Chapter I

Macro-Financial Risks

Global financial markets seem to have largely internalised tapering in the Federal Reserve's bond purchase programme and the focus has shifted to the likely path of policy interest rate in advanced economies (AEs), particularly the US. In the recent period, emerging market and developing economies (EMDEs) experienced a significant spillover of changes in the monetary policy stance in AEs. Against this backdrop, growth-inflation dynamics seem to have turned less favourable for EMDEs increasing their vulnerability to spillovers from AEs.

Domestically, with political stability returning, the next level of reforms, better policy implementation and initiation of steps to address supply side constraints will help revive the investment cycle and moderate inflation expectations. External sector risks have receded because of timely policy interventions, although there is a need to work towards reducing structural current account imbalances. Another concern is the dominance of stock market activity by foreign institutional investors. Balancing fiscal restraint with a boost to capital spending, especially for developing infrastructure will be a major challenge which can be partly addressed by creating a better environment for the private sector.

In domestic financial markets, active management of liquidity by the Reserve Bank should ensure adequate flow of credit to the productive sectors. The Securities and Exchange Board of India (SEBI) has taken several measures to tackle volatility in the markets.

Global Backdrop

1.1. Volatility unleashed by the initial indications of tapering of the Federal Reserve's (Fed) bond purchase programme about a year ago has subdued. The adverse impact of increased volatility was particularly severe in many emerging financial markets including India. Consequently, tougher monetary, fiscal and macro-prudential policy decisions in emerging market and developing economies (EMDEs) served to restore stability and confidence. With tapering being largely internalised by the financial markets, the focus has now shifted to the path of policy interest rates in advanced economies (AEs). In the US, inflation[1] is below the policy goal while the unemployment rate fell to below 6.5 per cent in the recent period. However, declining labour force participation rates suggest considerable slack in labour markets. Further, US GDP contracted in Q1 2014 though it is expected to improve in subsequent quarters. The situation is no better in the Euro area where fears of deflation have raised questions about the monetary policy stance. Asset prices have risen in these economies (Charts 1.1a and 1.1b). In a radical move to avoid deflation, the European Central Bank (ECB), cut its deposit rate from zero to -0.10 per cent and its main refinancing rate to 0.15 per cent from 0.25 per cent recently. ECB's policy move along with the quantitative and qualitative easing (QQE) in Japan, may reduce the impact of the Fed's tapering on global liquidity.

1.2. With regard to other risks, moderation in China's growth is evident as its economy seems to be shifting from an investment led model to a more sustainable growth path with a gradual transition to a more market based economy. Geo-political risks emanating in Iraq, Eastern Europe and in Asia Pacific may have implications for global energy prices and trade. Against this backdrop, EMDEs need to be more alert to ward off possible spillovers.

[1] As measured by the annual change in the price index for personal consumption expenditures.

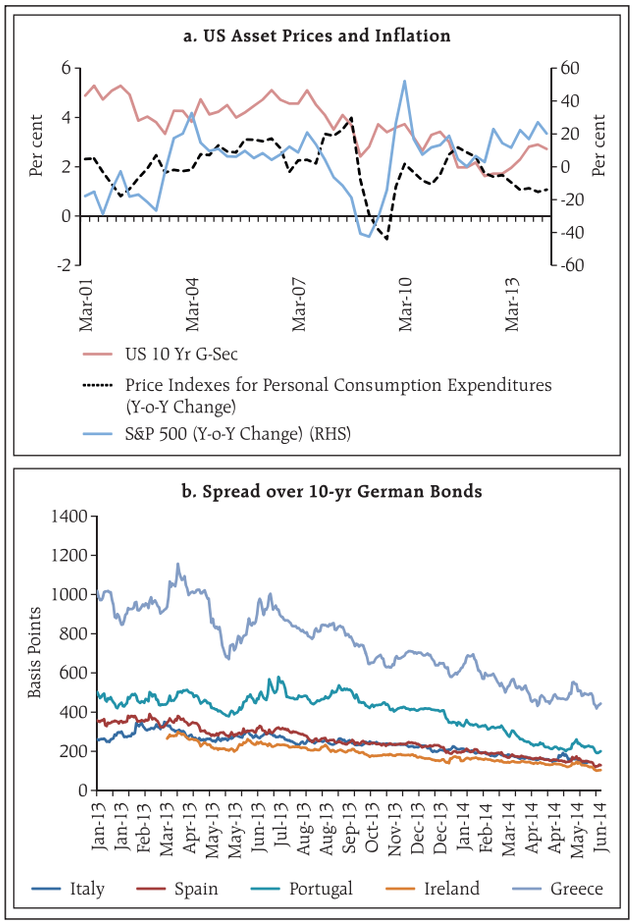
The Case for Monetary Policy Coordination

1.3. With the eventual removal of policy accommodation in the AEs, better global policy coordination could reduce unexpected spillovers and improve trust which may be essential for future coordination. In the absence of global policy coordination, cooperation and global safety nets, EMDEs may have to resort to less than optimal policy options such as strong macro-prudential measures including capital controls and reserve accumulation. With their enormous clout, countries whose currencies serve as reserve assets can induce negative externalities on EMDEs through changes in their monetary policies. While policy coordination has been initiated in the context of global trade, Globally Systemically Important Banks (G-SIBs) and other regulatory areas to stem negative externalities, policy cooperation/coordination is yet to be recognised in the context of reducing spillovers from changes in monetary policy especially with respect to AEs.

Domestic Scenario

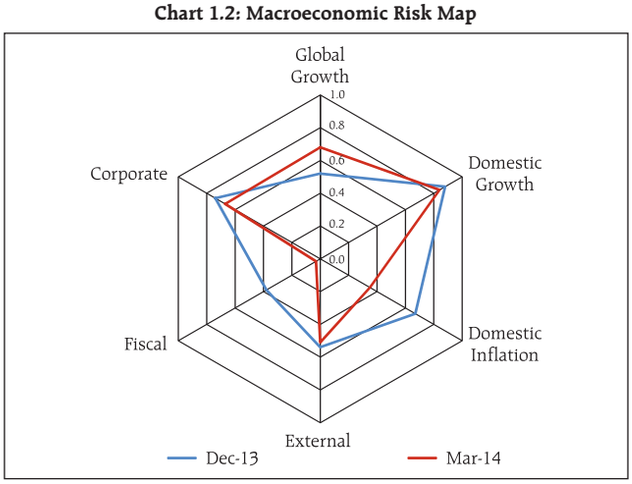
1.4. The risks being faced by the Indian economy receded between December 2013 and March 2014 (Chart 1.2) following, among other developments, a series of policy measures. In particular, India tightened its monetary policy as an immediate measure to shield against volatility emanating from Fed's intention to taper its bond purchase programme. These measures were augmented by policies aimed at attracting capital flows and overseas borrowings, particularly the window for banks to swap their fresh foreign currency non-resident (FCNR(B)) dollar funds with Reserve Bank bolstered reserves. Policy measures taken to curb gold imports helped in reducing the current account deficit (CAD). Formation of a stable government at the centre has ameliorated political risk and has led to expectations of better policy coordination and implementation which has had a positive impact on the markets. Going forward, in general the risks that the Indian economy is facing are expected to fall. However, in comparison to the

Chart 1.1: Upward Movement in Asset Prices



Source: Bureau of Economic Analysis, USA, Bloomberg and the Federal Reserve.

Chart 1.2: Macroeconomic Risk Map



Note: Movement away from the centre signifies increasing risk. Refer to Annex 2 for the methodology. Data for corporate dimension for March 2014 are early estimates. Data on ratio of short-term external debt to total external debt as at December 2013 has been used to calculate values for the external dimension for March 2014.
Source: RBI Staff Calculations.

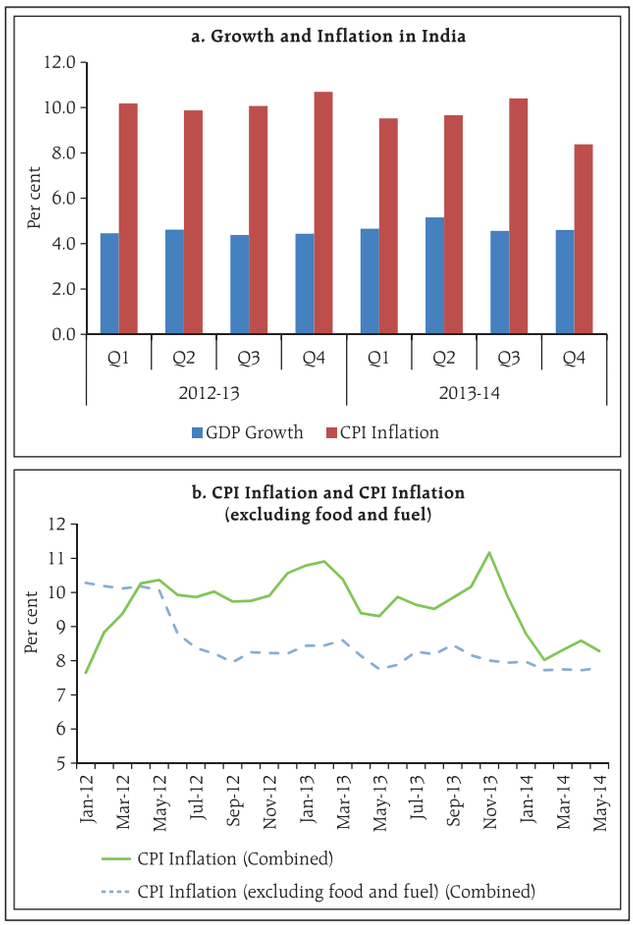
recent past, there could be some deterioration on the current account and fiscal deficit fronts.

Low Growth-High Inflation

1.5. The growth-inflation setting in India was adverse for seven of the last eight quarters with below 5 per cent GDP growth and high CPI inflation (Chart 1.3a). Persistent high inflation can alter inflation expectations permanently and may lead to disintermediation in the economy with resultant adverse effects on financial savings, investment and growth. High inflation can also interfere with the financial sector's ability to allocate resources effectively as price uncertainty can alter inflation expectations, which can significantly increase risk *premia* in financial transactions. Formation of a stable government and the expectation that the new government will address supply side constraints will have a positive impact on inflationary expectations. Although CPI inflation (combined) moderated during the last quarter of 2013-14, inflation in CPI excluding the food and fuel segments was persistent at around 8 per cent (Chart 1.3b). In this context, the efforts to stabilise the economy through monetary policy interventions needs to be complimented by appropriate fiscal policy measures.

1.6. GDP growth was marginally higher during 2013-14 than it was in 2012-13 though it continued to be sub-5 per cent for the second consecutive year. This largely reflected a contraction in the industrial sector even as agricultural growth improved due to the good monsoon while the services sector remained unchanged (Table 1.1). Increase in growth of index of industrial production (IIP) during April 2014 and improvement in export performance during May 2014 point towards recovery in growth. Easing of domestic supply bottlenecks and progress on the implementation of stalled projects that have already been cleared should further improve the growth outlook.

Chart 1.3: Growth-Inflation Dynamics in India



Note: CPI Inflation in Chart 1.3a refers to average CPI inflation (combined) during the quarter.
Source: Database on Indian Economy, RBI.

Table 1.1: Real GDP Growth-Supply Side (per cent)

	2012-13				2013-14			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
I. Agriculture, forestry & fishing	**1.8**	**1.8**	**0.8**	**1.6**	**4.0**	**5.0**	**3.7**	**6.3**
II. Industry	**-0.6**	**0.1**	**2.0**	**2.0**	**-0.9**	**1.8**	**-0.9**	**-0.5**
(i) Mining & quarrying	*-1.1*	*-0.1*	*-2.0*	*-4.8*	*-3.9*	*0.0*	*-1.2*	*-0.4*
(ii) Manufacturing	*-1.1*	*0.0*	*2.5*	*3.0*	*-1.2*	*1.3*	*-1.5*	*-1.4*
(iii) Electricity, gas & water supply	*4.2*	*1.3*	*2.6*	*0.9*	*3.8*	*7.8*	*5.0*	*7.2*
III. Services	**6.7**	**6.5**	**6.1**	**5.8**	**6.5**	**6.1**	**6.4**	**5.8**
(i) Construction	*2.8*	*-1.9*	*1.0*	*2.4*	*1.1*	*4.4*	*0.6*	*0.7*
(ii) Trade, hotels, transport & communication	*4.0*	*5.6*	*5.9*	*4.8*	*1.6*	*3.6*	*2.9*	*3.9*
(iii) Financing, insurance, real estate and business services	*11.7*	*10.6*	*10.2*	*11.2*	*12.9*	*12.1*	*14.1*	*12.4*
(iv) Community, social & personal services	*7.6*	*7.4*	*4.0*	*2.8*	*10.6*	*3.6*	*5.7*	*3.3*
(IV) GDP at factor cost	**4.5**	**4.6**	**4.4**	**4.4**	**4.7**	**5.2**	**4.6**	**4.6**

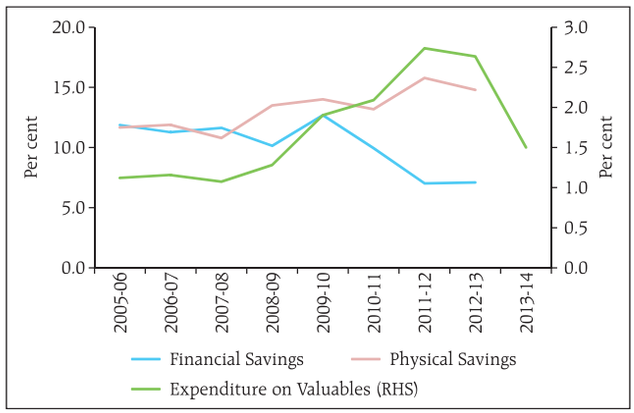
Source: Central Statistics Office.

Savings and Investments

1.7. Low domestic growth and high inflation continue to have an adverse effect on saving-investment dynamics. While households' financial savings (which include bank deposits) as per cent of GDP have been falling, expenditure on *valuables*[2] (which includes gold) has risen over the last few years though it declined in 2013-14 (Chart 1.4). This trend reflects financial disintermediation with households switching away from financial savings to *valuables* mainly gold. High inflation and the consequent low real rate of return on financial assets may force savers to assume excessive risks in their search for yield.

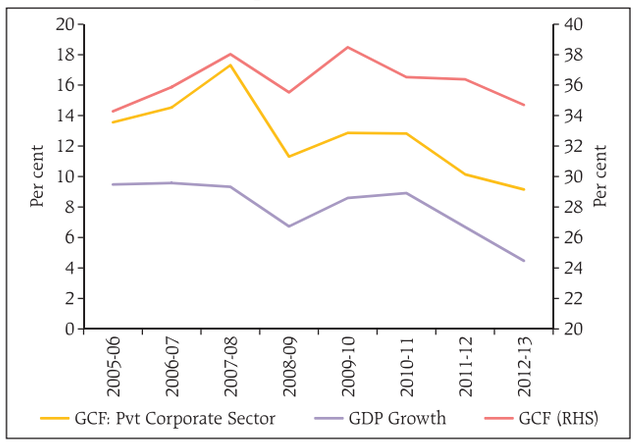
1.8. Gross capital formation (GCF) declined for the second consecutive year in 2012-13. This decline was led by the private corporate sector adversely impacting the growth prospects of the economy (Chart 1.5). Efficient disintermediation through fund raising activities in the Indian capital markets, particularly *via* public issues, was low in recent years (Chart 1.6) given the subdued investment climate. The Securities and Exchange Board of India (SEBI) has proposed significant measures to revitalise the primary market, which include changes in minimum dilution norms for initial public offers (IPOs), minimum public share holding for public sector undertakings, investment

Chart 1.4: Household Saving and Expenditure on Valuables
(as per cent of GDP at current market prices)



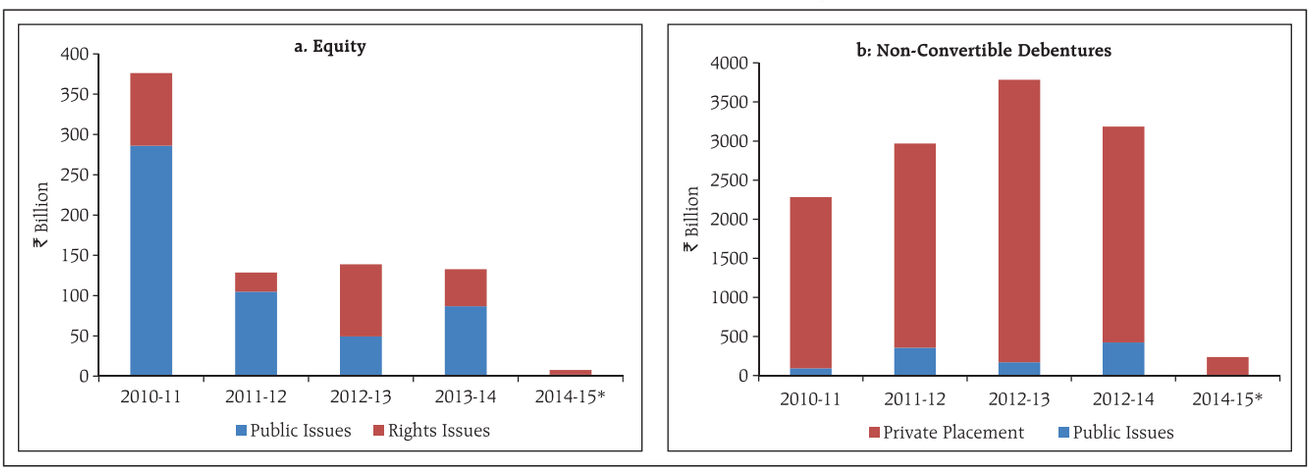
Source: Database on Indian Economy, RBI.

Chart 1.5: Gross Capital Formation and GDP Growth



Note: GCF (gross capital formation) is measured as a per cent to GDP at current market prices. GDP growth refers to real GDP growth (constant factor cost).
Source: Database on Indian Economy, RBI.

Chart 1.6: Resource Mobilisation in the Indian Capital Market



Note: *: up to April 2014.
Source: SEBI.

[2] Includes precious items like gold, gems, ornaments and precious stones among other things (National Accounts Statistics-Sources and Methods 2012)

bucket for anchor investors and eligibility criteria for 'offer for sale' in an IPO, among others. A number of issues have been hindering the development of the corporate bond market in India (Box 1.1).

Box 1.1: The Corporate Bond Market in India

The corporate bond market in India saw a growth in issuances during the last five years. However, the development of the corporate bond market in India has lagged behind in comparison with the G-Sec market owing to many structural factors. While primary issuances have been significant, most of these are accounted for by public sector financial institutions and are usually issued on a private placement basis to institutional investors. The secondary market has not developed commensurately and market liquidity has been very low. Dormancy in the Indian corporate bond market is attributed to a range of factors.

Traditionally, the Indian financial system has been dominated by banks with corporates relying more on loan financing as compared to bond financing. Corporates consider loan financing easier, less rigorous and operationally more flexible, especially cash credits[3]. Banks also find loan financing more convenient as they do not need to mark-to-market (MTM) the loans *vis-à-vis* the bonds. Further, banks prefer loan financing because it provides them a greater degree of control and monitoring over the performance of specific projects/activities of corporate borrowers unlike bond financing where banks have to rely on public disclosures of the financials by corporates. Another major bottleneck in the growth of secondary market liquidity is the large number of small size bond issuances. Consolidation of corporate bond issues through re-issuances may be needed to improve market functioning. Internationally, insurance companies are among the largest participants in the corporate bond market. However, in India, institutional investors like insurance companies, pension funds and the Employees' Provident Fund Organisation (EPFO) which have large assets under their management still have several constraints in the nature of investment mandates resulting in their limited participation in the corporate bond market. Since pension funds and insurance companies have to provide safe and guaranteed returns, they prefer government securities. Further, unavailability of the credit risk transfer mechanism in the corporate bond market also works as a deterrent.

Though credit default swaps (CDS) have been introduced in India, there is negligible activity in the market. One of the major constraints in this regard is the restriction on the netting of the MTM position against the same counterparty in the context of capital adequacy and exposure norms. Without netting, trades in CDS have become highly capital-intensive as banks and primary dealers (PDs) have to provide higher capital charges on a gross basis even if they act as market makers and have a 'positive' and 'negative' position against the same counterparty. Netting has not been allowed by the Reserve Bank due to lack of legal clarity. The absence of robust bankruptcy laws is also reckoned as one of the major reasons for low levels of investor interest in corporate bonds. The current system of dissemination of information in the corporate debt market is not robust. There is no information on company-wise issuance data, 'option' availability, outstanding amount and rating, among other relevant information, at one place. However, of late, SEBI has mandated that both the depositories *viz.* National Securities Depositary Limited (NSDL) and Central Depository Services (India) Limited (CDSL) jointly create, host, maintain and disseminate a centralised database of corporate bonds/debentures. Other measures taken by SEBI are aimed at according standardisation to corporate bonds, improving transparency and bringing them in line with dated government securities.

The success of order matching trading platform negotiated dealing system-order matching (NDS-OM) in the G-Sec market can act as a guide for setting up an order matching trading platform for the corporate bond market. SEBI has advised stock exchanges to start a separate anonymous trading platform like NDS-OM. Though NSE has introduced such a platform the trading volumes have been negligible. Due to lack of central counterparty (CCP) facility, market participants have not shown an interest in routing transactions through the trading platform and instead prefer to execute trades in the over the counter (OTC) environment. Further, different state governments charge different stamp duty on corporate bonds. Further, there is a need for uniformity in stamp duty across all states for bond issuance or re-issuances, debt assignment and pass through certificates, for development of corporate bond market.

[3] A cash credit is a drawing account against a credit limit granted by the bank. When the advance is secured by the pledge/hypothecation of goods or produce, it is treated as a cash credit account.

Fiscal Constraints

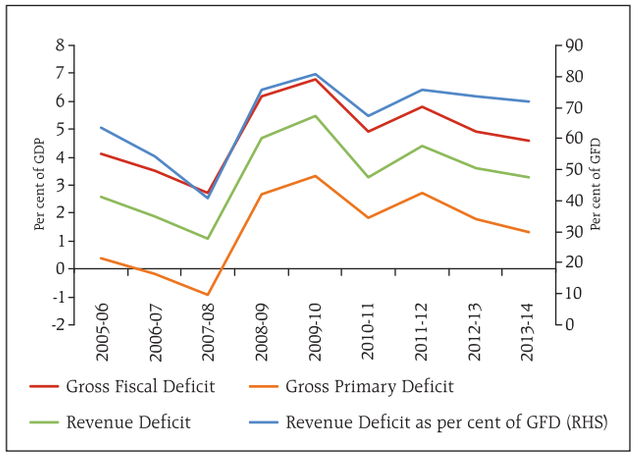
1.9. The fiscal consolidation process, which had resumed in 2012-13 through mid-year course corrective measures, was continued in 2013-14 (PA). With the growth slowdown affecting tax collections, particularly indirect tax collections, and market conditions not being conducive for meeting disinvestment targets, the recent reduction in fiscal defecit was mainly achieved through a sharp cutback in 'plan' expenditure and higher receipts of non-tax revenues that may not be recurring in nature. While the need for fiscal consolidation cannot be over-emphasised, it is important to ensure that its quality is not compromised (Chart 1.7). It might be challenging, but a fine balance needs to be struck between containing the fiscal deficit on the one hand and making investments in infrastructure to boost growth on the other.

1.10. The net market borrowing of the central government for 2014-15 has been budgeted at ₹4,573 billion, which is lower than the revised estimates at ₹4,689 billion during the last fiscal year. Besides the fiscal outlook, other factors including private credit off-take, capital flows and the interest rate cycle impact the government market borrowing programme. A planned reduction in deficits and in the government's market borrowing will leave more resources for the private sector.

Liquidity Conditions

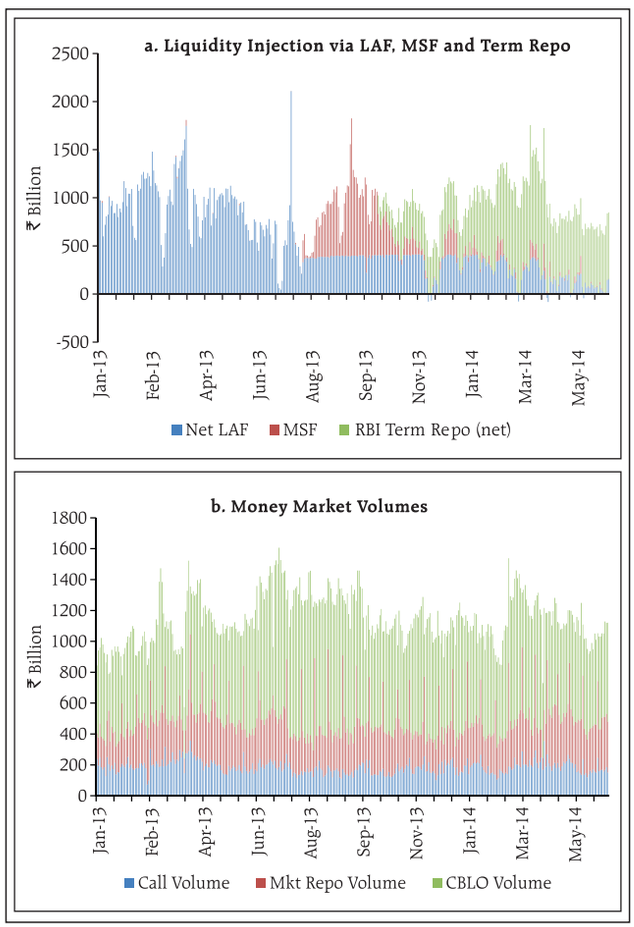
1.11. The Reserve Bank capped borrowings by banks from the liquidity adjustment facility (LAF) window in July 2013 (Chart 1.8a). One of the objectives of capping borrowings from LAF and of introducing term repos was to reduce banks' reliance on Reserve Bank's overnight liquidity facilities and to shift the remaining eligible liquidity support to term segments with a view to promoting the development of the term money market and providing greater flexibility to banks in managing their reserve requirements. Money market activity (excluding Reserve Bank's participation) is captured in Chart 1.8b. Liquidity stress increased

Chart 1.7: GoI's Deficit Indicators



Note : Data for 2012-13 are provisional and data for 2013-14 are revised estimates.
Source: Database on Indian Economy, RBI.

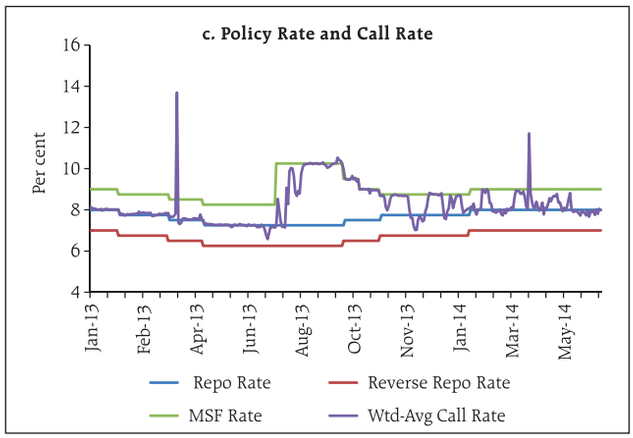
Chart 1.8: Movement in Money Market Variables



Note: Data up to June 10, 2014.
Source: CCIL and Database on Indian Economy, RBI.

between mid July 2013-end October 2013 after banks' borrowings from the overnight LAF were capped by the Reserve Bank leading them to borrow from the marginal standing facility (MSF) window. With the introduction of RBI's term repo window, the liquidity stress fell and call rates have more or less remained within the policy rate corridor (Chart 1.8c).

Chart 1.8: Movement in Money Market Variables



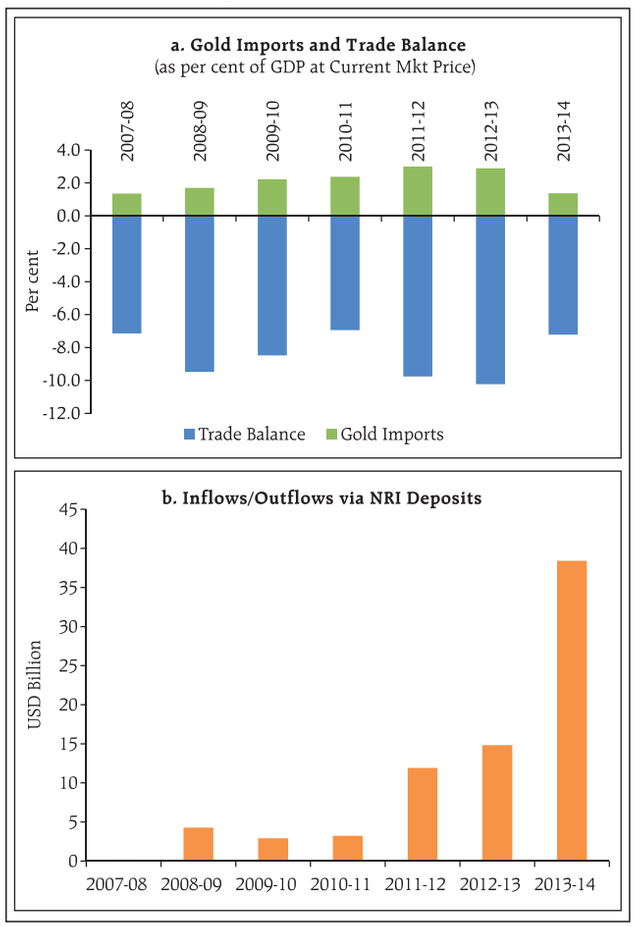
Note: Data up to June 10, 2014.
Source: CCIL and Database on Indian Economy, RBI.

External Sector

1.12. India's CAD at 4.7 per cent of GDP in 2012-13 deteriorated substantially mainly because of an increase in trade deficit due to a slowdown in major trade partner economies, inadequate pass-through of higher global oil prices and a sharp rise in demand for precious metals like gold and silver. Modest recovery in key partner economies and the depreciation of the rupee helped India boost its exports in 2013-14 and robust demand for software exports also improved earnings from invisibles. With a fall in gold imports mainly due to restrictions, the trade balance improved during 2013-14 (Chart 1.9a). Thus, the current account which had been under stress since 2011-12 was brought to a sustainable level during 2013-14 and CAD fell from 4.7 per cent during 2012-13 to 1.7 per cent during 2013-14. This along with strong capital inflows, particularly NRI deposits (Chart 1.9b), brought stability to the external front. Reduction in CAD, improvement in capital inflows, accretion to foreign exchanges reserves and stability of the exchange rate improved the external sector's resilience.

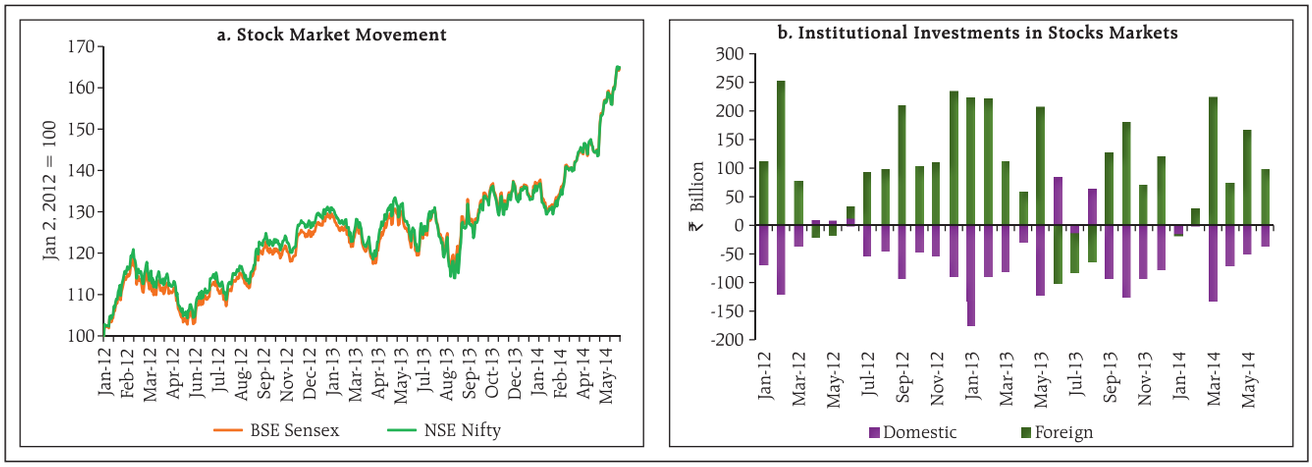
1.13. Recent bullish sentiments in domestic stock markets seem to have been largely supported by foreign institutional investors (FIIs) (Charts 1.10a and 1.10b).

Chart 1.9: Improvements in the External Sector



Note: Data for 2013-14 in Chart 1.9a are provisional.
Source: Database on Indian Economy, RBI.

Chart 1.10: Stock Market Movement and Institutional Investments



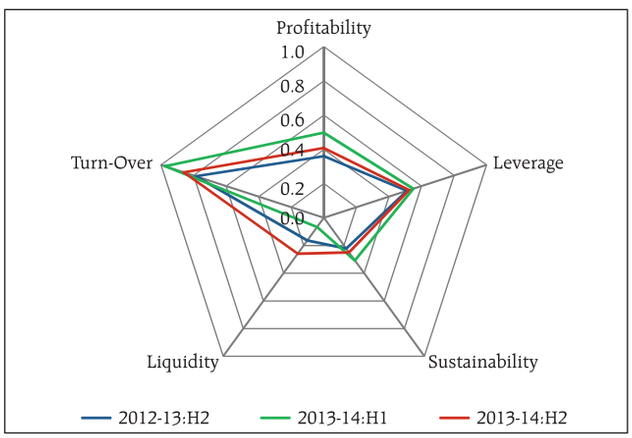
Note: Data for Chart 1.10b are provisional and updated till June 12, 2014
Source: BSE, Bloomberg, SEBI and NSDL.

Corporate Sector Performance

1.14. There has been some improvement in the performance of the corporate sector in the half year ending March 2014 when compared to the previous half year (Chart 1.11)[4].Improvement is witnessed in the profitability, leverage, sustainability and turnover dimensions.

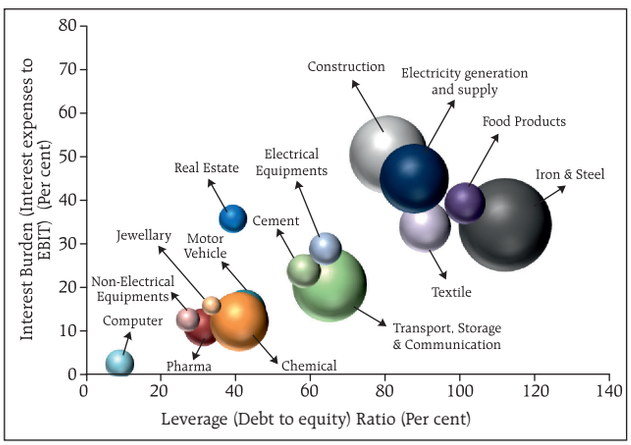
1.15. 'Construction', 'electricity generation and supply' and 'iron & steel' are the major industries burdened with interest expenses along with high leverage (Chart 1.12). Further, 'textiles', 'transport, storage & telecommunications' also show relatively high burden of interest payments and leverage[5].

Chart 1.11: Corporate Sector Stability Map



Note: Movement away from the centre signifies increase in risk. Refer to Annex 2 for methodology.
Source: RBI Staff Calculations.

Chart 1.12: Profile of Select Industries



Note: Size of the bubble is based on relative share of debt of the industry in total debt of all industries derived from sample companies. Based on half-yearly (H2 2013-14) financial statements of listed non-government non-financial companies. Data are provisional.
Source: RBI.

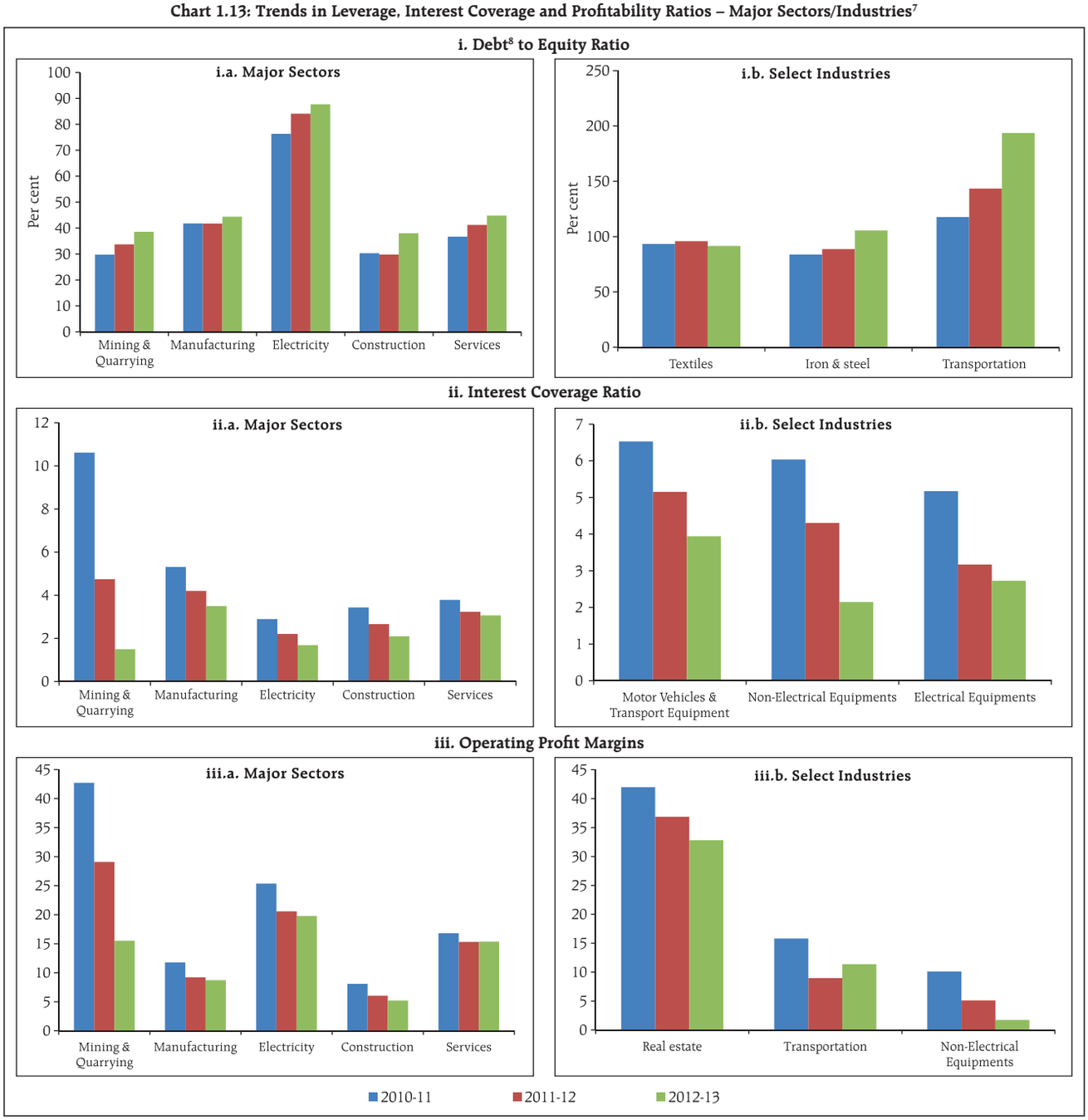
[4] Based on half-yearly financial statements of a sample of listed non-government non-financial companies.

[5] Sector/ industry wise analysis of stress in the banking sector has been presented in Chapter II (para 2.9, 2.21 and 2.30).

Sector/Industry Analysis – Select Indicators

1.16. Leverage of Indian corporates increased across major sectors/industries during 2010-11 and 2012-13 (Chart 1.13 i.a)[6]. Within manufacturing sector, 'iron & steel' and 'textiles' had relatively higher leverage. In the services sector, 'transportation' was burdened with higher leverage mainly on account of air transport companies (Chart 1.13 i.b).

Chart 1.13: Trends in Leverage, Interest Coverage and Profitability Ratios – Major Sectors/Industries[7]



Note: Data are provisional.
Source: RBI.

[6] Refers to a sample of non-government, non-financial public limited companies.
[7] Industries have been selected based on the level or proportional change in performance indicator.
[8] Debt refers to long-term borrowings only.

1.17. The interest coverage ratio[9], which reflects the ability of corporates to service borrowings with the present level of profits fell across sectors (Chart 1.13 ii.a) with mining & quarrying experiencing the sharpest decline. Within the manufacturing sector, 'motor vehicles & transport equipment', 'non-electrical equipments' and 'electrical equipments' industries witnessed a considerable fall in the interest coverage ratio (Chart 1.13 ii.b).

1.18. Stress was also visible in the declining operating profit margins[10] of Indian corporates. All sectors witnessed declining operating profit margins (Chart 1.13 iii.a), with mining & quarrying experiencing relatively larger decline. Industries such as 'real estate' and 'non-electrical equipments' experienced sizeable fall in their operating profit margins (Chart 1.13 iii.b).

[9] Earnings before interest and tax(EBIT) to interest expenses.

[10] EBITDA (Earnings before interest, tax, depreciation, ammortisation) to sales.