V. FINANCIAL MARKETS

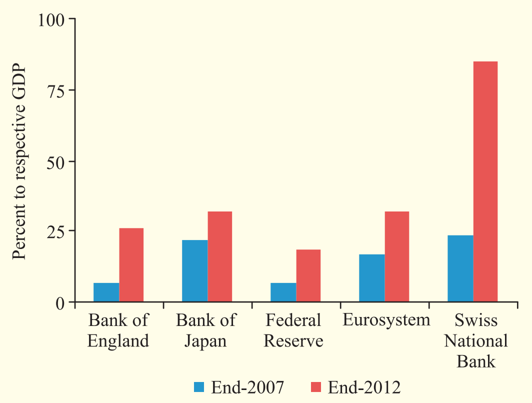
Global financial markets have experienced renewed turbulence, especially since the latter half of May 2013, following the Fed's signalling on tapering off of quantitative easing. Taking the cue that the global interest rate cycle may reverse, financial markets witnessed bond sell-offs across the globe. 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.

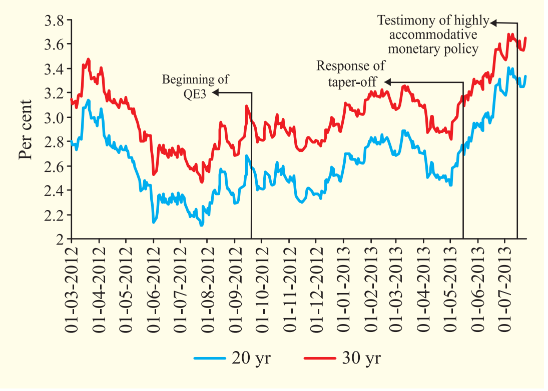
V.2 It may be observed in this context that the balance sheets of central banks in advanced economies have expanded significantly since the inception of the crisis in 2007 (Chart V.1). Therefore, the Fed's signal of an exit from QE raised the prospects of the global interest cycle turning thus posing 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).

Chart V.1: Balance sheet of central banks



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

Chart V.2: Movements in US Long-term Government Bond Yields



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 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

Chart V.3: Movements in Bond Yields in Select EMDEs and Euro Area Economies

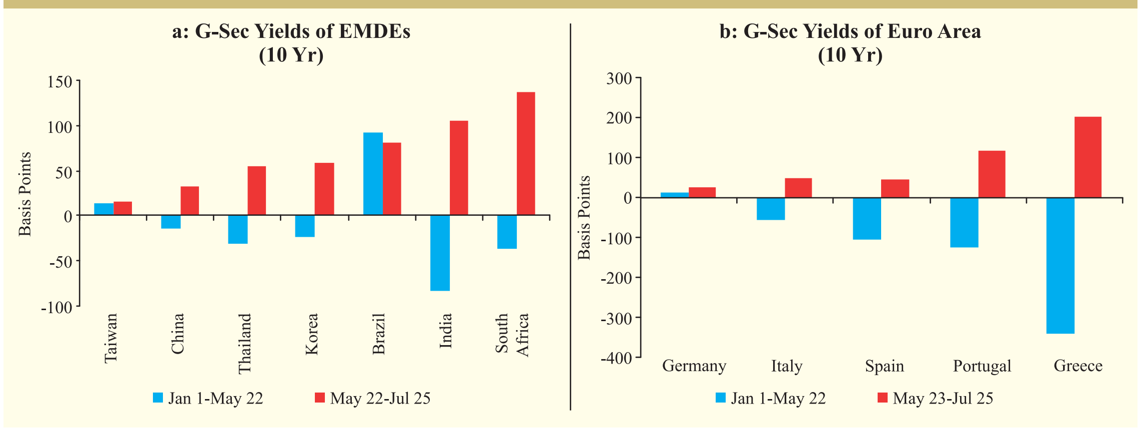
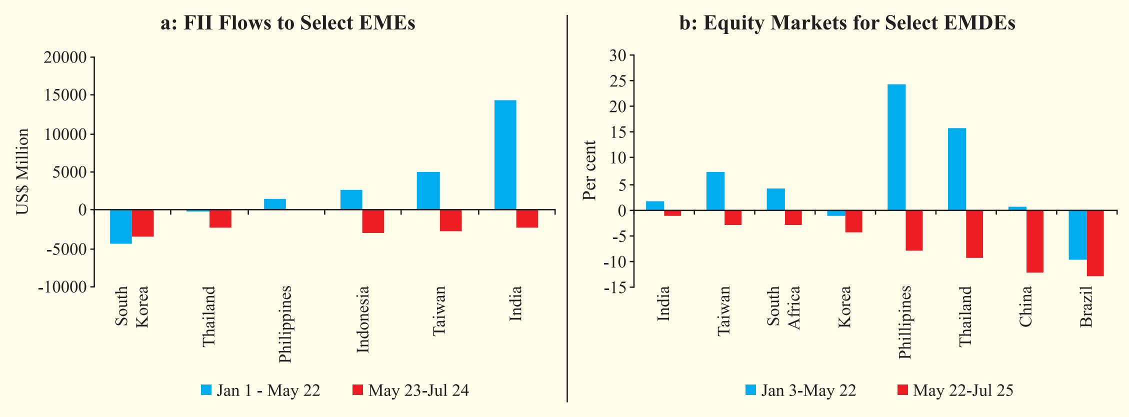


Chart V.4: Trends in the Equity and FII Flows to Select EMDEs



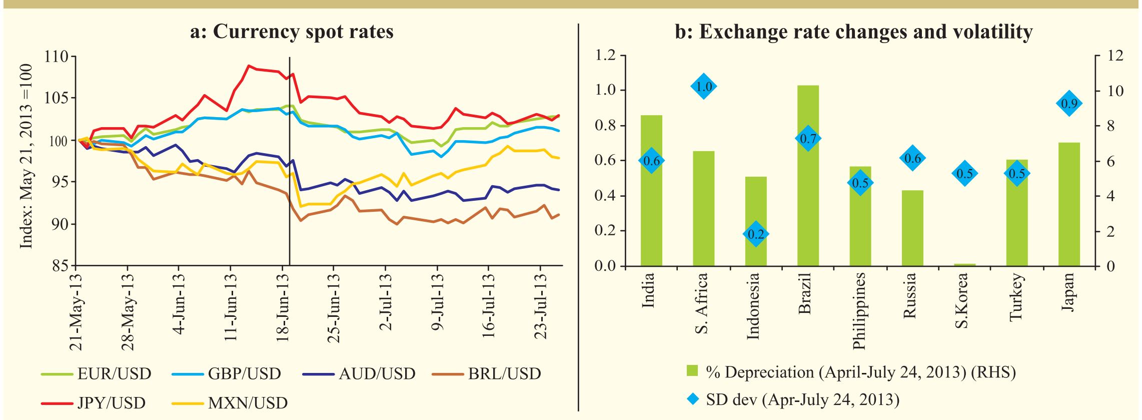
South Africa. The South African Rand witnessed the highest volatility followed by Brazilian Real, Russian Rouble and Indian Rupee.

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

Chart V.5: Movements in International Forex Markets

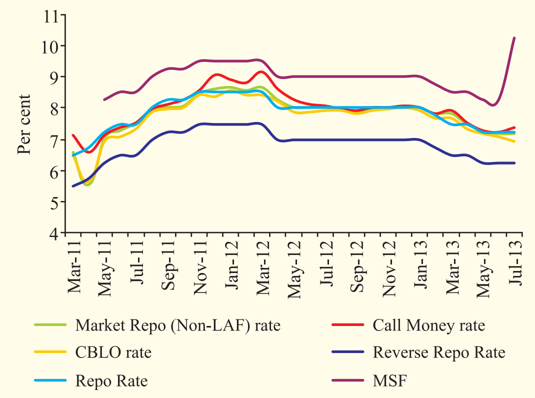


hardening of call rate to around 9.05 per cent on July 24, 2013. The rates in the collateralised segment also hardened as a result of these measures, with the CBLO rate increasing to 8.68 per cent on July 24, 2013. CD and CP rates also hardened. It subsequently reverted to the level prior to the measures.

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).

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.

Chart V.6: Movement of Money Market Rates



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

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.

2011-12. The average fortnightly 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 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

Chart V.7: Yield curves for Government Securities

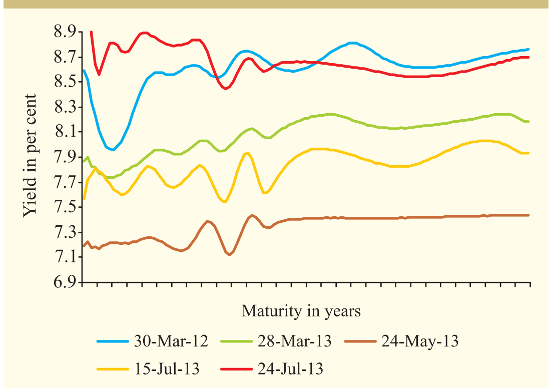


Chart V.8: Average Daily Volume and 10-Year Generic Yield

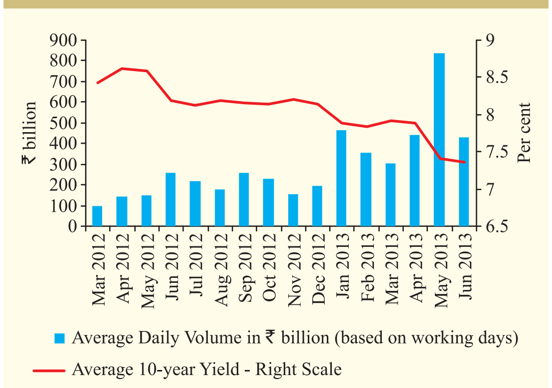


Table V.2: Issuances of Central and State Government Dated Securities*

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.

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.

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.

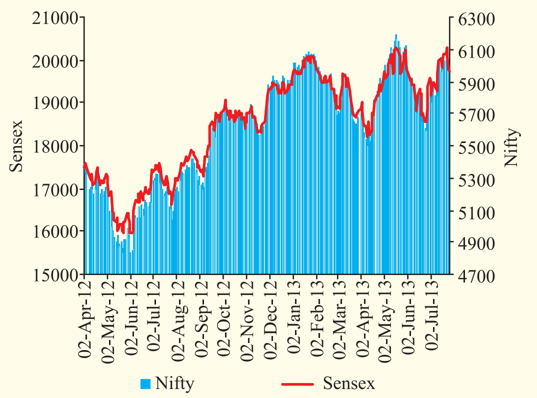
Domestic equity markets record marginal increase amid global uncertainties

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

Chart V.9: Movement of Sensex and Nifty



equity and debt) as against net investment of ₹19 billion during Q1 of 2012-13. In the equity market, FIIs made net investments 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).

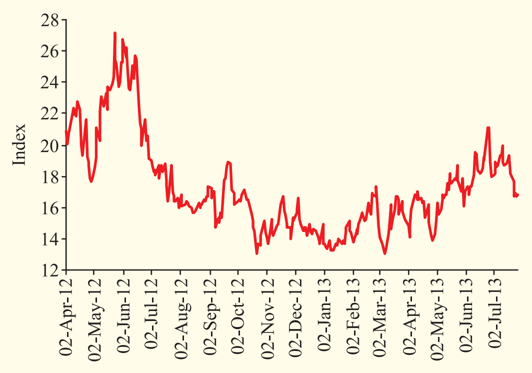
Table V.3: Institutional Investment in Equity and Debt Market

(₹ 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.

Chart V.10: Closing value of NSE's Volatility Index VIX



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

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.

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 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.

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.