state governments and mid-to small-sized ULBs to pool their projects together to achieve a marketable size of the pooled bond issuance and, on the other hand, create a risk mitigated environment for the capital and financial markets at large, providing them a good avenue to invest in the development of urban infrastructure of the towns and cities. It reduces the interest cost as each individual borrower (here, the ULBs) has access to the capital market at a much lower interest rate than it would have otherwise got if it had borrowed on its own. Such bonds also get higher ratings than those of the underlying borrowers due to pool diversity.

16. Its usage, however, has been low so far. Only Tamil Nadu and Karnataka have issued municipal bonds by pooling municipalities. In 2003, the Tamil Nadu Urban Development Fund issued a bond through a special purpose vehicle (SPV), the Water and Sanitation Pooled Fund, by pooling 14 municipalities for commercially viable water and sewerage infrastructure projects. Similarly, the Government of Karnataka used the concept of pooled financing to raise debt from investors for the Greater Bangalore Water Supply and Sewerage Project. A debt fund called the Karnataka Water and Sanitation Pooled Fund was established in 2005 for the purpose.

17. The success of the pooled finance model as demonstrated in the States of Tamil Nadu and Karnataka subsequently led the Government of India to create a central fund that enables capital investments to be pooled under one state borrowing umbrella in order to reap the benefits of economies of scale. Thus, the Pooled Finance Development Fund (PFDF) Scheme was set up by the Government of India's Ministry of Urban Development so as to enable ULBs to access market borrowings through state-level pooled mechanism as also to reduce the cost of borrowing to local bodies with appropriate credit enhancement measures.

18. The pooled financing mechanism has, however, not truly picked up in India after the initial success of Tamil Nadu and Karnataka. Even the PFDF has not been very popular. Tamil Nadu had planned tax free bonds under PFDF in 2008, but it did not get good response and was significantly undersubscribed. Subsequent to this, this scheme remains in standstill. There is need to address the various pending issues related to pooled financing, such as, legislative sanctions, streamlining approval process, addressing data gaps and establishment of Urban Infrastructure Funds to expand the use of pooled bond issues. Making the maximum possible use of pooled financing could be the cutting edge of municipal finance in the coming years.

PPP in Urban Infrastructure

19. Another important way to finance urban infrastructure has been to rope in the private sector through PPPs. PPPs in urban infrastructure has tremendous potential, particularly in sectors like water supply and sewerage, solid waste management and urban housing and transport. PPPs are essentially structured around a robust revenue model (including

user charges, targeted subsidies, and viability gap funding) and, thus, generally provide better return prospects on risk capital. A very important aspect of PPP, *albeit* less relevant from financing angle, is that they can serve as an important instrument for enhancing efficiency in the delivery of urban services. Also, when long term maintenance is included as part of obligation of private partner, it brings with it an element of sustainability into the operation. On the whole, PPPs have the potential to contribute to systemic gains and better management of urban services. As per the 12th Plan estimates about 13–23 per cent of the total investment requirement in urban sector can potentially come through PPPs. This would roughly translate to about 250–300 PPP projects in urban sector each year.

20. PPPs in the urban sector in India are, however, few in number. A few of them are in the water supply and sewerage projects. Experience has also been quite mixed. With regard to water supply system through PPP while the Pune Municipal Corporation's attempt failed to take off, it has been a success in the cities of Karnataka (Belgaum, Gulbarga and Hubli-Dharwad) and Nagpur. The 24x7 water supply project of Karnataka and that of Nagpur have ensured significantly better water supply situation along with considerable improvement in revenue generation from water supply. Both involved a number of governance reforms and tariff increases on the part of the public bodies and efficiency gains from the private sector. Of late, water sector PPP projects are increasingly focusing on distribution improvements and the emphasis is as much on service enhancement as on capital infusion from the private sector.

21. Some municipal bodies have also successfully implemented private sector participation in solid waste management. Cities like Surat and Rajkot have been successful in processing solid waste under PPP into bio-fertilisers, green coal, eco bricks, *etc.* It has, however, not always been a smooth journey. Municipal solid waste-based power plants under PPP scheme have also faced several problems in other cities like Lucknow.

22. In urban transport, areas where PPP model has been followed extensively are the Metro Rail Projects, running of modern city bus service in Indore, Bhopal, Jabalpur, Kota, Jodhpur, Jalandhar and Patiala, BRTS (Bus Rapid Transit System) in cities like Ahmedabad and overall development and modernisation of bus terminal and parking lots, foot-over-bridges and road signage in several other cities. There are good examples of transport-led planning for regional growth under Urban Road Projects developed on PPP basis. These include the Hyderabad outer ring road, Delhi-Noida Toll Bridge, Mumbai Trans Harbour Sea Link Project, Delhi-Gurgaon Expressway, *etc.* Looking at the Metro rail, nature and extent of involvement of private sector has varied across cities. For example, while Mumbai metro (first phase) is based on PPP (BOT) mode, Hyderabad is based on PPP (DBFOT)[2] while Delhi, Chennai, Kolkata, Bangaluru are mostly government initiatives with involvement of private sector being minimal to the extent that it enhances efficiency. Thus, as can be seen notwithstanding several problems, some cities either at the behest of the ULB or the state have taken the initiative or placed before us good examples of urban planning and development under the PPP mode. These need to be emulated by the rest of the country.

23. There are some challenges, which are generally highlighted, for the overall success of PPP in urban infrastructure in India. First, the commercial non-viability of projects that acts as a major deterrent to the entry of private firms. Very few projects are financially sustainable on the basis of user fee alone. Particularly in the field of water supply and sewerage, the low user charges make water supply and sewerage projects non-

[2] BOT stands for Build, Operate & Transfer and DBFOT stands for Design, Build, Finance, Operate and Transfer.

bankable given that such projects require general revenue support even for operations and maintenance. Second, the relatively smaller size/value of projects as compared with big infra projects in power, roads, telecom also makes some of these projects unattractive for private companies. Third, is the inability of ULBs to generate a strong internal revenue base. Very often private money is thought to be a substitute for weak local body finances.

Linkages with Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

24. Jawaharlal Nehru National Urban Renewal Mission (JNNURM) is a massive city-modernisation scheme launched by the Government of India under the Ministry of Urban Development in 2005 for a seven-year period up to March 2012, later extended to March 2014. JNNURM envisages government funding to be used as an explicit catalyst for private investment in infrastructure. The funds for the programme are channelled through state-level agencies, where grants from the central and state governments are pooled and passed on as grants or soft loans to cities provided that they have prepared sustainable development strategies and the investments identified fit into these strategies. The share of grant funding by the central government varies from 35 per cent in the larger cities to up to 90 per cent in cities in the North-Eastern region. Capacity building is also included in the mission so as to assist urban local bodies to prepare strategies and bankable projects.

25. With the launch of the reform-driven and part-grant financed JNNURM scheme, both the macro-environment as well as project-level micro environment has become more and more congenial for PPPs in the urban sector. JNNURM has led to a significant step up in private investment in Indian urban sector through the PPP mode. About forty-nine projects in sectors like solid waste management, water supply, sewage and urban transport have been taken up under PPP framework since 2005 with private sector contributing about one-fifth of the overall investment.

26. Many of the JNNURM-supported reforms are expected to create favourable governance and institutional framework for private sector to feel more confident to venture into the urban sector. To encourage more PPPs, it is, however, important to develop bankable or financially-sustainable models at a project level. After a project is started, there is a need to reduce delays in project implementation due to various regulatory approvals, land acquisition issues, *etc.* A frequently expressed criticism of JNNURM has been that the large numbers of projects were executed through parastatals. As a result, ULBs, which are the main institutions under the Constitution for participatory governance at ground level, have remained marginalised. Lack of participatory process has reduced the ownership of programmes by people. Against this backdrop, under the 12th Five Year Plan the government has come up with JNNURM-II that emphasises on People Public Private Partnerships (PPPP). Further, JNNURM II will be extended to all cities as against only "Mission city" approach of JNNURM-I.

External Commercial Borrowings (ECB)

27. Another route for financing urban infrastructure is the External Commercial Borrowings. Under the extant ECB guidelines, urban infrastructure includes water supply, sanitation and sewage projects. The definition of urban infrastructure, under the ECB guidelines is, however, under revision currently and is being expanded to bring it in line with the Government of India's harmonised list. This would expand the list to include: (a) urban public transport and (b) water and sanitation which will include (i) water supply pipelines, (ii) solid waste management, (iii) water treatment plants, (iv) sewage projects (sewage collection, treatment and disposal system), and (vi) storm water

drainage system. At present, a large part of the ECBs (about 40-45 per cent) has been channelled to the infrastructure sector. With this expanded list, there is greater scope for ULBs to access foreign funds through bankable PPP projects and avail of the concessions that have been prescribed for infrastructure sector including urban infrastructure. There is, however, a need to adopt a cautious approach with respect to external financing as infrastructure in general and, urban infrastructure in particular, do not generate matching foreign exchange earnings and foreign financing brings with it huge costs in terms of exchange rate volatility. The risks involved in terms of unhedged exposure, maturity mismatch, *etc.* have to be rigorously evaluated before accessing external finance.

IV. Urban Infrastructure Financing Institutions

28. Financing institutions that cater to the needs of the urban infrastructure by extending term loans and investing in their issues include Government Institutions like Housing & Urban Development Corporation limited (HUDCO), Life Insurance Corporation of India (LIC), banks and other specialised infrastructure finance entities like India Infrastructure Finance Company Limited (IIFCL), Infrastructure development Finance company Ltd (IDFC), Infrastructure Leasing and Financial Services Ltd (IL&FS). Term lending today is an important means to finance infrastructure development because of the relative ease *vis-a-vis* issuing bonds. Term lending to ULBs, however, remains rather modest. HUDCO and LIC have been important lenders though they are now withdrawing from municipal lending market. HUDCO and LIC were mandated by the Government of India to lend a certain amount to specific sectors including the urban sector. Overtime, due to various reasons, lending to urban infrastructure projects has, however, taken a back seat with HUDCO's lending to urban infrastructure sector accounting for only about 20 per cent of its overall lending. Problem essentially lies with lack of good projects in urban infrastructure and the diminishing ability to extend state government guarantee as a security in supporting the borrowing agencies like ULBs, Water Supply and Sewerage Boards. Fiscal pressure on state governments, particularly after enactments of fiscal responsibility legislations, has also forced them to reduce explicit state guarantees for municipal borrowing. Consequently, HUDCO's lending is skewed towards the energy and large commercial projects since 2002. LIC's liabilities being long term is also best suited to lend to urban infrastructure. Its exposure as loans and advances to various entities for infrastructure and social purpose projects engaged in water and sewerage sub-sector has, however, been less than even one per cent mainly due to recovery problems. Lending by scheduled commercial banks had shown some growth though that also seems to have stagnated in the last few years.

29. Specialised infrastructure financing like IIFCL, IDFC and IL&FS have some exposures to ULBs. Most of these agencies have shown preference to lend to SPVs and private infrastructure providers and not directly to ULBs unless it is through special intermediation mechanisms, such as, Pooled Municipal Debt Obligation (PMDO) credit facility. One important contribution of IL&FS in addition to supporting several urban-infra projects have been the setting up of the Pan-India facility for financing urban infrastructure, the PMDO Facility. IL&FS, in partnership with IDBI, IIFCL, Canara Bank and leading domestic banks, launched this ₹30 billion PMDO Facility in 2008. The projects include development of common infrastructure for Small and Medium Enterprises (SMEs), solid waste management, power generation, waste water treatment and other urban infrastructure facilities, such as, city bus transport. The PMDO facility is instrumental for structuring requirement of resources for projects in a bankable format and providing credit for setting up mandated projects at reasonable rate of interest.

30. In addition, there have been state specific initiatives to generate funds. For example, the Tamil Nadu Urban Development Fund (TNUDF) is the first Public Private Partnership between the government of Tamil Nadu and three financial institutions (ICICI, HDFC, and IL&FS) for providing long term debt for civic infrastructure in a non-guaranteed mode.

31. Some of the multilateral institutions like Asian Development Bank (ADB), World Bank have also financially supported some of the urban infrastructure development initiatives in the recent period. For example, ADB has funded the Bangalore Metro rail project and is currently funding North- Eastern Region Urban Development Program. The TNUDF has also garnered the World Bank assistance of US$ 300 million in the form of capital grants and loans to ULBs. Besides, some of these institutions are also providing assistance for capacity building for urban development under JNNURM.

32. On the whole, ULBs have not been able to project themselves as attractive customers for term lending institutions. As observed by World Bank (2011), underpinned by attenuated service delivery accountabilities deriving from the fragmented nature of the local government institutional structure in India, ULBs have been reluctant to engage constructively with the lenders. Besides, they at times lack the requisite expertise for effective engagement with lenders. On the lender side, this is matched by a negative perception that municipal sector is small, opaque and risky relative to other sectors. Hence, it is imperative to make systemic efforts to address the concerns of both the borrowers and the lenders.

33. I would now like to deal with the regulatory issues related to bank financing in some detail as it concerns the Reserve Bank directly.

Banking Institutions

34. Recognising the importance of infrastructural development in the country, the Reserve Bank has provided certain concessions/relaxations with regard to lending to infrastructure sector, such as, enhancement in single/group borrower limits, permission to issue guarantees favouring other lending institutions in respect of infrastructure projects, asset classification benefits under our restructuring guidelines, permission to extend finance for funding promoter's equity subject to certain conditions . In order to encourage lending by banks to the infrastructure, banks are permitted to finance SPVs, registered under the Companies Act, set up for financing infrastructure projects on ensuring that these loans/investments are not used for financing the budget of State Governments[3]. The Reserve Bank in a recent circular (March 18, 2013) has allowed the debts due to the lenders in case of PPP projects to be considered as secured to the extent assured by the project authority in terms of the Concession Agreement, subject to certain conditions.

35. While all these regulations are applicable to infrastructure sector in general, urban infrastructure sector[4] can also take the advantage of the relaxation in norms, particularly through the SPV route. RBI does not prohibit direct lending to ULBs but any such lending to ULBs must be for specific monitorable projects run on commercial lines and the repayment of the term finance should be made out of income to be generated by the project and not out of transfers, made available to it by the Government. Projects funded out of budgetary resources, or where a firm commitment for such budgetary support has been made and is in operation, should not be financed by banks. Bank finance could, however, supplement the budgetary

[3] Further, the promoters' shares in the SPV of an infrastructure project pledged to the lending bank are permitted to be excluded from the banks' capital market exposure.

[4] As per revised/latest infrastructure lending circular, the definition of urban infrastructure is taken to include the following sectors/sub-sectors: (a) urban public transport and (b) Water and sanitation which will include (i) water supply pipelines, (ii) solid waste management, (iii) water treatment plants, (iv) sewage projects (sewage collection, treatment and disposal system), and (v) storm water drainage system.

resources if it was contemplated in the project design. The underlying principle by banks and financial institutions should ensure that such loans/investments are not used for financing the budgets of the State Governments.

36. Currently, however, the scope for incremental financing by banks to infrastructure sector is limited. The single borrower and group borrower limits for banks in India are already high in comparison to international standards, in view of the need for large financing needs of the infrastructure sector. Any further increase in exposure limits would lead to higher concentration and asset-liability mismatch risks for banks. Recognising this, the Reserve Bank has permitted banks to enter into takeout financing arrangement with IDFC/other FIs and has allowed refinancing through Infrastructure Debt Funds (IDFs).

37. There is also a demand from certain sections to grant Statutory Liquidity Ratio (SLR) status to urban infra-bonds so as to attract banking sector investment. The securities prescribed for the purpose of SLR are highly liquid and useful at the time of stress/liquidity problems of the banks. It is essential that these securities are of high quality collateral nature so as to protect the Reserve Bank's balance sheet from credit risk and speed up the disbursement of assistance without detailed assessment of the security since time is the essence in such situations. While there is no credit risk to the Reserve Bank balance sheet in accepting Government securities (as collateral) since these are sovereign securities, for any other security there is an associated credit risk as well as liquidity risk. In the past, there were instances when Government undertakings were not able to redeem the securities issued by them on maturities even though the securities were guaranteed by the Central Government. Since the Reserve Bank cannot afford such credit risk for its assets, the securities issued under the approved market borrowing programme is only given SLR status. This also avoids a situation in which both categories of bonds would compete with each other for the limited investible resources in the economy, exerting an upward pressure on interest rate for market borrowings of the Government. For the aforesaid reasons, SLR status has not been accorded to various other securities/ bonds, such as, Oil Bonds, Power Bonds which were entirely owned by the Government of India and thus, fully guaranteed by the Government.

V. Challenges and Strategies in Financing Urban Infrastructure

Enhancing Own Resource Mobilisation Capacity

38. Without underplaying the important role that private sector can play in funding infrastructure, let me also highlight the general consensus that has developed in this regard that financing urban sector expenditures cannot be analysed independently of the ULBs own revenue position. A strong revenue position is required for the ULB not only for its own sake but also to attract private investment. This results in an improvement in 'municipal credit worthiness' and so far this has been a very important, rather most important factor, that has enabled municipalities to access the bond market and attract private investors. In many cases, ULBs have not been able to attract external finance mainly because of the precarious state of their own finances and poor governance. Cross country analysis also shows that a large part of the urban funding, (more than 80 per cent) comes from two main sources: (i) user charges and municipal taxes (such as, property tax) and (ii) intergovernmental transfers. Share of debt financing, public private partnerships and land monetisation in total urban funding varies from just 6 per cent in New York to 13 per cent in London to 18 per cent in Shanghai[5]. It is

[5] Even the 12th Plan projections indicate that about 85 per cent of the urban infrastructure requirements during the Plan period has to come from the own resources/centre/states.

against this backdrop that it becomes imperative that Indian ULBs enhance their resource mobilisation capacity in terms of taxes and other revenues that are already assigned to them.

39. For private investors to evince the interest in urban infrastructure and municipal bonds, it is necessary to enhance the ability of ULBs to have consistent revenues so that their bonds are seen as almost completely free from default risk. There is a particular need for focusing on maximisation of revenues from property taxes and user charges. 'Users pay', 'beneficiaries pay' and 'polluters pay' are the cornerstones of local public finance as suggested by theory as well as practice[6]. They must be fully made use of through scientific ways of identifying tax base (Mohanty *et al*, 2007). It is desirable that services like water supply, which can be measured and for which beneficiaries can be identified without incurring a huge cost, are financed through user charges. One should not underestimate this source of revenue. In fact, experience shows that user charges could actually contribute to meeting the capital investment in a big way[7]. Under the JNNURM-I that had insisted on 100 per cent recovery of operation and maintenance (O&M) costs by way of user charge collections, while many could not reach that level, some municipalities in Tamil Nadu (*viz.*, Porur, Tambaram and Madurai) have proved that cost recovery could be as high as 300 to 400 per cent, leading to recovery of the capital expenditure too, besides the O&M charges. Hence, it is necessary to try and improve user-charge collections to recover at least O&M expenditure on water, sewage, mass transit, and affordable housing.

40. Estimates suggest that India collects only an estimated 0.04 to 0.08 per cent of property values as property taxes – one of the lowest rates in the world. Some cities, including Bangalore and Delhi, have moved toward better assessment of property taxes. It is understood Ahmadabad and Hyderabad are also working towards it but there is still a long way to go before India can maximise its use of this type of revenue. It is, thus, necessary for all cities to try and exploit this source.

State Fiscal Position and Intergovernmental Transfers

41. Even though an urban local body based on its good fiscal credentials gets a good rating, it may not be able to attract private investors if the concerned state government's fiscal and financial position is perceived to be weak. Based on the model of Anglo-Saxon countries like the United Kingdom and Australia, the Indian urban public finance in India is also significantly dependent upon intergovernmental transfers. Most of the ULBs significantly depend upon the devolution of resources and grants from the State governments in addition to their 'own' and 'shared' revenues. This has two contradictory implications. First, in case the financial position of States is not sustainable, it may lead to unpredictability of transfers from State governments to ULBs and hence may impact outlook of financial position of ULBs. This is more so in the current framework when most of the states are committed to reducing fiscal deficit as per their Fiscal Responsibility Acts. Second, it is generally alleged that the present system of inter-governmental transfers to ULBs is *ad hoc* whereby transfers often bail out the incompetent and the irresponsible ULBs. In the kind of federal framework that we have in India, inter-governmental transfers will remain an integral part of solving the vertical imbalance in the assignment of responsibilities and fiscal powers between centre, state and local bodies. Hence, there is a need for establishing/ strengthening and effective functioning of State Finance Commissions (SFCs) by all States and efforts should be made to have well laid down performance-

[6] British Columbia, Canada presents a good example of successful implementation of the 'polluters pay' principle.

[7] There is a visible trend in the developed countries towards more effective utilisation of user charges and benefit taxes by local governments due to citizens' preference for them over general taxes.

linked transfers policies that are more objective, transparent and predictable so as to bridge the fiscal gap of ULBs without creating any kind of moral hasard. The Thirteenth Finance Commission (ThFC) has taken some steps in this regard by linking devolution of funds to implementation of reforms by ULBs[8]. A couple of states do qualify for such performance grants, but similar efforts by all states would be desirable.

Improving the Data Base for Urban Local Bodies

42. There is a need for a comprehensive and unified database on ULBs. This is a very crucial aspect. At present the reporting requirements for ULBs in India are weak. Experience so far shows that it takes a long time by the rating agencies to assign rating to ULBs mainly due to non-availability of systematic information on most of the parameters. Although a number of Municipal Corporations have made efforts to switch over to double entry accrual-based accounting system, progress seems to be more visible only in select States *viz.*, Tamil Nadu, Andhra Pradesh and Karnataka. There is a need for standardisation of financial recording and reporting formats by ULBs so as to enhance the ability to consolidate ULBs accounts at State and at all India levels. The ThFC, in its report submitted in 2009, had noted that notwithstanding the fact that the Eleventh and Twelfth Finance Commissions underlined the need for maintaining a data base as well as up-to-date accounts of the local bodies and made a provision for supporting State governments in addressing these shortcomings, no credible data on the financial performance of the local bodies could be obtained. In view of this, the ThFC reiterated that the States should implement in all ULBs an accounting framework consistent with the accounting format and codification pattern suggested in the National Municipal Accounts Manual (NMAM) of the Ministry of Urban Development (MoUD)[9]. There is, thus, a need to devise and implement a uniform pattern of budgetary and accounting practices to enable improved compilation/reporting/dissemination of financial data relating to ULBs.

Developing the Domestic Debt Market

43. Municipal bond markets that were active till about 2005-06 have not shown much progress in past few years. There is a need for further deepening the bond markets and encouraging municipalities to tap these bond markets by creating project-specific SPVs. Greater disclosure standards and an effective dispute-resolution mechanism are required. The overall perception of municipal bonds being risky has to change. Experience shows that all those who have successfully accessed bond market have cashed in on their creditworthiness image. There is also a demand from certain circles to remove the fixed cap on tax free interest from municipal bonds as it does not respond to market conditions and makes municipal bonds unattractive at times depending upon prevailing interest rates. Hence, it is felt that tax laws concerning municipal bonds could be revisited once in two years.Given the long term nature of infrastructure financing which is beyond the normal 5-8 year loan tenors of commercial banks and the decreasing scope for incremental financing by banks, there is an argument to relax norms for pension/insurance/provident funds that can fill in some of the gap in debt financing in the infrastructure sector in general and urban infrastructure in particular. Combining term loans with bond refinancing could also increase overall financing and help reach financial closure.

[8] These include Implementation of Double Entry Accrual based systems by the local bodies, assignment of technical guidance and supervision of audit to the CAG of India, appointment of Independent Local Body Ombudsman, electronic transfer of grants by the states to the local bodies to ensure transparency and timely disbursement, removal of exceptions in the levy of property tax, notification of current as well as expected levels of improvements in service standards *etc.*

[9] The Ministry of Urban Development had prepared the NMAM based on the report of the task force set up by the CAG in 2002. The Manual which provides for a codified structure to facilitate capturing of all financial information with an urban local body was circulated to all State governments in December 2004.

Upscaling PPPs

44. Currently, PPPs constitute only a small part of the urban infrastructure investment. It is crucial that as in case of roads and airport sector, PPPs should become the default mode of undertaking projects in the urban sector as well. But for that one has to create commercially viable and bankable projects which are attractive to private sector. One has to encourage PPP mode through monetisable models, project specific SPVs, well-structured 'Requests for Proposals' and draft contracts ensuring a fair and balanced relationship with clear and realistic risk allocation. Only then serious contenders from the private sector will come forth.

45. It is a well-known fact that a large part of the infrastructure sector in India (especially irrigation, water supply, urban sanitation, and state road transport) is not amenable to commercialisation for various regulatory, political and legal constraints. Due to this, Government is not in a position to levy sufficient user charges on these services. The insufficiency of user charges on infrastructure projects negatively affect the servicing of the infrastructure loans. Generally, such loans are taken on a non-recourse basis and are highly dependent on cash flows. Hence, levy and collection of appropriate user charges becomes essential for financial viability of the projects.

46. Urban Infrastructure sector is today at the same stage where the road sector was about 15 years back. The strategies adopted and lessons drawn from the privatisation process of the road sector should be put to use for successful privatisation of urban infra projects[10]. As highlighted in the Report of Sub-committee on Financing Infrastructure in the 12th Plan (2012), there is a need for standardised project documents (bid and concession agreements) as in the case of road or power sector. Lender's interests are to be adequately and appropriately protected in the concession agreements like in the model concession agreement of transportation or power sector.

47. Also, one has to learn the lessons from the central/state level infra-projects, more than half of which are stuck due to various regulatory/administrative hurdles, land acquisition issues and environmental clearances. Consequently most of these projects have exhibited significant time and cost overruns making projects unviable. Effective governance is another key to the success of private investment. Today telecom and coal sector are examples of how lack of effective governance can bring them to a standstill. Of course, Government in the past few months have taken a lot of measures to address some of these issues. Urban sector is at an early stage of its journey of the PPP mode and we should be careful in creating the enabling environment for the private sector to operate effectively in this framework in which risks and rewards are shared in an optimal way.

Unlocking Land Value

48. Evidence suggests that land, especially in and around urban areas, can be tapped for generating resources for supporting sustainable urbanisation. Sales revenues from MMRDA land auctions in Bandra-Kurla complex in January 2006 was a staggering ₹23 billion, which was two times more than the total infrastructure investment made by the Mumbai Municipal Corporation during 2004-05. The Report on Monetising Land prepared for the ThFC[11] has presented a case for financing urbanisation using land based instruments. As per the study, about 15 per cent of ULB revenues

[10] Road sector has done considerably well with regard to PPP since early 2000s except 2012-13 when roads projects faced time and cost overruns due to regulatory/administrative hurdles.

[11] Sridhar Kala Seetharam (2009), "Land as a Municipal Financing Option: A Pilot Study from India".

have in the 10 years (1998-99 to 2007-08) come from the sale/lease of land by Development Authorities in the cities of Kolkata, Bangalore and Ahmedabad. Thus, there is a case for better tapping of some of the land based financing sources like conversion charges, betterment charges and development charges. Vacant land tax could be an important source of financing. While common internationally, especially in Latin America countries which levy about 3 per cent tax on the capital value of properties, vacant land tax is sparingly used in India. This instrument can also contribute to promoting housing if the tax rate on built-up land is lower than on vacant premises. A comprehensive registry of urban land at all levels of government is needed as a first step towards putting land based instruments to good use.

Potential Role of Micro-finance Institutions

49. Some Microfinance institutions (MFIs) in conjunction with NGOs have also played an important, *albeit* limited role in providing access to urban infrastructure, particularly for slum development, such as, SEWA in Gujarat. Local feel of the area, low cost of delivery and absence of bureaucratic processes are the unique selling propositions (USPs) of the MFIs. About 25 per cent of India's urban population live in slums and urban development cannot be carried out by neglecting slums. Recognising this, the potential with MFIs could be explored and exploited to ensure better service delivery, particularly in sectors like water supply and sanitation and home improvement lendings in urban areas through micro loans and supporting services. The reasons for the less popularity of MFIs in urban infrastructure space could be linked to their complex setting when compared with the rural areas; recent problems that have dented the credibility of the sector; lack of enthusiasm on the part of the public authorities and the political class to engage in the sector and the perception that the concept of MFI's has a rural origin.

Enhanced Scope for Multilateral/Bilateral Loans

50. Multilateral/bilateral assistance has been an important contributor to urban infrastructure financing, *albeit* at a lower scale so far. This could, however, become an significant source of debt financing. As per the 12th Plan estimates, about 8 per cent of the total projected urban transport infrastructure investment requirements have to come from multilateral/bilateral loans[12]. While on the one hand, such loans have the advantage of having lower interest rates compared to commercial loans, they generally have conditionalities attached to them. Also, these loans are seldom offered at the sub-sovereign level. Notwithstanding this, ULBs need to improve their credit worthiness and overall bargaining power so as to make some of the first steps towards accessing international finance at cheaper rates with suitable state/central government guarantees. They also have to put in place the mechanism to mitigate foreign exchange related risk.

Regulatory Framework for Municipal Defaults

51. The process whereby municipal default, or the threat of default, is handled in India is extremely opaque and there is almost no reliable or objective data concerning it. In the absence of any municipal bankruptcy process, any default is generally handled through a three-way negotiating process involving the borrowing municipality, the relevant state government, and the investor, with the state government playing a very significant role. The process is generally *ad hoc*, often strongly relationship-driven, and is usually affected by a range of political and commercial

[12] It may be noted that the share of projected private investment as per 12th Plan in urban transport is higher *vis-à-vis* overall urban infrastructure investment.

considerations (World Bank, 2011). Keeping this in mind, there is a need for a well laid down default resolution mechanism for municipalities so as to avoid moral hazard on the part of borrowers and attract private investors.

Best Practices and Innovations

52. There are many best practices and innovative experiments undertaken by some of the ULBs and State Governments in India in areas, such as, local resource mobilisation, expenditure management, raising debt funds and in engaging private sector. Sometimes it is purely a local body initiative and sometimes at the behest of the State Government. The same needs to be discussed and disseminated widely. A national institutional set up on urban best practices and innovations by urban local bodies in the country and outside may also be developed. This Conference, ofcourse, is a constructive step towards this end.

Professional Management in ULBs

53. There are several studies that suggest that local bodies are not fully equipped to take up the responsibility of long term planning, especially of launching capital projects. A considerable expertise is required to identify the infrastructure projects appropriate for the development of urban areas and make a proper assessment of resources required. One of the biggest concerns for investors in ULBs arise from political risks. It is therefore necessary to put in place all possible measures to insulate project financing structures from political interference or decisions based on political and other external considerations. More than any credit guarantees, investors will value ensuring that such projects are insulated from politically populist interventions. Tariffs and other revenue streams from such projects need to be fully ring-fenced from the vagaries of politics. Given the weak institutional capacity of ULBs to monitor the implementation of such arrangements, it is also imperative that release of funds is followed by capacity building to monitor its implementation. Lateral induction from private sector and internship from reputed management/educational institutions in a structured and incentivised framework could greatly aid in professionalisation of the ULBs, particularly in the areas of urban infrastructure management.

VI. Concluding remarks

I would like to conclude by emphasising the fact that in the coming years, Indian cities are going to be central to its economic future. Today most advanced countries and even many developing countries like China, Brazil and Thailand are grappling with aging populations and rising dependency ratios. Unlike them, India has a young and rapidly growing population – a potential demographic dividend[13] - that presents the country with a great opportunity to enhance its growth and seek more convergence of per capita incomes with that in the developed world. For India to reap in the benefits from this dividend in a sustainable manner, we need to create adequate jobs, particularly in the relatively more productive Indian urban sector and for that we need to invest in our cities. It needs to be appreciated that today it's not nations but cities that fight for investments. With India globalising in a big way, there is a lot of focus on attracting foreign direct investment (FDI). This essentially means that our cities will have to host these foreign companies including global banks, their back offices, R&D centres as well as foreign nationals and non-resident Indians. Accordingly, there is an urgent

[13] Median age for India's population is about 27 years compared with over 40 for most OECD economies. This will add significantly to its labour pool and even as the median age bucket rises, it will still be at a relatively young 30-34 age bracket by 2026.

need for improvement in city infrastructure and provision of quality services in cities so as to enable them to compete for investments, both nationally and internationally. These together would ensure that cities generate adequate productive employment opportunities and provide a decent quality of life to all its inhabitants including the poor. Undoubtedly to achieve this, urban sector needs more attention than what it has garnered so far in contrast to the importance we have hitherto given to the rural areas in terms of schemes, programmes and projects. I am happy this Conference has taken an important step in this direction. On the part of the cities and towns, authorities have to really live up to this expectation by taking focused initiatives in a proactive manner anticipating the demand for the same rather than playing constant catch-up as we see in India. The crucial link is raising funds for the same with a multi pronged approach: (i) generating adequate own resources, (ii) taking innovative measures to attract private capital, both internal and external, into the sector and (iii) finally, taking the desirable reform measures to ensure the fulfilment of the first two.

55. I once again thank the organisers from CAFRAL for giving me an opportunity to share my thoughts on the subject and wish that the conference would generate productive discussions and practical ideas for evolving sustainable financing strategies for urban infrastructure.

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*Internationalisation and Integration of Asian Capital Markets: Expanded Role for Asian Currencies including the Renminbi**

G. Padmanabhan

I am indeed indebted to the organisers, Lee Kuan Yew School of Public Policy, National University of Singapore for providing me this opportunity to share my thoughts on an issue, which has the potential to alter the global financial landscape in the years to come.

2. Global financial crisis and its aftermath have renewed the debates pertaining to functioning of international monetary system (IMS) and the need for multi-currency system. Is there a viable alternative for the mighty US Dollar? These debates coincided with the Chinese authorities taking a number of steps to bring about greater internationalisation of Renminbi (RMB). At the present juncture, the global financial system is still dominated by the US Dollar, followed by a few other advanced economy currencies, at the margin. In sharp contrast, emerging market (EM) currencies are hardly used for international transactions, notwithstanding the fact that these economies are increasingly getting more integrated into the global economy and their contribution to global growth, trade and financial flows is accelerating.

3. Since the topic of discussion focuses on the link between internationalisation and integration of Asian capital markets, I shall limit my observations to the issues relating to the development and integration of Asian capital markets, and the role this can play in possible greater internationalisation of Asian currencies, especially the Renminbi. Successful internationalisation is generally associated with financial openness, allowing for the free flow of capital and contributing to the development of domestic financial markets, as restrictions on the convertibility of a currency for capital account transactions are likely to raise the costs of transactions denominated in the currency, and limit foreign access to domestic stores of value. Further, the depth and liquidity of financial market is a very important element as it provides borrowers and investors access to deep and liquid financial markets onshore, and also enable hedging of currency and credit risks. Additionally, offshore markets also play an important part in currency internationalisation efforts and their development should go in tandem with financial deepening onshore.

4. According to a recent BIS paper (2012), there has been significant progress over the years in achieving greater regional financial integration in the Asian equity and bond markets. The extent of integration, however, still seems to be limited. The process appears to have stalled in recent years, and the two major regional blocs – mature and emerging markets – seem to have different degrees of integration. According to another BIS study, there has been *de facto* integration in Asia, but it is Sino-centric, not so much multilateral, involving bilateral trade between China and other Asian countries. Full-fledged integration of the European sort has not taken place in Asia because of various reasons.

5. To this enlightened audience, I would like to propose that internationalisation needs to be viewed as a continuum and not as two extremes, as different currencies may have different levels of internationalisation. Internationalisation merely refers to greater international use of that currency and should not be confused with international reserve currencies like the US dollar, which are in a league of their own.

* Comments submitted by Shri G. Padmanabhan. Executive Director, Reserve Bank of India circulated at the OMFIF-LKY Asia's role in the global economy forum on 12 July 2013, Singapore. Assistance provided by Shri G. Mahalingam and Shri Anand Prakash is gratefully acknowledged.

Integration of Indian financial markets

6. Now let me turn to the issue of integration of Indian financial markets with global financial markets. The Indian financial markets are now increasingly getting integrated with global financial markets which are reflected in the increasing volatility in Indian financial markets as a result of spill over from turmoil emanating from international markets. As witnessed in the recent weeks, the Indian Rupee came under some pressure primarily on account of external developments and both equity and bond prices witnessed volatility because of global factors like deleveraging by FIIs on fears of impending winding up of the quantitative easing by the US Fed.

7. In the Indian context, broadly speaking, integration of financial markets has been facilitated by various measures in the form of (i) free pricing, (ii) widening of participation base in markets, (iii) introduction of new instruments and (iv) improvements in payment and settlement infrastructure. Free pricing in the form of market-determined exchange rate, freeing of interest rates, gradual liberalisation of capital account, *etc.*, helped in greater integration of the Indian financial markets. The advent of FIIs who have access to both domestic as well as international markets, have had a profound impact on the domestic financial markets. The linkage between the domestic foreign exchange market and the overseas market (vertical integration) was facilitated by allowing banks/authorised dealers (ADs) to borrow and invest funds abroad (subject to certain limits), and to lend in foreign currency to companies in India and by allowing Indian companies to raise resources from abroad, through American/ Global Depository Receipts (ADRs/ GDRs), foreign currency convertible bonds (FCCBs) and external commercial borrowings (ECBs). Several new instruments were introduced, especially the derivative products, which facilitated the deepening of market and enabled participants to hedge currency and interest rate risks. A number of institutional measures, and significant improvement in technology and payment and settlement infrastructure, such as, introduction of DvP, Government securities order matching platform christened NDS-OM, RTGS, electronic trading system at the exchanges, *etc.*, have significantly strengthened the financial sector market infrastructure.

Progress with regard to internationalisation of Asian currencies, especially Renminbi and Rupee

8. China's fast economic growth and its increasing economic integration with the world have accelerated the progress of Chinese currency's internationalisation. At present, RMB is not yet a currency playing the role of store of value, nor an anchor. However, at a limited level, China's endeavour to internationalise the RMB has begun as some progress is already visible in transactions with its trading partners. RMB is being widely used in trade and other current account transactions with Vietnam, Laos, Myanmar, the Central Asian states, Russia, and so forth. Additionally, with respect to capital transactions, China has promulgated provisional rules governing the issuance of RMB-denominated bonds by international development institutions. China has permitted invoicing of any trade with Mainland China in RMB. In regard to its management of foreign exchange reserves since the outbreak of the global financial crisis, the People's Bank of China (PBOC) has entered into a series of bilateral currency swap agreements whereby the PBOC and other central banks (over 20 in number) have agreed to exchange the RMB (not the US dollar) with the respective counter-party currencies. The Chinese authorities have also been taking a number of proactive steps towards developing an offshore market for RMB.

9. Comparisons are bound to be made between Renminbi and Indian Rupee on the issue of internationalisation. Indian Rupee is not fully convertible at this stage. While the current account has been made fully convertible, we have consciously followed a calibrated approach towards capital account

convertibility. It is also important to understand that unlike China, which runs large current account surpluses, India has generally been a current account deficit country. In view of the large current account deficit, the exchange rate of the rupee is susceptible to the influence of large capital movements, especially during crisis periods. This does not mean that the country does not aspire to see the Rupee as an international currency particularly as we increase our global integration through trade and investment channels. In order to promote Rupee invoicing for trade related transactions, Reserve Bank of India has taken several steps in recent times.

Constraints to internationalisation of Asian currencies and the way forward

10. Let me conclude by flagging five issues. First, as I have already outlined above, a number of recent studies on integration of Asian financial markets have, based on empirical analysis, concluded that regional integration of Asian financial markets, both equity and debt markets, have progressed over the years but is still incomplete and there is a lot of divergence in the level of integration. China has been making definite moves, but there is hardly any integration in the rest of Asia, though spillovers from international markets are increasingly being felt in other Asian markets, including India, which is indicative of growing integration of the Asian markets with global markets. Apart from local factors such as credit or liquidity risks in some Asian economies, the divergence and the lack of progress in financial market integration can be attributed to several factors, particularly the failure to harmonise standards in the regions' capital markets.

11. Second, currency internationalisation, which entails market liberalisation, requires putting in place regional financial market infrastructure that includes a regional system of clearing and settlement, regional credit guarantee institutions, hedging facilities, and regional credit rating agencies to foster cross-border investments. This will also need to be accompanied by the harmonisation of legal and regulatory systems, market practices, rating standards, accounting and auditing practices, and withholding taxes on bond coupon payments across countries in the region. Additionally, greater internationalisation of Asian currencies would require existence of well-developed and deep forex markets with diversified forex hedging instruments, which will facilitate issuance of foreign bonds in domestic markets and local currency bonds by foreign entities. At the present juncture, such preconditions are not being fully met in the region. How do we proceed?

12. Third, ASEAN countries are nowhere near forming a single market as in the EU. There have been proposals regarding formation of an Asian Monetary Union and a single regional currency but these proposals have not reached anywhere. Full-fledged integration in the region will require creation of a supranational institution on the lines of EU but that is just a far-fetched thing at this juncture. The lessons from not so happy experience of European integration through a monetary union mechanism will also weigh on the minds of the Asian policymakers. In any case, the greater integration and internationalisation of Asian currencies would require an agreement between the participating countries to be bound by collective decisions rather than bilateral ones. How do we achieve this?

13. Fourth, in view of the obstacles to regional integration mentioned above, most of the Asian countries are individually linked to the global economy more as compared to the regional economy. Financial market integration is, however, important to the region's economic development. The slow pace and the varying degrees of integration in the region warrant concerted policy actions to surmount the constraints. Asian countries have shown their political support for greater financial co-operation and integration. There is certainly huge scope for channelising regional savings in the region, particularly say for investments

in infrastructure development. There is a need to address obstacles in areas such as differences in economic structure and development, maturity of individual markets and infrastructure. Can we hope for a co-ordinated strategy for promoting integration of the Asian financial markets that will go a long way towards facilitating internationalisation of Asian currencies?

14. Fifth, one final thought. As we discuss the issue of internationalisation, we also need to be conscious about the problems of unfettered integration with global markets, where the local fundamentals recede to the background and the global factors start playing a major role in creating unwarranted volatility in the markets as the recent developments have amply demonstrated. How do we address this issue? India approached this issue exactly the same way as the country has approached capital account convertibility- as a process rather than an event, by a gradual rather than the Big Bang opening of the door. It is for each country to strategise its approach.

Thank you.

*Conference of Principal Code Compliance Officers/ Chairmen of Regional Rural Banks: Inaugural Address**

Deepali Pant Joshi

It is a privilege to be here this morning and I would like to thank Shri A.C. Mahajan, Chairman, BCSBI, and Shri N. Raja, CEO, BCSBI, for giving me the opportunity to be here. I extend warm congratulations to the BCSBI on the initiative of hosting this Conference of Principal Code Compliance Officers (PCCOs) of Regional Rural Banks (RRBs). I understand it is an annual event.

2. The purpose is to interface with the Chairmen of RRBs. This becomes especially important as we all accept that the quality of customer service and the bank's treatment of customers depend on guidance of its top management in the building of an organisation culture committed to high level of customer service with an ethical value system.

3. The Banking Codes and Standards Board of India (BCSBI) was set up seven years ago, since then it has prepared and published voluntary comprehensive Codes and Standards for banks for providing fair treatment to customers.

4. It functions as an independent body to monitor and to ensure that the Codes voluntarily adopted by banks are adhered to, in true spirit in delivering the services, as promised.

BCSBI had evolved two Codes for Member Banks to implement:

1. Code of Bank's Commitment to Customers
2. Code of Bank's Commitment to Micro and Small Enterprises

   These Codes are periodically updated keeping in view the contemporary recent changes.

5. Now let us talk a bit about RRBs:

The RRBs are now treated on par with other commercial banks and as banks, they must focus on customer empowerment and extending customer service. I have been a Director of several RRBs many years ago and have keenly watched their evolution. I will now spend some time in discussing their evolution and growth.

Establishment of RRBs

6. The Narasimham Working Group (1975) conceptualised the creation of RRBs in 1975 as a new set of regionally oriented rural banks, which would combine the local feel and familiarity of rural problems characteristic of cooperatives with the professionalism and large resource base of commercial banks. RRBs were established under the Regional Rural Banks Act, 1976 to create an alternative channel to the cooperative credit structure and to ensure sufficient institutional credit for the rural and agriculture sector. RRBs are jointly owned by the Government of India, the concerned State government and sponsor banks, with the issued capital shared in the proportion of 50 per cent, 15 per cent and 35 per cent, respectively. As per the provisions of the Regional Rural Banks Act, 1976 the authorised capital of each RRB is ₹5 crore and the issued capital is a maximum of ₹1 crore.

7. From a modest beginning of 6 RRBs with 17 branches covering 12 districts in December 1975, the number of RRBs increased to 196 RRBs with 14,446 branches in 1991 operating in 518 districts across the country. After a phase of consolidation starting from September, 2005, the number of RRBs was reduced from 196 to 82. In the current phase of consolidation

* Inaugural Address by Dr. (Smt.) Deepali Pant Joshi, Executive Director, Reserve Bank of India at the conference organised by BCSBI on July 15, 2013. Assistance rendered by Shri A.G. Ray, General Manager, Ms. Beena Abdulrahiman, Deputy General Manager and Ms. Jaya Bharathi Kannan, Assistant General Manager is gratefully acknowledged.

which began in October 2012, by amalgamation of RRBs across sponsor banks within a State, the number of RRBs has further reduced to 61 as on date with over 18,000 branches in 638 districts.

Reforms in the RRB Sector have taken place in three phases

First Phase: 1993-2000

8. Based on the recommendations of the Narasimham Committee Report (1992), reforms were initiated in 1993 with a view to improve the financial health and operational viability of RRBs. Various measures including recapitalisation, rationalisation of branch network, providing better access to non-fund business, expanding avenues of investment and advances, upgrading the level of technology and taking up select RRBs for comprehensive restructuring were taken. Further, they were permitted to lend to non-target group borrowers up to 60 per cent of new loans. From January 1995, the investment avenues for RRBs were broadened to improve the operational efficiency and profitability. In December 1996, the investment policy was further liberalised, to accord parity with commercial banks, permitting RRBs to invest in shares and debentures of corporate and units of Mutual Funds with a ceiling upto 5 per cent of the incremental deposits of the bank during the previous year. Prudential accounting norms of income recognition, asset classification, provisioning and exposure, were implemented during this period to provide durability to the reform process. In April 2000, RRBs were allowed to apply for permission to maintain non-resident accounts in rupees.

Second Phase: 2004-2010

9. The next phase of reforms started in 2004-05 with the structural consolidation of RRBs by amalgamation of RRBs of the same sponsor bank within a State. Capital support aggregating ₹1,796 crore was provided during the period 2007-08 to 2009-10 as part of this process. In October 2004, RRBs were permitted to undertake insurance business without risk participation and in May 2007, they were allowed to take up corporate agency business for distribution of all types of insurance products without risk participation. In December 2005, to further extend support to RRBs for accelerating the flow of credit to the rural areas, the resource base of RRBs was expanded to include lines of credit from sponsor banks; they were also permitted to access the term money markets and CBLO/Repo markets. Issuance of credit/debit cards, setting up of ATMs, opening of currency chests, undertaking government business, as sub-agents, were allowed to enhance business opportunities. In March 2006, RRBs were permitted to apply for AD-Category II licence to undertake non-trade related current account transactions for certain specified purposes to further enhance the scope of business. In June 2007, to increase their exposure to foreign exchange business they were allowed to accept FCNR deposits. RRBs were also allowed to participate in consortium lending with sponsor banks, DFIs and other banks within the area of operation. The capital adequacy standards were introduced in December 2007, in the context of financial stability and RRBs were required to disclose the level of CRAR in their balance sheets.

Third Phase: 2010 onwards

10. Based on the recommendations of Dr. K. C. Chakrabarty Committee (2010), 40 RRBs have been taken up for recapitalisation to enable them to achieve and sustain a CRAR of 9 per cent. In November 2010, the branch licensing policy was liberalised which allowed RRBs to open branches in Tier 3 to Tier 6 centres (with population of up to 49,999 as per 2001 Census) without prior approval from the Reserve Bank, subject to certain conditions. This policy was further liberalised in August 2012 to also include Tier 2 centres. The second phase of consolidation commenced

Table 1: Recent Key Indicators of RRBs

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
No of RRBs	133	96	90	86	82	82	82	64
No of branches	14489	14563	14790	15524	15475	16024	16914	17867
Net profit (cr)	617	625	1027	1335	1884	1785	1886	2384
Profit/loss making RRBs	111/22	81/15	82/8	80/6	79/3	75/7	79/3	63/1
Deposits (cr)	71329	83144	99093	120189	145035	166232	186336	211457
Loans & Advances (cr)	38520	47326	57568	65609	79157	94715	113035	133098
CD ratio (%)	55.7	58.3	59.5	56.4	57.6	59.51	63.3	66.13
Share of CASA in deposits (%)	59.14	61.21	59.63	58.35	57.90	60.35	58.51	57
Share of PSA in total	81	82.2	82.9	83.4	82.2	83.5	80	86
Share of agri adv to total (%)	54.2	56.6	56.3	55.1	54.8	55.7	53	63
Gross NPA (%)	7.3	6.55	6.1	4.2	3.72	3.75	5.03	5.65
Net NPA (%)		3.46	3.36	1.81	1.62	2.05	2.98	3.40

Source: Reports on Trend and Progress of Banking in India and NABARD

from October, 2012 with amalgamation of RRBs across sponsor banks within a State.

Performance of RRBs Post-Amalgamation:

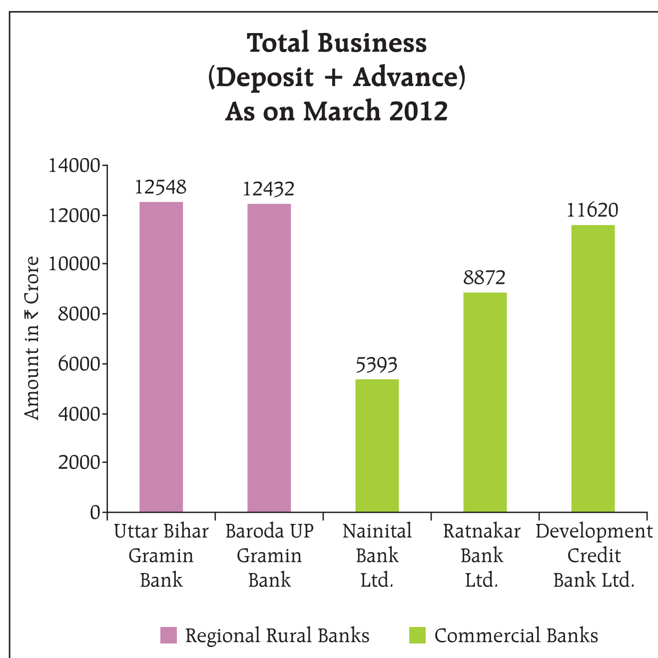
11. It can be seen from the data on performance of RRBs post-amalgamation that there has been consistent progress in the operations of RRBs (Table 1).

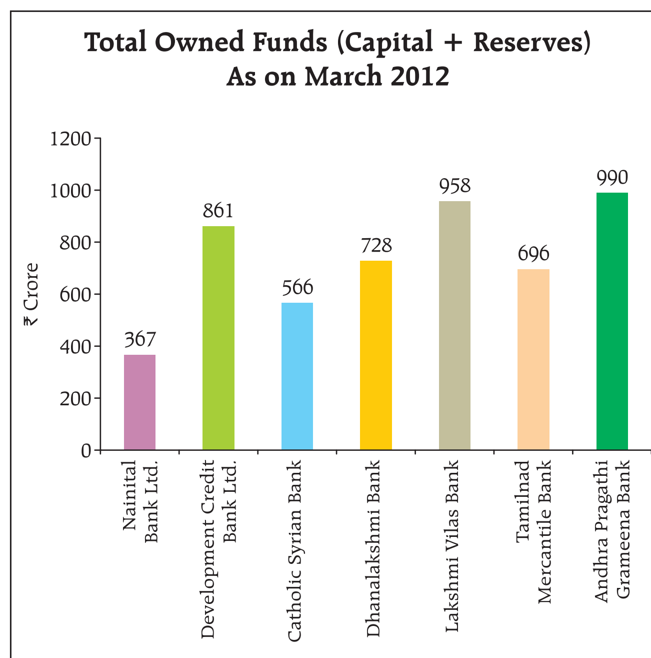
Post-amalgamation, in terms of total business 2 RRBs are larger than some private sector commercial banks as can be seen from the graph below.

In terms of owned funds Andhra Pragathi Grameena Bank is much larger than some of the private sector commercial banks.

Financial Inclusion by RRBs

12. In order to achieve the objective of universal financial inclusion, RRBs have been directed to use a combination of strategies, which include (a) provision of basic banking products; (b) introduction of the Business Correspondent/Business Facilitator (BF)

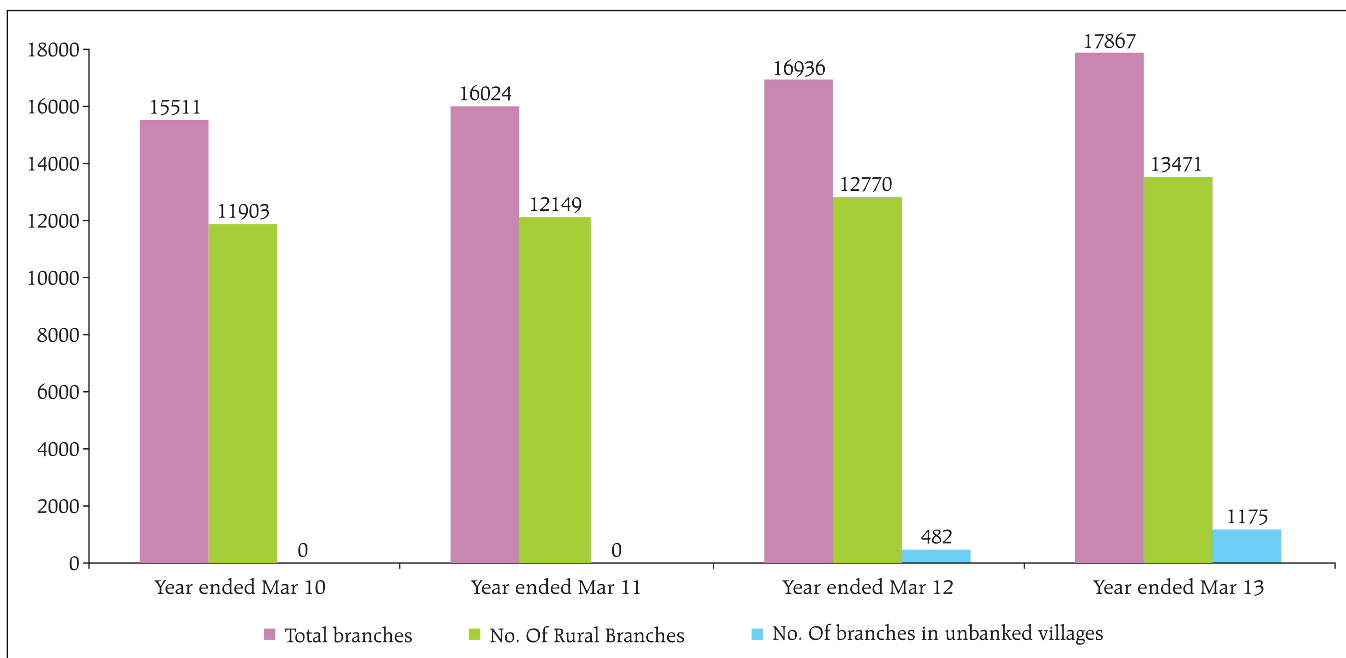


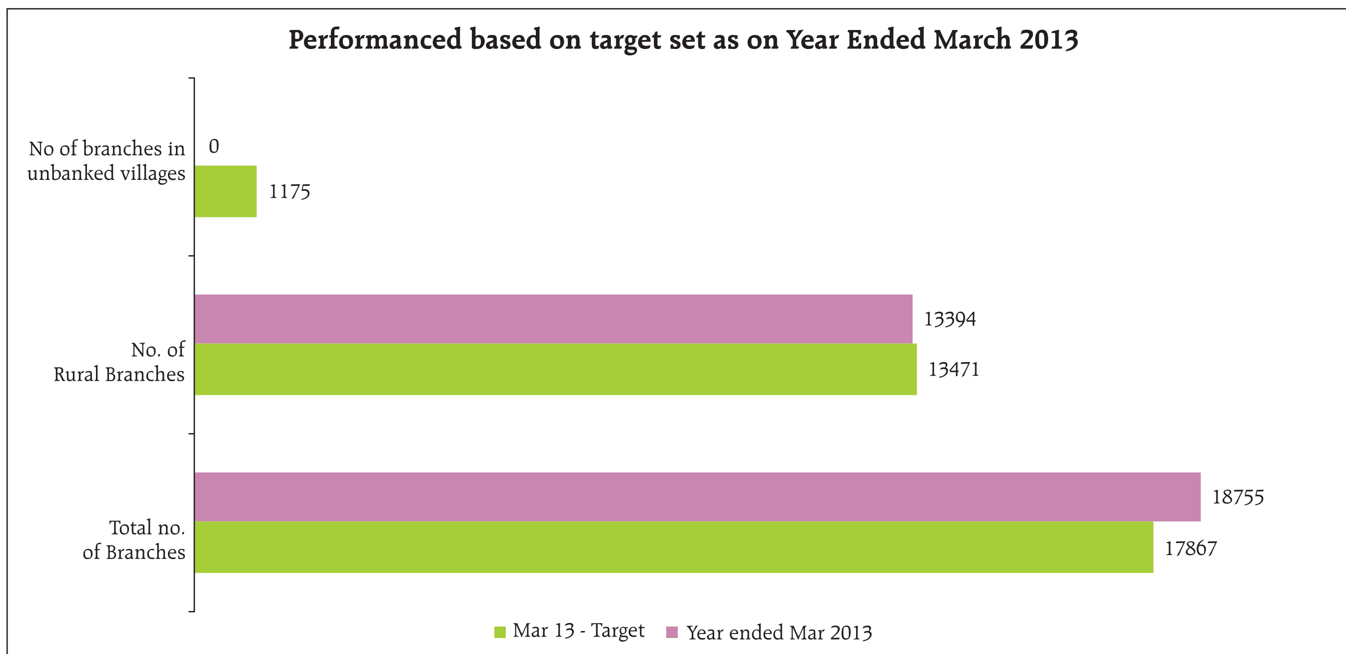


model; (c) adoption of the relaxed regulatory Know Your Customer (KYC) guidelines; (d) enhanced use of technology; and (e) setting up financial literacy centres in districts to achieve greater outreach. Though the share of RRBs in aggregate deposits and gross bank credit is only around 2.5 to 3 per cent, they play a critical role in financial inclusion. RRBs are required to prepare Financial Inclusion Plans which are to be integrated with their business plans. The major highlights of their performance under the first FIP for the period April 2010-March 2013, are as under.

1. Banking Outreach

The number of rural branches has increased by 15 per cent. The self set FIP targets have almost been met. At the same time number of branches in unbanked





villages has grown from 0 in 2011 to 1175 as on year ended March, 2013. However, they could not completely fullfil their targets of opening up the total number of branches. The target was set around 18,755 branches while they were able to open close to 17,867 branches only as on year ended March 2013.

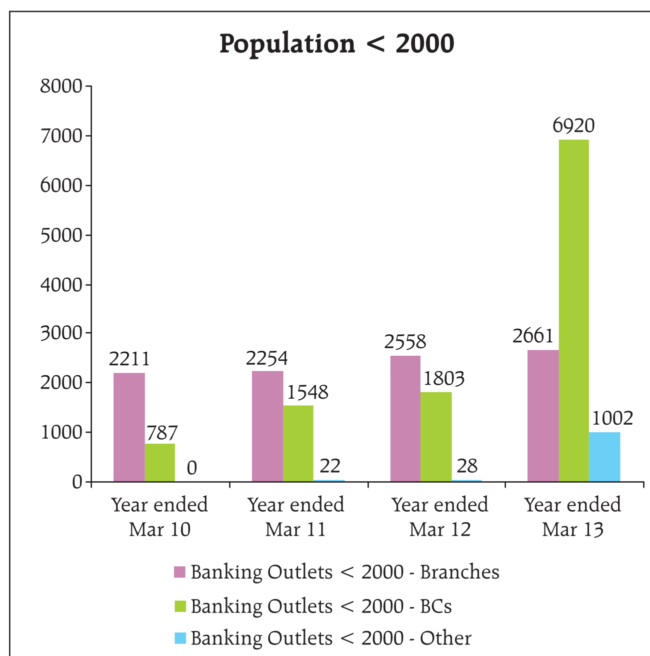
2. Type of Banking Outlets – Based on Size of Population

a. Population > 2000

The total number of banking outlets can be viewed in terms of Bank Branches, Business Correspondents (BCs) and other modes. For villages with population of more than 2,000 there has been a considerable increase in the number of BCs. There was a steep rise from mere 703 BC outlets (year ended March, 2010) to close to 19,000 BC outlets (year ended March, 2012).

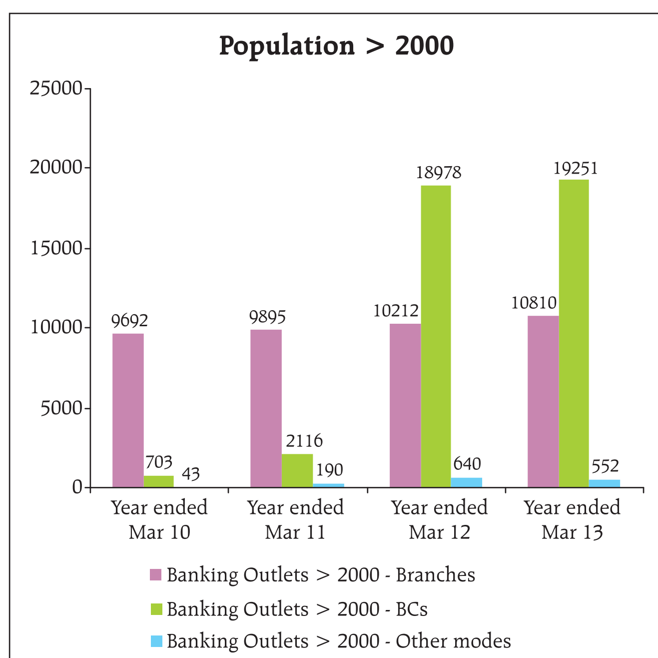
b. Population < 2000

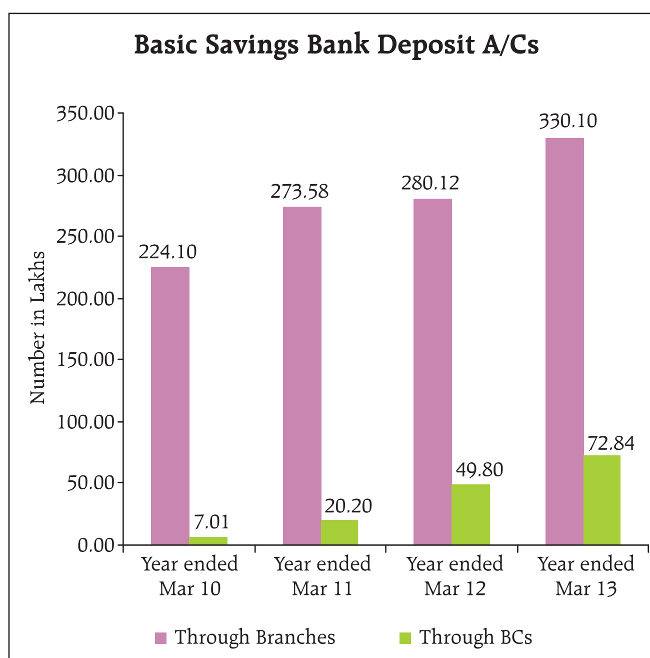
For villages with population less than 2000, the number of BCs registered a sharp growth. However, the RRBs failed in achieving the set target for BC outlets for the year ended March 2013.

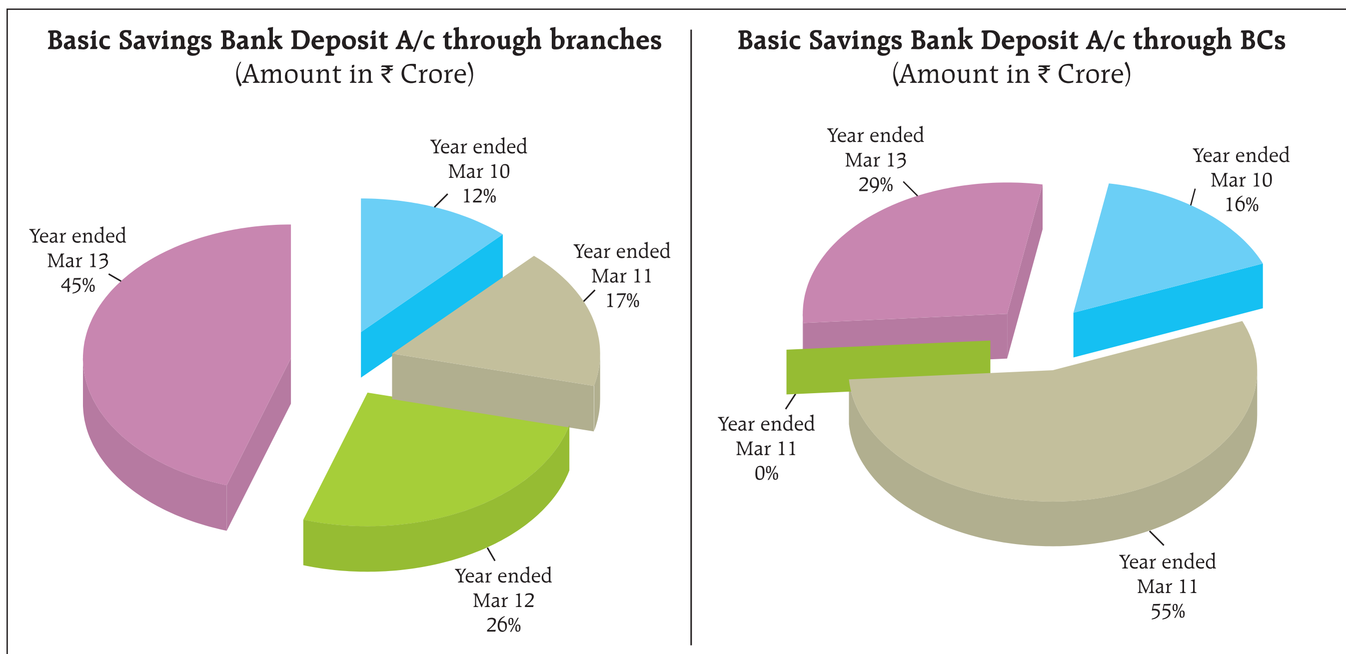


3. Basic Savings Bank Deposit Account

It is observed that most of the Basic Savings Bank Deposit Accounts (BSBDA) were opened through branches. The number of accounts opened through branches stood at 330.10 lakh, while only 72.84 lakh accounts were opened through BCs (year ended March 2013).





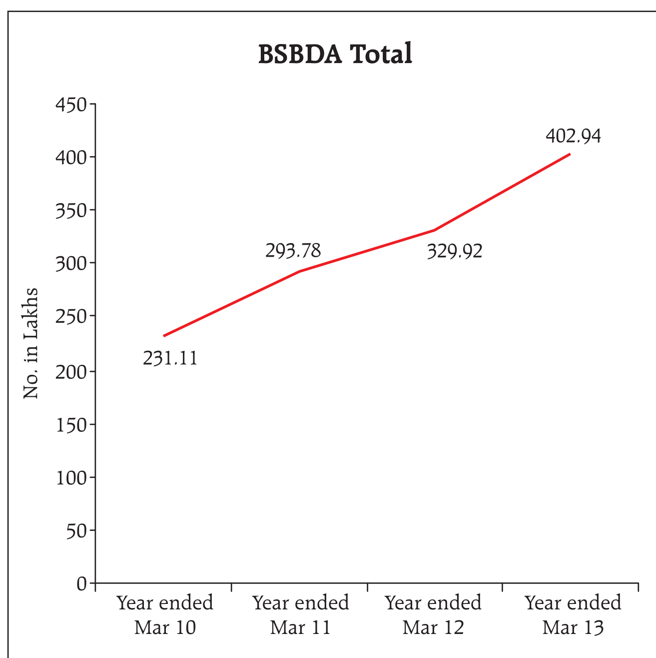


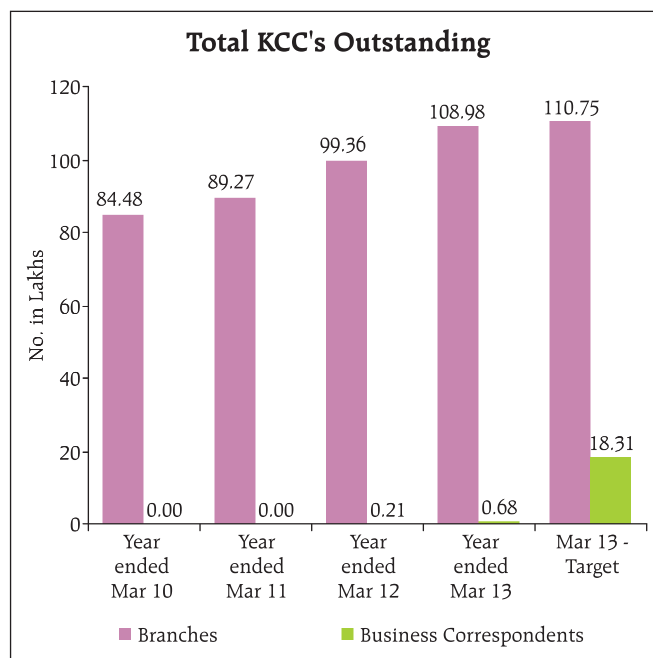
The graphs show the amount mobilised each year (in per centage) in Basic Savings Bank Deposit Account (BSBDA) through branches and BCs. In the year 2012, there was a sharp fall in the amount mobilised through BCs but it has again picked up in 2013.

The total number of Basic Savings Bank Deposit Accounts has increased considerably. From around 230 lakh accounts (year ended March, 2010) to more than 400 lakh accounts (year ended March 2013), the growth rate has been equal to 74 per cent.

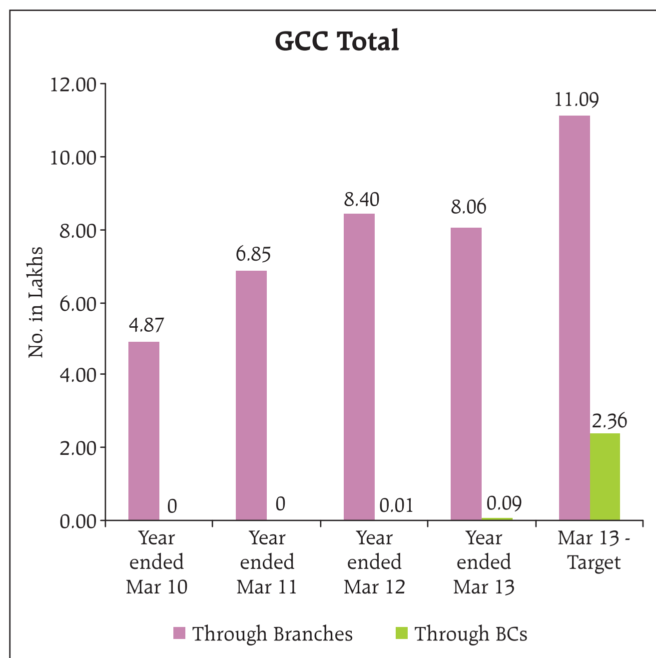
4. Kisan Credit Cards

The branches were successful in achieving their target number of KCCs (year ended March, 2013). No KCCs were sourced through the BCs for the years ended 2010 and 2011.





5. General Credit Cards



13. The BC is utilised to externalise part of the credit cycle. He has to work towards spreading awareness of the availability of the bank's products and services. BCs can be better leveraged by the RRB branches. They are in need of greater handholding and necessarily of close and continuous supervision.

14. Though there has been reasonable progress with regard to extending the penetration of banking services and opening of basic bank accounts, the number of transactions through the ICT based BC outlets are poor. During the period of the next 3 year Financial Inclusion Plan, *i.e.,* 2013-16 RRBs should endeavour to leverage technology to the optimum. Technology enables the bank to transcend the barriers of geography and to provide services at the borrower's doorstep. Though the initial cost is high over time it pays for itself. Regional Rural Banks should through financial innovation try to focus on mezzanine finance, on the creation of customised products linked to the income streams of the poor borrowers and geared to meet the specific needs of the rural clientele. Mobile technology can be harnessed to improve access and usage of banking services.

The Codes and RRBs

15. All banks offer the same products with variants but what distinguishes and sets apart and gives the competitive edge to a bank is the quality of customer service extended by the bank.

16. The Codes are the RRBs mandate, adopted by RRBs with the specific approval of the Board of Directors. RRBs must take full ownership of these Codes and facilitate their adoption ensuring complete adherence.

17. RRBs have undergone a sea change. They are now almost treated on par with other commercial banks. The customers of the RRBs are illiterate and poor; there is also an asymmetry of information. Hence, the adoption of standards of behaviour and codes of conduct framed by BCSBI for dealing with customers is an imperative.

18. At one point, we are all customers of banks. What are the ingredients of treating customers fairly? Transparency, proper disclosure, non-discriminatory and non-exploitative pricing, building a robust and responsive grievance redressal mechanism within the bank and also making the customer aware of redressal available through the Banking Ombudsman Scheme. Transparency does not mean bombarding the illiterate customer with humungous amount of information which she is neither able to understand or use. It merely means no hidden charges. The customer must up front understand what she is letting herself in for; the terms and conditions of the contract should be clearly understood.

19. The codes need to be clearly understood and fairly implemented by RRBs. Banks are commercial establishments. They are not philanthropic organisations. However, they enjoy great leverage and an oligopolistic position simply as the borrower in the rural areas may lack choice which his urban

counterpart enjoys. This casts a much greater responsibility upon the RRBs. Knowledge and general awareness about the Codes of the BCSBI needs to be increased. Just this morning, Mr Mahajan shared with me that despite valiant attempts, knowledge of and appreciation of the BCSBI codes was spreading very slowly and this was a cause of concern. The Chairmen of the RRBs must appreciate that the poor borrower who comes to the door step of the Bank is highly unlikely to meet the Chairman of the bank. For him the frontline manager is the Bank. The frontline manager needs to be sensitised to the importance of the Code of bank's commitment to customers. He must understand and believe in them. This affirmation will then translate to increased sensitivity and in empathetic behavior towards the special niche clientele of the RRBs. The pay off in terms not just of profitability but in terms of job satisfaction assuredly, will be tremendous.

20. To close with a few clear messages for easy recall:

- Please ensure that all the RRB staff are aware of, clearly understand and commit to the BCSBI Codes.
- The Codes are evident in precept and practice and in the actual business of the Banks.
- Customer empowerment occurs as knowledge and awareness of customer rights is enhanced.

Once again I thank the BCSBI for this opportunity and commend them on the initiative of hosting this conference.

*National Seminar on Consumer Protection – Agenda for Inclusive Growth**

Deepali Pant Joshi

I congratulate Assocham on the timely initiative of hosting this event and bringing to the centre stage of debate very critical issues as customer Empowerment and Financial Inclusion.

The "post crisis" world is governed by a new paradigm of customer empowerment. The financial crisis has highlighted the importance of financial consumer protection for the long-term stability of the global financial system. Rapid increase in the use of financial services brings into sharp salience the need for strengthened financial regulation and consumer education to protect and empower consumers.

Consumer empowerment is a central goal. Education of consumers through information disclosure or through consumer literacy is utilised as a means to even out asymmetries of bargaining power between consumers and financial services providers. In the area of consumer credit and financial literacy, investment empowerment relies on the consumers' ability to understand complex financial products and their knowledge and experience of using such products and services.

All financial products contain risks and also offer rewards. Financially literate consumers are individuals who are equipped to assess risks and to make informed decisions about the suitability of financial products to their situation.

There are differences between individual consumers. This granularity arises due to the differences in incomes of consumers. The largest issue to be tackled is an asymmetry of bargaining power between the financial services provider and the consumer of services. The consumers are always the weaker parties in need of protection. Consumers need to be enabled to navigate the financial markets to make choices beneficial to their needs. They should be able to understand complex financial products and should be equipped with the knowledge and skills to assess risks and make informed decisions about the suitability of financial products to their situation.

A well-functioning consumer protection regime provides effective safeguards for retail financial services consumers while empowering consumers to exercise their legal rights and fulfill their legal obligations.

The Banking Ombudsman Scheme provides clear consumer protection rules with regard to banking products and services. The necessary institutional arrangement for grievance redress is in place. However, these rules need objective, timely and fair implementation. All these three aspects are important.

BCSBI has also developed codes of conduct and these codes are widely publicised and expected to be adhered to.

Dispute resolution mechanisms to be effectively utilised require financial literacy of consumers and this is the process of consumer empowerment which alone can ensure financial inclusion.

Financial Inclusion and inclusive growth

Financial exclusion is a barrier to attaining a high growth rate, it should be the unremitting endeavour to draw the excluded into the pale of mainstream financial institutions. A developed financial system broadens access to funds and banking facilities conversely in an underdeveloped financial system high cost informal sources as moneylenders proliferate. Lower the availability of funds and higher their cost fewer are the economic activities that can be financed and hence lower the resulting economic growth. Today, we are painfully aware that there are a vast number of

* Address by Dr. (Smt.) Deepali Pant Joshi, Executive Director, Reserve Bank of India at National Seminar on Consumer Protection – Agenda for Inclusive Growth, New Delhi on July 24, 2013. The author expresses here thanks to Smt. Sonali Sengupta, General Manager for presenting the speech at ASSOCHAM, New Delhi. Assistance rendered by Shri Bipin Nair, Assistant General Manager and Smt. Mruga Paranjape, Manager is gratefully acknowledged.

unreached people excluded from formal financial services potential entrepreneurs small enterprises fail to grow and prosper due to capital constraints. Financial deepening is thus a necessary for economic growth as Dr. Manmohan Singh has explained. The goal of the development process is to include every last member of our society especially those at the margins. This not only broadens the support base for development, it also strengthens the ability to perform the core developmental goal.

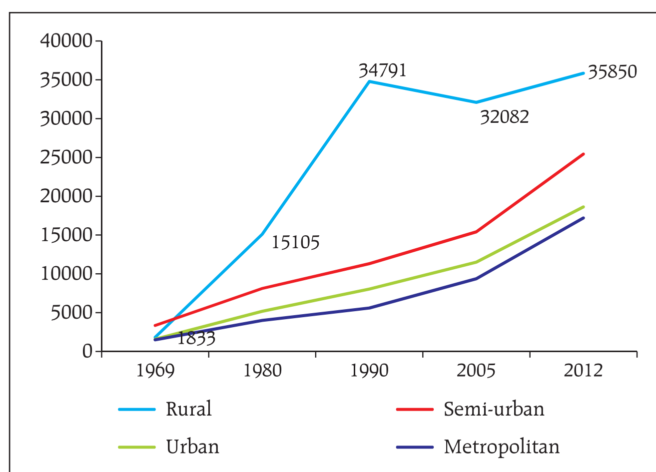
Extent of Financial Exclusion in India

Let us be clear as to the enormity of the challenge, half of the country is unbanked. Thirty four years after bank nationalisation and extensive bank branch building, 6 lakh villages in India, rural branches of SCBs including RRBs number 33,495.

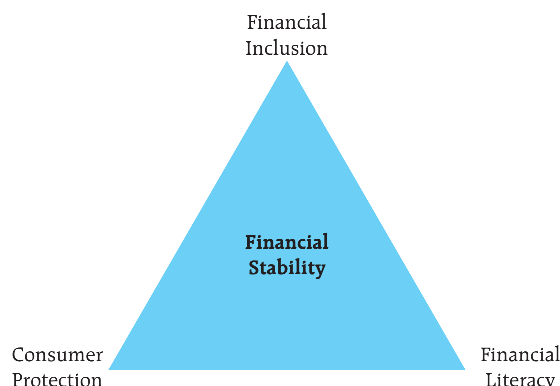
Post-Nationalisation, number of bank branches of scheduled commercial banks increased starting with 1990s the focus shifted to strengthening financial institutions as part of financial sector reforms. Number of rural branches actually came down in the decade of the nineties leading in the middle of the next decade to critical concerns on inclusion.

Population Group-wise Number of Branches of Scheduled Commercial Banks

Year	Rural	Semi-Urban	Urban	Metropolitan	Total
1969	1833	3342	1584	1503	8262
1990	34791	11324	8042	5595	59752
2005	32082	15403	11500	9370	68355
2012	35850	25439	18625	17197	97111



Trinity to make Financial Stability Possible



Financial Inclusion and inclusive growth

Inclusive growth allows people to 'contribute to and benefit from economic growth'.

Bank led Model

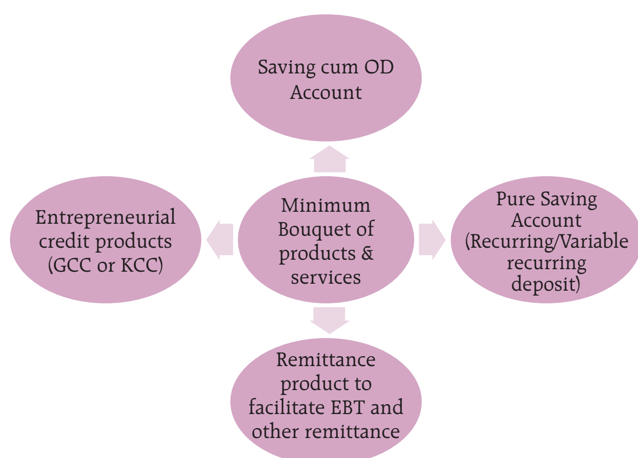
Keeping in view the existing infrastructure of bank branches in India, we have adopted a bank- led model for financial inclusion which leverages technology for optimisation of results. The financial inclusion initiatives are ICT enabled and ride on new delivery models be customised by market participants to best suit their requirements. The development of the habit of banking would lead to an increase in savings and investment improve the efficiency of allocation of capital and increase the ability of monetary authorities to stabilise the economy in times of crisis.

Our experience shows that the goal of financial inclusion is better served through mainstream banking institutions as only they have the ability to offer the suite of products required to bring in effective/ meaningful financial inclusion. A well functioning financial system creates necessary conditions for more rapid economic growth, so that there is a positive correlation between economic growth and the financial system.

Minimum bouquet of products and services

To meet the criterion of availability of banking services, a minimum of four basic products must be offered to customers:

- A savings cum overdraft account
- A pure savings account, ideally a recurring or variable recurring deposit
- A remittance product to facilitate EBT and other remittances, and
- Entrepreneurial credit products like a General Purpose Credit Card (GCC) or a Kisan Credit Card (KCC)



Since size of population and the distribution foot print of bank branches are not enough to cater each and every person in the country; to increase number of bank branches through FIP following initiatives were taken:

Relaxed regulatory requirements

i. **Relaxed regulatory dispensation on KYC norms:** Know Your Customer (KYC) requirements for opening bank accounts have been relaxed and simplified, especially for small accounts with balances not exceeding ₹50,000/- and aggregate credits in the accounts not exceeding ₹ one lakh a year. In modification to the earlier guidelines on KYC norms, the Reserve Bank has now advised banks not to insist on introduction for opening bank accounts of customers. In addition to this the Reserve Bank has now allowed banks to use Aadhaar Card as a proof of both identity and address and the MNREGA Job Card as an officially valid document for opening of bank accounts.

ii. **Mandatory requirement for opening branches in unbanked villages:** To further step up the opening of branches in rural areas so as to improve banking penetration and financial inclusion rapidly, the need for opening of more brick and mortar branches, besides the use of BCs, was felt. Accordingly, domestic SCBs have been mandated in the Monetary Policy Statement – April 2011 to allocate at least 25 per cent of the total number of branches to be opened during a year in unbanked rural (Tier 5 and Tier 6) centres. There are few studies on the impact of bank branches and development. In 2003, Burgess and Pande examined the branch expansion policy of commercial banks implemented post nationalisation. From 1990 to 1997, the RBI branch authorisation policies specified that banks could establish a new bank branch in a location with one or more bank branches only if they set up four branches in a location with no new bank branches. This regulatory prescription ensured that banks opened rural branches in states where financial development was lower to address the regional inequities in development. Their results to evaluate the impact of a new rural branch on poverty suggested that a one percent increase in the number of banks in rural locations reduced rural poverty by 0.36 per cent and increased total output by 0.55 per cent. Rural branch expansion also increased non primary sector output and non agricultural employment. These favourable effects show the positive influence of bank branches on economic development Banks to the 1990s disbursed a greater share of credit to the less developed states this trend reversed after the 1990s.

iii. In the Annual Policy Statement for 2013-14, banks have been advised to consider frontloading (prioritising) the opening of branches in unbanked rural centres over a three year cycle co-terminus with their FIPs. This is expected to facilitate faster branch expansion in unbanked rural centres.

"Step into A Bank Step Out of Poverty is Our Central Message"

iv. **Business Correspondent/Business Facilitator Model:** In January 2006, the Reserve Bank permitted banks to utilise the services of non-governmental organisations (NGOs), micro-finance institutions (other than Non-Banking Financial Companies) and other civil society organisations as intermediaries in providing financial and banking services through the use of business facilitator and business correspondent (BC) models. The BC model allows banks to do 'cash in – cash out' transactions at a location much closer to the rural population, thus addressing the last mile problem. As on March 31 2013, banks have reported deploying 1,95,380 BCs which covered 2,21,341 villages.

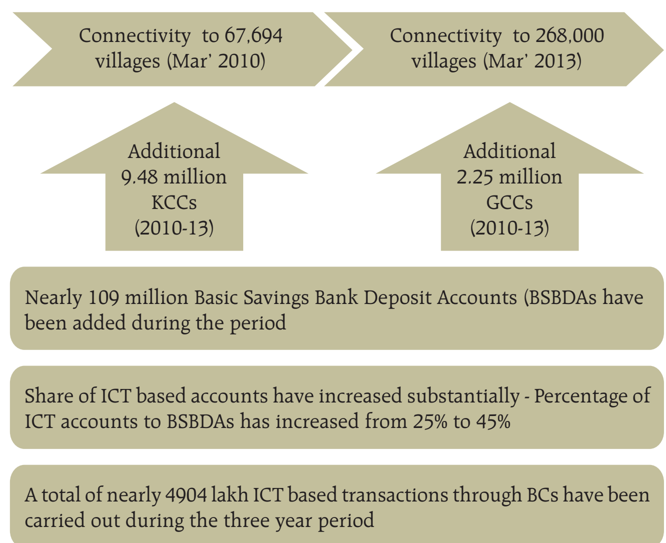
v. **Introducing Technology:** To ensure sustainability and scalability of business model, technology was adopted. It leads to higher costs at initial stage however; it brings better opportunities and optimisation of result. The UID is also good instrument of connecting to all the people once it gets effectively operational.

vi. **The Direct Benefit Transfer scheme** and the Adhar number are going to be very significant in the years to come the RBI has accepted Adhaar as a proof of identity and as fulfilling KYC requirements 1st of January, 2013. Nearly 11 lakh beneficiaries have received the benefit directly into their bank accounts.

Financial Inclusion Plans of banks for 3 years:

The Reserve Bank in January 2010 had advised all public and private sector banks to submit a Board approved three-year Financial Inclusion Plan (FIP) starting April 2010. Banks were advised to devise FIPs congruent with their business strategy and comparative advantage to make it an integral part of their corporate plans. These plans broadly included self-set targets in respect of rural brick and mortar branches opened, BCs employed, coverage of unbanked villages with population above 2000 as also other unbanked villages with population below 2000 through branches/BCs/ other modes, no-frills accounts opened including through BC-ICT, Kisan Credit Cards (KCC) and General Credit Cards (GCC) issued, and other specific products designed by them to cater to the financially excluded segments.Banks were advised to integrate Board-approved FIPs with their business plans and to include the criteria on financial inclusion as a parameter in the performance evaluation of their staff. The implementation of these plans was closely monitored by the Reserve Bank on a monthly basis through a quantitative reporting format. Qualitative aspect under FIP was monitored through a qualitative report submitted by banks on quarterly basis.

A snapshot of the progress made by banks under the 3 year Financial Inclusion Plan (April 10 – March 13) for key parameters during the three year period is given below:



Challenges in Financial Inclusion

- Business Model: The business models are yet to emerge hence upscaling is not taking place. Banks need to evolve appropriate business model .Credit linkage is vital Electronical Benefit Transfers are useful but to be users of financial products the SCRIPT Savings Credit Remittance Insurance Pension and Transfers must be available both sides of the equation access and usage must be equally strong.
- BC model was envisaged as cheaper model of doorstep delivery as opposed to bank branches however, the ease and comfort of transaction for the customer is higher at bank branch level.
- Limitations and Lack of infrastructure for scaling up; physical and technical infrastructure roads and in several cases digital connectivity also hampers the process.
- The biggest challenge remains the need for attitudinal change and of empathy with the customer the need for a Buy In and of passionate belief and commitment to the idea of financial inclusion.

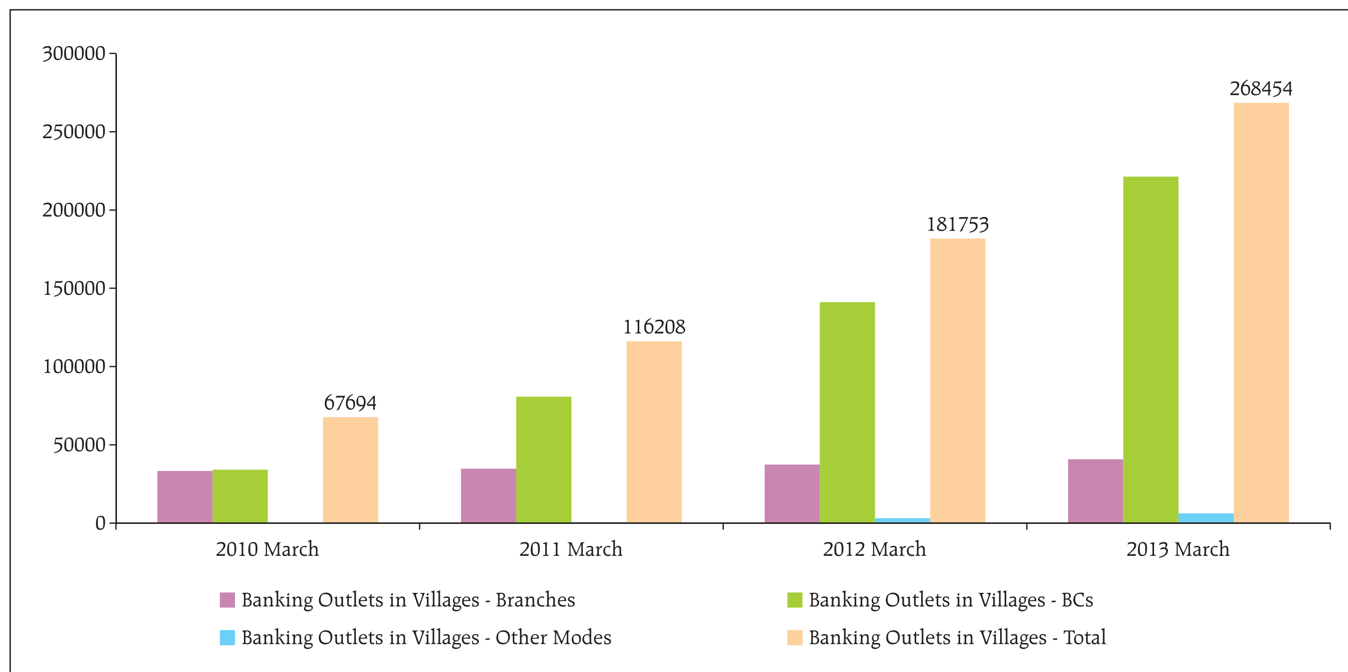
New banks

New banks are expected to bring sustainable business models, bring innovation in banking products and services and improve penetration of banking activities. We need new banks to bring new business models and not for derivative products and investment banking. At mezzanine finance level, Banks also need sensitivity to default rates. They require an estimation of extent of losses, loss given default our message is that Financial Inclusion should be viewed neither from the prophet or the profit motive but as a pragmatic business opportunity by the Banks. I would do well to sum up with Dr. P Chidambarams enunciation. Dr. Chidambaram stated the reforms since 1991 have changed the face of the Indian economy. India is slowly but surely being recognised. Economic reforms have led to a sharp decline in people below the poverty line, sustainability of the reform process demands that all sections of society stand to gain from it only if the poorer sections of society also perceive a visible change in quality of their life will the reform process continue in our vibrant democracy. I thank you for a patient hearing and wish your deliberations all success.

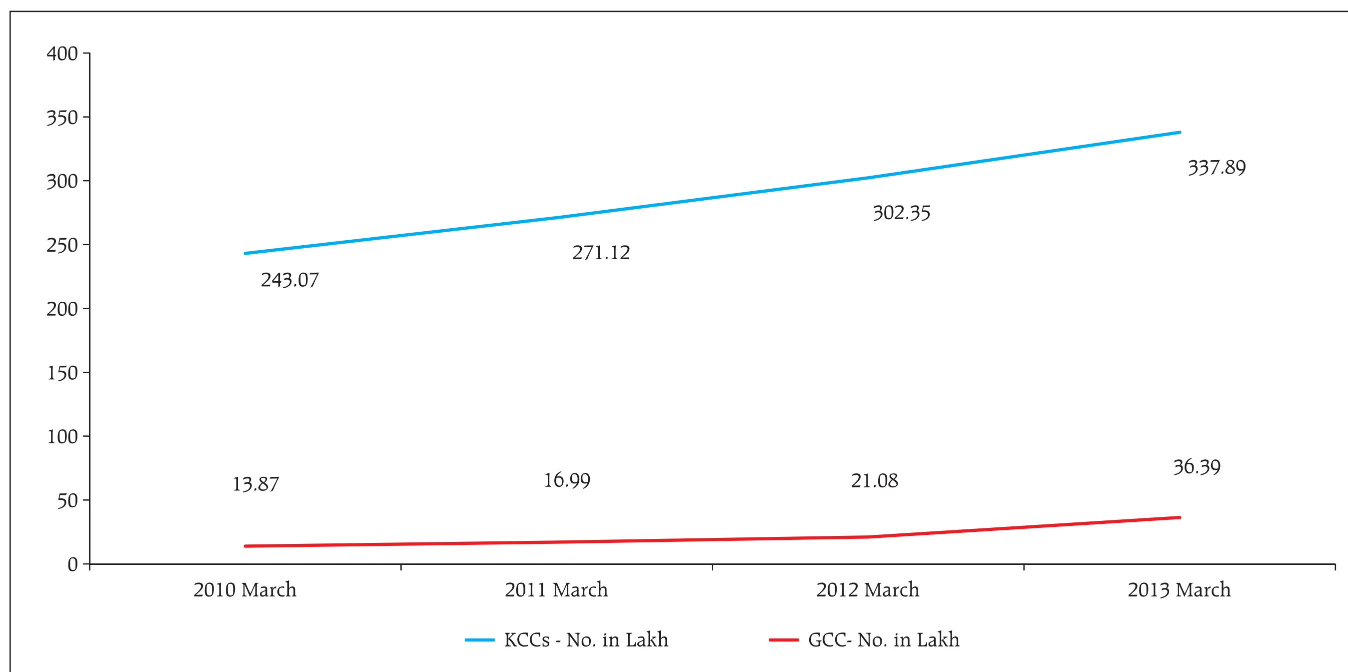
Annex

Sr. No.	Particulars	2010 March	2011 March	2012 March	2013 March	Progress April 10 - March 13
1.	Banking Outlets in Villages - Branches	33378	34811	37471	40837	7459
2.	Banking Outlets in Villages - BCs	34174	80802	141136	221341	187167
3.	Banking Outlets in Villages - Other Modes	142	595	3146	6276	6134
4.	Banking Outlets in Villages -TOTAL	67694	116208	181753	268454	200760
5.	Urban Locations covered through BCs	447	3771	5891	27143	26696
6.	Basic Savings Bank Deposit A/c through branches (No. in Lakhs)	601.88	731.29	812.03	1007.95	406.07
7.	Basic Savings Bank Deposit A/c through branches (Amt. in crores)	4433.01	5757.84	11026.25	16469.43	12036.42
8.	Basic Savings Bank Deposit A/c through BCs (No. in Lakhs)	132.65	316.3	573.01	812.68	680.03
9.	Basic Savings Bank Deposit A/c through BCs (Amt. in crores)	1068.7	1854.16	1014.37	1822.46	753.76
10.	BSBDA Total	734.53	1047.59	1385.04	1820.63	1086.1
11.	BSBDA Total Amt.	5501.71	7612	12040.62	18291.89	12790.18
12.	OD facility availed in Basic Savings Bank Deposit A/c (No. in lakh)	1.83	6.06	27.05	39.54	37.71
13.	OD facility availed in Basic Savings Bank Deposit A/c (Amt. in crores)	9.98	26.48	108.41	154.78	144.8
14.	KCCs - No. in Lakh	243.07	271.12	302.35	337.89	94.82
15.	KCCs - Amt In ₹ Crores	124007.06	160005.04	206839.03	262298.02	138291.96
16.	GCC- No. in Lakh	13.87	16.99	21.08	36.39	22.52
17.	GCC-Amt In ₹ Crores	3510.87	3507.06	4184.41	7661.39	4150.53
18.	ICT A/Cs-BC- Transaction - No. in lakhs	265.15	841.64	1558.67	2504.55	4904.86
19.	ICT A/Cs-BC- Transactions - Amt in crores	692.07	5800.42	9709.37	23388.05	38897.84

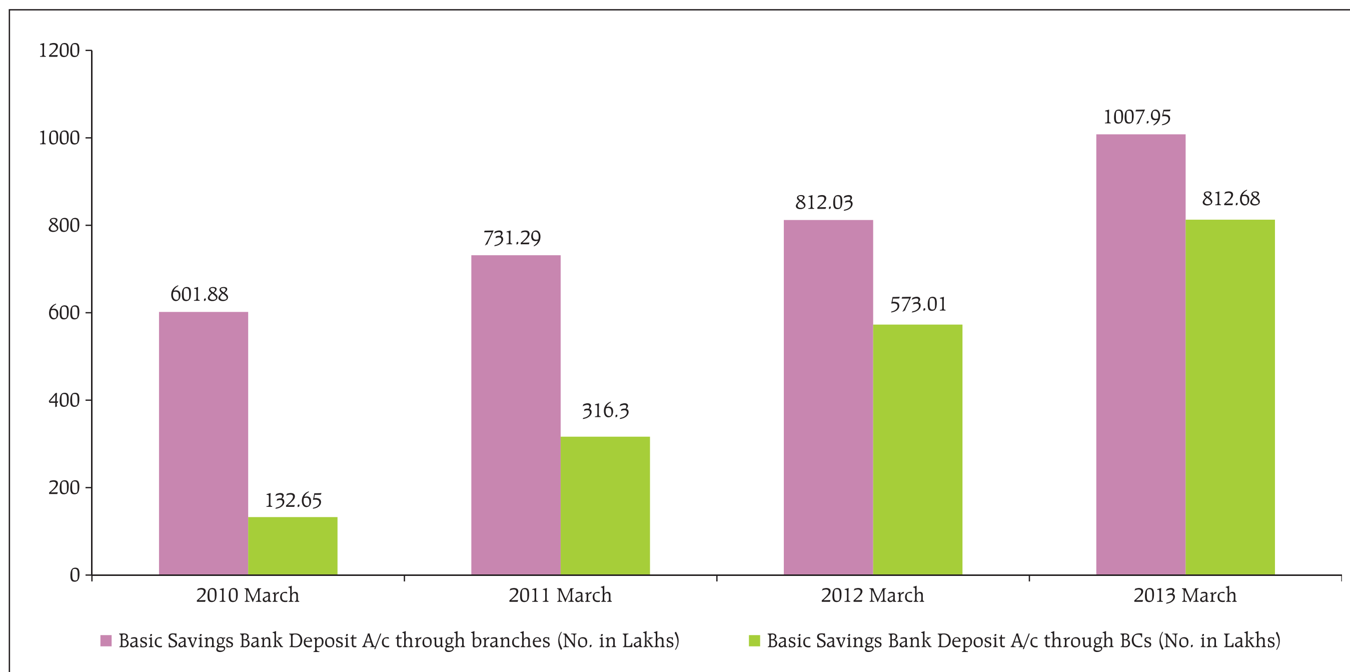
1. Progress in Modes of FI delivery



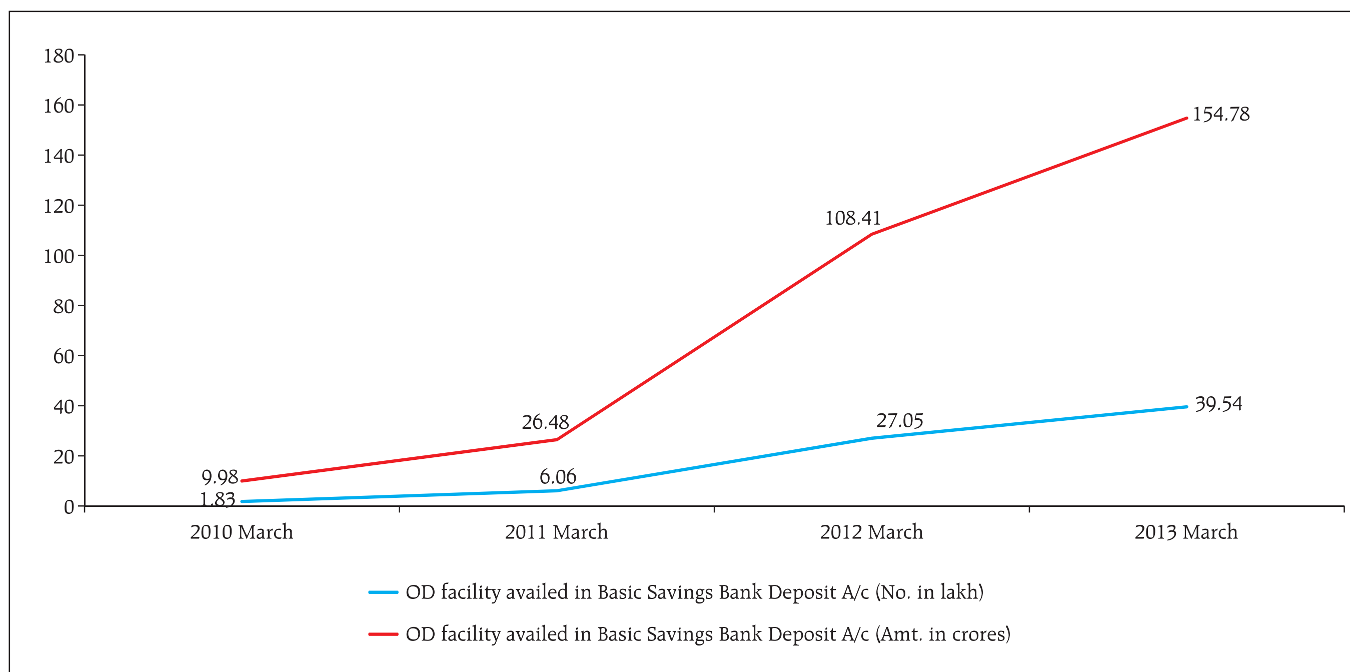
2. Progress in KCCs and GCCs



3. Progress in number of Accounts



4. Progress in O/D facility availed



ARTICLE

Survey on Computer Software & Information Technology Services Exports: 2011-12

*Survey on Computer Software & Information Technology Services Exports: 2011-12**

The Reserve Bank conducted the 6th round of annual survey on Computer Software and Information Technology Services Exports for compiling data on various aspects of computer services exports as well as exports of Information Technology Enabled Services (ITES) and Business Process Outsourcing (BPO). The survey collects details on export of software services as per the activity, type of services (on-site/off-site) and country of destination along with the four modes of supply, as per General Agreement on Trade in Services (GATS).

This article presents salient features of 2011-12 round of survey on Computer Software and IT Services Exports and investigates any changes in the characteristics of software services exports following global financial crisis based on current and earlier round of survey results.

I. Introduction

The annual survey on Software and Information Technology Services Exports is conducted by the Reserve Bank of India for compiling data on various aspects of computer services exports as well as exports of Information Technology Enabled Services (ITES)/ Business Process Outsourcing (BPO). The Reserve Bank has started to conduct this annual survey on '*Software and Information Technology Services Exports*' in 2002-03 as per the recommendations of the National Statistical Commission (2001) and subsequent guidance from the Technical Group on Computer Services Exports (TGCSE) (2008). The survey collects details of export of computer services, as defined in the *Balance of Payments and International Investment Position Manual (BPM6)* of the International Monetary Fund (IMF) and the *GATS Manual on Statistics of International Trade in Services (MSITS)* as well as other select information on ITES/BPO services exports. The survey also collects exports data as per the four modes of supply (*viz.*, cross-border supply, consumption abroad, commercial presence and presence of natural persons) as defined in MSITS. The previous annual round of the survey was conducted with reference period 2010-11.

For the 2011-12 survey round, the schedule was canvassed among 6,550 companies *of which* 731 companies, including most of the large companies, responded accounting for around 81.0 per cent of the total software exports during the year.

II. Software Services Export From India since 2008-09

India's software exports are positively linked to the global economic growth. However, in spite of decline in global GDP (-0.7%) in 2009 following global financial crisis, software services exports continued to increase, *albeit* at a slower rate. As per BoP statistics, software services contributed more than 20 per cent of the total exports as well as 3.6 per cent of the GDP during 2011-12.

In the survey, software services exports are divided into two major categories (i) Computer Services exports which include IT services as well as Software Product Development and (ii) ITES/ BPO services which includes BPO services and engineering services. As per the survey results, the growth in total exports in software and ITES/BPO services declined from 19.3 per cent in 2008-09 to 9.8 per cent in 2009-10. It recovered in the subsequent years. However, total software service exports recorded lower growth of 14.5 per cent in 2011-12 as compared to 18.1 per cent in 2010-11. The lower growth is due to slow down in the growth of its major component 'Computer services', while the other component 'BPO services' showed an improvement in growth. Within computer services, IT services remained the dominant component which slowed down significantly in 2009-10 following global crisis and recovered in 2010-11, however, its growth moderated in 2011-12. The export of the Software Product Development component recorded significantly high growth in 2011-12 after a contraction of 29.6 per cent in 2010-11 (Table 1).

* Prepared in the External Liabilities and Assets Statistics Division, Department of Statistics & Information Management. The previous article in the series with reference period 2010-11 was published in October 2012.

Table 1: Software Services Export From India since 2008-09

Activity	Software Exports (₹ billion)				Growth (%)		
	2008-09	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
A) Computer Services	**1219.6**	**1266.6**	**1598.4**	**1867.1**	**3.9**	**26.2**	**16.8**
Of which: i) IT services	1070.4	1115.8	1492.2	1661.8	4.2	33.7	11.4
ii) Software Product Development	149.1	150.8	106.2	205.3	1.1	-29.6	93.3
B) ITES/BPO Services	**452.8**	**570.3**	**571.7**	**617.2**	**25.9**	**0.2**	**8.0**
Of which: i) BPO Services	383.4	431.3	468.7	523.0	12.5	8.7	11.6
ii) Engineering Services	69.4	139.0	103.0	94.2	100.3	-25.9	-8.5
Total Export of Software Services (A+B)	**1672.4**	**1836.9**	**2170.1**	**2484.3**	**9.8**	**18.1**	**14.5**

III. Industry-wise Distribution of ITES/BPO Services Exports

The classification given by the Department of Information Technology (DIT-2003), Government of India, was used for compilation of data on export of *ITES/BPO services.* Exports in ITES/BPO services recorded an increase of ₹45.5 billion in 2011-12 as compared to increase of ₹1.4 billion in 2010-11 (Table 1).

Among the BPO services exports, *medical transcription*, *content development and management and publishing* observed drastic reduction in their shares as well as amount of exports during 2009-10 and remained around the same level subsequently; thus, these sectors can be considered as most affected by the global slowdown. *Other BPO services* (including Legal services, Animation, Gaming, Pharmaceuticals & biotechnology services *etc.*), which constituted more than 40 per cent of the total BPO services exports recorded a contraction of 8.4 per cent in 2011-12.

Among the major components of BPO services, *'Finance and Accounting, auditing, book keeping and tax consulting services'* showed significant increase in its share in 2011-12. It contributed about one fourth in total BPO services export. The share of *'Engineering Services'* declined in 2011-12 as compared to the previous year (Table 2).

Table 2: Industry-wise Distribution of ITES/BPO Services Exports

(per cent)

Activity	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
BPO Services	**84.7**	**75.6**	**82.0**	**84.7**
Customer interaction services	10.7	18.0	12.2	14.4
Finance and Accounting, auditing, book keeping and tax consulting services	8.3	11.9	13.4	23.5
HR Administration	2.4	1.3	0.5	0.2
Procurements and logistics	1.2	0.3	0.5	0.0
Medical transcription	11.8	0.4	0.6	0.2
Document Management	-	0.3	0.6	0.4
Content development and management and publishing	6.5	1.0	0.8	0.7
Other BPO service	43.8	42.4	53.4	45.3
Engineering Services	**15.3**	**24.4**	**18.0**	**15.3**
Embedded Solutions	3.0	0.8	2.4	2.1
Product Design Engineering (mechanical, electronics excluding software)	6.0	7.5	8.6	7.0
Industrial automation and enterprise asset management	-	2.6	0.6	0.0
Other Engineering service	6.3	13.5	6.4	6.2
Total	**100.0**	**100.0**	**100.0**	**100.0**

Table 3: Organisation-wise Share of Software Services Exports

(per cent)

Type of Organisation	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
Private Limited Company	34.8	39.3	38.5	41.2
Public Limited Company	62.0	58.1	61.3	58.7
Others	3.2	2.6	0.2	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**

IV. Organisation-wise Distribution of Software Exports

The public limited companies accounted for a higher share of the total software services exports; however, its share had declined to 58.7 per cent in 2011-12 from 61.3 per cent in 2010-11. On the other hand, the share of Private Limited Companies in total software exports has increased from 38.5 per cent in 2010-11 to 41.2 percent in 2011-12 (Table 3).

V. Country-wise Distribution of Software Services Exports

United States and Canada continued to remain the major destination for software services exports from India. Over the period, the share of USA, Canada and Europe remained around 88 per cent. Though the share of West Asia, Australia and Newzealand improved marginally, there is necessity of diversifying the export of software services from India further to new markets to tide over any future crisis (Table 4).

Table 4: Country-wise share of software exports

(per cent)

Country	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
USA & Canada	61.5	61.9	65.0	64.3
Europe	27.0	26.5	23.5	23.3
of which UK	13.9	12.4	15.0	14.3
Asia	5.0	4.9	5.1	5.2
of which East Asia	4.1	3.8	4.0	4.0
West Asia	0.8	0.8	0.9	1.0
South Asia	0.1	0.3	0.2	0.2
Australia & Newzealand	1.4	2.3	2.7	3.5
Others countries	5.1	4.4	3.7	3.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

Table 5: Currency composition of Invoice – Software Service Exports

(per cent)

Currency	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
USD	74.8	76.2	75.3	76.4
EUR	6.1	6.9	7.0	7.0
GBP	12.8	10.4	9.8	8.7
AUD	1.6	1.9	2.9	3.5
INR	1.1	1.1	1.3	0.9
Other Currencies	3.6	3.6	3.7	3.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

VI. Currency Composition of Software Services Exports

US Dollar (USD) continued to be the major currency of invoicing software export contributing around three fourth of all currencies during 2011-12. While invoicing share of Australian Dollar had increased since 2008-09, the share of Indian Rupee had declined marginally (Table 5).

VII. Software Service Exports – Type of Service

Software services are exported through both on-site and off-site routes. As evident from the Table 6, the share of export of software service through off-site mode increased in 2009-10 following global crisis. The share of export of software service through off-site mode continued to increase consistently and its share increased from 67.8 per cent in 2008-09 to 82.2 per cent in 2011-12.

Table 6: Software Services Export – Type of Service

(per cent)

Type of Services	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
On-site (Mode 4)	32.2	21.6	20.7	17.8
Off-site (Mode 1 & Mode 2)	67.8	78.4	79.3	82.2
Total	**100.0**	**100.0**	**100.0**	**100.0**

VIII. Software Services as per mode of Supply

As per MSITS (2002) guidelines, international trade in services can be conducted through four different modes, *viz.*,

(i) transactions between resident and non-resident covering Mode-1 (cross-border supply), Mode-2 (consumption abroad) and Mode-4 (presence of natural person) and

(ii) services provided locally by the affiliates established abroad, *i.e.*, Mode-3 (commercial presence).

However, as per the BoP manual, foreign affiliates established abroad are treated as the domestic units in the host economy and hence the services delivered by them are not considered as the exports of the home country. To this extent, data on services exports in BoP differs from those in the Foreign Affiliates Trade Statistics (FATS).

The present survey collected the software services trade data on all four modes of supply. The total international trade in computer services by India stood at ₹2,937.7 billion in 2011-12. The share of software services exports through Mode-1 and Mode-3 increased in 2011-12 whereas the share of software services by India through Mode-4 has decreased since 2008-09. The share of exports through Mode- 2 (consumption abroad) remained negligible (Table 7).

Table 7: Software Exports by Different Modes

(per cent)

Type of Mode	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
Mode 1	56.3	64.6	67.4	69.0
Mode 2	0.1	0.0	0.1	0.5
Mode 3	16.8	17.6	14.8	15.4
Mode 4	26.8	17.8	17.7	15.1

IX. Software Business of Subsidiaries/Associates Abroad

The survey also collected the information on the software business of foreign subsidiaries/associates of Indian companies (foreign affiliates), under the heads of software business done in the host country, *i.e.*, locally, to India and to other countries, for the purpose of Foreign Affiliates Trade in Services (FATS). The total software business of the Indian-owned foreign affiliates (excluding the services made available to India) did not observe immediate slow down following global crisis. The exports of foreign affiliates declined from ₹437.2 billion in 2009-10 to ₹415.8 billion in 2010-11 due to global slowdown. However, it increased significantly to ₹520.4 billion in 2011-12 (Table 8).

Based on the activity, Indian companies were classified into four major categories, *viz.*, IT services, Software product development, BPO services and Engineering services. Companies providing the combination of these services were classified under 'Others'. Foreign affiliates located abroad, under

Table 8: Software Business by Foreign Affiliates of Indian Companies

(₹ billion)

Activity	2008-09			2009-10			2010-11			2011-12		
	Locally	To India	Other Countries	Locally	To India	Other Countries	Locally	To India	Other Countries	Locally	To India	Other Countries
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
IT services	12.16	0.84	0.13	6.35	0.03	0.36	17.88	0.18	1.63	27.48	10.67	5.43
Software Product Development	1.65	0.33	0.13	0.18	0.03	4.93	4.7	0.01	0.64	1.64	0.67	7.95
BPO Services	3.82	0.36	28.53	15.07	0.44	17.22	15.23	0.55	9.11	30.99	4.44	12.25
Engineering Services	0.04	0.20	0.28	0.61	0.12	0	1.71	0.26	0	1.49	0.27	20.55
Other services	319.28	9.76	37.31	370.12	7.11	22.34	338.2	4.37	26.73	391.81	0.38	20.79
Total	**336.95**	**11.49**	**66.38**	**392.33**	**7.73**	**44.85**	**377.72**	**5.37**	**38.11**	**453.41**	**16.43**	**66.97**

'Others' category were the major source for generating the software business outside India. Software services provided by the Indian-owned foreign affiliates were mainly in the respective host county. It may be observed that, following global crisis, slowdown is observed in software business by foreign affiliates with respect to IT services and Software product development, whereas, in case of BPO services, there was not much impact of global crisis.

USA had maximum share of total software business by foreign affiliates followed by UK, though the share of UK observed a declining trend. Thus, the survey results indicate that some of the businesses of foreign affiliates of Indian companies might have shifted from UK to other countries (Table 9).

Table 9: Software Business by Foreign Affiliates of Indian Companies – Country-wise Distribution

(per cent)

Country	2008-09	2009-10	2010-11	2011-12
	(1)	(2)	(3)	(4)
USA	61.0	54.7	67.5	65.0
United Kingdom	8.9	6.1	6.8	5.3
Singapore	3.7	3.0	3.4	4.4
Netherlands	2.9	3.1	3.6	4.3
Canada	5.1	4.0	2.7	3.6
Germany	3.5	3.1	2.5	2.9
Other Countries	14.9	26.0	13.5	14.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

X. Conclusion

India's software services exports continued to increase, *albeit* at a slower rate, following global crisis in 2008. During 2011-12, India's export of software services is estimated at ₹2,484.3 billion, registering an annual growth of 14.5 per cent. Exports of computer services accounted for 75.2 per cent of the total software services and ITES/BPO services the remaining 24.8 per cent. During 2011-12, growth of *computer services* exports slowed down, while growth of *BPO services* exports improved.

Among the major activities in BPO services exports, *Finance & Accounting related services* observed significant increase in its share over the years. USA and Canada continued to remain the major destination for software exports in 2011-12 and US dollar remained the major invoice currency for software exports with more than three forth share. Mode -1(cross-border supply) continued to be major Mode of software services. The share of software services exports through Mode-1 and Mode-3 (commercial presence) had increased whereas the share of software services by India through Mode-4 (presence of natural person) has decreased.

The software exports by foreign affiliates increased significantly in 2011-12 and the total international trade in software services by India, including the services delivered by foreign affiliates established abroad, stood at ₹2,937.7 billion in 2011-12

Box: Comparison of survey results with NASSCOM and SOFTEX data

The Reserve Bank of India collects the information of software exports through SOFTEX forms filed by software companies which accounts for only non-physical offsite software exports. As per the SOFTEX forms filed by Indian companies to the Reserve Bank, non-physical (off-site) software exports stood at ₹1,991.0 billion in 2011-12 which does not include on-site software exports. Adding the on-site software exports of ₹442.2 billion, as reported in the survey, the total software services exports in 2011-12 worked out to ₹ 2,433.2 billion.

The Reserve Bank publishes the software exports data in BoP using reporting by Authorised Dealers and STPI and also the software exports data released by the NASSCOM. NASSCOM publishes exports of IT-BPO industry which is based on the global software business of the Indian software companies, *i.e.*, software exports of Indian companies together with the software business of their overseas subsidiaries. Accordingly, in order to make the data generated through the Reserve Bank's survey on Software & ITES/BPO Services Exports comparable with NASSCOM data, the software business of overseas subsidiaries of Indian companies have been added to the estimated software services exports of India, based on the survey.

Based on the survey, export of software services from India in 2011-12 was estimated at ₹2,484.3 billion (US$ 51.8 billion) and the software business done by the Indian subsidiaries abroad in 2011-12 was estimated at ₹453.4 billion (US$ 9.5 billion). Thus, the global software export of India based on the survey was ₹2,937.7 billion (US$ 61.3 billion) as against ₹ 3,297.1 billion (US$ 68.8 billion) published by the NASSCOM. The software business done by the overseas subsidiaries of Indian companies accounted for 15.4 per cent of the global software business, estimated through the survey.

The survey results are quite comparable with the software exports data released by NASSCOM and also with the software exports data collected through SOFTEX forms by the Reserve Bank.

Reconciliation of Software Exports of India during 2011-12

(₹ billion)

Software exports as per NASSCOM (Global business)	Software Exports Based on ITES Survey			Software Exports based on ITES Survey and SOFTEX data		
	Indian companies (Mode 1, Mode 2 & Mode 4)	Subsidiaries Abroad (Mode 3 & export of Subsidiaries Other than India)	Global Business	Offsite Non-physical Software Exports based on SOFTEX (Mode 1 & Mode 2)	Onsite Software Exports based on ITES survey (Mode 4)	Total Software Exports of India
(1)	(2)	(3)	(4)=(2)+(3)	(5)	(6)	(7)=(5)+(6)
3,297.1	2,484.3	453.4	2,937.7	1,991.0	442.2	2,433.2

References:

1. International Monetary Fund (2008): *Balance of Payments and International Investment Position Manual – Sixth Edition* (BPM6), Washington, D.C.

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3. Government of India (2003): *IT-Enabled Services*; Ministry of Information Technology.

4. Reserve Bank of India (2003): Report of the Technical Group on Re-examination of Data Reporting System on Software Exports, Mumbai

5. Reserve Bank of India (2011): Survey on Computer Software & Information Technology Services Exports: 2009-10, Reserve Bank of India Bulletin, June issue.

6. Reserve Bank of India (2012): Survey on Computer Software & Information Technology Services Exports: 2010-11, Reserve Bank of India Bulletin, October issue.

7. United Nations (2002): *GATS Manual on Statistics of International Trade in Services* (MSITS), Geneva.

Annex I:
Methodology for estimation of Software Exports of Non-responding companies

In total, 731 companies responded to the annual comprehensive survey covering all major companies. So, the non-responded companies were the smaller companies. Further, it was observed from data received from the responded companies that onsite export was mainly reported by the major companies. So while estimating the exports done by the non-responded companies, only offsite export was considered. As no information was available about the business activity of the non-responded companies, these were classified into 4 groups *viz.*; IT services, ITES/BPO services, Engineering services and Software Product Development based on the observed proportion. Also, the distribution of export in all the four groups *i.e.,* IT services, BPO, Engineering and Software Product Development was highly positively skewed. So median exports done by each of these groups was used for estimating the exports done by respective group of business. The detailed methodology for estimation of exports is given below. Using the methodology, the software services exports of non-respondent companies was estimated to the tune of ₹ 458.9 billion (around 18.5 per cent of total software services exports). To estimate other distributional patterns of exports, observed proportions were used.

Annual survey on Software and IT Services Exports for the period 2011-12 was launched canvassing around 6,550 Software and ITES/BPO companies. Of these, 868 companies responded to the survey which includes 137 NIL and closed companies. All the major software and IT/BPO companies responded to the survey. Using the observed proportion, number of NIL and closed companies have been estimated from 5,682 non-responded companies and software exports have been estimated for the remaining 4,785 non-responded companies, using the following method:

I. Based on the ITES/BPO reported activity, companies have been classified in four groups, *viz.*; IT Services, ITES/BPO Services, Engineering Services and Software Product Services (having 100 per cent business under respective group).

II. For classifying the other companies having combination of these as their business activity, reported proportions of their exports done in IT, BPO, Engineering and Software Product services have been used.

III. Based on the reported data, it was observed that 'On-site' software export was primarily reported by the major companies. Therefore, only offshore software exports component was used for estimating software export of non-responded companies.

IV. As the observed distribution of exports was highly positively skewed in each of these groups, median was used for estimating software exports in each group.

Estimated software exports for i^{th} group of non-responding companies

$$= \text{median of } i^{th} \text{ group} * \left[\frac{\#\text{ reported companies in } i^{th} \text{ group}}{\text{total no. of reported companies}}\right] * [\#\text{ non-responding companies}]$$

Then, the total software exports of India has been compiled as the sum of reported software exports and the estimated software extort for non-responded companies in each of the four groups.

CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

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Notes: .. = Not available.
– = Nil/Negligible.
P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2012-13	2011-12		2012-13	
		Q3	Q4	Q3	Q4
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GDP	5.0	6.0	5.1	4.7	4.8
1.1.1 Agriculture	1.9	4.1	2.0	1.8	1.4
1.1.2 Industry	1.2	0.9	1.0	2.3	2.0
1.1.3 Services	6.8	8.1	7.0	6.2	6.3
1.1a Final Consumption Expenditure	4.0	9.0	9.3	3.8	3.3
1.1b Gross Fixed Capital Formation	1.7	-1.7	2.6	4.5	3.4

Item	2012-13	2012		2013	
		May	Jun	May	Jun
	1	2	3	4	5
1.2 Index of Industrial Production	1.1	2.5	-2.0	-1.6	..
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	14.2	14.3	13.5	13.1	13.8
2.1.2 Credit	14.1	17.8	16.5	13.9	13.7
2.1.2.1 Non-food Credit	14.0	17.2	16.1	13.9	13.9
2.1.3 Investment in Govt. Securities	15.4	14.0	16.1	12.7	14.6
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	6.2	6.7	7.8	6.0	7.1
2.2.2 Broad Money (M3)	13.8	13.9	15.8	13.7	12.8
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.00	4.75	4.75	4.00	4.00
3.2 Statutory Liquidity Ratio	23.0	24.0	24.0	23.0	23.0
3.3 Cash-Deposit Ratio	4.8	5.8	5.9	4.8	5.3
3.4 Credit-Deposit Ratio	77.9	76.6	76.4	77.3	76.4
3.5 Incremental Credit-Deposit Ratio	77.1	28.8	46.7	54.4	45.5
3.6 Investment-Deposit Ratio	29.7	29.8	29.9	30.0	30.1
3.7 Incremental Investment-Deposit Ratio	31.9	43.6	39.0	38.4	38.5
4 Interest Rates (%)					
4.1 Policy Repo Rate	7.50	8.00	8.00	7.25	7.25
4.2 Reverse Repo Rate	6.50	7.00	7.00	6.25	6.25
4.3 Marginal Standing Facility (MSF) Rate	8.50	9.00	9.00	8.25	8.25
4.4 Bank Rate	8.50	9.00	9.00	8.25	8.25
4.5 Base Rate	9.70/10.25	10.00/10.50	10.00/10.50	9.70/10.25	9.70/10.25
4.6 Term Deposit Rate >1 Year	7.50/9.00	8.00/9.25	8.00/9.25	7.50/9.00	7.50/9.00
4.7 Savings Deposit Rate	4.00	4.00	4.00	4.00	4.00
4.8 Call Money Rate (Weighted Average)	8.30	8.09	8.21	7.15	7.19
4.9 91-Day Treasury Bill (Primary) Yield	8.19	8.39	8.31	7.31	7.48
4.10 182-Day Treasury Bill (Primary) Yield	8.01	8.42	8.31	7.30	7.40
4.11 364-Day Treasury Bill (Primary) Yield	7.79	8.28	8.12	7.29	7.50
4.12 10-Year Government Securities Yield	7.95	8.38	8.15	7.44	7.39
5 RBI Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (₹ Per Foreign Currency)	54.39	56.42	56.31	56.50	59.70
5.2 INR-Euro Spot Rate (₹ Per Foreign Currency)	69.54	69.95	70.91	73.68	77.98
5.3 Forward Premia of US$ 1-month (%)	7.72	7.66	7.67	7.01	6.63
3-month (%)	7.57	6.88	7.17	6.58	6.23
6-month (%)	7.28	5.74	6.36	6.16	5.90
6 Inflation (%)					
6.1 Wholesale Price Index	7.4	7.6	7.6	4.7	4.9
6.1.1 Primary Articles	9.8	10.3	9.8	6.7	8.1
6.1.2 Fuel and Power	10.6	11.5	12.1	7.3	7.1
6.1.3 Manufactured Products	5.4	5.2	5.4	3.1	2.8
6.2 All India Consumer Price Index	10.21	10.4	9.9	9.3	9.9
6.3 Consumer Price Index for Industrial Workers	10.43	10.2	10.1	10.7	11.1
7 Foreign Trade (% Change)					
7.1 Imports	0.5	-7.8	-11.5	7.0	-0.4
7.2 Exports	-2.0	-6.6	-6.1	-3.3	-4.6

Reserve Bank of India

No. 2: RBI - Liabilities and Assets

(₹ Billion)

Item	As on the Last Friday/ Friday						
	2012-13	2012	2013				
		Jul.	Jun. 28	Jul. 5	Jul. 12	Jul. 19	Jul. 26
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	11,772.18	10,882.12	12,017.78	12,043.81	12,112.07	12,030.90	11,902.65
1.1.2 Notes held in Banking Department	0.08	0.16	0.08	0.13	0.12	0.07	0.12
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**11,772.26**	**10,882.28**	**12,017.86**	**12,043.95**	**12,112.19**	**12,030.96**	**11,902.77**
1.2 Assets							
1.2.1 Gold Coin and Bullion	740.85	760.10	675.97	674.32	674.32	674.32	674.32
1.2.2 Foreign Securities	11,019.02	10,110.93	11,328.97	11,357.06	11,425.67	11,344.85	11,217.08
1.2.3 Rupee Coin	1.92	0.80	2.46	2.11	1.74	1.33	0.91
1.2.4 Government of India Rupee Securities	10.46	10.46	10.46	10.46	10.46	10.46	10.46
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	4,577.50	3,550.81	3,592.80	3,163.82	3,450.62	3,279.16	3,493.41
2.1.1.1 Central Government	817.59	1.01	1.01	1.01	1.00	1.00	1.00
2.1.1.2 Market Stabilisation Scheme	–	–	–	–	–	–	–
2.1.1.3 State Governments	0.42	0.42	0.42	0.43	0.42	0.42	0.42
2.1.1.4 Scheduled Commercial Banks	3,424.24	3,236.63	3,287.72	2,821.20	3,068.13	2,931.65	3,150.97
2.1.1.5 Scheduled State Co-operative Banks	41.29	33.19	34.28	31.08	30.46	30.18	31.72
2.1.1.6 Non-Scheduled State Co-operative Banks	2.37	1.04	2.50	2.62	2.71	2.91	2.96
2.1.1.7 Other Banks	152.48	146.24	141.41	144.43	141.38	143.70	142.88
2.1.1.8 Others	139.10	132.29	125.47	163.07	206.51	169.29	163.45
2.1.2 Other Liabilities	6,959.83	7,053.64	8,114.62	8,173.76	8,180.10	8,215.53	8,053.37
2.1/2.2 Total Liabilities or Assets	**11,537.33**	**10,604.45**	**11,707.42**	**11,337.58**	**11,630.73**	**11,494.69**	**11,546.77**
2.2 Assets							
2.2.1 Notes and Coins	0.08	0.16	0.08	0.13	0.12	0.07	0.12
2.2.2 Balances held Abroad	3,161.94	4,137.11	3,970.47	3,914.74	3,735.92	3,731.40	3,690.78
2.2.3 Loans and Advances							
2.2.3.1 Central Government	–	–	15.72	409.42	97.81	208.91	186.45
2.2.3.2 State Governments	3.70	7.93	12.45	2.71	4.44	3.73	3.82
2.2.3.3 Scheduled Commercial Banks	418.66	109.17	221.24	163.56	211.21	253.23	344.34
2.2.3.4 Scheduled State Co-op.Banks	–	–	–	–	–	–	0.30
2.2.3.5 Industrial Dev. Bank of India	–	–	–	–	–	–	–
2.2.3.6 NABARD	–	–	–	–	–	–	–
2.2.3.7 EXIM Bank	–	–	–	–	–	–	–
2.2.3.8 Others	19.00	35.96	9.89	2.92	2.90	18.87	23.71
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	–	–	–	–	–	–	–
2.2.4.2 Government Treasury Bills	–	–	–	–	–	–	–
2.2.5 Investments	7,185.00	5,469.40	6,760.80	6,009.92	6,759.97	6,489.35	6,516.60
2.2.6 Other Assets	748.93	844.71	716.78	834.17	818.36	789.15	780.66
2.2.6.1 Gold	672.98	690.46	614.04	612.54	612.54	612.54	612.54

No. 3: Liquidity Operations by RBI

(₹ Billion)

Date	Liquidity Adjustment Facility		MSF	Standing Liquidity Facilities	OMO (Outright)		Net Injection (+)/ Absorption (-) (1+3+4+6-2-5)
	Repo	Reverse Repo			Sale	Purchase	
	1	2	3	4	5	6	7
Jun. 3, 2013	725.25	–	–	8.62	–	–	733.87
Jun. 4, 2013	664.10	0.35	–	17.97	–	–	681.72
Jun. 5, 2013	553.40	0.30	0.01	7.02	–	–	560.13
Jun. 6, 2013	560.30	0.10	–	–11.30	–	–	548.90
Jun. 7, 2013	562.95	0.20	–	115.42	–	–	678.17
Jun. 10, 2013	775.90	0.20	–	–33.30	–	68.06	810.47
Jun. 11, 2013	755.45	4.60	–	–47.70	–	–	703.15
Jun. 12, 2013	536.20	0.80	–	–0.50	–	–	534.90
Jun. 13, 2013	449.85	0.95	–	–22.43	–	–	426.47
Jun. 14, 2013	753.25	5.60	–	–9.70	–	–	737.95
Jun. 17, 2013	713.40	0.05	–	59.80	–	–	773.15
Jun. 18, 2013	668.45	1.05	–	–1.70	–	–	665.70
Jun. 19, 2013	603.40	3.05	–	4.25	–	–	604.60
Jun. 20, 2013	717.40	0.15	–	–64.80	–	–	652.45
Jun. 21, 2013	682.95	2.70	–	–0.20	–	–	680.05
Jun. 24, 2013	802.15	22.85	–	–6.50	–	–	772.80
Jun. 25, 2013	629.25	11.40	–	–8.36	–	–	609.49
Jun. 26, 2013	368.90	–	–	82.50	–	–	451.40
Jun. 27, 2013	596.40	69.75	–	–83.30	–	–	443.35
Jun. 28, 2013	877.45	115.55	–	58.10	–	–	820.00

No. 4: Sale/ Purchase of U.S. Dollar by the RBI

Item	2012-13	2012	2013	
		Jun.	May	Jun.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US$ Million) (1.1–1.2)	–2,601.00	–50.00	–107.00	–2,252.00
1.1 Purchase (+)	13,648.00	650.00	3,003.00	469.00
1.2 Sale (–)	16,249.00	700.00	3,110.00	2,721.00
2 ₹ equivalent at contract rate (₹ Billion)	–153.16	–4.28	–15.59	–133.82
3 Cumulative (over end-March 2013) (US $ Million)	–2,601.00	–810.00	411.00	–1,841.00
(₹ Billion)	–153.16	–44.84	65.50	–127.27
4 Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US$ Million)	–11,006.00	–14,084.00	–5,800.00	–4,914.00

No. 5: RBI's Standing Facilities

(₹ Billion)

Item		As on the Last Reporting Friday						
	2012-13	2012	2013					
		Jun. 29	Jan. 25	Feb. 22	Mar. 22	Apr. 19	May 31	Jun. 28
	1	2	3	4	5	6	7	8
1 MSF	–	6.0	1.8	–	–	–	0.1	–
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	412.3	126.1	397.4	407.2	412.3	422.7	405.4	394.0
2.2 Outstanding	136.3	71.1	248.0	197.6	136.3	139.6	57.9	113.0
3 Liquidity Facility for PDs								
3.1 Limit	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
3.2 Outstanding	15.2	5.9	6.5	6.1	15.2	8.0	10.9	8.1
4 Others								
4.1 Limit	50.0	50.0	50.0	50.0	50.0	–	–	–
4.2 Outstanding	–	22.8	10.9	–	–	–	–	–
5 Total Outstanding (1+2.2+3.2+4.2)	151.5	105.8	267.1	203.7	151.5	147.6	68.9	121.1

Money and Banking

No. 6: Money Stock Measures

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2012-13	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	11,447.4	10,697.2	11,773.9	11,935.9	11,674.3
1.1 Notes in Circulation	11,756.4	11,037.5	12,127.3	12,261.8	12,017.8
1.2 Circulation of Rupee Coin	146.0	131.7	149.8	149.8	149.8
1.3 Circulation of Small Coins	7.4	7.4	7.4	7.4	7.4
1.4 Cash on Hand with Banks	462.3	479.3	510.5	483.1	500.7
2 Deposit Money of the Public	7,502.0	7,382.4	7,477.6	7,307.8	8,085.7
2.1 Demand Deposits with Banks	7,469.6	7,363.5	7,434.1	7,287.1	8,061.8
2.2 'Other' Deposits with Reserve Bank	32.4	19.0	43.6	20.6	24.0
3 M_1 (1 + 2)	18,949.4	18,079.6	19,251.6	19,243.6	19,760.0
4 Post Office Saving Bank Deposits	50.4	50.4	50.4	50.4	50.4
5 M_2 (3 + 4)	18,999.8	18,130.0	19,302.0	19,294.1	19,810.4
6 Time Deposits with Banks	64,870.9	59,482.7	67,065.3	67,060.8	67,694.1
7 M_3 (3 + 6)	83,820.2	77,562.3	86,316.8	86,304.4	87,454.1
8 Total Post Office Deposits	259.7	259.7	259.7	259.7	259.7
9 M_4 (7 + 8)	84,079.9	77,822.0	86,576.5	86,564.1	87,713.8

No. 7: Sources of Money Stock (M_3)

(₹ Billion)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2012-13	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Net Bank Credit to Government	**27,072.1**	**25,365.3**	**28,432.2**	**29,178.7**	**29,268.9**
1.1 RBI's net credit to Government (1.1.1–1.1.2)	5,905.8	5,675.6	6,456.1	6,883.0	6,784.6
1.1.1 Claims on Government	6,581.4	5,677.0	6,457.6	6,884.4	6,786.0
1.1.1.1 Central Government	6,580.2	5,673.2	6,453.9	6,859.9	6,773.6
1.1.1.2 State Governments	1.2	3.8	3.7	24.5	12.4
1.1.2 Government deposits with RBI	675.6	1.4	1.4	1.4	1.4
1.1.2.1 Central Government	675.2	1.0	1.0	1.0	1.0
1.1.2.2 State Governments	0.4	0.4	0.4	0.4	0.4
1.2 Other Banks' Credit to Government	21,166.3	19,689.7	21,976.1	22,295.7	22,484.3
2 Bank Credit to Commercial Sector	**56,646.6**	**51,363.2**	**57,832.1**	**57,613.2**	**58,178.6**
2.1 RBI's credit to commercial sector	30.6	41.9	24.1	21.3	21.2
2.2 Other banks' credit to commercial sector	56,616.1	51,321.3	57,808.0	57,591.9	58,157.4
2.2.1 Bank credit by commercial banks	52,604.6	47,630.4	53,792.3	53,580.3	54,150.0
2.2.2 Bank credit by co-operative banks	3,968.7	3,636.4	3,972.5	3,968.2	3,963.3
2.2.3 Investments by commercial and co-operative banks in other securities	42.8	54.5	43.2	43.4	44.0
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**16,366.6**	**16,466.9**	**16,735.5**	**17,211.3**	**17,377.8**
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	15,580.6	15,957.7	15,949.5	16,425.3	16,591.8
3.1.1 Gross foreign assets	15,580.8	15,957.8	15,953.8	16,425.8	16,592.1
3.1.2 Foreign liabilities	0.2	0.1	4.2	0.5	0.3
3.2 Other banks' net foreign exchange assets	786.0	509.2	786.0	786.0	786.0
4 Government's Currency Liabilities to the Public	**153.4**	**139.0**	**157.2**	**157.2**	**157.2**
5 Banking Sector's Net Non-monetary Liabilities	**16,418.5**	**15,772.2**	**16,840.2**	**17,855.9**	**17,528.3**
5.1 Net non-monetary liabilities of RBI	6,925.0	7,255.6	7,348.9	7,843.3	8,112.9
5.2 Net non-monetary liabilities of other banks (residual)	9,493.4	8,516.5	9,491.3	10,012.6	9,415.5
M_3 (1+2+3+4–5)	**83,820.2**	**77,562.3**	**86,316.8**	**86,304.4**	**87,454.1**

No. 8: Monetary Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2012-13	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
Monetary Aggregates					
M_1 (1.1 + 1.2.1+1.3)	18,834.7	17,959.9	19,141.5	19,133.7	19,648.7
NM_2 (M_1 + 1.2.2.1)	46,970.6	43,766.8	48,238.7	48,216.2	49,010.8
NM_3 (NM_2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	83,575.6	77,343.0	85,965.7	86,013.3	87,228.1
1 Components					
1.1 Currency with the Public	11,461.0	10,708.9	11,786.5	11,948.2	11,686.6
1.2 Aggregate Deposits of Residents	69,865.6	64,580.8	71,971.8	71,792.7	73,187.3
1.2.1 Demand Deposits	7,341.3	7,232.0	7,311.5	7,164.8	7,938.1
1.2.2 Time Deposits of Residents	62,524.3	57,348.8	64,660.4	64,627.8	65,249.2
1.2.2.1 Short-term Time Deposits	28,135.9	25,806.9	29,097.2	29,082.5	29,362.1
1.2.2.1.1 Certificates of Deposit (CDs)	3,831.4	4,224.0	3,562.4	3,514.6	3,514.6
1.2.2.2 Long-term Time Deposits	34,388.4	31,541.8	35,563.2	35,545.3	35,887.1
1.3 ‘Other’ Deposits with RBI	32.4	19.0	43.6	20.6	24.0
1.4 Call/Term Funding from Financial Institutions	2,216.6	2,034.4	2,163.8	2,251.8	2,330.2
2 Sources					
2.1 Domestic Credit	85,823.3	78,267.2	88,422.2	89,012.4	89,678.0
2.1.1 Net Bank Credit to the Government	26,579.4	24,932.0	27,932.6	28,669.6	28,760.1
2.1.1.1 Net RBI credit to the Government	5,905.8	5,675.6	6,456.1	6,883.0	6,784.6
2.1.1.2 Credit to the Government by the Banking System	20,673.6	19,256.4	21,476.4	21,786.6	21,975.5
2.1.2 Bank Credit to the Commercial Sector	59,243.9	53,335.3	60,489.7	60,342.9	60,917.9
2.1.2.1 RBI Credit to the Commercial Sector	30.6	41.9	24.1	21.3	21.2
2.1.2.2 Credit to the Commercial Sector by the Banking System	59,213.4	53,293.4	60,465.6	60,321.6	60,896.7
2.1.2.2.1 Other Investments (Non-SLR Securities)	3,674.6	2,950.3	3,761.8	3,826.7	3,826.7
2.2 Government’s Currency Liabilities to the Public	153.4	139.0	157.2	157.2	157.2
2.3 Net Foreign Exchange Assets of the Banking Sector	14,775.0	14,881.6	14,931.2	15,239.1	15,405.7
2.3.1 Net Foreign Exchange Assets of the RBI	15,580.6	15,957.7	15,949.5	16,425.3	16,591.8
2.3.2 Net Foreign Currency Assets of the Banking System	–805.6	–1,076.1	–1,018.3	–1,186.1	–1,186.1
2.4 Capital Account	12,869.4	13,071.4	13,822.0	14,351.9	14,614.1
2.5 Other items (net)	4,306.7	2,873.4	3,722.9	4,043.5	3,398.7

No. 9: Liquidity Aggregates

(₹ Billion)

Aggregates	2012-13	2012	2013		
		Jun.	Apr.	May	Jun.
	1	2	3	4	5
1 NM_3	**83,575.6**	**77,343.0**	**84,605.5**	**85,965.7**	**87,228.1**
2 Postal Deposits	1,398.8	1,279.4	1,398.8	1,398.8	1,398.8
3 L_1 (1 + 2)	**84,974.4**	**78,622.4**	**86,004.3**	**87,364.5**	**88,626.9**
4 Liabilities of Financial Institutions	29.3	29.3	29.3	29.3	29.3
4.1 Term Money Borrowings	26.6	26.6	26.6	26.6	26.6
4.2 Certificates of Deposit	0.3	0.3	0.3	0.3	0.3
4.3 Term Deposits	2.5	2.5	2.5	2.5	2.5
5 L_2 (3 + 4)	**85,003.7**	**78,651.7**	**86,033.6**	**87,393.8**	**88,656.2**
6 Public Deposits with Non-Banking Financial Companies	99.4	100.6			99.4
7 L_3 (5 + 6)	**85,103.1**	**78,752.3**			**88,755.6**

No. 10: Reserve Bank of India Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2012-13	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	11,909.8	11,176.5	12,284.4	12,418.9	12,175.0
1.2 Bankers' Deposits with the RBI	3,206.7	3,434.6	3,074.3	3,391.9	3,465.9
1.2.1 Scheduled Commercial Banks	3,018.9	3,254.3	2,896.9	3,218.2	3,287.7
1.3 'Other' Deposits with the RBI	32.4	19.0	43.6	20.6	24.0
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	15,148.9	14,630.1	15,402.3	15,831.5	15,664.9
2 Sources					
2.1 RBI's Domestic Credit	6,339.9	5,789.0	6,644.4	7,092.3	7,028.7
2.1.1 Net RBI credit to the Government	5,905.8	5,675.6	6,456.1	6,883.0	6,784.6
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1.1 + 2.1.1.1.2 + 2.1.1.1.3 + 2.1.1.1.4 – 2.1.1.1.5)	5,905.0	5,672.2	6,452.9	6,858.9	6,772.6
2.1.1.1.1 Loans and Advances to the Central Government	–	–	–	119.4	15.7
2.1.1.1.2 Investments in Treasury Bills	–	–	–	–	–
2.1.1.1.3 Investments in dated Government Securities	6,578.3	5,670.9	6,451.8	6,739.2	6,755.4
2.1.1.1.3.1 Central Government Securities	6,567.8	5,660.5	6,441.3	6,728.7	6,744.9
2.1.1.1.4 Rupee Coins	1.9	2.3	2.1	1.3	2.5
2.1.1.1.5 Deposits of the Central Government	675.2	1.0	1.0	1.0	1.0
2.1.1.2 Net RBI credit to State Governments	0.8	3.4	3.2	24.1	12.0
2.1.2 RBI's Claims on Banks	403.5	71.5	164.2	188.1	222.9
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	403.4	70.7	162.4	186.4	221.2
2.1.3 RBI's Credit to Commercial Sector	30.6	41.9	24.1	21.3	21.2
2.1.3.1 Loans and Advances to Primary Dealers	17.4	5.9	10.9	8.1	8.1
2.1.3.2 Loans and Advances to NABARD	–	–	–	–	–
2.2 Government's Currency Liabilities to the Public	153.4	139.0	157.2	157.2	157.2
2.3 Net Foreign Exchange Assets of the RBI	15,580.6	15,957.7	15,949.5	16,425.3	16,591.8
2.3.1 Gold	1,397.4	1,450.6	1,290.0	1,290.0	1,290.0
2.3.2 Foreign Currency Assets	14,183.4	14,507.3	14,659.7	15,135.4	15,302.0
2.4 Capital Account	6,364.9	6,664.8	6,666.2	7,145.6	7,407.7
2.5 Other Items (net)	560.1	590.8	682.7	697.7	705.2

No. 11: Reserve Money - Components and Sources

(₹ Billion)

Item	Outstanding as on March 31/ last Fridays of the month/ Fridays						
	2012-13	2012	2013				
		Jun. 29	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
	1	2	3	4	5	6	7
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	15,148.9	14,630.1	15,402.3	15,459.5	15,831.5	15,512.2	15,664.9
1 Components							
1.1 Currency in Circulation	11,909.8	11,176.5	12,284.4	12,385.2	12,418.9	12,327.8	12,175.0
1.2 Bankers' Deposits with RBI	3,206.7	3,434.6	3,074.3	3,047.6	3,391.9	3,164.1	3,465.9
1.3 'Other' Deposits with RBI	32.4	19.0	43.6	26.7	20.6	20.3	24.0
2 Sources							
2.1 Net Reserve Bank Credit to Government	5,905.8	5,675.6	6,456.1	6,380.1	6,883.0	6,551.9	6,784.6
2.2 Reserve Bank Credit to Banks	403.5	71.5	164.2	301.5	188.1	185.4	222.9
2.3 Reserve Bank Credit to Commercial Sector	30.6	41.9	24.1	21.5	21.3	21.3	21.2
2.4 Net Foreign Exchange Assets of RBI	15,580.6	15,957.7	15,949.5	16,109.5	16,425.3	16,689.6	16,591.8
2.5 Government's Currency Liabilities to the Public	153.4	139.0	157.2	157.2	157.2	157.2	157.2
2.6 Net Non- Monetary Liabilities of RBI	6,925.0	7,255.6	7,348.9	7,510.3	7,843.3	8,093.1	8,112.9

No. 12: Commercial Bank Survey

(₹ Billion)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2012-13	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	66,677.8	61,518.8	68,791.2	68,609.8	70,004.9
1.1.1 Demand Deposits	6,623.0	6,512.9	6,595.9	6,448.4	7,221.9
1.1.2 Time Deposits of Residents	60,054.8	55,005.9	62,195.3	62,161.4	62,783.0
1.1.2.1 Short-term Time Deposits	27,024.7	24,752.6	27,987.9	27,972.6	28,252.4
1.1.2.1.1 Certificates of Deposits (CDs)	3,835.3	4,224.0	3,562.4	3,514.6	3,514.6
1.1.2.2 Long-term Time Deposit	33,030.1	30,253.2	34,207.4	34,188.8	34,530.7
1.2 Call/Term Funding from Financial Institutions	2,216.6	2,034.4	2,163.8	2,251.8	2,330.2
2 Sources					
2.1 Domestic Credit	76,376.1	69,160.5	78,369.6	78,540.7	79,301.7
2.1.1 Credit to the Government	20,036.5	18,615.6	20,845.9	21,156.6	21,343.2
2.1.2 Credit to the Commercial Sector	56,339.6	50,544.9	57,523.7	57,384.1	57,958.5
2.1.2.1 Bank Credit	52,604.6	47,630.4	53,792.3	53,580.3	54,150.0
2.1.2.1.1 Non-food Credit	51,664.1	46,555.2	52,612.0	52,469.0	52,469.0
2.1.2.2 Net Credit to Primary Dealers	59.0	28.6	35.2	42.5	46.6
2.1.2.3 Investments in Other Approved Securities	24.5	25.2	24.0	24.2	24.9
2.1.2.4 Other Investments (in non-SLR Securities)	3,651.5	2,860.7	3,672.2	3,737.1	3,737.1
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	–782.2	–1,076.1	–1,018.3	–1,186.1	–1,186.1
2.2.1 Foreign Currency Assets	919.6	575.5	772.2	627.2	627.2
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	826.8	809.2	874.2	896.6	896.6
2.2.3 Overseas Foreign Currency Borrowings	875.0	842.4	916.3	916.7	916.7
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	3,011.7	3,594.9	3,188.9	3,459.0	3,511.2
2.3.1 Balances with the RBI	2,822.7	3,254.3	2,896.9	3,218.2	3,287.7
2.3.2 Cash in Hand	404.9	411.3	454.4	427.1	444.8
2.3.3 Loans and Advances from the RBI	215.9	70.7	162.4	186.4	221.2
2.4 Capital Account	6,374.2	6,164.9	6,914.1	6,964.7	6,964.7
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	3,337.0	1,961.2	2,671.1	2,987.3	2,327.1
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	3,241.3	2,956.7	3,105.7	3,140.1	3,144.9
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	–809.8	–707.9	–646.6	–700.6	–923.0

No. 13: Scheduled Commercial Banks' Investments

(₹ Billion)

Item	As on March 22, 2013	2012	2013		
		Jun. 29	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 SLR Securities	20,061.0	18,640.8	20,826.2	21,180.9	21,368.1
2 Commercial Paper	324.3	177.1	305.3	300.2	238.7
3 Shares issued by					
3.1 PSUs	86.8	75.2	84.4	84.2	84.5
3.2 Private Corporate Sector	338.0	319.9	333.2	335.1	334.6
3.3 Others	8.7	5.7	8.2	8.3	10.1
4 Bonds/Debentures issued by					
4.1 PSUs	460.5	424.8	451.8	404.6	437.6
4.2 Private Corporate Sector	1,026.2	809.2	1,010.7	1,041.4	1,078.2
4.3 Others	480.8	399.9	486.1	475.4	500.5
5 Instruments issued by					
5.1 Mutual funds	436.7	210.6	589.4	649.2	364.9
5.2 Financial institutions	489.5	438.4	461.5	438.6	456.2

No. 14: Business in India - All Scheduled Banks and All Scheduled Commercial Banks

(₹ Billion)

Item	As on the Last Reporting Friday (in case of March)/ Last Friday							
	All Scheduled Banks				All Scheduled Commercial Banks			
	2012-13	2012	2013		2012-13	2012	2013	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	218	236	218	218	151	169	151	151
1 Liabilities to the Banking System	1,368.2	1,222.8	1,401.4	1,107.0	1,331.0	1,191.6	1,364.2	1,071.3
1.1 Demand and Time Deposits from Banks	879.3	834.7	941.0	755.5	846.5	806.2	906.1	721.6
1.2 Borrowings from Banks	398.0	319.0	366.1	303.3	393.6	316.3	364.0	301.5
1.3 Other Demand and Time Liabilities	90.9	69.1	94.2	48.3	90.9	69.1	94.2	48.3
2 Liabilities to Others	75,818.5	69,988.3	77,678.2	79,338.4	73,837.5	68,161.4	75,661.5	77,293.4
2.1 Aggregate Deposits	69,420.0	64,086.4	71,442.4	72,872.1	67,504.5	62,328.0	69,495.3	70,901.5
2.1.1 Demand	6,783.3	6,671.9	6,711.1	7,387.4	6,623.0	6,512.9	6,550.6	7,221.9
2.1.2 Time	62,636.7	57,414.6	64,731.2	65,484.7	60,881.5	55,815.1	62,944.7	63,679.7
2.2 Borrowings	2,227.2	2,048.6	2,174.2	2,343.7	2,216.6	2,034.4	2,163.8	2,330.2
2.3 Other Demand and Time Liabilities	4,171.3	3,853.3	4,061.6	4,122.6	4,116.3	3,799.0	4,002.4	4,061.7
3 Borrowings from Reserve Bank	217.2	71.5	164.2	222.9	215.9	70.7	162.4	221.2
3.1 Against Usance Bills /Promissory Notes	–	–	–	–	–	–	–	–
3.2 Others	217.2	71.5	164.2	222.9	215.9	70.7	162.4	221.2
4 Cash in Hand and Balances with Reserve Bank	3,320.9	3,761.4	3,446.6	3,828.4	3,227.6	3,665.6	3,352.6	3,732.5
4.1 Cash in Hand	414.8	421.0	466.0	455.0	404.9	411.3	455.7	444.8
4.2 Balances with Reserve Bank	2,906.1	3,340.4	2,980.6	3,373.4	2,822.7	3,254.3	2,896.9	3,287.7
5 Assets with the Banking System	2,448.3	2,198.3	2,284.0	2,338.0	2,199.5	1,928.0	1,997.2	2,040.9
5.1 Balances with Other Banks	1,051.5	857.3	1,034.3	1,186.0	960.8	762.2	941.6	1,081.7
5.1.1 In Current Account	127.6	127.2	124.7	138.1	111.9	111.0	109.0	118.5
5.1.2 In Other Accounts	923.9	730.1	909.6	1,047.9	848.9	651.2	832.6	963.2
5.2 Money at Call and Short Notice	397.6	317.5	399.0	342.9	296.0	210.1	284.1	219.0
5.3 Advances to Banks	136.1	163.1	166.2	144.7	126.9	154.3	147.4	135.8
5.4 Other Assets	863.0	860.4	684.5	664.4	815.8	801.5	624.0	604.4
6 Investment	20,660.3	19,196.3	21,431.9	21,983.5	20,061.0	18,640.8	20,826.2	21,368.1
6.1 Government Securities	20,633.5	19,168.8	21,408.4	21,956.8	20,036.5	18,615.6	20,804.4	21,343.2
6.2 Other Approved Securities	26.7	27.5	23.5	26.6	24.5	25.2	21.7	24.9
7 Bank Credit	54,281.4	49,083.1	55,381.6	55,856.2	52,604.6	47,630.4	53,687.8	54,150.0
7a Food Credit	1,045.6	1,149.8	1,261.8	1,204.9	964.2	1,075.2	1,180.4	1,123.6
7.1 Loans, Cash-credits and Overdrafts	52,244.1	47,315.1	53,343.9	53,807.8	50,591.7	45,881.9	51,673.8	52,125.1
7.2 Inland Bills-Purchased	253.1	178.1	252.6	249.2	248.6	173.9	248.5	245.5
7.3 Inland Bills-Discounted	1,109.9	984.6	1,123.1	1,102.9	1,094.5	973.6	1,107.3	1,087.4
7.4 Foreign Bills-Purchased	216.6	211.2	211.5	222.6	214.9	210.5	210.6	221.6
7.5 Foreign Bills-Discounted	457.7	394.1	450.5	473.8	454.7	390.3	447.5	470.5

No. 15: Deployment of Gross Bank Credit by Major Sectors

(₹ Billion)

Item	Outstanding as on				Growth (%)	
	Mar. 22, 2013	2012	2013		Financial year so far	Y-o-Y
		Jun. 29	May 31	Jun. 28	2013-14	2013
	1	2	3	4	5	6
1 Gross Bank Credit	**49,642**	**45,102**	**50,605**	**51,019**	**2.8**	**13.1**
1.1 Food Credit	**946**	**1,069**	**1,158**	**1,101**	**16.4**	**3.0**
1.2 Non-food Credit	**48,696**	**44,032**	**49,447**	**49,918**	**2.5**	**13.4**
1.2.1 Agriculture & Allied Activities	**5,899**	**5,508**	**6,034**	**6,051**	**2.6**	**9.9**
1.2.2 Industry	**22,302**	**20,006**	**22,593**	**22,820**	**2.3**	**14.1**
1.2.2.1 Micro & Small	2,843	2,416	2,865	2,928	3.0	21.2
1.2.2.2 Medium	1,247	1,178	1,335	1,321	5.9	12.2
1.2.2.3 Large	18,211	16,412	18,393	18,572	2.0	13.2
1.2.3 Services	**11,486**	**10,434**	**11,547**	**11,699**	**1.9**	**12.1**
1.2.3.1 Transport Operators	796	779	816	829	4.1	6.4
1.2.3.2 Computer Software	169	147	177	178	5.2	21.0
1.2.3.3 Tourism, Hotels & Restaurants	354	338	361	362	2.1	7.0
1.2.3.4 Shipping	82	75	87	86	4.4	14.8
1.2.3.5 Professional Services	564	491	597	607	7.5	23.6
1.2.3.6 Trade	2,760	2,363	2,836	2,818	2.1	19.3
1.2.3.6.1 Wholesale Trade	1,501	1,327	1,523	1,489	–0.8	12.2
1.2.3.6.2 Retail Trade	1,259	1,036	1,313	1,330	5.6	28.3
1.2.3.7 Commercial Real Estate	1,261	1,160	1,320	1,339	6.2	15.4
1.2.3.8 Non-Banking Financial Companies (NBFCs)	2,570	2,542	2,497	2,589	0.8	1.9
1.2.3.9 Other Services	2,930	2,539	2,856	2,892	–1.3	13.9
1.2.4 Personal Loans	**9,009**	**8,085**	**9,273**	**9,348**	**3.8**	**15.6**
1.2.4.1 Consumer Durables	84	75	89	90	7.9	21.0
1.2.4.2 Housing	4,600	4,144	4,799	4,849	5.4	17.0
1.2.4.3 Advances against Fixed Deposits	611	523	603	631	3.3	20.6
1.2.4.4 Advances to Individuals against share & bonds	31	28	30	30	–3.5	8.0
1.2.4.5 Credit Card Outstanding	249	215	230	230	–7.8	6.9
1.2.4.6 Education	550	509	552	555	1.1	9.1
1.2.4.7 Vehicle Loans	1,111	940	1,167	1,167	5.1	24.2
1.2.4.8 Other Personal Loans	1,774	1,652	1,803	1,795	1.2	8.7
1.2A Priority Sector	**15,398**	**14,045**	**16,166**	**16,105**	**4.6**	**14.7**
1.2A.1 Agriculture & Allied Activities	5,899	5,508	6,034	6,051	2.6	9.9
1.2A.2 Micro & Small Enterprises	5,623	4,937	6,031	6,103	8.5	23.6
1.2A.2.1 Manufacturing	2,843	2,416	2,865	2,928	3.0	21.2
1.2A.2.2 Services	2,779	2,521	3,166	3,175	14.2	25.9
1.2A.3 Housing	2,672	2,554	2,834	2,866	7.2	12.2
1.2A.4 Micro-Credit	165	152	179	173	4.6	13.7
1.2A.5 Education Loans	526	488	531	534	1.5	9.5
1.2A.6 State-Sponsored Orgs. for SC/ST	1	1	1	1	0.0	–10.1
1.2A.7 Weaker Sections	2,734	2,387	2,893	2,951	7.9	23.6
1.2A.8 Export Credit	422	392	451	454	7.6	16.0

No. 16: Industry-wise Deployment of Gross Bank Credit

(₹ Billion)

Industry	Outstanding as on				Growth (%)	
	Mar. 22, 2013	2012	2013		Financial year so far	Y-o-Y
		Jun. 29	May 31	Jun. 28	2013-14	2013
	1	2	3	4	5	6
1 Industry	**22,302**	**20,006**	**22,593**	**22,820**	**2.3**	**14.1**
1.1 Mining & Quarrying (incl. Coal)	**346**	**335**	**316**	**312**	**–10.0**	**–6.9**
1.2 Food Processing	**1,174**	**928**	**1,244**	**1,246**	**6.1**	**34.2**
1.2.1 Sugar	330	298	345	339	2.9	13.8
1.2.2 Edible Oils & Vanaspati	171	125	178	182	6.7	46.0
1.2.3 Tea	26	22	26	27	5.2	22.5
1.2.4 Others	648	483	695	697	7.7	44.4
1.3 Beverage & Tobacco	**165**	**147**	**153**	**159**	**–3.5**	**8.6**
1.4 Textiles	**1,835**	**1,615**	**1,845**	**1,852**	**0.9**	**14.6**
1.4.1 Cotton Textiles	925	830	916	922	–0.3	11.0
1.4.2 Jute Textiles	22	17	23	22	1.0	30.0
1.4.3 Man-Made Textiles	189	158	190	192	1.5	21.6
1.4.4 Other Textiles	699	610	716	715	2.3	17.3
1.5 Leather & Leather Products	**87**	**82**	**89**	**90**	**4.3**	**10.1**
1.6 Wood & Wood Products	**77**	**66**	**79**	**81**	**5.1**	**21.8**
1.7 Paper & Paper Products	**283**	**258**	**297**	**296**	**4.7**	**14.9**
1.8 Petroleum, Coal Products & Nuclear Fuels	**643**	**620**	**523**	**566**	**–12.0**	**–8.7**
1.9 Chemicals & Chemical Products	**1,592**	**1,269**	**1,446**	**1,480**	**–7.0**	**16.7**
1.9.1 Fertiliser	269	137	275	225	–16.5	64.5
1.9.2 Drugs & Pharmaceuticals	495	460	501	529	6.7	14.8
1.9.3 Petro Chemicals	441	337	289	337	–23.6	0.1
1.9.4 Others	387	335	381	390	0.8	16.3
1.10 Rubber, Plastic & their Products	**312**	**299**	**317**	**317**	**1.6**	**6.1**
1.11 Glass & Glassware	**74**	**67**	**72**	**71**	**–4.4**	**6.1**
1.12 Cement & Cement Products	**459**	**377**	**460**	**468**	**2.1**	**24.2**
1.13 Basic Metal & Metal Product	**3,141**	**2,664**	**3,176**	**3,219**	**2.5**	**20.8**
1.13.1 Iron & Steel	2,366	2,009	2,411	2,459	3.9	22.4
1.13.2 Other Metal & Metal Product	775	655	765	760	–2.0	16.0
1.14 All Engineering	**1,284**	**1,165**	**1,308**	**1,335**	**4.0**	**14.6**
1.14.1 Electronics	334	273	301	306	–8.4	12.1
1.14.2 Others	950	892	1,008	1,029	8.3	15.4
1.15 Vehicles, Vehicle Parts & Transport Equipment	**589**	**560**	**598**	**608**	**3.3**	**8.5**
1.16 Gems & Jewellery	**611**	**536**	**682**	**686**	**12.2**	**27.9**
1.17 Construction	**522**	**491**	**543**	**538**	**3.2**	**9.5**
1.18 Infrastructure	**7,297**	**6,488**	**7,722**	**7,727**	**5.9**	**19.1**
1.18.1 Power	4,158	3,421	4,416	4,439	6.7	29.8
1.18.2 Telecommunications	878	977	936	910	3.7	–6.8
1.18.3 Roads	1,313	1,159	1,389	1,408	7.2	21.5
1.18.4 Other Infrastructure	948	932	981	970	2.3	4.1
1.19 Other Industries	**1,810**	**2,037**	**1,721**	**1,768**	**–2.3**	**–13.2**

No. 17: State Co-operative Banks Maintaining Accounts with the Reserve Bank of India

(₹ Billion)

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday					
	2012-13	2012	2013			
		Mar. 30	Feb. 22	Mar. 8	Mar. 22	Mar. 29
	1	2	3	4	5	6
Number of Reporting Banks	31	31	31	31	31	31
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	356.5	315.3	353.6	353.1	352.0	356.5
2 Demand and Time Liabilities						
2.1 Demand Liabilities	127.2	126.1	122.0	123.5	122.0	127.2
2.1.1 Deposits						
2.1.1.1 Inter-Bank	25.0	19.6	16.8	20.2	21.5	25.0
2.1.1.2 Others	70.1	66.4	70.1	69.2	68.1	70.1
2.1.2 Borrowings from Banks	10.2	12.3	14.6	13.2	11.3	10.2
2.1.3 Other Demand Liabilities	21.8	27.8	20.6	21.0	21.1	21.8
2.2 Time Liabilities	802.5	715.1	784.9	784.5	790.4	802.5
2.2.1 Deposits						
2.2.1.1 Inter-Bank	507.0	455.4	492.0	492.8	498.2	507.0
2.2.1.2 Others	286.4	248.9	283.6	283.9	284.0	286.4
2.2.2 Borrowings from Banks	0.5	3.6	2.1	0.2	1.0	0.5
2.2.3 Other Time Liabilities	8.6	7.2	7.3	7.6	7.3	8.6
3 Borrowing from Reserve Bank	–	–	–	–	–	–
4 Borrowings from a notified bank / State Government	319.3	275.9	299.3	308.4	314.0	319.3
4.1 Demand	132.1	106.9	122.3	128.1	129.7	132.1
4.2 Time	187.2	169.0	177.0	180.3	184.3	187.2
5 Cash in Hand and Balances with Reserve Bank	44.2	37.1	30.9	33.2	33.6	44.2
5.1 Cash in Hand	2.1	1.9	2.0	2.1	2.0	2.1
5.2 Balance with Reserve Bank	42.1	35.2	29.0	31.1	31.6	42.1
6 Balances with Other Banks in Current Account	7.0	6.5	6.0	5.5	6.0	7.0
7 Investments in Government Securities	269.3	251.8	268.4	268.3	269.2	269.3
8 Money at Call and Short Notice	156.2	159.1	131.3	139.4	223.7	156.2
9 Bank Credit (10.1+11)	365.0	310.3	355.6	361.1	364.5	365.0
10 Advances						
10.1 Loans, Cash-Credits and Overdrafts	364.9	310.1	355.5	361.0	364.5	364.9
10.2 Due from Banks	570.8	461.6	572.9	573.5	569.0	570.8
11 Bills Purchased and Discounted	0.1	0.1	0.1	0.1	0.1	0.1

Price and Production

No. 18: Consumer Price Index (Base: 2010=100)

Group/Sub group	2012-13			Rural			Urban			Combined		
	Rural	Urban	Combined	Jun. 12	May 13	Jun. 13	Jun. 12	May 13	Jun. 13	Jun. 12	May 13	Jun. 13
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food, beverages and tobacco	**125.0**	**124.3**	**124.8**	**120.2**	**130.8**	**133.8**	**120.4**	**132.2**	**135.6**	**120.3**	**131.3**	**134.4**
1.1 Cereals and products	117.8	115.2	117.1	110.9	126.9	128.7	106.4	127.8	129.8	109.7	127.1	129.0
1.2 Pulses and products	112.1	113.6	112.6	106.8	115.7	116.6	106.0	114.8	114.8	106.6	115.4	116.0
1.3 Oils and fats	138.5	145.6	140.8	132.3	141.5	142.4	142.8	144.1	143.5	135.7	142.3	142.8
1.4 Egg, fish and meat	128.8	128.8	128.8	125.2	136.2	138.9	125.5	140.0	145.8	125.3	137.5	141.2
1.5 Milk and products	132.6	128.0	130.9	129.6	138.8	140.4	125.5	132.6	134.8	128.1	136.5	138.3
1.6 Condiments and spices	126.1	121.9	124.9	122.5	129.7	131.7	119.5	127.4	129.2	121.6	129.0	131.0
1.7 Vegetables	129.8	121.7	127.2	129.0	130.4	143.8	125.3	134.0	152.0	127.8	131.6	146.4
1.8 Fruits	137.4	135.9	136.7	136.0	144.1	148.0	139.8	145.4	147.7	137.6	144.6	147.9
1.9 Sugar etc	108.9	109.3	109.0	100.3	109.7	110.0	99.6	107.6	107.1	100.1	109.1	109.2
1.10 Non-alcoholic beverages	124.5	124.2	124.4	120.5	130.7	131.9	119.3	133.6	134.6	120.0	131.9	133.1
1.11 Prepared meals etc	124.1	125.2	124.6	120.2	130.1	131.5	120.4	133.5	134.4	120.3	131.8	132.9
1.12 Pan, tobacco and intoxicants	132.2	133.4	132.6	128.7	138.7	140.3	130.1	143.2	144.9	129.1	139.9	141.6
2 Fuel and light	**127.4**	**124.8**	**126.4**	**123.7**	**132.7**	**134.1**	**121.1**	**131.2**	**132.0**	**122.7**	**132.1**	**133.4**
3 Housing	**--**	**121.0**	**121.0**	**--**	**--**	**--**	**117.5**	**128.6**	**130.1**	**117.5**	**128.6**	**130.1**
4 Clothing, bedding and footwear	**131.6**	**132.5**	**131.9**	**127.3**	**138.3**	**139.7**	**128.4**	**139.8**	**140.7**	**127.7**	**138.8**	**140.1**
4.1 Clothing and bedding	132.1	133.8	132.7	127.7	138.9	140.2	129.5	141.4	142.3	128.3	139.8	141.0
4.2 Footwear	128.5	125.0	127.2	124.8	134.8	136.2	121.7	130.4	131.1	123.7	133.2	134.4
5 Miscellaneous	**120.7**	**116.8**	**118.9**	**118.5**	**124.4**	**125.6**	**114.7**	**120.9**	**122.0**	**116.7**	**122.8**	**123.9**
5.1 Medical care	116.6	115.2	116.2	114.6	120.6	121.6	112.4	120.3	120.7	113.9	120.5	121.3
5.2 Education, stationery etc	117.2	116.5	116.8	114.9	121.0	122.4	113.7	122.2	123.9	114.2	121.7	123.2
5.3 Recreation and amusement	114.4	106.6	109.7	112.3	117.9	118.8	105.0	110.4	111.2	107.9	113.4	114.2
5.4 Transport and communication	122.0	117.4	119.4	120.0	126.0	127.4	116.6	119.9	121.5	118.1	122.6	124.1
5.5 Personal care and effects	117.9	115.0	116.7	115.3	122.5	123.6	112.5	119.2	119.7	114.2	121.2	122.0
5.6 Household requisites	127.9	119.8	124.6	125.5	128.9	130.1	116.8	123.5	124.2	122.0	126.7	127.7
5.7 Others	131.5	132.6	131.9	128.2	139.0	140.8	127.1	143.1	144.3	127.8	140.7	142.2
General Index (All Groups)	**124.5**	**121.8**	**123.3**	**120.5**	**129.8**	**132.1**	**118.5**	**128.4**	**130.5**	**119.6**	**129.2**	**131.4**

Source: Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India.

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2012-13	2012	2013	
				Jun.	May	Jun.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2001	4.63	215	208	228	231
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	672	646	719	729
3 Consumer Price Index for Rural Labourers	1986-87	–	673	648	720	730

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.

No. 20: Monthly Average Price of Gold and Silver in Mumbai

Item	2012-13	2012	2013	
		Jun.	May	Jun.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	30,164	29,819	26,769	27,178
2 Silver (₹ per kilogram)	57,602	54,599	45,037	43,664

Source: Bombay Bullion Association Ltd.

No. 21: Wholesale Price Index

(Base: 2004-05 = 100)

Commodities	Weight	2012-13	2012	2013		
			Jun.	Apr.	May (P)	Jun. (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**167.6**	**164.7**	**171.3**	**171.6**	**172.7**
1.1 PRIMARY ARTICLES	**20.118**	**220.0**	**215.0**	**226.5**	**229.3**	**232.5**
1.1.1 Food articles	**14.337**	**211.8**	**209.4**	**219.8**	**223.1**	**229.8**
1.1.1.1 Food Grains	4.090	207.1	193.3	216.5	216.9	220.3
1.1.1.1.1 Cereals	3.373	199.9	186.3	212.9	213.8	218.3
1.1.1.1.2 Pulses	0.717	241.3	226.1	233.2	231.6	229.7
1.1.1.2 Fruits & Vegetables	3.843	198.4	212.7	206.4	214.4	230.5
1.1.1.2.1 Vegetables	1.736	210.1	245.9	216.5	235.6	286.4
1.1.1.2.2 Fruits	2.107	188.8	185.3	198.1	197.0	184.5
1.1.1.3 Milk	3.238	208.1	206.0	211.1	213.2	213.7
1.1.1.4 Eggs, Meat & Fish	2.414	244.5	236.3	253.8	257.0	265.2
1.1.1.5 Condiments & Spices	0.569	209.5	196.3	230.0	232.0	229.8
1.1.1.6 Other Food Articles	0.183	242.2	244.0	250.9	241.8	241.1
1.1.2 Non-Food Articles	**4.258**	**201.9**	**194.1**	**209.7**	**208.5**	**208.8**
1.1.2.1 Fibres	0.877	208.3	198.9	218.7	219.1	228.3
1.1.2.2 Oil Seeds	1.781	198.0	184.1	210.4	207.6	202.5
1.1.2.3 Other Non-Food Articles	1.386	211.1	214.1	210.1	209.3	210.6
1.1.2.4 Flowers	0.213	148.5	128.3	164.3	167.5	171.1
1.1.3 Minerals	**1.524**	**346.9**	**326.6**	**336.0**	**346.5**	**324.9**
1.1.3.1 Metallic Minerals	0.489	439.0	442.2	430.5	446.8	392.8
1.1.3.2 Other Minerals	0.135	204.7	195.1	217.3	217.0	216.9
1.1.3.3 Crude Petroleum	0.900	318.2	283.6	302.5	311.4	304.3
1.2 FUEL & POWER	**14.910**	**186.5**	**181.1**	**193.7**	**192.0**	**194.0**
1.2.1 Coal	2.094	208.6	210.3	189.7	189.7	191.5
1.2.2 Mineral Oils	9.364	202.5	192.6	210.8	208.1	211.0
1.2.3 Electricity	3.452	129.8	132.4	149.6	149.6	149.6
1.3 MANUFACTURED PRODUCTS	**64.972**	**147.1**	**145.3**	**149.1**	**149.1**	**149.3**
1.3.1 Food Products	**9.974**	**163.5**	**157.6**	**166.8**	**167.1**	**167.7**
1.3.1.1 Dairy Products	0.568	176.1	175.7	176.3	176.5	177.0
1.3.1.2 Canning, Preserving & Processing of Food	0.358	144.0	143.6	152.3	152.0	152.5
1.3.1.3 Grain Mill Products	1.340	156.0	145.4	162.9	165.5	164.2
1.3.1.4 Bakery Products	0.444	130.0	128.1	136.6	136.5	137.0
1.3.1.5 Sugar, Khandsari & Gur	2.089	185.7	173.7	184.6	185.1	185.6
1.3.1.6 Edible Oils	3.043	148.1	146.1	147.1	146.9	146.1
1.3.1.7 Oil Cakes	0.494	210.8	194.9	228.6	230.1	228.5
1.3.1.8 Tea & Coffee Proccessing	0.711	163.3	160.9	173.4	171.6	183.2
1.3.1.9 Manufacture of Salt	0.048	182.2	181.8	185.0	185.4	185.0
1.3.1.10 Other Food Products	0.879	164.6	162.1	172.3	172.7	173.3
1.3.2 Beverages, Tobacco & Tobacco Products	**1.762**	**175.3**	**171.3**	**181.8**	**181.9**	**181.4**
1.3.2.1 Wine Industries	0.385	124.8	123.8	126.8	125.8	125.3
1.3.2.2 Malt Liquor	0.153	171.5	171.6	170.9	170.9	170.9
1.3.2.3 Soft Drinks & Carbonated Water	0.241	152.8	150.5	158.9	159.4	159.5
1.3.2.4 Manufacture of Bidi, Cigarettes, Tobacco & Zarda	0.983	201.3	194.9	210.8	211.2	210.5
1.3.3 Textiles	**7.326**	**131.4**	**130.2**	**134.4**	**135.0**	**135.3**
1.3.3.1 Cotton Textiles	2.605	146.2	145.0	152.1	152.2	152.2
1.3.3.1.1 Cotton Yarn	1.377	157.2	155.5	166.2	166.3	166.5
1.3.3.1.2 Cotton Fabric	1.228	133.9	133.2	136.3	136.3	136.1
1.3.3.2 Man-Made Textiles	2.206	124.1	121.6	127.1	126.7	127.5
1.3.3.2.1 Man-Made Fibre	1.672	124.0	121.3	126.7	126.8	126.8
1.3.3.2.2 Man-Made Fabric	0.533	124.3	122.6	128.1	126.3	129.9
1.3.3.3 Woollen Textiles	0.294	142.6	138.2	149.7	150.6	148.2
1.3.3.4 Jute, Hemp & Mesta Textiles	0.261	177.8	174.7	182.7	182.6	183.0
1.3.3.5 Other Misc. Textiles	1.960	111.9	113.3	110.5	112.6	113.5
1.3.4 Wood & Wood Products	**0.587**	**171.0**	**167.8**	**173.9**	**174.3**	**175.3**
1.3.4.1 Timber/Wooden Planks	0.181	140.5	139.1	141.8	141.8	141.9
1.3.4.2 Processed Wood	0.128	178.9	176.0	179.9	182.7	183.4
1.3.4.3 Plywood & Fibre Board	0.241	193.6	189.7	199.1	198.5	199.6
1.3.4.4 Others	0.038	146.1	138.7	147.5	147.7	152.6

No. 21: Wholesale Price Index (Concld.)

(Base: 2004-05 = 100)

Commodities	Weight	2012-13	2012	2013		
			Jun.	Apr.	May (P)	Jun. (P)
	1	2	3	4	5	6
1.3.5 Paper & Paper Products	**2.034**	**136.6**	**134.5**	**140.3**	**140.7**	**140.5**
1.3.5.1 Paper & Pulp	1.019	135.8	134.5	138.8	139.1	138.9
1.3.5.2 Manufacture of boards	0.550	128.2	126.2	130.6	130.9	130.4
1.3.5.3 Printing & Publishing	0.465	148.2	144.3	155.2	155.6	156.0
1.3.6 Leather & Leather Products	**0.835**	**134.2**	**133.0**	**135.6**	**136.1**	**138.1**
1.3.6.1 Leathers	0.223	112.2	110.1	113.3	112.1	112.1
1.3.6.2 Leather Footwear	0.409	149.8	149.8	150.0	151.6	155.1
1.3.6.3 Other Leather Products	0.203	126.9	124.5	131.0	131.3	132.3
1.3.7 Rubber & Plastic Products	**2.987**	**137.5**	**135.9**	**140.7**	**139.7**	**142.4**
1.3.7.1 Tyres & Tubes	0.541	163.1	162.8	165.8	162.8	169.2
1.3.7.1.1 Tyres	0.488	162.9	162.6	165.9	162.5	169.7
1.3.7.1.2 Tubes	0.053	165.1	164.9	165.1	165.1	165.1
1.3.7.2 Plastic Products	1.861	127.0	125.0	131.1	130.4	132.5
1.3.7.3 Rubber Products	0.584	147.4	146.0	148.3	147.9	149.1
1.3.8 Chemicals & Chemical Products	**12.018**	**143.6**	**141.9**	**146.2**	**146.1**	**146.0**
1.3.8.1 Basic Inorganic Chemicals	1.187	147.8	146.0	149.6	148.8	149.2
1.3.8.2 Basic Organic Chemicals	1.952	140.3	139.4	142.8	141.6	141.3
1.3.8.3 Fertilisers & Pesticides	3.145	144.7	140.2	147.8	147.8	147.2
1.3.8.3.1 Fertilisers	2.661	149.0	144.3	152.4	152.5	151.4
1.3.8.3.2 Pesticides	0.483	121.2	117.9	122.0	122.3	123.9
1.3.8.4 Paints, Varnishes & Lacquers	0.529	143.6	143.4	145.1	144.5	145.2
1.3.8.5 Dyestuffs & Indigo	0.563	126.9	126.8	128.2	127.9	128.3
1.3.8.6 Drugs & Medicines	0.456	124.2	123.5	126.1	125.8	126.2
1.3.8.7 Perfumes, Cosmetics, Toiletries etc.	1.130	151.9	150.7	153.9	154.6	154.9
1.3.8.8 Turpentine, Plastic Chemicals	0.586	140.0	139.1	145.8	145.6	145.8
1.3.8.9 Polymers including Synthetic Rubber	0.970	135.3	136.1	138.2	138.9	139.4
1.3.8.10 Petrochemical Intermediates	0.869	164.2	163.6	165.7	166.0	164.2
1.3.8.11 Matches, Explosives & other Chemicals	0.629	142.6	142.0	146.1	146.3	148.9
1.3.9 Non-Metallic Mineral Products	**2.556**	**163.3**	**161.3**	**166.2**	**164.8**	**166.6**
1.3.9.1 Structural Clay Products	0.658	164.7	161.9	168.1	165.9	171.6
1.3.9.2 Glass, Earthenware, Chinaware & their Products	0.256	130.8	129.4	131.4	131.2	130.5
1.3.9.3 Cement & Lime	1.386	168.6	167.5	171.3	169.8	170.3
1.3.9.4 Cement, Slate & Graphite Products	0.256	163.2	158.4	168.2	168.3	169.2
1.3.10 Basic Metals, Alloys & Metal Products	**10.748**	**166.1**	**166.8**	**164.3**	**163.8**	**163.0**
1.3.10.1 Ferrous Metals	8.064	156.3	157.9	154.7	154.6	153.9
1.3.10.1.1 Iron & Semis	1.563	161.6	167.1	155.3	155.1	153.0
1.3.10.1.2 Steel: Long	1.630	169.7	171.9	166.5	166.4	166.1
1.3.10.1.3 Steel: Flat	2.611	154.2	154.5	153.7	153.6	153.3
1.3.10.1.4 Steel: Pipes & Tubes	0.314	128.0	128.9	128.1	128.2	127.3
1.3.10.1.5 Stainless Steel & alloys	0.938	156.8	156.0	158.0	157.9	157.1
1.3.10.1.6 Castings & Forgings	0.871	138.9	138.5	141.1	141.1	140.4
1.3.10.1.7 Ferro alloys	0.137	151.7	153.2	153.4	153.8	152.1
1.3.10.2 Non-Ferrous Metals	1.004	160.9	159.9	161.3	161.0	162.0
1.3.10.2.1 Aluminium	0.489	134.1	132.9	134.7	133.5	134.4
1.3.10.2.2 Other Non-Ferrous Metals	0.515	186.4	185.7	186.7	187.2	188.2
1.3.10.3 Metal Products	1.680	216.0	214.0	211.9	209.3	207.2
1.3.11 Machinery & Machine Tools	**8.931**	**128.4**	**127.7**	**130.0**	**130.1**	**130.4**
1.3.11.1 Agricultural Machinery & Implements	0.139	137.0	136.4	137.7	137.7	137.7
1.3.11.2 Industrial Machinery	1.838	146.2	145.4	148.5	149.1	148.5
1.3.11.3 Construction Machinery	0.045	135.7	135.9	137.0	136.9	136.9
1.3.11.4 Machine Tools	0.367	154.4	152.5	158.1	158.3	158.3
1.3.11.5 Air Conditioner & Refrigerators	0.429	112.5	111.2	114.2	114.2	114.5
1.3.11.6 Non-Electrical Machinery	1.026	122.9	122.6	123.0	123.3	122.9
1.3.11.7 Electrical Machinery, Equipment & Batteries	2.343	133.0	132.2	134.5	135.2	135.3
1.3.11.8 Electrical Accessories, Wires, Cables etc.	1.063	143.4	143.2	147.3	145.7	149.3
1.3.11.9 Electrical Apparatus & Appliances	0.337	117.4	117.1	117.4	117.4	117.5
1.3.11.10 Electronics Items	0.961	86.7	86.1	87.2	86.8	86.4
1.3.11.11 IT Hardware	0.267	89.2	89.2	89.0	88.5	88.0
1.3.11.12 Communication Equipments	0.118	94.1	95.1	94.4	96.3	96.3
1.3.12 Transport, Equipment & Parts	**5.213**	**129.8**	**128.2**	**132.1**	**132.1**	**132.7**
1.3.12.1 Automotives	4.231	129.0	127.2	131.5	131.6	132.2
1.3.12.2 Auto Parts	0.804	130.2	129.5	131.3	131.7	131.7
1.3.12.3 Other Transport Equipments	0.178	147.3	145.7	149.4	147.8	148.0

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

No. 22: Index of Industrial Production (Base:2004-05=100)

Industry	Weight	2011-12	2012-13	April-May		May	
				2012-13	2013-14	2012	2013
	1	2	3	4	5	6	7
General Index	**100.00**	**170.3**	**172.2**	**167.2**	**167.4**	**170.3**	**167.6**
1 Sectoral Classification							
1.1 Mining and Quarrying	14.16	128.5	125.4	127.4	121.7	130.0	122.6
1.2 Manufacturing	75.53	181.0	183.3	176.0	176.2	179.0	175.4
1.3 Electricity	10.32	149.3	155.2	157.5	165.8	162.3	172.4
2 Use-Based Classification							
2.1 Basic Goods	45.68	150.0	153.6	152.0	153.1	155.9	155.2
2.2 Capital Goods	8.83	267.8	251.5	217.6	214.4	227.3	221.2
2.3 Intermediate Goods	15.69	144.4	146.7	145.2	148.2	148.6	150.8
2.4 Consumer Goods	29.81	186.1	190.6	187.3	185.5	187.1	179.6
2.4.1 Consumer Durables	8.46	295.1	301.2	308.2	278.5	310.1	277.9
2.4.2 Consumer Non-Durables	21.35	142.9	146.8	139.4	148.7	138.3	140.6

Source : Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India.

Government Accounts and Treasury Bills

No. 23: Union Government Accounts at a Glance

(Amount in ₹ Billion)

Item	Financial Year	April–June			
	2013-14 (Budget Estimates)	2012-13 (Actuals)	2013-14 (Actuals)	Percentage to Budget Estimates	
				2012-13	2013-14
	1	2	3	4	5
1 Revenue Receipts	10,563.3	1,187.2	1,172.3	12.7	11.1
1.1 Tax Revenue (Net)	8,840.8	1,045.1	1,019.1	13.6	11.5
1.2 Non-Tax Revenue	1,722.5	142.2	153.2	8.6	8.9
2 Capital Receipts	6,089.7	1,928.6	2,650.0	34.7	43.5
2.1 Recovery of Loans	106.5	10.7	15.7	9.2	14.7
2.2 Other Receipts	558.1	13.3	6.1	4.4	1.1
2.3 Borrowings and Other Liabilities	5,425.0	1,904.6	2,628.2	37.1	48.4
3 Total Receipts (1+2)	16,653.0	3,115.8	3,822.3	20.9	23.0
4 Non-Plan Expenditure	11,099.8	2,253.6	2,674.0	23.2	24.1
4.1 On Revenue Account	9,929.1	1,998.7	2,335.6	23.1	23.5
4.1.1 Interest Payments	3,706.8	606.3	614.8	19.0	16.6
4.2 On Capital Account	1,170.7	254.9	338.4	24.4	28.9
5 Plan Expenditure	5,553.2	862.2	1,148.3	16.5	20.7
5.1 On Revenue Account	4,432.6	715.6	941.5	17.0	21.2
5.2 On Capital Account	1,120.6	146.6	206.8	14.6	18.5
6 Total Expenditure (4+5)	16,653.0	3,115.8	3,822.3	20.9	23.0
7 Revenue Expenditure (4.1+5.1)	14,361.7	2,714.3	3,277.1	21.1	22.8
8 Capital Expenditure (4.2+5.2)	2,291.3	401.5	545.2	19.6	23.8
9 Revenue Deficit (7-1)	3,798.4	1,527.1	2,104.8	43.6	55.4
10 Fiscal Deficit {6-(1+2.1+2.2)}	5,425.0	1,904.6	2,628.2	37.1	48.4
11 Gross Primary Deficit [10-4.1.1]	1,718.1	1,298.3	2,013.4	67.0	117.2

Source: Controller General of Accounts, Ministry of Finance, Government of India.

No. 24: Treasury Bills – Ownership Pattern

(₹ Billion)

Item	2012-13	2012	2013					
		Jun. 29	May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
	1	2	3	4	5	6	7	8
1 14-day								
1.1 Banks	–	–	–	–	–	–	–	–
1.2 Primary Dealers	–	–	–	–	–	–	–	–
1.3 State Governments	1,422.2	675.8	938.7	802.4	826.4	672.7	696.9	663.6
1.4 Others	3.7	17.8	9.6	9.3	11.0	11.3	17.6	9.8
2 91-day								
2.1 Banks	345.6	596.4	426.2	413.0	416.7	403.8	448.8	413.2
2.2 Primary Dealers	248.9	422.3	246.0	267.3	272.1	273.3	246.4	231.1
2.3 State Governments	282.0	421.4	382.3	465.5	450.5	545.5	645.3	623.1
2.4 Others	174.4	213.7	97.6	101.6	102.7	128.3	99.3	161.1
3 182-day								
3.1 Banks	234.9	155.1	201.7	194.9	228.7	218.7	225.9	243.8
3.2 Primary Dealers	207.9	282.4	299.5	309.5	294.2	225.0	241.8	227.3
3.3 State Governments	–	–	–	–	–	–	–	–
3.4 Others	199.2	142.5	140.8	137.6	119.2	198.3	174.3	170.9
4 364-day								
4.1 Banks	335.7	182.8	360.8	328.3	343.3	321.7	324.9	338.6
4.2 Primary Dealers	447.9	558.8	502.4	576.0	527.0	523.9	524.0	525.2
4.3 State Governments	3.8	5.9	3.8	6.6	6.6	2.9	2.9	9.7
4.4 Others	517.4	308.0	437.9	393.9	427.9	452.6	449.4	434.5
5 Total	4,423.5	3,982.9	4,047.2	4,006.0	4,026.2	3,978.1	4,097.4	4,051.9

No. 25: Auctions of Treasury Bills

(Amount in ₹ Billion)

Date of Auction	Notified Amount	Bids Received			Bids Accepted			Total Issue (6+7)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)
		Number	Total Face Value		Number	Total Face Value				
			Competitive	Non-Competitive		Competitive	Non-Competitive			
	1	2	3	4	5	6	7	8	9	10
91-day Treasury Bills										
2013-14										
May 29	70	63	175.90	109.72	41	70.00	109.72	179.72	98.21	7.3105
Jun. 5	70	63	194.44	12.17	51	70.00	12.17	82.17	98.20	7.3521
Jun. 12	70	68	176.20	97.15	47	70.00	97.15	167.15	98.17	7.4769
Jun. 19	70	68	223.55	105.80	39	70.00	105.80	175.80	98.18	7.4353
Jun. 26	70	67	195.44	27.98	37	70.00	27.98	97.98	98.17	7.4769
182-day Treasury Bills										
2013-14										
May 22	50	39	110.36	0.02	24	50.00	0.02	50.02	96.49	7.2954
Jun. 5	50	59	172.47	0.01	15	50.00	0.01	50.01	96.48	7.3169
Jun. 19	50	55	193.91	0.01	18	50.00	0.01	50.01	96.44	7.4031
364-day Treasury Bills										
2013-14										
May 15	50	58	157.51	0.01	5	50.00	0.01	50.01	93.29	7.2124
May 29	50	56	118.06	–	35	50.00	–	50.00	93.22	7.2931
Jun. 12	50	68	164.06	–	14	50.00	–	50.00	93.12	7.4086
Jun. 26	50	83	117.17	6.86	51	50.00	6.86	56.86	93.04	7.5012

Financial Markets

No. 26: Daily Call Money Rates

(Per cent per annum)

As on	Range of Rates	Weighted Average Rates
	Borrowings/ Lendings	Borrowings/ Lendings
	1	2
June 1, 2013	6.40-7.30	7.06
June 3, 2013	6.25-7.55	7.28
June 4, 2013	6.25-7.35	7.26
June 5, 2013	6.25-7.35	7.25
June 6, 2013	6.25-7.35	7.27
June 7, 2013	6.25-7.70	7.31
June 8, 2013	6.50-7.40	7.20
June 10, 2013	6.25-7.55	7.28
June 11, 2013	6.25-7.55	7.26
June 12, 2013	6.25-7.35	7.26
June 13, 2013	6.24-7.35	7.25
June 14, 2013	6.15-7.40	7.19
June 15, 2013	6.50-7.35	7.24
June 17, 2013	6.25-7.40	7.28
June 18, 2013	6.25-7.35	7.26
June 19, 2013	6.25-7.40	7.25
June 20, 2013	6.25-7.35	7.25
June 21, 2013	6.25-7.35	7.27
June 22, 2013	6.35-7.10	6.93
June 24, 2013	6.25-7.35	7.22
June 25, 2013	6.17-7.35	7.16
June 26, 2013	6.00-7.60	7.17
June 27, 2013	6.00-7.35	7.17
June 28, 2013	6.25-7.40	7.26
June 29, 2013	6.35-7.35	7.19
July 2, 2013	6.00-7.45	7.20
July 3, 2013	6.00-7.30	7.09
July 4, 2013	5.82-7.20	6.84
July 5, 2013	5.50-6.90	6.57
July 6, 2013	5.65-7.25	6.37
July 8, 2013	5.50-7.80	6.89
July 9, 2013	6.00-7.30	7.16
July 10, 2013	6.00-7.35	7.16
July 11, 2013	6.00-7.40	7.19
July 12, 2013	6.00-7.25	7.14
July 13, 2013	6.30-7.05	6.90
July 15, 2013	6.00-7.60	7.21

No. 27: Certificates of Deposit

Item	2012	2013			
	Jun. 29	May 17	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	4,251.7	3,729.9	3,609.4	3,547.5	3,644.9
1.1 Issued during the fortnight (₹ Billion)	814.6	109.4	147.9	541.2	614.1
2 Rate of Interest (per cent)	8.83-9.95	7.94-8.42	7.93-9.95	7.75-8.70	7.95-8.71

No. 28: Commercial Paper

Item	2012	2013			
	Jun. 30	May 15	May 31	Jun. 15	Jun. 30
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	1,258.1	1,755.8	1,732.5	1,702.5	1,355.9
1.1 Reported during the fortnight (₹ Billion)	276.0	294.8	274.8	408.1	263.6
2 Rate of Interest (per cent)	8.24-15.25	7.70-12.77	7.70-13.30	7.57-12.79	7.58-12.71

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Billion)

Item	2012-13	2012	2013				
		Jun. 29	May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
	1	2	3	4	5	6	7	8
1 Call Money	250.1	246.2	292.7	273.6	217.1	229.9	265.6	301.3
2 Notice Money	73.2	52.1	2.7	108.6	60.0	73.5	78.9	60.8
3 Term Money	9.4	7.1	10.5	10.8	9.1	7.1	4.8	9.6
4 CBLO	832.7	946.8	1,101.5	1,027.3	1,255.4	1,126.2	1,423.4	1,292.5
5 Market Repo	747.8	659.3	917.8	1,390.6	776.5	1,124.8	1,039.7	1,148.4
6 Repo in Corporate Bond	0.1	0.2	–	–	0.4	0.8	–	–
7 Forex (US $ million)	51,021	58,261	50,298	59,475	49,692	53,326	51,402	60,632
8 Govt. of India Dated Securities	491.3	348.5	1,659.3	1,525.8	968.5	966.9	904.6	582.9
9 State Govt. Securities	10.0	5.1	17.4	9.6	17.0	7.3	17.3	11.8
10 Treasury Bills								
10.1 91-Day	20.7	29.8	11.6	14.2	13.7	18.2	20.5	10.5
10.2 182-Day	9.3	6.4	4.9	4.8	4.2	6.0	10.1	8.5
10.3 364-Day	17.2	10.3	10.3	18.0	19.0	27.7	27.7	30.3
10.4 Cash Management Bills	–	–	–	–	–	–	–	–
11 Total Govt. Securities (8+9+10)	548.5	400.0	1,703.6	1,572.4	1,022.3	1,026.1	980.2	644.1
11.1 RBI	7.3	23.2	0.3	0.9	0.1	14.0	2.1	0.8

No. 30: New Capital Issues By Non-Government Public Limited Companies

(Amount in ₹ Billion)

Security & Type of Issue	2012-13		2012-13 (Apr.-Jun.)		2013-14 (Apr.-Jun.)		Jun. 2012		Jun. 2013	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
	1	2	3	4	5	6	7	8	9	10
1 Equity Shares	48	138.8	7	5.1	5	13.6	2	0.6	2	4.3
1A Premium	44	120.9	7	4.4	4	12.6	2	0.5	2	3.6
1.1 Prospectus	32	49.4	5	4.5	4	9.4	2	0.6	1	0.2
1.1.1 Premium	30	46.0	5	4.1	3	9.1	2	0.5	1	0.1
1.2 Rights	16	89.4	2	0.6	1	4.2	–	–	1	4.2
1.2.1 Premium	14	74.9	2	0.3	1	3.5	–	–	1	3.5
2 Preference Shares	–	–	–	–	–	–	–	–	–	–
2.1 Prospectus	–	–	–	–	–	–	–	–	–	–
2.2 Rights	–	–	–	–	–	–	–	–	–	–
3 Debentures	6	22.2	–	–	1	1.3	–	–	–	–
3.1 Prospectus	6	22.2	–	–	1	1.3	–	–	–	–
3.2 Rights	–	–	–	–	–	–	–	–	–	–
3.2.1 Convertible	–	–	–	–	–	–	–	–	–	–
3.2.1.1 Prospectus	–	–	–	–	–	–	–	–	–	–
3.2.1.2 Rights	–	–	–	–	–	–	–	–	–	–
3.2.2 Non-Convertible	6	22.2	–	–	1	1.3	–	–	–	–
3.2.2.1 Prospectus	6	22.2	–	–	1	1.3	–	–	–	–
3.2.2.2 Rights	–	–	–	–	–	–	–	–	–	–
4 Bonds	–	–	–	–	–	–	–	–	–	–
4.1 Prospectus	–	–	–	–	–	–	–	–	–	–
4.2 Rights	–	–	–	–	–	–	–	–	–	–
5 Total (1+2+3+4)	54	161.0	7	5.1	6	14.9	2	0.6	2	4.3
5.1 Prospectus	38	71.6	5	4.5	5	10.8	2	0.6	1	0.2
5.2 Rights	16	89.4	2	0.6	1	4.2	–	–	1	4.2

Source: Based on prospectus/advertisements issued by companies, replies to Reserve Bank's questionnaire and information received from SEBI, stock exchanges, press reports, etc.

External Sector

No. 31: Foreign Trade

Item	Unit	2012-13	2012	2013				
			Jun.	Feb.	Mar.	Apr.	May	Jun.
		1	2	3	4	5	6	7
1 Exports	₹ Billion	16,352.6	1,396.4	1,385.3	1,672.5	1,295.2	1,318.6	1,389.0
	US $ Million	300,570.6	24,923.1	25,761.7	30,742.2	23,819.4	23,969.0	23,785.6
1.1 Oil	₹ Billion	3,261.1	234.9	271.8	307.6	278.9	254.8	..
	US $ Million	60,004.1	4,192.4	5,053.8	5,654.5	5,158.5	5,128.8	..
1.2 Non-oil	₹ Billion	13,091.5	1,161.5	1,113.5	1,364.9	1,016.3	1,063.7	..
	US $ Million	240,566.4	20,730.7	20,707.9	25,087.7	18,660.9	18,840.3	..
2 Imports	₹ Billion	26,731.1	2,026.5	2,218.3	2,206.0	2,286.3	2,457.5	2,104.3
	US $ Million	491,487.2	36,167.6	41,251.8	40,548.2	42,045.7	44,673.2	36,034.7
2.1 Oil	₹ Billion	9,209.4	628.2	816.0	728.7	769.5	828.1	745.6
	US $ Million	169,396.3	11,225.6	15,175.4	13,393.5	14,151.0	15,054.2	12,767.7
2.2 Non-oil	₹ Billion	17,521.8	1,398.3	1,402.2	1,477.3	1,516.8	1,629.4	1,358.7
	US $ Million	322,090.9	24,942.0	26,076.3	27,154.7	27,894.6	29,619.0	23,267.0
3 Trade Balance	₹ Billion	–10,378.5	–630.0	–833.0	–533.5	–991.1	–1,139.0	–715.3
	US $ Million	–190,916.6	–11,244.5	–15,490.1	–9,805.9	–18,226.2	–20,704.2	–12,249.1
3.1 Oil	₹ Billion	–5,948.3	–393.3	–544.3	–421.0	–490.6	–573.3	..
	US $ Million	–109,392.2	–7,033.2	–10,121.6	–7,739.0	–8,992.5	–9,925.4	..
3.2 Non-oil	₹ Billion	–4,430.2	–236.8	–288.7	–112.5	–500.5	–565.7	..
	US $ Million	–81,524.5	–4,211.3	–5,368.4	–2,067.0	–9,233.7	–10,778.8	..

Source: DGCI & S and Ministry of Commerce & Industry.

No. 32: Foreign Exchange Reserves

Item	Unit	2012	2013					
		Jul. 20	Jun. 14	Jun. 21	Jun. 28	Jul. 5	Jul. 12	Jul. 19
		1	2	3	4	5	6	7
1 Total Reseves	**₹ Billion**	**15,877**	**16,754**	**17,018**	**16,920**	**16,891**	**16,778**	**16,693**
	US $ Million	**287,339**	**290,658**	**287,846**	**284,645**	**280,167**	**280,188**	**279,203**
1.1 Foreign Currency Assets	₹ Billion	14,069	15,076	15,338	15,240	15,212	15,102	15,017
	US $ Million	255,102	261,089	258,433	255,278	252,103	252,136	251,137
1.2 Gold	₹ Billion	1,451	1,290	1,290	1,290	1,287	1,287	1,287
	US $ Million	25,760	22,836	22,836	22,836	21,556	21,556	21,556
1.3 SDRs	SDRs Million	2,886	2,887	2,887	2,887	2,887	2,887	2,887
	₹ Billion	240	254	260	259	261	260	260
	US $ Million	4,345	4,401	4,373	4,342	4,327	4,334	4,343
1.4 Reserve Tranche Position in IMF	₹ Billion	118	135	131	131	132	130	130
	US $ Million	2,131	2,333	2,204	2,189	2,182	2,162	2,167

No. 33: NRI Deposits

(US$ Million)

Scheme	Outstanding				Flows	
	2012-13	2012	2013		2012-13	2013-14
		Jun.	May	Jun.	Apr.-Jun.	Apr.-Jun.
	1	2	3	4	5	6
1 NRI Deposits	**70,823**	**60,874**	**71,694**	**71,079**	**6,553**	**5,497**
1.1 FCNR(B)	15,188	14,272	15,395	15,087	–696	–101
1.2 NR(E)RA	45,924	35,681	47,061	47,141	7,436	5,601
1.3 NRO	9,710	10,921	9,238	8,851	–188	–3

No. 34: Foreign Investment Inflows

(US$ Million)

Item	2012-13	2012-13	2013-14	2012	2013	
		Apr.-Jun.	Apr.-Jun.	Jun.	May	Jun.
	1	2	3	4	5	6
1 Foreign Investment Inflows	**46,710**	**1,899**	**6,379**	**813**	**8,667**	**–6,531**
1.1 Net Foreign Direct Investment (1.1.1–1.1.2)	**19,819**	**3,821**	**6,702**	**1,235**	**1,917**	**2,129**
1.1.1 Direct Investment to India (1.1.1.1–1. 1.1.2)	**26,953**	**5,915**	**7,623**	**1,740**	**2,364**	**2,390**
1.1.1.1 Gross Inflows/Gross Investments	**34,298**	**7,306**	**9,142**	**2,203**	**2,870**	**2,896**
1.1.1.1.1 Equity	22,884	4,683	5,640	1,329	1,712	1,525
1.1.1.1.1.1 Government (SIA/FIPB)	2,319	519	429	139	189	132
1.1.1.1.1.2 RBI	15,967	2,963	2,906	697	1,189	880
1.1.1.1.1.3 Acquisition of shares	3,539	946	2,061	408	253	432
1.1.1.1.1.4 Equity capital of unincorporated bodies	1,059	255	243	85	81	81
1.1.1.1.2 Reinvested earnings	9,880	2,259	2,061	753	687	687
1.1.1.1.3 Other capital	1,534	363	1,441	121	471	684
1.1.1.2 Repatriation/Disinvestment	**7,345**	**1,390**	**1,518**	**463**	**506**	**506**
1.1.1.2.1 Equity	6,853	1,033	1,303	344	434	434
1.1.1.2.2 Other capital	493	358	215	119	72	72
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)	**7,134**	**2,094**	**921**	**505**	**447**	**261**
1.1.2.1 Equity capital	7,101	1,382	1,063	509	397	268
1.1.2.2 Reinvested Earnings	1,189	297	297	99	99	99
1.1.2.3 Other Capital	4,331	1,278	956	184	416	359
1.1.2.4 Repatriation/Disinvestment	5,488	863	1,395	288	465	465
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)	**26,891**	**–1,922**	**–323**	**–422**	**6,749**	**–8,661**
1.2.1 GDRs/ADRs	187	94	20	94	–	20
1.2.2 FIIs	27,582	–1,706	–480	–412	6,704	–8,726
1.2.3 Offshore funds and others	–	–	–	–	–	–
1.2.4 Portfolio investment by India	878	310	–137	103	–46	–46

No. 35: Outward Remittances under the Liberalised Remittance Scheme (LRS) for Resident Individuals

(US$ Million)

Item	2012-13	2012	2013		
		May	Mar.	Apr.	May
	1	2	3	4	5
1 Outward Remittances under the LRS	**1,206.4**	**105.0**	**180.2**	**141.8**	**115.3**
1.1 Deposit	20.1	1.9	4.2	4.8	2.2
1.2 Purchase of immovable property	77.7	5.9	16.6	9.7	7.2
1.3 Investment in equity/debt	236.9	17.3	52.4	33.6	13.3
1.4 Gift	261.6	19.8	35.7	38.7	28.8
1.5 Donations	4.5	0.4	–	0.4	0.2
1.6 Travel	44.8	3.3	3.7	3.2	4.3
1.7 Maintenance of close relatives	226.6	31.8	31.1	22.7	23.3
1.8 Medical Treatment	4.9	0.3	0.7	0.2	0.6
1.9 Studies Abroad	124.7	7.7	10.7	10.2	16.9
1.10 Others	204.1	16.6	25.0	18.4	18.5

No. 36: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

Item	2011-12	2012-13	2012	2013	
			July	June	July
	1	2	3	4	5
36-Currency Export and Trade Based Weights (Base: 2004-05=100)					
1 Trade-Based Weights					
1.1 NEER	87.38	78.32	77.56	73.77	72.54
1.2 REER	101.38	94.61	93.46	89.26	87.78
2 Export-Based Weights					
2.1 NEER	89.13	80.05	79.30	75.47	74.22
2.2 REER	104.05	97.42	96.31	91.72	90.21
6-Currency Trade Based Weights					
1 Base: 2004-05 (April-March) =100					
1.1 NEER	84.86	76.11	75.95	70.51	69.20
1.2 REER	111.86	105.46	104.16	98.77	96.94
2 Base: 2010-11 (April-March) =100					
2.1 NEER	92.41	82.87	82.71	76.78	75.36
2.2 REER	97.35	91.77	90.65	85.96	84.36

No. 37: External Commercial Borrowings (ECBs)

(Amount in US$ Million)

Item	2012-13	2012	2013	
		Jun.	May	Jun.
	1	2	3	4
1 Automatic Route				
1.1 Number	825	91	48	71
1.2 Amount	18,395	1,955	1,114	1,006
2 Approval Route				
2.1 Number	92	5	12	10
2.2 Amount	13,651	32	1,373	947
3 Total (1+2)				
3.1 Number	917	96	60	81
3.2 Amount	32,046	1,987	2,487	1,953
4 Weighted Average Maturity (in years)	6.27	5.59	6.34	5.34
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	2.73	3.84	3.30	3.04
5.2 Interest rate range for Fixed Rate Loans	0.00-12.44	0.00-11.50	0.00-12.79	0.00-10.00

No. 38: India's Overall Balance of Payments

(US $ Million)

Item	Jan-Mar 2012 (PR)			Jan-Mar 2013 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**264,141**	**269,878**	**–5,738**	**275,986**	**273,305**	**2,681**
1 CURRENT ACCOUNT	**138,344**	**160,112**	**–21,768**	**142,127**	**160,297**	**–18,170**
1.1 MERCHANDISE	**80,172**	**131,690**	**–51,518**	**84,772**	**130,408**	**–45,635**
1.2 INVISIBLES	**58,172**	**28,421**	**29,751**	**57,355**	**29,890**	**27,465**
1.2.1 Services	38,075	20,554	17,521	37,819	20,860	16,960
1.2.1.1 Travel	5,462	3,238	2,224	5,489	2,719	2,770
1.2.1.2 Transportation	4,681	4,311	370	4,513	3,433	1,080
1.2.1.3 Insurance	635	337	298	604	305	300
1.2.1.4 G.n.i.e.	47	214	–166	126	323	–197
1.2.1.5 Miscellaneous	27,250	12,455	14,795	27,086	14,079	13,006
1.2.1.5.1 Software Services	17,199	329	16,870	17,691	586	17,106
1.2.1.5.2 Business Services	7,204	7,574	–370	6,569	7,484	–915
1.2.1.5.3 Financial Services	1,495	1,902	–406	1,093	1,192	–99
1.2.1.5.4 Communication Services	395	491	–97	454	247	207
1.2.2 Transfers	17,824	1,021	16,803	16,896	1,205	15,690
1.2.2.1 Official	99	160	–62	98	195	–97
1.2.2.2 Private	17,725	861	16,864	16,798	1,010	15,788
1.2.3 Income	2,273	6,846	–4,573	2,640	7,825	–5,185
1.2.3.1 Investment Income	1,688	6,274	–4,586	1,840	7,250	–5,411
1.2.3.2 Compensation of Employees	585	572	13	800	574	226
2 CAPITAL ACCOUNT	**125,797**	**109,212**	**16,586**	**133,557**	**113,008**	**20,549**
2.1 Foreign Investment	**63,574**	**48,291**	**15,282**	**67,176**	**50,129**	**17,048**
2.1.1 Foreign Direct Investment	9,241	7,885	1,356	10,658	4,924	5,733
2.1.1.1 In India	8,557	4,343	4,214	9,064	1,893	7,171
2.1.1.1.1 Equity	6,098	4,262	1,836	5,751	1,856	3,895
2.1.1.1.2 Reinvested Earnings	2,051	–	2,051	2,732	–	2,732
2.1.1.1.3 Other Capital	408	81	327	581	37	544
2.1.1.2 Abroad	684	3,541	–2,857	1,594	3,032	–1,438
2.1.1.2.1 Equity	684	1,765	–1,081	1,594	2,066	–472
2.1.1.2.2 Reinvested Earnings	–	302	–302	–	297	–297
2.1.1.2.3 Other Capital	–	1,474	–1,474	–	669	–669
2.1.2 Portfolio Investment	54,333	40,407	13,926	56,518	45,204	11,314
2.1.2.1 In India	54,223	40,125	14,098	56,343	44,804	11,540
2.1.2.1.1 FIIs	54,193	40,125	14,068	56,343	44,804	11,540
2.1.2.1.1.1 Equity	–	–	–	43,819	34,171	9,648
2.1.2.1.1.2 Debt	–	–	–	12,525	10,633	1,892
2.1.2.1.2 ADR/GDRs	30	–	30	–	–	–
2.1.2.2 Abroad	110	282	–172	175	400	–225
2.2 Loans	**36,346**	**33,609**	**2,737**	**42,802**	**33,584**	**9,218**
2.2.1 External Assistance	1,120	817	303	1,415	887	529
2.2.1.1 By India	17	57	–39	13	84	–72
2.2.1.2 To India	1,103	760	342	1,402	802	600
2.2.2 Commercial Borrowings	8,189	5,907	2,282	8,792	4,571	4,221
2.2.2.1 By India	807	776	31	263	154	109
2.2.2.2 To India	7,382	5,131	2,251	8,529	4,417	4,112
2.2.3 Short Term to India	27,037	26,885	152	32,594	28,126	4,468
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	26,288	26,885	–597	30,765	28,126	2,639
2.2.3.2 Suppliers' Credit up to 180 days	749	–	749	1,829	–	1,829
2.3 Banking Capital	**24,503**	**22,504**	**1,999**	**17,926**	**21,497**	**–3,572**
2.3.1 Commercial Banks	24,454	22,408	2,046	17,926	21,472	–3,546
2.3.1.1 Assets	162	5,857	–5,696	206	9,518	–9,312
2.3.1.2 Liabilities	24,293	16,551	7,742	17,720	11,954	5,766
2.3.1.2.1 Non-Resident Deposits	21,013	16,355	4,658	15,423	12,629	2,794
2.3.2 Others	48	95	–47	–	26	–26
2.4 Rupee Debt Service	**–**	**47**	**–47**	**–**	**31**	**–31**
2.5 Other Capital	**1,375**	**4,761**	**–3,386**	**5,654**	**7,767**	**–2,113**
3 Errors & Omissions	**–**	**555**	**–555**	**302**	**–**	**302**
4 Monetary Movements	**5,738**	**–**	**5,738**	**–**	**2,681**	**–2,681**
4.1 I.M.F.	–	–	–	–	–	–
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	5,738	–	5,738	–	2,681	–2,681

No. 39: India's Overall Balance of Payments

(₹ Billion)

Item	Jan-Mar 2012 (PR)			Jan-Mar 2013 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**13,280**	**13,568**	**–288**	**14,949**	**14,804**	**145**
1 CURRENT ACCOUNT	**6,955**	**8,050**	**–1,094**	**7,698**	**8,683**	**–984**
1.1 MERCHANDISE	**4,031**	**6,621**	**–2,590**	**4,592**	**7,064**	**–2,472**
1.2 INVISIBLES	**2,925**	**1,429**	**1,496**	**3,107**	**1,619**	**1,488**
1.2.1 Services	1,914	1,033	881	2,048	1,130	919
1.2.1.1 Travel	275	163	112	297	147	150
1.2.1.2 Transportation	235	217	19	244	186	58
1.2.1.3 Insurance	32	17	15	33	17	16
1.2.1.4 G.n.i.e.	2	11	–8	7	18	–11
1.2.1.5 Miscellaneous	1,370	626	744	1,467	763	704
1.2.1.5.1 Software Services	865	17	848	958	32	927
1.2.1.5.2 Business Services	362	381	–19	356	405	–50
1.2.1.5.3 Financial Services	75	96	–20	59	65	–5
1.2.1.5.4 Communication Services	20	25	–5	25	13	11
1.2.2 Transfers	896	51	845	915	65	850
1.2.2.1 Official	5	8	–3	5	11	–5
1.2.2.2 Private	891	43	848	910	55	855
1.2.3 Income	114	344	–230	143	424	–281
1.2.3.1 Investment Income	85	315	–231	100	393	–293
1.2.3.2 Compensation of Employees	29	29	–	43	31	12
2 CAPITAL ACCOUNT	**6,325**	**5,491**	**834**	**7,234**	**6,121**	**1,113**
2.1 Foreign Investment	**3,196**	**2,428**	**768**	**3,639**	**2,715**	**923**
2.1.1 Foreign Direct Investment	465	396	68	577	267	311
2.1.1.1 In India	430	218	212	491	103	388
2.1.1.1.1 Equity	307	214	92	312	101	211
2.1.1.1.2 Reinvested Earnings	103	–	103	148	–	148
2.1.1.1.3 Other Capital	21	4	16	31	2	29
2.1.1.2 Abroad	34	178	–144	86	164	–78
2.1.1.2.1 Equity	34	89	–54	86	112	–26
2.1.1.2.2 Reinvested Earnings	–	15	–15	–	16	–16
2.1.1.2.3 Other Capital	–	74	–74	–	36	–36
2.1.2 Portfolio Investment	2,732	2,031	700	3,061	2,448	613
2.1.2.1 In India	2,726	2,017	709	3,052	2,427	625
2.1.2.1.1 FIIs	2,725	2,017	707	3,052	2,427	625
2.1.2.1.1.1 Equity	–	–	–	2,373	1,851	523
2.1.2.1.1.2 Debt	–	–	–	678	576	102
2.1.2.1.2 ADR/GDRs	2	–	2	–	–	–
2.1.2.2 Abroad	6	14	–9	9	22	–12
2.2 Loans	**1,827**	**1,690**	**138**	**2,318**	**1,819**	**499**
2.2.1 External Assistance	56	41	15	77	48	29
2.2.1.1 By India	1	3	–2	1	5	–4
2.2.1.2 To India	55	38	17	76	43	33
2.2.2 Commercial Borrowings	412	297	115	476	248	229
2.2.2.1 By India	41	39	2	14	8	6
2.2.2.2 To India	371	258	113	462	239	223
2.2.3 Short Term to India	1,359	1,352	8	1,765	1,523	242
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	1,322	1,352	–30	1,666	1,523	143
2.2.3.2 Suppliers' Credit up to 180 days	38	–	38	99	–	99
2.3 Banking Capital	**1,232**	**1,131**	**101**	**971**	**1,164**	**–193**
2.3.1 Commercial Banks	1,229	1,127	103	971	1,163	–192
2.3.1.1 Assets	8	294	–286	11	516	–504
2.3.1.2 Liabilities	1,221	–	389	960	–	312
2.3.1.2.1 Non-Resident Deposits	1,056	822	–	835	684	–
2.3.2 Others	2	5	–2	–	1	–1
2.4 Rupee Debt Service	–	**2**	**–2**	–	**2**	**–2**
2.5 Other Capital	**69**	**239**	**–170**	**306**	**421**	**–114**
3 Errors & Omissions	–	**28**	**–28**	**16**	–	**16**
4 Monetary Movements	**288**	–	**288**	–	**145**	**–145**
4.1 I.M.F.	–	–	–	–	–	–
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	288	–	288	–	145	–145

No. 40: Standard Presentation of BoP in India as per BPM6

(US $ Million)

Item	Jan-Mar 2012 (PR)			Jan-Mar 2013 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account	**137,706**	**159,412**	**–21,706**	**142,041**	**160,118**	**–18,078**
1.A Goods and Services	**117,708**	**151,706**	**–33,998**	**122,591**	**151,267**	**–28,676**
1.A.a Goods	**80,043**	**131,690**	**–51,647**	**84,772**	**130,408**	**–45,635**
1.A.a.1 General merchandise on a BOP basis	80,172	115,536	–35,364	82,893	113,985	–31,092
1.A.a.2 Net exports of goods under merchanting	–129	–	–129	1,880	609	1,270
1.A.a.3 Non-monetary gold	–	16,155	–16,155	–	15,813	–15,813
1.A.b Services	**37,665**	**20,016**	**17,650**	**37,819**	**20,859**	**16,960**
1.A.b.1 Manufacturing services on physical inputs owned by others	–	–	–	12	12	–
1.A.b.2 Maintenance and repair services n.i.e.	–	–	–	36	80	–43
1.A.b.3 Transport	4,686	4,333	353	4,513	3,433	1,080
1.A.b.4 Travel	5,462	3,238	2,224	5,489	2,719	2,770
1.A.b.5 Construction	219	329	–110	301	455	–154
1.A.b.6 Insurance and pension services	635	337	298	604	305	300
1.A.b.7 Financial services	1,495	1,902	–406	1,093	1,192	–99
1.A.b.8 Charges for the use of intellectual property n.i.e.	85	990	–905	65	1,159	–1,094
1.A.b.9 Telecommunications, computer, and information services	17,614	923	16,691	18,217	952	17,265
1.A.b.10 Other business services	6,832	7,035	–203	6,569	7,484	–915
1.A.b.11 Personal, cultural, and recreational services	118	69	49	262	144	119
1.A.b.12 Government goods and services n.i.e.	47	214	–166	126	323	–197
1.A.b.13 Others n.i.e.	473	647	–174	529	2,602	–2,073
1.B Primary Income	**2,273**	**6,845**	**–4,572**	**2,640**	**7,825**	**–5,185**
1.B.1 Compensation of employees	585	572	13	800	574	226
1.B.2 Investment income	1,619	6,081	–4,462	1,547	6,819	–5,272
1.B.2.1 Direct investment	659	6,032	–5,373	479	3,009	–2,530
1.B.2.2 Portfolio investment	–	–	–	31	943	–912
1.B.2.3 Other investment	–	44	–44	77	2,866	–2,790
1.B.2.4 Reserve assets	960	6	955	960	1	959
1.B.3 Other primary income	69	192	–123	293	432	–139
1.C Secondary Income	**17,725**	**861**	**16,864**	**16,810**	**1,027**	**15,783**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	17,725	861	16,864	16,798	1,010	15,788
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	17,192	756	16,437	16,220	918	15,302
1.C.1.2 Other current transfers	533	105	428	578	92	486
1.C.2 General Government	–	–	–	12	17	–5
2 Capital Account	**99**	**252**	**–153**	**581**	**430**	**150**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	1	92	–91	6	10	–4
2.2 Capital transfers	99	160	–62	574	420	154
3 Financial Account	**131,534**	**109,120**	**22,415**	**133,334**	**115,708**	**17,626**
3.1 Direct Investment	**9,241**	**7,885**	**1,356**	**10,658**	**4,924**	**5,733**
3.1.A Direct Investment in India	8,557	4,343	4,214	9,064	1,893	7,171
3.1.A.1 Equity and investment fund shares	8,149	4,262	3,887	8,483	1,856	6,627
3.1.A.1.1 Equity other than reinvestment of earnings	6,098	4,262	1,836	5,751	1,856	3,895
3.1.A.1.2 Reinvestment of earnings	2,051	–	2,051	2,732	–	2,732
3.1.A.2 Debt instruments	408	81	327	581	37	544
3.1.A.2.1 Direct investor in direct investment enterprises	408	81	327	581	37	544
3.1.B Direct Investment by India	684	3,541	–2,857	1,594	3,032	–1,438
3.1.B.1 Equity and investment fund shares	684	2,067	–1,383	1,594	2,363	–769
3.1.B.1.1 Equity other than reinvestment of earnings	684	1,765	–1,081	1,594	2,066	–472
3.1.B.1.2 Reinvestment of earnings	–	302	–302	–	297	–297
3.1.B.2 Debt instruments	–	1,474	–1,474	–	669	–669
3.1.B.2.1 Direct investor in direct investment enterprises	–	1,474	–1,474	–	669	–669
3.2 Portfolio Investment	**54,303**	**40,407**	**13,896**	**56,518**	**45,204**	**11,314**
3.2A Portfolio Investment in India	54,193	40,125	14,068	56,343	44,804	11,540
3.2A.1 Equity and investment fund shares	35,425	26,244	9,181	43,819	34,171	9,648
3.2A.2 Debt securities	18,768	13,881	4,887	12,525	10,633	1,892
3.2.B Portfolio Investment by India	110	282	–172	175	400	–225
3.3 Financial derivatives (other than reserves) and employee stock options	–	–	–	**1,031**	**1,942**	**–911**
3.4 Other investment	**62,253**	**60,828**	**1,425**	**65,119**	**60,937**	**4,181**
3.4.1 Other equity (ADRs/GDRs)	30	–	30	–	–	–
3.4.2 Currency and deposits	21,061	16,450	4,611	15,423	12,654	2,768
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	48	95	–47	–	26	–26
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	21,013	16,355	4,658	15,423	12,629	2,794
3.4.2.3 General government	–	–	–	–	–	–
3.4.2.4 Other sectors	–	–	–	–	–	–
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	12,750	12,777	–26	12,710	14,301	–1,591
3.4.3A Loans to India	11,927	11,945	–18	12,434	14,063	–1,629
3.4.3B Loans by India	824	832	–8	276	238	38
3.4.4 Insurance, pension, and standardized guarantee schemes	–	–	–	7	19	–12
3.4.5 Trade credit and advances	27,037	26,885	152	32,594	28,126	4,468
3.4.6 Other accounts receivable/payable - other	1,374	4,716	–3,342	4,392	5,856	–1,464
3.4.7 Special drawing rights	–	–	–	–	–	–
3.5 Reserve assets	**5,738**	–	**5,738**	–	**2,681**	**–2,681**
3.5.1 Monetary gold	–	–	–	–	–	–
3.5.2 Special drawing rights n.a.	–	–	–	–	–	–
3.5.3 Reserve position in the IMF n.a.	–	–	–	–	–	–
3.5.4 Other reserve assets (Foreign Currency Assets)	5,738	–	5,738	–	2,681	–2,681
3 Total assets/liabilities (Instrument wise)	**131,534**	**109,120**	**22,415**	**133,334**	**115,708**	**17,626**
3.0.1 Equity and investment fund shares	44,368	32,855	11,513	55,109	40,752	14,357
3.0.2 Debt instruments	80,024	71,549	8,476	73,833	66,420	7,413
3.0.3 Other financial assets and liabilities	7,142	4,716	2,426	4,392	8,537	–4,145
4 Net errors and omissions	–	–	**–555**	–	–	**302**

No. 41: Standard Presentation of BoP in India as per BPM6

(₹ Billion)

Item	Jan-Mar 2012 (PR)			Jan-Mar 2013 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account	**6,923**	**8,015**	**–1,091**	**7,694**	**8,673**	**–979**
1.A Goods and Services	**5,918**	**7,627**	**–1,709**	**6,640**	**8,193**	**–1,553**
1.A.a Goods	**4,024**	**6,621**	**–2,597**	**4,592**	**7,064**	**–2,472**
1.A.a.1 General merchandise on a BOP basis	4,031	5,809	–1,778	4,490	6,174	–1,684
1.A.a.2 Net exports of goods under merchanting	–6	–	–6	102	33	69
1.A.a.3 Non-monetary gold	–	812	–812	–	857	–857
1.A.b Services	**1,894**	**1,006**	**887**	**2,048**	**1,130**	**919**
1.A.b.1 Manufacturing services on physical inputs owned by others	–	–	–	1	1	–
1.A.b.2 Maintenance and repair services n.i.e.	–	–	–	2	4	–2
1.A.b.3 Transport	236	218	18	244	186	58
1.A.b.4 Travel	275	163	112	297	147	150
1.A.b.5 Construction	11	17	–6	16	25	–8
1.A.b.6 Insurance and pension services	32	17	15	33	17	16
1.A.b.7 Financial services	75	96	–20	59	65	–5
1.A.b.8 Charges for the use of intellectual property n.i.e.	4	50	–46	4	63	–59
1.A.b.9 Telecommunications, computer, and information services	886	46	839	987	52	935
1.A.b.10 Other business services	343	354	–10	356	405	–50
1.A.b.11 Personal, cultural, and recreational services	6	3	2	14	8	6
1.A.b.12 Government goods and services n.i.e.	2	11	–8	7	18	–11
1.A.b.13 Others n.i.e.	24	33	–9	29	141	–112
1.B Primary Income	**114**	**344**	**–230**	**143**	**424**	**–281**
1.B.1 Compensation of employees	29	29	1	43	31	12
1.B.2 Investment income	81	306	–224	84	369	–286
1.B.2.1 Direct investment	33	303	–270	26	163	–137
1.B.2.2 Portfolio investment	–	–	–	2	51	–49
1.B.2.3 Other investment	–	2	–2	4	155	–151
1.B.2.4 Reserve assets	48	–	48	52	–	52
1.B.3 Other primary income	3	10	–6	16	23	–8
1.C Secondary Income	**891**	**43**	**848**	**910**	**56**	**855**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	891	43	848	910	55	855
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	864	38	826	879	50	829
1.C.1.2 Other current transfers	27	5	22	31	5	26
1.C.2 General Government	–	–	–	1	1	–
2 Capital Account	**5**	**13**	**–8**	**31**	**23**	**8**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	–	5	–5	–	1	–
2.2 Capital transfers	5	8	–3	31	23	8
3 Financial Account	**6,613**	**5,486**	**1,127**	**7,222**	**6,267**	**955**
3.1 Direct Investment	**465**	**396**	**68**	**577**	**267**	**311**
3.1.A Direct Investment in India	430	218	212	491	103	388
3.1.A.1 Equity and investment fund shares	410	214	195	459	101	359
3.1.A.1.1 Equity other than reinvestment of earnings	307	214	92	312	101	211
3.1.A.1.2 Reinvestment of earnings	103	–	103	148	–	148
3.1.A.2 Debt instruments	21	4	16	31	2	29
3.1.A.2.1 Direct investor in direct investment enterprises	21	4	16	31	2	29
3.1.B Direct Investment by India	34	178	–144	86	164	–78
3.1.B.1 Equity and investment fund shares	34	104	–70	86	128	–42
3.1.B.1.1 Equity other than reinvestment of earnings	34	89	–54	86	112	–26
3.1.B.1.2 Reinvestment of earnings	–	15	–15	–	16	–16
3.1.B.2 Debt instruments	–	74	–74	–	36	–36
3.1.B.2.1 Direct investor in direct investment enterprises	–	74	–74	–	36	–36
3.2 Portfolio Investment	**2,730**	**2,031**	**699**	**3,061**	**2,448**	**613**
3.2A Portfolio Investment in India	2,725	2,017	707	3,052	2,427	625
3.2A.1 Equity and investment fund shares	1,781	1,319	462	2,373	1,851	523
3.2A.2 Debt securities	944	698	246	678	576	102
3.2.B Portfolio Investment by India	6	14	–9	9	22	–12
3.3 Financial derivatives (other than reserves) and employee stock options	**–**	**–**	**–**	**56**	**105**	**–49**
3.4 Other investment	**3,130**	**3,058**	**72**	**3,527**	**3,301**	**226**
3.4.1 Other equity (ADRs/GDRs)	2	–	2	–	–	–
3.4.2 Currency and deposits	1,059	827	232	835	685	150
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	2	5	–2	–	1	–1
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	1,056	822	234	835	684	151
3.4.2.3 General government	–	–	–	–	–	–
3.4.2.4 Other sectors	–	–	–	–	–	–
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	641	642	–1	688	775	–86
3.4.3A Loans to India	600	601	–1	673	762	–88
3.4.3B Loans by India	41	42	–0	15	13	2
3.4.4 Insurance, pension, and standardized guarantee schemes	–	–	–	–	1	–1
3.4.5 Trade credit and advances	1,359	1,352	8	1,765	1,523	242
3.4.6 Other accounts receivable/payable - other	69	237	–168	238	317	–79
3.4.7 Special drawing rights	–	–	–	–	–	–
3.5 Reserve assets	**288**	**–**	**288**	**–**	**145**	**–145**
3.5.1 Monetary gold	–	–	–	–	–	–
3.5.2 Special drawing rights n.a.	–	–	–	–	–	–
3.5.3 Reserve position in the IMF n.a.	–	–	–	–	–	–
3.5.4 Other reserve assets (Foreign Currency Assets)	288	–	288	–	145	–145
3 Total assets/liabilities (Instrument wise)	**6,613**	**5,486**	**1,127**	**7,222**	**6,267**	**955**
3.0.1 Equity and investment fund shares	2,231	1,652	579	2,985	2,207	778
3.0.2 Debt instruments	4,023	3,597	426	3,999	3,598	402
3.0.3 Other financial assets and liabilities	359	237	122	238	462	–225
4 Net errors and omissions	**–**	**–**	**–28**	**–**	**–**	**16**

No. 42: International Investment Position

(US$ Million)

Item	As on Financial Year /Quarter End							
	2012-13		2012				2013	
			Mar.		Dec.		Mar.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1 Direct Investment Abroad/in India	119,510	233,678	112,376	222,206	118,072	225,094	119,510	233,678
1.1 Equity Capital and Reinvested Earnings	84,851	223,143	82,048	213,109	84,081	215,009	84,851	223,143
1.2 Other Capital	34,659	10,535	30,329	9,097	33,991	10,085	34,659	10,535
2 Portfolio Investment	1,390	182,957	1,472	165,820	1,521	169,058	1,390	182,957
2.1 Equity	1,307	139,460	1,455	125,327	1,440	128,932	1,307	139,460
2.2 Debt	83	43,497	17	40,493	81	40,126	83	43,497
3 Other Investment	34,822	338,456	28,979	298,661	28,677	329,914	34,822	338,456
3.1 Trade Credit	3,921	88,961	–39	67,327	5,671	84,590	3,921	88,961
3.2 Loan	4,917	165,893	5,982	160,221	3,524	165,576	4,917	165,893
3.3 Currency and Deposits	13,058	71,004	11,144	58,778	6,888	67,758	13,058	71,004
3.4 Other Assets/Liabilities	12,926	12,597	11,893	12,335	12,592	11,990	12,926	12,597
4 Reserves	292,046	–	294,397	–	295,638	–	292,046	–
5 Total Assets/ Liabilities	447,768	755,091	437,225	686,687	443,907	724,067	447,768	755,091
6 IIP (Assets - Liabilities)		–307,323		–249,462		–280,159		–307,323

Payment and Settlement Systems

No. 43: Payment System Indicators

System	Volume (Million)				Value (₹ Billion)			
	2012-13	2013			2012-13	2013		
		Apr.	May	Jun.		Apr.	May	Jun.
	1	2	3	4	5	6	7	8
1 RTGS	**68.52**	**6.46**	**6.69**	**6.14**	**1,026,350.05**	**74,641.77**	**71,678.93**	**76,755.54**
1.1 Customer Transactions	63.99	6.04	6.26	5.74	512,997.84	45,362.17	44,931.62	47,929.52
1.2 Interbank Transactions	4.52	0.42	0.44	0.41	163,843.20	15,698.95	13,791.49	14,453.90
1.3 Interbank Clearing	0.009	0.001	0.001	0.001	349,509.02	13,580.65	12,955.83	14,372.11
2 CCIL Operated Systems	**2.26**	**0.22**	**0.30**	**0.24**	**501,598.49**	**54,742.18**	**64,457.15**	**53,820.77**
2.1 CBLO	0.16	0.01	0.01	0.01	120,480.39	12,983.41	12,176.45	15,389.59
2.2 Govt. Securities Clearing	0.70	0.09	0.15	0.08	119,947.98	16,248.21	26,762.78	15,166.88
2.2.1 Outright	0.66	0.09	0.15	0.08	65,920.33	10,213.01	19,125.65	9,032.88
2.2.2 Repo	0.041	0.004	0.005	0.004	54,027.65	6,035.20	7,637.13	6,134.00
2.3 Forex Clearing	1.40	0.12	0.14	0.14	261,170.12	25,510.56	25,517.92	23,264.30
3 Paper Clearing	**1,313.05**	**108.84**	**103.41**	**104.03**	**100,396.48**	**8,547.90**	**7,928.06**	**7,282.04**
3.1 Cheque Truncation System (CTS)	275.04	31.65	32.74	32.26	21,779.52	2,619.90	2,535.76	2,461.31
3.2 MICR Clearing	823.31	59.05	54.24	50.63	57,503.97	4,349.07	4,000.99	3,439.13
3.2.1 RBI Centres	496.81	35.73	31.80	29.15	36,045.97	2,754.61	2,338.48	2,071.26
3.2.2 Other Centres	326.50	23.32	22.45	21.47	21,458.00	1,594.46	1,662.51	1,367.87
3.3 Non-MICR Clearing	215.31	18.14	16.42	21.15	20,898.28	1,578.93	1,391.32	1,381.60
4 Retail Electronic Clearing	**694.07**	**66.48**	**67.01**	**71.53**	**31,881.14**	**3,546.13**	**3,318.82**	**3,565.51**
4.1 ECS DR	176.53	15.57	15.20	15.36	1,083.10	94.84	95.33	102.69
4.2 ECS CR (includes NECS)	122.18	9.99	9.42	12.51	1,771.28	191.59	153.57	207.44
4.3 EFT/NEFT	394.13	40.65	42.02	43.19	29,022.42	3,258.26	3,067.98	3,253.07
4.4 Interbank Mobile Payment Service (IMPS)	1.23	0.27	0.38	0.47	4.33	1.44	1.94	2.30
5 Cards	**6,398.35**	**584.52**	**591.07**	**578.86**	**18,637.36**	**1,765.63**	**18,172.58**	**1,760.09**
5.1 Credit Cards	399.13	37.79	38.71	37.02	1,243.93	125.51	1,259.72	115.03
5.1.1 Usage at ATMs	2.52	0.23	0.23	0.22	14.42	1.33	13.34	1.27
5.1.2 Usage at POS	396.61	37.56	38.48	36.80	1,229.51	124.18	1,246.38	113.76
5.2 Debit Cards	5,999.21	546.73	552.36	541.84	17,393.44	1,640.12	16,912.86	1,645.06
5.2.1 Usage at ATMs	5,530.16	501.07	504.69	493.93	16,650.08	1,563.87	16,141.56	1,574.17
5.2.2 Usage at POS	469.05	45.66	47.68	47.91	743.36	76.26	771.30	70.89
6 Prepaid Payment Instruments (PPIs)	**66.94**	**9.59**	**10.51**	**10.60**	**79.22**	**5.79**	**6.15**	**5.57**
6.1 m-Wallet	32.70	6.63	7.01	7.01	10.01	1.76	1.98	1.86
6.2 PPI Cards	33.76	2.91	3.45	3.56	49.62	1.90	2.10	2.05
6.3 Paper Vouchers	0.48	0.05	0.05	0.04	19.60	2.13	2.07	1.66
7 Mobile Banking	**53.30**	**6.33**	**6.87**	**6.63**	**59.90**	**9.89**	**11.94**	**11.48**
8 Cards Outstanding	**350.75**	**356.44**	**361.27**	**368.32**	–	–	–	–
8.1 Credit Card	19.55	19.57	19.61	19.15	–	–	–	–
8.2 Debit Card	331.20	336.87	342.25	349.17	–	–	–	–
9 Number of ATMs (in actuals)	**114014**	**116378**	**118867**	**121617**	–	–	–	–
10 Number of POS (in actuals)	**845653**	**913867**	**1013094**	**1031734**	–	–	–	–
11 Grand Total (1.1+1.2+2+3+4+5+6)	**8,543.17**	**776.12**	**779.00**	**771.41**	**1,329,433.72**	**129,668.75**	**152,605.87**	**128,817.41**

Explanatory Notes to the Current Statistics

Table No. 1

1.2 & 6: Annual data are averages of months.
3.5 & 3.7: Relate to ratios of increments over financial year so far.
4.1 to 4.4, 4.8, 4.12 & 5: Relate to the last day of the month/financial year.
4.5, 4.6 & 4.7: Relate to five major banks on the last Friday of the month/financial year.
4.9 to 4.11: Relate to the last auction day of the month/financial year.

Table No. 2

2.1.2: Include paid-up capital, reserve fund and Long-Term Operations Funds.
2.2.2: Include cash, fixed deposits and short-term securities/bonds, *e.g.*, issued by IIFC (UK).

Table No. 4

Maturity-wise position of outstanding forward contracts is available at http://nsdp.rbi.org.in under ``Reserves Template''.

Table No. 5

Special refinance facility to Others, i.e. to the EXIM Bank, is closed since March 31, 2013.

Table No. 6

For scheduled banks, March-end data pertain to the last reporting Friday.
2.2: Exclude balances held in IMF Account No.1, RBI employees' provident fund, pension fund, gratuity and superannuation fund.

Table Nos. 7 & 11

3.1 in Table 7 and 2.4 in Table 11: Include foreign currency denominated bonds issued by IIFC (UK).

Table No. 8

NM_2 and NM_3 do not include FCNR (B) deposits.
2.4: Consist of paid-up capital and reserves.
2.5: includes other demand and time liabilities of the banking system.

Table No. 9

Financial institutions comprise EXIM Bank, SIDBI, NABARD and NHB.
L_1 and L_2 are compiled monthly and L_3 quarterly.
Wherever data are not available, the last available data have been repeated.

Table No. 17

2.1.1: Exclude reserve fund maintained by co-operative societies with State Co-operative Banks
2.1.2: Exclude borrowings from RBI, SBI, IDBI, NABARD, notified banks and State Governments.
4: Include borrowings from IDBI and NABARD.

Table No. 24

Primary Dealers (PDs) include banks undertaking PD business.

Table No. 30

Exclude private placement and offer for sale.
1: Exclude bonus shares.
2: Include cumulative convertible preference shares and equi-preference shares.

Table No. 32

Exclude investment in foreign currency denominated bonds issued by IIFC (UK) and foreign currency received under SAARC SWAP arrangement. Foreign currency assets in US dollar take into account appreciation/depreciation of non-US currencies (such as Euro, Sterling and Yen) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

Table No. 34

1.1.1.1.2 & 1.1.1.1.1.4: Estimates.

1.1.1.2: Estimates for latest months.

'Other capital' pertains to debt transactions between parent and subsidiaries/branches of FDI enterprises.

Data may not tally with the BoP data due to lag in reporting.

Table No. 35

1.10: Include items such as subscription to journals, maintenance of investment abroad, student loan repayments and credit card payments.

Table No. 36

Increase in indices indicates appreciation of rupee and vice versa. For 6-Currency index, base year 2010-11 is a moving one, which gets updated every year. Methodological details are available in December 2005 issue of the Bulletin.

Table No. 37

Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.

Table Nos. 38, 39, 40 & 41

Explanatory notes on these tables are available in December issue of RBI Bulletin, 2012.

Table No. 43

1.3: Pertain to multilateral net settlement batches.

3.1: Pertain to two centres - New Delhi and Chennai.

3.3: Pertain to clearing houses managed by 21 banks.

6: Available from December 2010.

7: Include IMPS transactions.

Detailed explanatory notes are available in the relevant press releases issued by RBI and other publications/releases of the Bank such as **Handbook of Statistics on the Indian Economy**.

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	India	Abroad
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23. Banking Paribhashik Kosh (English-Hindi) 2010	₹ 75 per copy (over the counter) ₹ 97 per copy (including postal charges)	–
24. Banking Glossary (2012)	₹ 80 (normal) (postage extra)	

Notes

1. Many of the above publications are available at the RBI website (www.rbi.org.in).
2. Time Series data are available at the Database on Indian Economy (http://dbie.rbi.org.in).
3. The Reserve Bank of India History 1935-1981 (3 Volumes), Challenges to Central Banking in the Context of Financial Crisis and the Regional Economy of India: Growth and Finance are available at leading book stores in India.

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