

# II

## ECONOMIC REVIEW

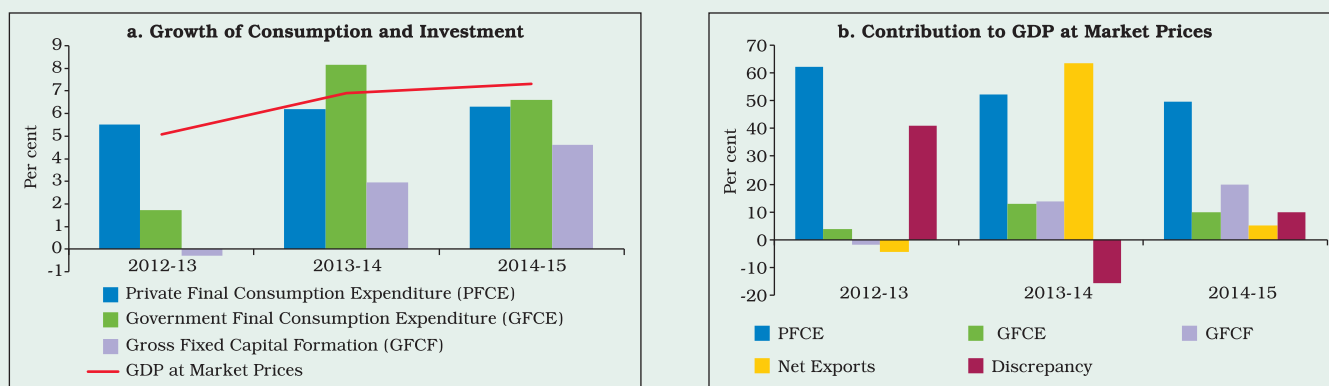
*The macroeconomic environment in 2014-15 was marked by a modest pick-up in activity amidst building internal and external stability, against the backdrop of a tepid and multi-speed global recovery across regions. Going forward, the economy needs to grapple with significant challenges in the path towards realising its potential and sustaining the growth process. Importantly, structural constraints to growth and asset quality concerns need to be addressed sooner than later.*

### II.1 THE REAL ECONOMY

II.1.1 In January 2015, the Central Statistics Office (CSO) released a new series on India's national accounts. The distinguishing features of the new series are: (i) updating the base year from 2004-05 to 2011-12; (ii) improved coverage of corporate activity by (a) using the MCA 21 database<sup>1</sup> of the Ministry of Corporate Affairs, (b) employing value-based indicators such as sales tax collections in conjunction with volume-based indicators such as industrial production, and (c) use of results from the latest surveys, including on activity in the unorganised sector; and (iii) methodological changes such as shifting from the

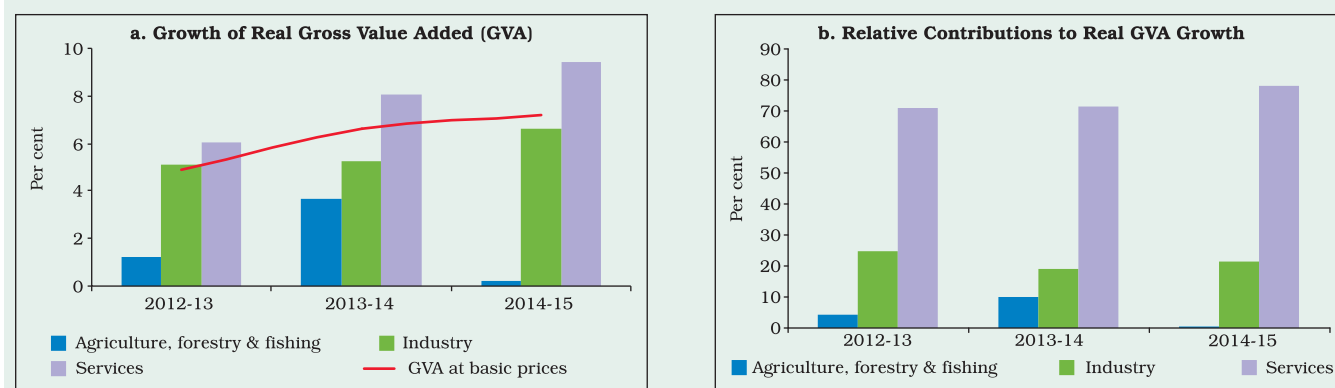
'establishment' to the 'enterprise' approach for estimating value added in mining and manufacturing. In line with international practices, GDP at market prices will henceforth be the headline measure for output. Gross value added (GVA) at basic prices will measure activity from the supply side instead of GDP at factor cost. In terms of the new series, real activity (at market prices) picked up in 2014-15, rising by 7.3 per cent on top of a growth of 6.9 per cent in 2013-14 (Chart II.1). The firming up of growth during 2014-15 was driven mainly by private consumption and supported by fixed investment, even as government consumption and net exports slackened considerably.

**Chart II.1: Growth of Real GDP at Market Prices**



<sup>1</sup> The MCA 21 database is an e-governance initiative by the Ministry of Corporate Affairs (MCA) for companies registered under the Companies Act to file their annual accounts electronically under two web platforms: (i) Form 23 AC/ACA and (ii) Extensible Business Reporting Language (XBRL). Currently, banking companies, power companies, non-banking financial companies and insurance companies are exempted from compulsory XBRL filing. For the new series (base: 2011-12), the CSO has incorporated the accounts of about 5 lakh companies for 2011-12 and 2012-13, and around 3 lakh common companies for 2013-14. The database also covers limited liability partnership companies (LLPs) registered with MCA under the LLP Act, 2008.

Chart II.2: Growth in Real GVA at Basic Prices



II.1.2 From the supply side, the quickening of activity in 2014-15 was largely led by industry and services (Chart II.2). Within industry, higher growth was observed in manufacturing and electricity generation. The share of manufacturing was augmented by trading activity of constituent entities which formed part of services in the old series. In the services sector, 'financial, real estate, and professional services' as well as construction were the primary drivers. On the other hand, the agriculture sector lost momentum, adversely impacted by the deficient southwest monsoon (SWM) which affected *kharif* sowing and by unseasonal rains and hailstorms at the time of *rabi* harvesting.

II.1.3 Thus, in terms of the new series, India emerged among the fastest growing economies in the world, notwithstanding the still sluggish global economy which dragged down the contribution of net exports to growth in 2014-15.

#### *Saving and Investment*

II.1.4 In 2013-14, the gross domestic saving rate declined for the second consecutive year to 30 per cent of gross national disposable income (GNDI) (Table II.1) This largely reflected the reduction in the saving rate of households on account of a decline in physical assets as well as in valuables. On the other hand, household financial saving gained from returns turning attractive with the

Table II.1: Gross Saving (As a ratio of GNDI)

(Per cent)

Item	2011-12	2012-13	2013-14
1	2	3	4
<b>1 Gross Savings</b>	<b>33.0</b>	<b>31.1</b>	<b>30.0</b>
<b>1.1 Non-financial Corporations</b>	<b>9.7</b>	<b>9.6</b>	<b>10.3</b>
1.1.1 Public non-financial corporations	1.4	1.2	1.0
1.1.2 Private non-financial corporations	8.3	8.4	9.3
<b>1.2 Financial Corporations</b>	<b>2.9</b>	<b>3.1</b>	<b>2.8</b>
1.2.1 Public financial corporations	1.8	1.7	1.5
1.2.2 Private financial corporations	1.1	1.4	1.3
<b>1.3 General Government</b>	<b>-1.8</b>	<b>-1.3</b>	<b>-1.0</b>
<b>1.4 Household sector</b>	<b>22.2</b>	<b>19.7</b>	<b>17.8</b>
1.4.1 Net financial saving	7.1	6.8*	7.1*
1.4.2 Saving in physical assets	14.8	12.6	10.4
1.4.3 Saving in the form of valuables	0.4	0.4	0.3

Note: Net financial saving of the household sector is obtained as the difference between change in financial assets and change in financial liabilities.

Source: Central Statistics Office.

\*: As per Reserve Bank's latest estimates, household financial saving for 2012-13 and 2013-14 are 7.0 per cent and 7.3 per cent, respectively, of GNDI.

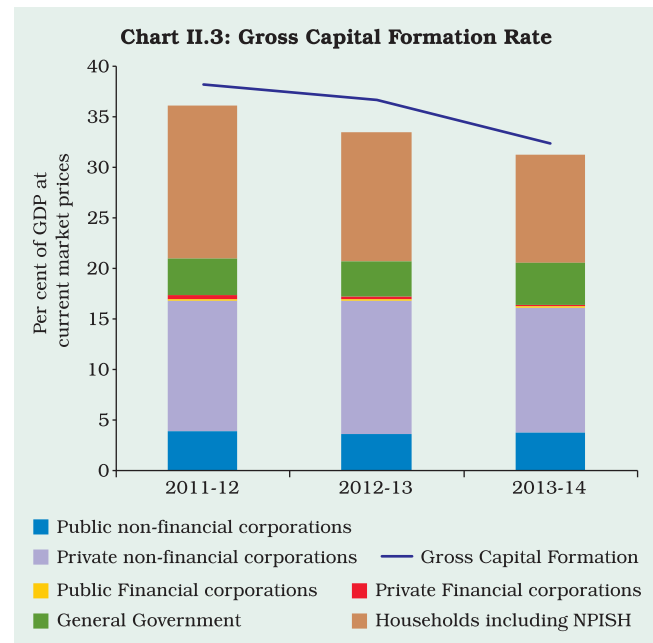
moderation in inflation as well as the pick-up in economic activity. For 2014-15, CSO has not yet released its estimates of gross saving. However, in terms of the Reserve Bank's preliminary estimates, household financial saving is placed at 7.5 per cent of GNDI in 2014-15, up from 7.3 per cent in 2013-14.

II.1.5 As regards the saving rate of the private corporate sector, non-financial corporations posted a near-steady improvement since 2011-12, *i.e.*, since the new series is available, but it appears that this increase may not have sustained in 2014-15. Private financial corporations, on the other hand, underwent some erosion in saving rates in 2013-14, partly reflecting the slowdown in the growth of operating profits of private sector banks. Available indicators suggest that this has been recouped in 2014-15.

II.1.6 The ongoing reduction in 'dissaving' of the general government boosted the gross national saving rate in 2013-14. With the perseverance of fiscal consolidation, especially by the centre, the decline in the dissaving of the government sector has likely continued into 2014-15. There was, however, a decline in the saving rate of the public financial (including public sector banks) and non-financial corporations in 2013-14. In case of public sector banks, there was a decline in profit after tax during 2014-15.

II.1.7 The investment rate (gross capital formation as a proportion to GDP at current market prices) declined in 2012-13 and 2013-14, largely reflecting the slackening in the non-financial corporations' investment rate on account of weak domestic and external demand and other structural factors such as delay in land acquisition and environment clearances, weak business confidence and policy uncertainties. The household sector's investment rate also declined in 2012-13 and 2013-14. The improvement in general government investment in 2013-14 did, however, provide some offset (Chart II.3).

II.1.8 Viewed in conjunction with other indicators of investment activity such as stalled projects,



capital goods imports/production and capex spending, the decline in the private investment intention appears to have become more pronounced in 2014-15 relative to the preceding year. As per the Reserve Bank's data on new projects which were sanctioned financial assistance by banks/financial institutions (FIs) or funded through external commercial borrowings (ECBs)/foreign currency convertible bonds (FCCBs)/domestic capital market issuance, investment intentions for such projects aggregated to ₹1,459 billion during 2014-15 as against ₹2,081 billion in the previous year. A turnaround in the investment demand cycle, therefore, assumes critical importance to steer the economy on to a sustainable high growth trajectory. The recent experience suggests that a strong step-up in public investment may be required to dispel the inertia constraining private investment and to crowd it in, given the robust business sentiment. Key to this effort will be putting stranded investments in stalled projects back to work while ensuring the availability of key inputs such as power, land (especially for roads) and skilled labour. Steadfast implementation of structural reforms like the goods and services tax (GST) is also required to reinvigorate productivity and competitiveness.

## Agriculture

II.1.9 The vagaries of the monsoon were in full play during 2014-15. The likelihood of *El Nino* emerging, was initially placed high, but it eventually did not materialise. Nevertheless, delay, deficiency, and unevenness in rainfall during the SWM season led to a decline in the production of most *kharif* crops. The deficient SWM did not replenish soil moisture adequately and, in addition, the northeast monsoon (NEM) also turned deficient. With the production of most *rabi* crops estimated lower, the initial hope that a good *rabi* harvest could make up for the *kharif* losses was belied. At the end of the seasons, the SWM turned 12 per cent below the long period average (LPA) and the NEM 33 per cent below the LPA. In addition to under-replenishment of reservoirs and intermittent dry halts, a bigger blow to *rabi* crops, mainly to wheat, came in the form of unseasonal rainfall and hailstorms during late February and early March 2015. As per the fourth advance estimates of the Ministry of Agriculture released on August 17, 2015, the total foodgrains production declined by 4.6 per cent. Similarly, the production of oilseeds and cotton declined by 18.5 per cent and 1.2 per cent respectively, though that of sugarcane increased

by 2.0 per cent. The impact of a decline in the volume of foodgrains production to 252.7 million tonnes from 265.0 million tonnes a year ago may, however, be mitigated by the availability of food stock buffers of 55.6 million tonnes (end-July 2015), which is much higher than the buffer norm which varies between 21.0-41.1 million tonnes.

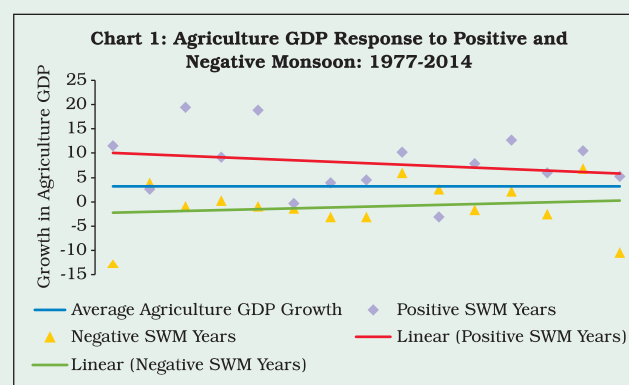
II.1.10 For the 2015 SWM season, the India Meteorological Department (IMD) has forecast precipitation at 88 per cent of the LPA in June 2015, and retained the same forecast in August 2015 with a higher likelihood of *El Nino* effect intensifying during the season<sup>2</sup>. Though delayed in arrival, the rainfall was in excess in June barring the last week when a dry spell set in and continued till mid-July, limiting the season's precipitation to 9 per cent below LPA so far (August 19, 2015). Better rainfall in June augmented sowing under most *kharif* crops *vis-à-vis* last year. In view of these developments, the prospects of *kharif* harvest 2015 could be expected better notwithstanding the persisting risks to supply shortfalls and likely inflation pressures given the unpredictability of SWM during the remaining part of the season, alongside the need for reappraisal of the degree of weather proofing of Indian agriculture in the context of monsoon vagaries (Box II.1).

### Box II.1

#### How Monsoon Proof is Indian Agriculture?

Historically, agricultural failures in India have often been associated with deficient south west monsoons (SWM). The SWM which constitutes 75-80 per cent of total rainfall received in India, coincides with *kharif* sowing and is vital for replenishment of ground water, soil moisture and reservoirs and thus crucial for a good *rabi* harvest as well. Visual observation of trend growth rates of agriculture seems to suggest resilience at least in some bad monsoon years (Chart 1).

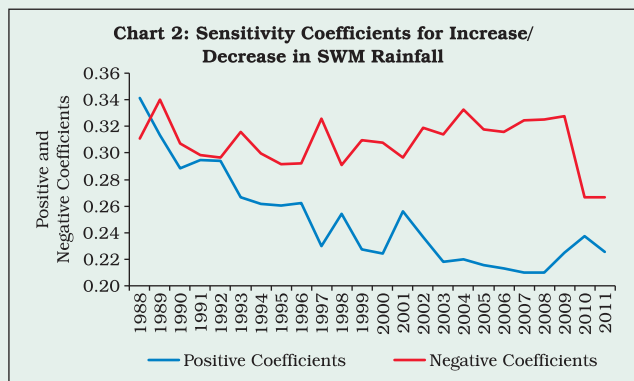
Empirical analysis of positive and negative SWM shocks suggests that during 1988-2012, the impact of variations in SWM is statistically significant for agricultural output, but it is



*contd.*

<sup>2</sup> In July 2015, Skymet, a weather monitoring and agri-risk solutions company revised its forecast of the SWM rainfall to 98 per cent of LPA (error margin of +/-4%) from 102 per cent of LPA (error margin of +/-4%), forecast in March 2015.

much less than that of variations in net sown area (Chart 2). The absence of multicollinearity between rainfall and sown area is validated by variance inflation factor (VIF).



Clearly, Indian agriculture is yet to become fully weather proof and public policy interventions to insulate crop production from monsoon shocks is an imperative. Saturation of land use and exhaustion of economies of scale can be halted by multi-pronged strategies covering, *inter alia*, credit, capital and machinery, technology, research and development, use of improved and hybrid seeds, irrigation and water management, and land reclamation including in arid and semi-arid areas while more vigorously pursuing the

scheme of extending the green revolution in the east. A diversified approach to agricultural development with emphasis on livestock, fishery, forestry and logging will also buffer agricultural output from SWM variations, provided it is pursued in the overall context of food and nutritional security.

Contingency plans put in place during 2009-10 in the face of a 22 per cent shortfall in SWM warrant careful consideration for replication. The provision of quality and short duration seeds, agricultural inputs, an active *rabi* campaign and an action plan for the next cropping season, media telecasting and awareness campaigns, enhanced availability of funds under centrally sponsored programmes, and additional diesel subsidy for irrigation served well, bringing home the point that the impact of adverse monsoon shocks can be ameliorated by pro-active policy measures.

**References:**

Aggarwal P.K. *et al.* (2009), 'Vulnerability of Indian Agriculture to Climate Change: Current State of Knowledge' available at <http://www.moef.nic.in>

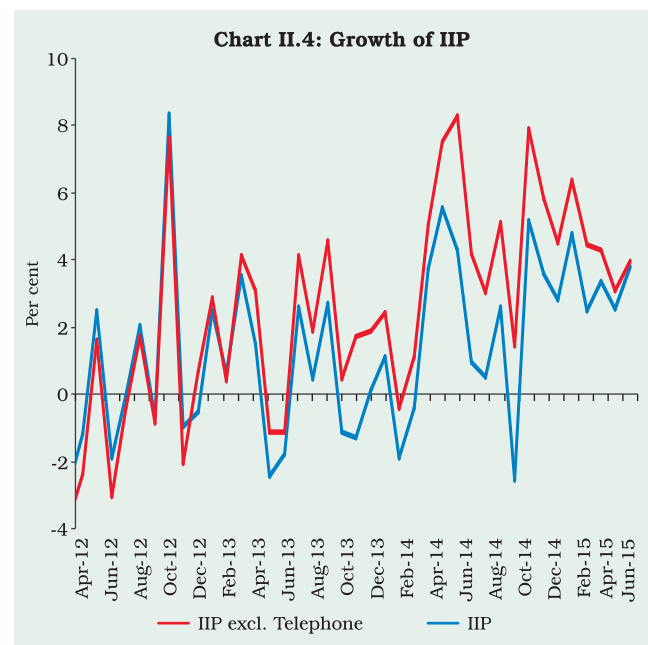
RBI Bulletin (2015), 'Monsoon and Indian Agriculture – Conjoined or Decoupled?', May.

**Industry**

II.1.11 Industrial production turned around from the contraction recorded in 2013-14 and posted a growth of 2.8 per cent during 2014-15. The production of consumer durables continued to shrink as in the previous year, especially telephone instruments, including mobile phones which was due to the one-off closure of Nokia's manufacturing unit in Chennai in November 2014. Excluding this category, industrial production would have risen by 5.3 per cent during 2014-15 (Chart II.4).

II.1.12 Higher production of basic metals, electricity and capital goods drove up the index of industrial production (IIP) growth during 2014-15. In terms of the use-based classification, the production of basic and capital goods accelerated, while that of intermediate goods decelerated and the output of consumer goods contracted (Table II.2).

II.1.13 Mining activity recovered during 2014-15 from a three-year slump, buoyed by a sharp increase



**Table II.2: Index of Industrial Production**

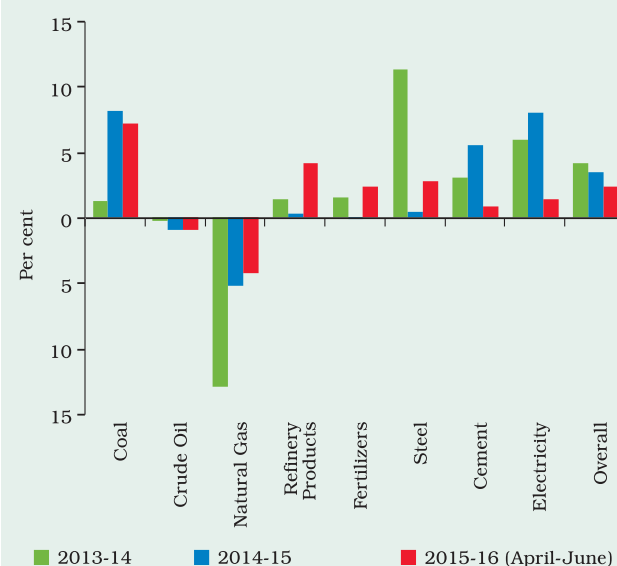
(Per cent)

Industry Group	Weight in IIP	Growth Rate				
		2011-12	2012-13	2013-14	2014-15	April-June 2015-16P
1	2	3	4	5	6	7
<b>Overall IIP</b>	<b>100.0</b>	<b>2.9</b>	<b>1.1</b>	<b>-0.1</b>	<b>2.8</b>	<b>3.2</b>
Mining	14.2	-2.0	-2.3	-0.6	1.5	0.7
Manufacturing	75.5	3.0	1.3	-0.8	2.3	3.6
Electricity	10.3	8.2	4.0	6.1	8.4	2.3
<b>Use-Based</b>						
Basic Goods	45.7	5.5	2.5	2.1	7.0	4.7
Capital Goods	8.8	-4.0	-6.0	-3.6	6.4	1.5
Intermediate Goods	15.7	-0.6	1.6	3.1	1.7	1.6
Consumer Goods	29.8	4.4	2.4	-2.8	-3.4	2.4
Consumer Durables	8.5	2.6	2.0	-12.2	-12.6	3.7
Consumer Non-durables	21.3	5.9	2.8	4.8	2.8	1.6
<b>Source:</b> Central Statistics Office.	P: Provisional					

in the production of coal (Chart II.5). Among other items within the mining sector, the production of crude oil declined on account of ageing oil fields and delay in the execution of new oil field projects. Also, contraction in the production of natural gas from the KG-D6 block affected natural gas production during 2014-15 as in the previous three years. Electricity generation registered its highest growth in the last two decades during 2014-15, facilitated by improved coal supply and higher capacity addition of 22,566 MW (as against a target of 17,830 MW), which is the highest ever achieved in a single year. Capacity addition, coupled with higher generation and improved transmission capacity resulted in a considerable reduction in power shortage from a level of 7 to 11 per cent during the last two decades to a record low of only 3.6 per cent during 2014-15. The plant load factor (PLF) in the thermal power sector was largely sustained in 2014-15. However, there has been some slippage in the PLF in the first quarter of 2015-16.

II.1.14 Weakness in consumer spending, sluggish investment activity and poor external demand

operated as drags on manufacturing activity during 2014-15. Within the manufacturing sector, export-oriented industries like textiles, wearing apparels and refined petroleum products decelerated. On the other hand, capital goods industries like machinery and equipment and electrical machinery

**Chart II.5: Growth in the Index of Eight Core Industries**

registered improved growth. Revival in the production of capital goods after three years of contraction signals improved prospects for investment demand going forward. During April-June 2015, however, the growth in IIP decelerated mainly on account of a sluggish performance in capital goods, electricity and food products.

### *Services*

II.1.15 The services sector is estimated to have grown by 9.4 per cent during 2014-15 mainly driven by 'financial, real estate and professional services' and construction sector. As for 2015-16, available data on lead indicators of services sector including commercial/passenger vehicles sales, air passenger traffic, port and international air cargo, show an improvement over the corresponding period last year. However, railway freight traffic, domestic air cargo, tourist arrivals, cement production and steel consumption - which provide lead indications of construction activity- show moderation. During 2014-15, purchasing managers index (PMI) for services remained in an expansionary mode since May 2014, though the rate of expansion was at a slower pace in ensuing months. However, PMI services contracted in May-June 2015 on account of a decline in both output and new orders though it expanded marginally in July 2015. Also, given the drag emanating from fiscal consolidation by central and state governments on total spending, 'public administration, defence and other services' may not serve as a durable growth driver, going forward.

### *Employment Generation*

II.1.16 Quarterly employment surveys conducted by the Labour Bureau for select export-oriented sectors reveal that the rate of employment generation in these sectors picked up in 2013 and 2014, after a significant decline in 2012. However,

the pace of employment generation is yet to recover to its pre-2010 level. Information technology-business process outsourcing (IT-BPO) and textiles continue to be the key export oriented sectors generating large employment from 2009 to 2014.

### *Infrastructure*

II.1.17 The growth of production in core industries (coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity) moderated during 2014-15 (Chart II.5) and remained sluggish during April-June 2015. Structural constraints have resulted in a persistent decline in the production of natural gas, crude oil and fertilisers. The growth of the steel industry was affected by the fall in global prices of steel and the resultant increase in steel imports. On the other hand, the coal sector's impressive growth performance during 2014-15 benefitted from several efficiency enhancing measures taken by the government for Coal India Limited (CIL), like use of mass production technologies, rationalisation of linkages from coal sources to end-users, coordinated efforts with railways for speedy evacuation of coal and shifting to underground mines.

II.1.18 As on mid-August 2015, the government's Project Monitoring Group (PMG) has received proposals for 675 projects (₹10 billion and above or any other critical projects in sectors such as infrastructure, manufacturing and power) with an estimated project cost of ₹28.8 trillion for its consideration. Out of these, 291 projects worth ₹9.9 trillion were cleared by the PMG with the majority of projects pertaining to the power sector, followed by coal, road and petroleum sectors. However, the impact of government initiatives is yet to be felt in terms of the revival of central sector infrastructure projects (₹1.5 billion and above) monitored by the

**Table II.3: Status of Projects**

Central Sector Infrastructure Projects					
Period	Total No. of Projects	No. of Delayed Projects	Value of Delayed Projects (₹ billion)	No. of projects without DOC	Value of projects without DOC (₹ billion)
1	2	3	4	5	6
May-15	766	237	4,826	371	2,470
Mar-15	751	328	5,752	264	1,531
Dec-14	738	315	4,961	266	1,475
Sep-14	750	312	5,504	302	1,730
Jun-14	729	290	4,975	300	1,805

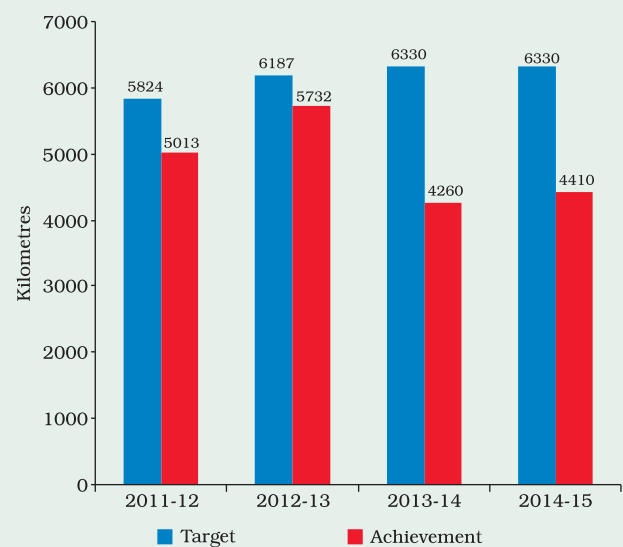
**Source:** Infrastructure and Project Monitoring Division, MoSPI, Government of India (Gol).  
DOC: Date of Commissioning.

Ministry of Statistics and Programme Implementation (MoSPI) (Table II.3).

II.1.19 While investment through the public-private partnership (PPP) mode was the highest in India during 2008 to 2012 as per the World Bank's database<sup>3</sup>, thereafter the private participation in prime infrastructure projects in roads and ports decreased sharply. The focus of the government on construction of highways through the publicly funded engineering, procurement and construction (EPC) mode is reflected in a marginal improvement in road construction activity in 2014-15 *vis-à-vis* 2013-14 (Chart II.6).

II.1.20 Spectrum auctions in March 2015 elicited vibrant bidding for all the four bands (1800 MHz, 900 MHz, 2100 MHz, and 800 MHz). This is the first time that spectrum has been offered simultaneously in all the four bands (Table II.4).

II.1.21 The government initiated a number of structural reforms in the recent period to boost the infrastructure sector: the passing of the Coal Mines (Special Provisions) Act, 2015; auctioning of coal mines; hike in tariffs on iron and steel; adoption of the plug-and-play mode of project execution for mega power projects; allowing foreign direct investment up to 100 per cent in railway infrastructure;

**Chart II.6: Implementation of Road Projects by NHAI**

**Source:** National Highways Authority of India (NHAI), Government of India.

the proposed National Investment and Infrastructure Fund; tax free infrastructure bonds for projects in the rail, road and irrigation sectors and increased plan outlays for roads and railways.

II.1.22 In order to give a direct thrust to infrastructure investment, the government has stepped in to boost public spending in infrastructure by ₹700 billion in 2015-16. These efforts are also expected to crowd in private participation. Going forward, the government's decision to award new projects only after obtaining the requisite clearances and linkages could catalyse the pace of infrastructure project completion.

**Table II.4: Spectrum Auction**

Year	Revenue Realisation (₹ billion)
1	2
2010	1062.62
2012	94.07
2013	36.39
2014	611.61
2015	1098.75

**Source:** Ministry of Information & Communication Technology, Gol.

<sup>3</sup> Compendium of 'PPP projects in infrastructure', Planning Commission, Government of India, March 2014.

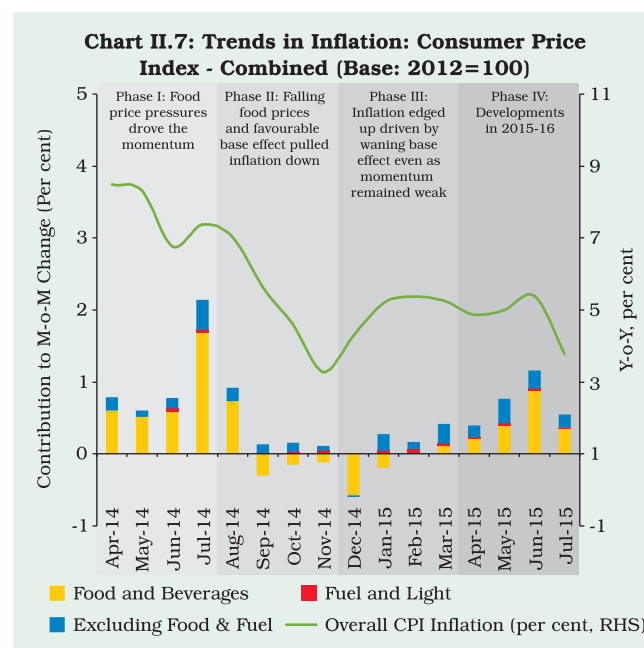


## II.2 PRICE SITUATION

II.2.1 The year 2014-15 marked a turning point in the evolution of price-cost dynamics in India. In January 2014, the stance of monetary policy was anchored to a path of disinflation that would take inflation (measured in terms of y-o-y changes in the all India consumer price index (combined) or CPI-C, base 2010 =100) down from 8.6 per cent to below 8 per cent by January 2015 and to below 6 per cent by January 2016. This stance was backed by policy rate increases of 25 basis points each in September 2013, October 2013 and January 2014. Although unseasonal food price spikes owing to weather-related transportation disruptions in north India kept inflation stubbornly high till July 2014, steadfast perseverance with the anti-inflationary monetary policy allowed rate increases in the second half of 2013-14 to feed through into the economy. Aided by a range of supply management strategies and a dramatic plunge in international commodity prices<sup>1</sup> by 28 per cent between September 2014 and February 2015, inflation persistence (near double digit CPI inflation for six consecutive years) was finally broken and headline inflation started easing from August 2014. The abatement in food price pressures contributed 76 per cent to the decline in inflation between July and November 2014. By April 2015, it had declined to 4.9 per cent measured by the new CPI series (base 2012=100), thus confirming that disinflation was getting entrenched. Notwithstanding an uptick in June 2015 to 5.4 per cent, largely reflecting fuel price adjustments and short-term food price pressures, inflation moderated significantly to 3.8 per cent in July 2015. Importantly, inflation excluding food and fuel almost halved from 8.3 per cent in May 2014 to 4.2 per cent in March

2015, providing abiding momentum to the disinflation process. However, this moved significantly up to 5.0 per cent in June 2015 before falling to 4.5 per cent in July 2015. By December 2014, households' inflation expectations (both three months ahead and one-year ahead), which had been ruling in double digits persistently since September 2009, eased to single digit.

II.2.2 Average inflation at 5.9 per cent during 2014-15 turned out to be significantly lower than 9.5 per cent a year ago (Chart II.7). Intra-year movements in inflation during 2014-15, however, exhibited three distinct phases – first, weather-related vegetable price pressures till August; second, the subsequent fall in food prices and pass-through of declining global commodity prices into food, fuel and services prices, resulting in a major shift in the inflation trajectory that took inflation down to an intra-year low of 3.3 per cent in November 2014; and finally the reversal of favourable base effect, which pushed inflation up

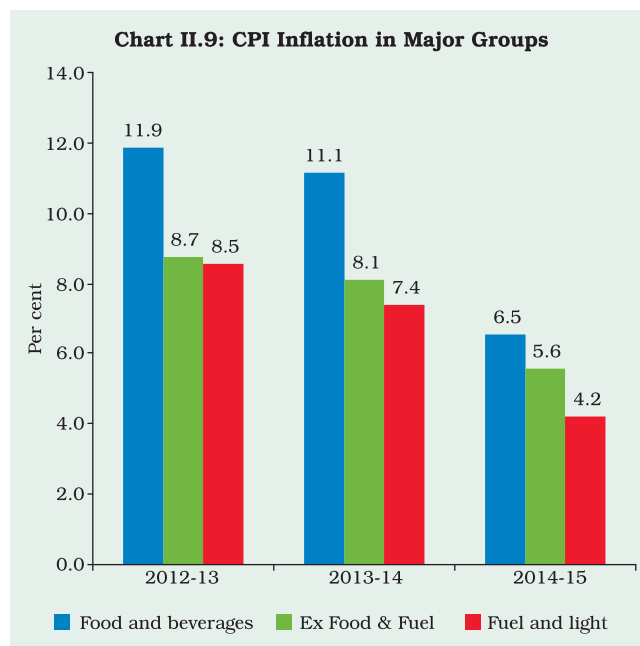
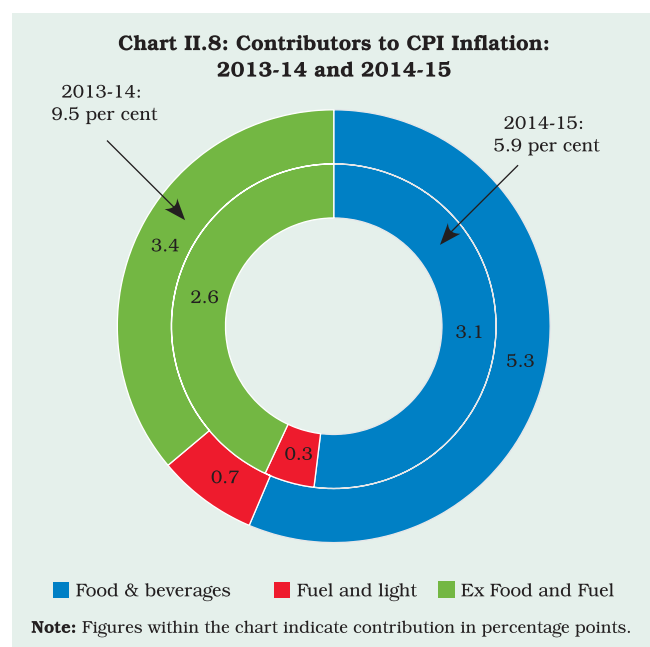


<sup>1</sup> As measured by IMF's primary commodity price index.

to 5.3 per cent in March 2015. Significantly, even as inflation moved up during December 2014 - February 2015, the month-on-month increase in prices remained moderate or negative, attesting to the sustained abatement of inflation risks.

### Drivers of CPI Inflation

II.2.3 All the three major constituent groups of CPI - food, fuel and categories excluding food and fuel - contributed to a decline in headline inflation, reflecting improvement in supply conditions and the ebbing of inflation momentum (Chart II.8), with the largest impact emanating from the food component. Fuel group's contribution to inflation remained marginal, reflective of its relatively lower weight and declining frequency of changes in administered prices of non-transport fuel items. The fall in inflation, excluding food and fuel, was facilitated by the anti-inflationary monetary policy stance as inflation in most of its sub-components edged down.



### Food Inflation

II.2.4 The wedge between inflation in food and non-food groups narrowed considerably during 2014-15 (Chart II.9). Two major groups - cereals and vegetables - together accounted for almost 80 per cent of the decline in average food price inflation during the year. Cereals' inflation declined partly on account of the lower order of revision in minimum support prices (MSPs) in 2014-15 (Table II.5) and active supply management under the

**Table II.5: Minimum Support Prices of Food Grains (₹ per quintal)**

Commodity	2012-13	2013-14	2014-15	2015-16
1	2	3	4	5
Paddy (Common)	1,250	1,310	1,360	1,410
Wheat	1,350	1,400	1,450	-
Gram	3,000	3,100	3,175	-
Arhar (Tur)	3,850	4,300	4,350	4,425
Moong	4,400	4,500	4,600	4,650
Urad	4,300	4,300	4,350	4,425

Source: DAC, Ministry of Agriculture & Farmers Welfare.

public distribution system (PDS), including the open market sale of wheat. Vegetable prices shrugged off bouts of weather-related volatility in H1 of 2014-15 and declined relatively faster in H2 of 2014-15 with policy actions taken to discourage stockpiling, and bringing vegetables under the Essential Commodities Act (ECA). Sugar prices moderated in tandem with global prices, but protein-rich items (eggs, fish, meat, milk and pulses) exhibited downward rigidity in inflation, reflecting structural mismatches between demand and supply.

II.2.5 A number of policy initiatives were taken to improve both supply chain and post-harvest crop management. These included issuing advisories to states to enable free movement of fruits and vegetables by delisting them from the Agricultural Produce Marketing Committee (APMC) Act; bringing onions and potatoes under the purview of ECA, thereby allowing state governments to impose stock limits so as to deal with cartelisation and hoarding and making violation of stock limits a non-bailable offence. Imposing a minimum export price (MEP) of US\$ 450 per metric tonne (MT) for potatoes with effect from June 26, 2014 and US\$ 300 per MT for onions with effect from August 21, 2014 also helped in maintaining domestic supplies of these perishable items.

#### Fuel Group Inflation

II.2.6 From August 2014, crude oil prices fell but the full pass-through of this decline was impeded by lingering under-recoveries of the oil marketing companies (OMCs) (Table II.6). Further, the government increased the excise duty on petrol and diesel cumulatively by ₹7.75 per litre for petrol

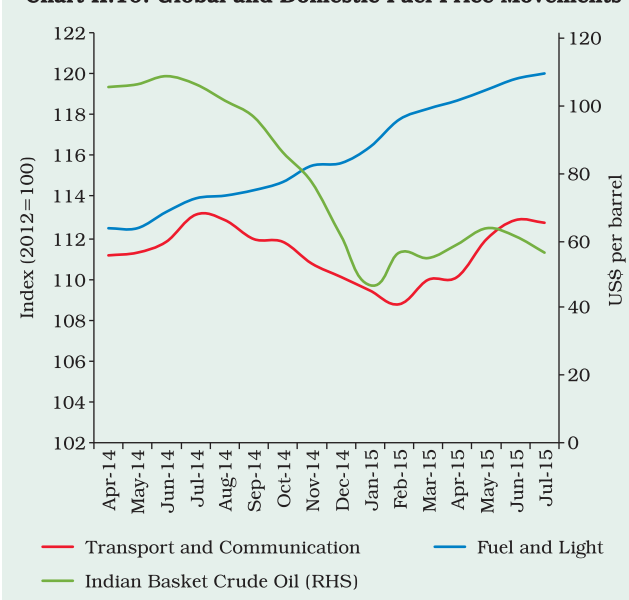
**Table II.6: Under-recoveries of Oil Marketing Companies**

Product	(₹ billion)	
	2013-14	2014-15
1	2	3
Diesel	628	109
PDS Kerosene	306	248
Domestic LPG	465	366
<b>Total</b>	<b>1,399</b>	<b>723</b>

**Source:** PPAC, Ministry of Petroleum & Natural Gas.

and ₹6.50 per litre for diesel during November 2014 - January 2015, which partially offset the overall fall in prices. In case of coal, Indian prices have historically remained substantially lower than the global prices. Therefore, the decline in global coal prices during 2014-15 resulted in bridging the gap between global and domestic prices rather than a fall in domestic prices. Since the CPI fuel group includes a number of items, such as electricity and kerosene whose prices are administered, prices in this category remained sticky (Chart II.10).

**Chart II.10: Global and Domestic Fuel Price Movements**



### *Inflation Excluding Food and Fuel*

II.2.7 Prices in respect of the transport and communication sub-group declined in tandem with softening of global crude oil prices. By the end of the year, the transport and communication category contributed negatively to inflation (Chart II.11). Also, housing inflation showed a much more significant moderation under the new series (base 2012=100) partly on account of methodological improvements, which included doubling the sample size for collection of rentals data from 6,684 rented dwellings in the old series to 13,368 in the revised series. Inflation in services components, such as health, education and household requisites declined, reflecting a slowdown in wage growth.

### *Rural Wage Growth Moderated*

II.2.8 Input cost pressures from fuel, farm inputs and rural wages ebbed significantly during 2014-15. After the high and unprecedented rise in rural wages during 2007-08 to 2012-13, the recent slowdown in wage growth has evoked academic

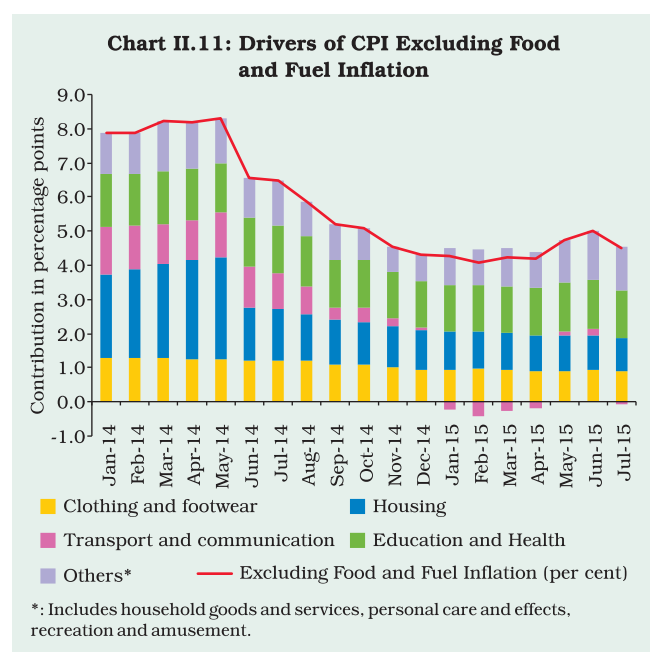
and policy interest. Average wage growth, as per the new wage series, for November 2014 to May 2015, remained at 3.9 per cent for agricultural and 5.7 per cent for non-agricultural occupations, respectively. This was substantially lower than the annual average rate of 16 per cent for agricultural occupations and 14 per cent for non-agricultural occupations during the six-year period from 2007 to 2013. However, the role of productivity will have to be examined carefully while assessing the durability of the impact of the changes in wage growth on inflation (Box II.2).

### *Wholesale Price Inflation*

II.2.9 Inflation measured by the wholesale price index (WPI) declined significantly during 2014-15. Since November 2014, wholesale prices have moved into contraction [(-) 4.1 per cent in July 2015, y-o-y] (Chart II.12). Prices of non-food manufactured products also contracted in July 2015 [(-) 1.4 per cent, y-o-y], indicating the extent of slack in the economy as well as falling cost pressures.

### *Global Commodity Prices and Supply Conditions*

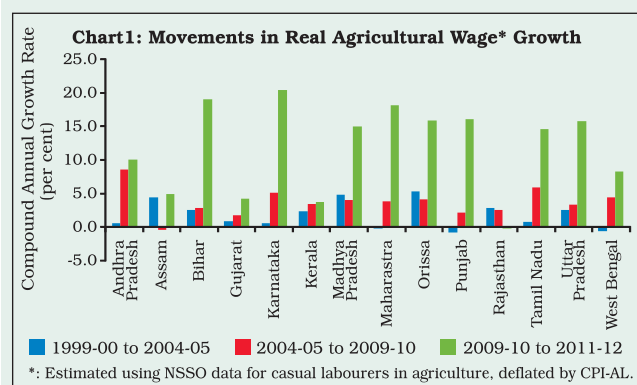
II.2.10 Global commodity prices declined sharply amidst improved supply, large spare capacity and weak demand conditions in 2014-15 (Chart II.13). During the initial part of the year, crude oil prices hardened on account of supply outages in Libya, Nigeria and Syria. From August 2014, global crude oil prices fell substantially, driven by abundant supplies of North American shale oil and the Organisation of Petroleum Exporting Countries' (OPEC) decision not to cut production at its November 2014 meeting. Global crude oil prices reached a trough of US\$ 47 per barrel



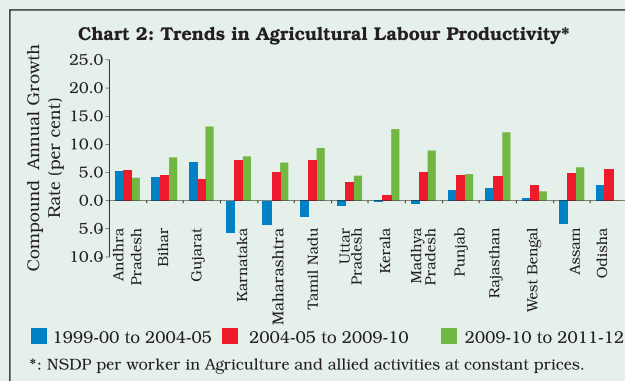
### Box II.2 Wage Growth and Rural Inflation – Are They Related?

An increase in rural wages can influence prices, both by increasing demand and pushing up the cost of production. On the other hand, wage growth in itself could respond to high price increases, particularly food price increases. The wage-inflation nexus also works through productivity - as labour productivity increases, wages rise. An increase in labour productivity will reduce unit labour cost, which is the average cost of labour per unit of output (usually calculated as the ratio of total labour costs to real output) and therefore, it will be possible to pay a higher wage without an increase in final output price. On the other hand, if wage increases are unaccompanied by productivity increases, rise in unit labour costs will lead to further increase in output prices and hence inflation. This dynamics is more complex in a regional perspective, where there is large heterogeneity in product and labour markets.

A comparison between agricultural labour productivity and agricultural wages at the all-India level as well as for major states is insightful. Real wage growth, *i.e.*, growth in agricultural wages adjusted for CPI - agricultural labourers (AL) inflation, remained moderate during 1999-00 to 2009-10. Subsequently, it went up sharply during 2009-10 to 2011-12 (Chart 1). This trend was broad-based and observed in major agricultural states like Bihar, Maharashtra, Madhya Pradesh, Tamil Nadu and Uttar Pradesh.



(Indian basket), marking a decline of 57 per cent during June 2014 to January 2015. Though the slow pace of global economic recovery has kept



Agricultural labour productivity declined in some states over the period from 1999-2000 to 2004-05, but went up subsequently during the period 2009-10 to 2011-12 at the all-India level as well as for major states (Chart 2). The productivity improvement was partly contributed by a shift in labour force from agricultural to non-agricultural occupations, which led to a decline in the total number of persons engaged in agriculture in 2011-12 *vis-à-vis* 2004-05. Thus, the sharp increase in real wages in recent years was partly offset by a rise in productivity. The impact of rural wage increases on rural food prices was not as large due to commensurate rise in productivity (Goyal and Baikar 2014). Post-2013, real wage growth declined in India barring a few states like Madhya Pradesh, Uttar Pradesh, Gujarat and Tamil Nadu. The fall in real wage growth is mainly contributed by a fall in nominal wage growth.

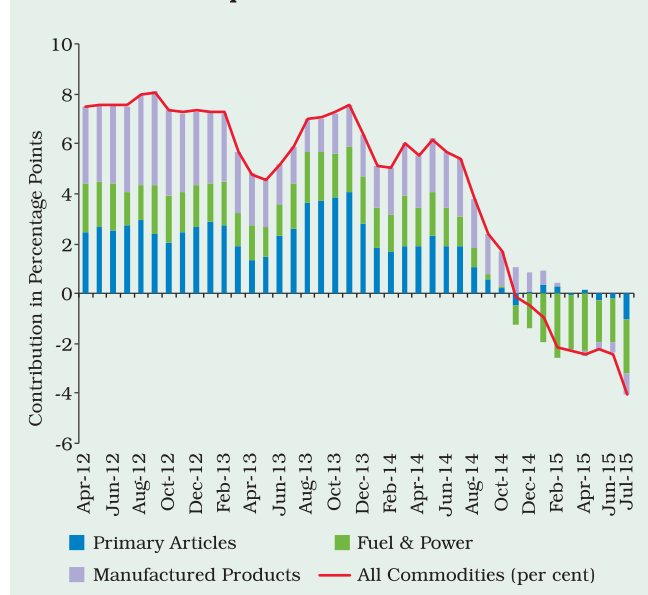
#### References:

Dholakia, R.H., M. B. Pandya and P. Pateriya (2014), 'Urban – Rural Income Differential in Major States: Contribution of Structural Factors', WP No. 7, Indian Institute of Management, Ahmedabad.

Goyal, A. and A.K. Baikar (2014), 'Psychology, Cyclicity or Social Programs: Rural Wage and Inflation Dynamics in India', WP, IGIDR, Mumbai.

demand prospects weak, the International Monetary Fund (IMF) estimated that lower demand could account for only 20 to 35 per cent

**Chart II.12: Group-wise Contribution to WPI Inflation**



of the price decline between June and December 2014.

II.2.11 Since January 2015, several factors, such as falling oil rigs in the US, decline in stockpiles and elevated geo-political tensions in the Middle East rekindled upside risks to oil prices. Indian basket prices firmed up to US\$ 63.8 per barrel in May 2015 but declined subsequently to US\$ 49 per barrel by mid-August 2015 as supply prospects improved with the clinching of the nuclear deal by

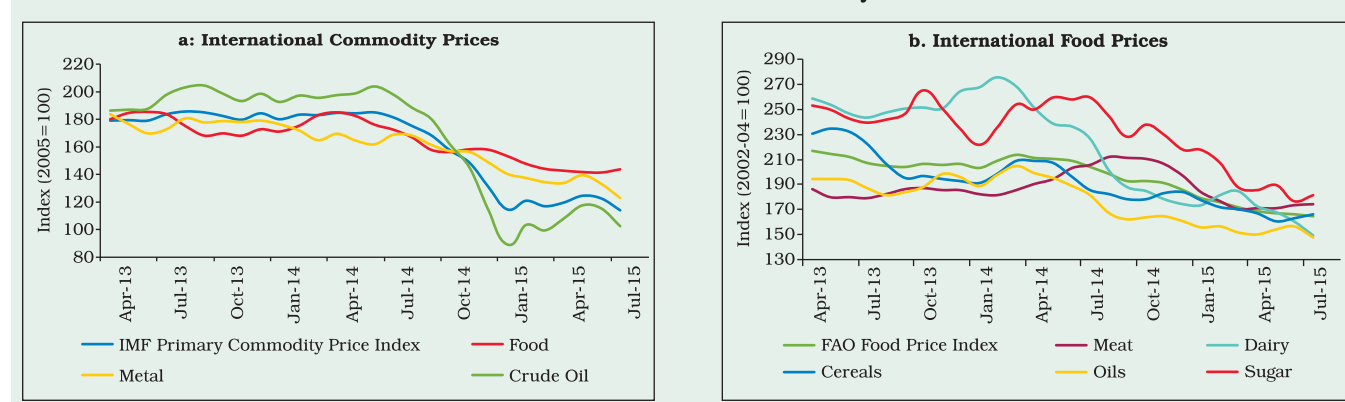
Iran with the major world powers. Metal prices edged down in 2014 aided by surplus supplies and slowing demand conditions in emerging economies, particularly in China.

II.2.12 Global food prices declined by 3.8 per cent in 2014 as large accumulated stocks continued to pull down international prices of commodities, such as cereals, oils and sugar. The Food and Agriculture Organisation (FAO), in its update of July 2015, forecast that the world cereals production might decline by 1.1 per cent in 2015 while exceptionally high stocks were likely to compensate for the production shortfall. During 2015 so far, prices have continued to move downwards for almost all food items, with large supplies and slow trading activity as buyers are expecting a further fall in prices in the coming months.

*Revision in the CPI Base Year*

II.2.13 In order to capture shifting consumption pattern of households, the Central Statistics Office (CSO) revised the base year of CPI to 2012 from its earlier base of 2010, using the weighting pattern from the latest consumer expenditure survey (CES), 2011-12 of the National Sample Survey Office

**Chart II.13: Trends in Global Commodity Prices**



**Table II.7: Comparison of Weighting Diagrams—Previous and Revised CPI Series**

Sub-Categories	Base Year: 2010			Base Year: 2012		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Food and Beverages	56.59	35.81	47.58	54.18	36.29	45.86
Pan, Tobacco and Intoxicants	2.72	1.34	2.13	3.26	1.36	2.38
Clothing and Footwear	5.36	3.91	4.73	7.36	5.57	6.53
Housing	--	22.54	9.77	--	21.67	10.07
Fuel and Light	10.42	8.40	9.49	7.94	5.58	6.84
Miscellaneous	24.91	28.00	26.31	27.26	29.53	28.32
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

'--': CPI (Rural) for housing is not compiled.

**Source:** Press Release on CPI base year revision, MOSPI, GoI.

(NSSO). Changing patterns of consumer expenditure over the years are reflected in sub-category-wise weights computed for the new CPI series (Table II.7).

II.2.14 Methodologically, the new series has incorporated certain improvements: a weighting pattern based on the modified mixed reference period (MMRP); internationally accepted 'classification of individual consumption according to purpose' with suitable deviations; and the use of a geometric mean to compute indices at the elementary/item level. Along with the prices of items under the above poverty line (APL) and below poverty line (BPL) categories, prices of items under the *Antyodaya Anna Yojana* (AAY) are also incorporated in the new series. The revision has a number of policy implications: lower sensitivity of the overall index to food price shocks and idiosyncratic price movements and incisiveness in identifying sources of inflation at the item level.

#### *Developments in Inflation: 2015-16 so far*

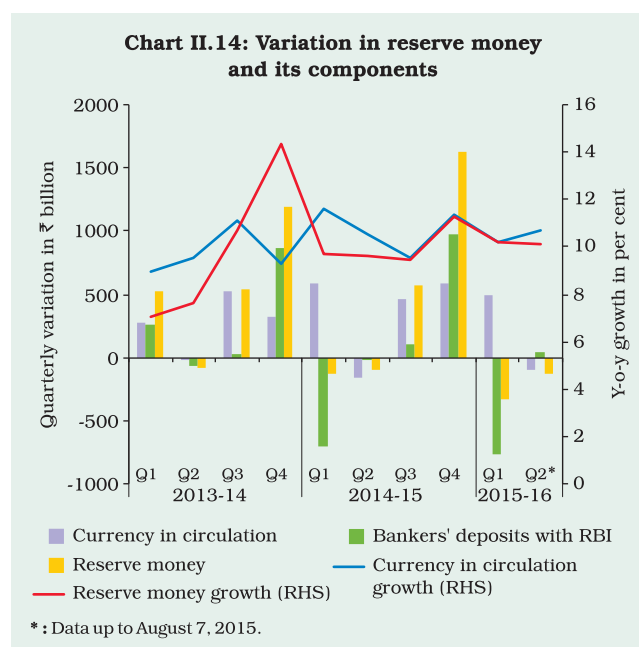
II.2.15 After dipping below 5 per cent in April 2015, CPI inflation edged up to 5.4 per cent in June driven by the food group owing to a fall in pulses production during 2014-15 and short-term pressures in vegetables prices. In July, however, inflation declined significantly to 3.8 per cent aided by favourable base effect and ebbing food price pressures. Excluding food and fuel, inflation moved up substantially to 5.0 per cent in June 2015 from 4.2 per cent in March 2015 on account of a broad-based rise in inflation in services segment, such as health and education as well as retail fuel price increases captured by the transport and communication sub-group. It, however, moderated to 4.5 per cent in July 2015 tracking lower transport costs with recent fall in fuel prices. Importantly, household inflation expectations returned to double digits in June 2015 quarter.

## II.3 MONEY AND CREDIT

II.3.1 Monetary and credit conditions remained sluggish through 2014-15 as reflected in the subdued growth in key monetary and banking aggregates. The sizeable expansion in Reserve Bank's net foreign exchange assets driven by surges in capital inflows was largely sterilised by active liquidity management operations. Consequently, reserve money grew at a subdued pace, reflecting the slow pace of economic activity as well as the anti-inflationary monetary policy stance of the Reserve Bank. Growth of money supply ( $M_3$ ) also slowed in relation to the preceding year reflecting the interaction of a number of factors. First, credit demand was muted reflecting the slack in the economy. Second, increasing levels of non-performing assets (including restructured assets) imparted an element of risk aversion across the banking sector. This inhibited credit supply, especially to stressed sectors such as infrastructure, with substitution at the margin in loan portfolios in favour of personal loans and retail lending where the incidence of non-performing assets (NPAs) was markedly less. Accordingly, banks tended to moderate their access to deposits which were also impacted by inadequate real returns relative to competing financial assets of households and corporate entities.

### Reserve Money

II.3.2 During 2014-15, reserve money expanded by 11.3 per cent, down from 14.4 per cent a year ago. On the components side, currency in circulation, constituting around 75 per cent of reserve money, increased by 11.3 per cent. The pick-up in currency demand from 9.2 per cent a year ago reflected the interaction of several factors -election-induced demand for currency and increased food subsidy (Chart II.14). On the other hand, growth of bankers' deposits with the Reserve Bank slowed to 8.3 per cent, mainly reflecting the



deceleration in deposit growth. The maintenance of reserves evened out across 2014-15 following the introduction of minimum daily CRR balances of 95 per cent since September 2013. Average daily excess reserve holdings by the banking sector declined from around 3 per cent in 2013-14 to 2 per cent in 2014-15, which indicated some efficiency gains under the new liquidity management framework introduced in September 2014. Variable rate auctions have induced some discipline in the banking system in planning liquidity. A system level liquidity flux appears to have eased with assurance on availability of liquidity as needed.

II.3.3 On the sources side, there was a change in the composition of reserve money in 2014-15 in terms of net domestic assets (NDA) and net foreign assets (NFA). With the emergence of India as a preferred destination for foreign capital, the Reserve Bank's foreign exchange operations to mitigate undue volatility in the foreign exchange market resulted in a large increase in NFA, injecting around ₹3.2 trillion primary liquidity (reserve money) into the financial system. Concomitantly, NDA (adjusted for net non-monetary liabilities) declined by around ₹1.9 trillion to partially sterilise the impact of the



Reserve Bank's forex market operations on reserve money expansion.

II.3.4 Global financial markets have been roiled by turbulence associated with divergence in monetary policy stances in the G3 economies. During 2014-15, significant shifts in monetary policy settings were also observed among emerging economies to manage the effects of G3 monetary policies on their financial systems transmitted through capital flows and asset prices as also to deal with domestic fragilities which restrained

growth and made them vulnerable to financial shocks. Cross-border externalities associated with the conduct of unconventional monetary policies in advanced and emerging economies alike occupied centre-stage in 2014-15 (Box II.3).

II.3.5 In response to these global factors affecting domestic liquidity conditions, the Reserve Bank endeavoured to contain the expansionary effects in keeping with its commitment to the glide path of disinflation. The Reserve Bank, therefore, appropriately calibrated repo auctions and open

### Box II.3 Spillovers and Spillbacks

'Spillovers' have come to be commonly employed in the post-unconventional monetary policy (UMP) literature to refer to the beneficial or damaging effects that a country's economic policies can have on other nations. In the more recent period, the focus has largely been on negative externalities associated with the Fed's quantitative easing (QE) and its widely anticipated normalisation, especially as the Fed's forward guidance on it has been data-dependent and consequently, every incoming data has triggered intense market reactions on its possible timing. In the event, UMPs have generated large capital flows to emerging market economies (EMEs) in an indiscriminate search for yields, while exit from them has increased the risks of substantial capital outflows of which the taper tantrum of the summer of 2013 provided a sinister preview. Empirical evidence suggests that UMPs have amplified the pro-cyclicality of capital flows and leverage in EMEs by strengthening the incentives to engage in maturity transformations, leading to misalignment with fundamentals with adverse implications for macroeconomic and financial stability (Fratzscher *et al.* 2013; Moore *et al.* 2013). Quite naturally, spillovers from UMPs have been the subject of acrimonious disharmony (Taylor 2013). Given the heterogeneity in the structural characteristics of EMEs, it is important to nuance these findings and qualify them with country-specific experiences.

For India, an analysis of the impact of spillovers from the Fed's QEs using a combination of methodologies, such as the event study framework, generalised method of moments (GMM) and vector auto-regressions (VARs) shows that the largest favourable impact came from QE1 that pushed capital flows into India, helping finance a widening current account deficit. QE2, unlike QE1, was associated with capital outflows from India. These spillovers were transmitted

mainly through the portfolio rebalancing channel, followed by the liquidity channel (Patra *et al.* 2014).

'Spillbacks' are a new entrant in this proliferating body of work, essentially the boomerang effects from recipient countries in a vicious loop that in a globally inter-dependent world adversely affect the source country that caused the spillovers in the first place. The larger global role played by EMEs implies that spillbacks from fluctuations in their growth as a result of shocks in advanced economies can be non-trivial. VAR specifications suggest that about 50 per cent of the fluctuations in outputs in advanced economies spill over onto EMEs of which one-third spill back to advanced economies (IMF 2014) (Table 1).

Spillback effects are more pronounced for Japan and the euro area, and less for the United States and the United Kingdom due to stronger trade linkages (Trade openness for the US and the UK is relatively far less).

Overall, spillback effects appear to be modest but could be larger in periods of stress, which in turn might have an

**Table 1: Estimated spillovers and spillbacks (per cent)**

	US	Euro Area	Japan	UK	Average
1	2	3	4	5	6
EM Spillover	58.3*	59.2*	25.4*	56.3*	52.8
EM Spillback	12.4	29.8*	12.7*	7.2	17.4
EM Spillback/ EM Spillover	21.3	50.4	51.1	12.8	34.4

**Source:** IMF staff calculations.

\*: Significant at the 10 per cent level. Estimates of spillovers and spillbacks from a 1 percentage point increase in growth in advanced economies (eight quarters after impact).

(Contd...)

adverse impact on the setting of monetary policy. Careful calibration and clear communication, with cooperation among policymakers could help in managing spillbacks and spillovers.

#### References:

Fratzscher, Marcel, Marco Lo Duca and Roland Straub (2013), 'On the International Spillovers of US Quantitative Easing', Working Paper Series No. 1557, June.

International Monetary Fund (2014), *Spillover Report 2014*.

Moore J., S. Nam, M. Suh and A. Tepper (2013), 'Estimating

the Impacts of US LSAP's on Emerging Market Economies' Local Currency Bond Markets', Staff Report No. 595, Federal Reserve Bank of New York.

Patra, M.D., J.K. Khundrakpam, S. Gangadaran, Rajesh Kavediya and Jessica Anthony (2014), 'Responding to QE Taper from the Receiving End', mimeo, RBI.

Taylor John B. (2013), 'International Monetary Policy Coordination: Past, Present and Future', Paper prepared for presentation at the 12th BIS Annual Conference on 'Navigating the Great Recession: What Role for Monetary Policy', Lucerne, Switzerland, June 21.

market operation (OMO) sales, both outright and on the Negotiated Dealing System-Order Matching (NDS-OM) platform to contract NDA and offset the large increase in NFA (Chart II.15).

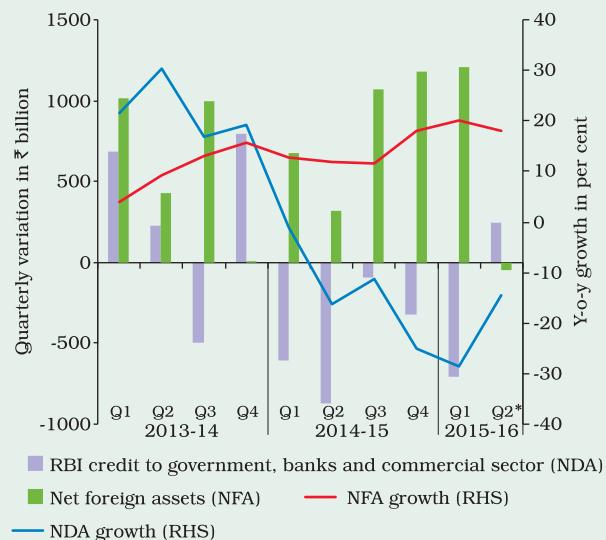
II.3.6 Quarterly movements in reserve money in 2014-15 evolved in line with changing drivers of liquidity and resulting composition shifts in the Reserve Bank's balance sheet. On the components side, except for the seasonal decline in Q2, currency in circulation increased throughout the year. On the sources side, the increase in NFA was largely offset by a decline in NDA in the H1 of 2014-15. In Q4, however, end year balance sheet adjustments and

advance tax payments tightened liquidity conditions, warranting injection of primary liquidity that remained largely unsterilised. Consequently, reserve money growth increased in the last quarter of 2014-15.

II.3.7 There was also a change in the composition of NDA during 2014-15 which was in accordance with modifications in the Reserve Bank's accounting policies as recommended by the Technical Committee formed to review the format of the balance sheet and the profit and loss account of the Reserve Bank (Chairman: Shri Y.H. Malegam). Specifically, net repo operations are now being recorded under the Reserve Bank's credit to banks and commercial sector rather than in its credit to general government as was done earlier. These accounting changes are reflected in a decline in the Reserve Bank's net credit to the government and the commensurate increase in its net claim on banks in 2014-15, though the absolute size of NDA remains unaffected.

II.3.8 Movements in reserve money influence the broader measures of money supply through the money multiplier. In terms of magnitude, the money multiplier stood at 5.5 in March 2015, unchanged from its level a year ago. Both the cash deposit ratio and the cash reserve ratio remained unchanged over the year, imparting stability to the money multiplier.

Chart II.15: Variation in sources of reserve money



\* : Data up to August 7, 2015.

### Money Supply

II.3.9 The money supply growth slowed down in 2014-15 (Table II.8), mainly reflecting easing inflation which lowered the demand for money. The slowdown in money supply in general, and in aggregate deposits in particular, *vis-à-vis* 2013-14 has to be seen in the context of the base effect caused by the swap facility for FCNR(B) deposits operated by the Reserve Bank during September-November 2013 which led to high mobilisation of these deposits in 2013-14. Money supply net of FCNR(B) deposits was marginally lower in 2014-15 than in the preceding year. However, money supply improved in the second half of the year (March 2015 over September 2014) in line with the growth in credit. In tandem, the year-on-year growth in the liquidity aggregate L1 [sum of the new monetary aggregate (NM<sub>3</sub>) and postal deposits] remained marginally lower than a year ago.

II.3.10 Growth in aggregate deposits, which forms a major component of money supply, has generally been declining over the years in line with a decrease in the saving rate of the economy. In addition, slowdown in credit growth led to lower deposit mobilisation by banks. The growth in aggregate deposits decelerated to 10.6 per cent in 2014-15 from 14.1 per cent a year ago. On the sources side, a decline in banks' credit growth to the commercial sector was one of the key drivers. Another major constituent from the sources side, that is, net bank credit to the government declined during the year mainly due to reduction in the Reserve Bank's holding of government securities (G-secs). Commercial banks, on the other hand, stepped up their investment in G-secs in view of credit deceleration during the year.

II.3.11 The velocity of money (Chart II.16), which declined over the past six decades hovered around

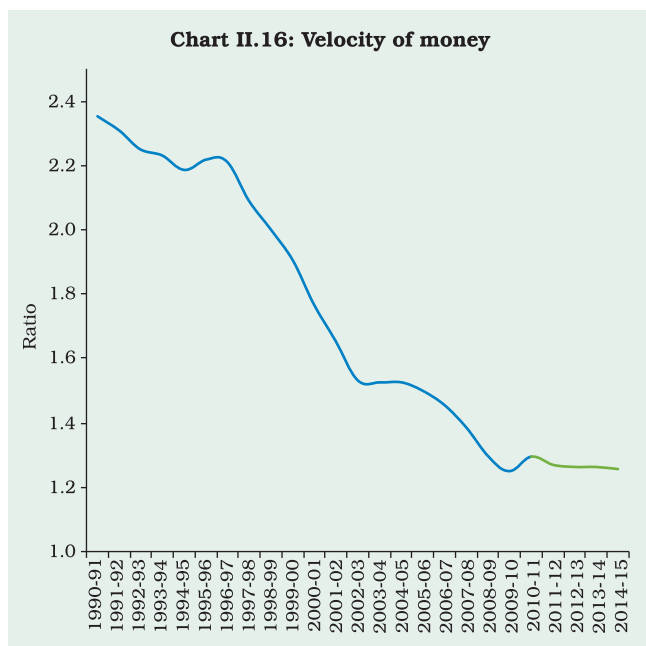
**Table II.8: Monetary Aggregates**

Item	Outstanding as on (₹ billion)		Year-on-year growth rate (in per cent)			Growth rate (in per cent)		
	March 31, 2015	August 7, 2015	2013-14	2014-15	2015-16 (as on August 7)	FY 15: H1	FY 15: H2	FY 16: H1
1	2	3	4	5	6	7	8	9
I. Reserve Money	19,285	18,815	14.4	11.3	10.1	-1.4	12.9	-2.4
II. Broad Money (M <sub>3</sub> )	105,455	109,830	13.4	10.8	10.9	4.4	6.2	4.1
III. Liquidity Aggregate (L1)	106,759	110,722 <sup>#</sup>	11.2	10.7	11.6 <sup>#</sup>	4.0	6.5	3.7 <sup>#</sup>
<b>IV. Major Components of M<sub>3</sub></b>								
IV.1. Currency with the Public	13,863	14,251	9.2	11.3	9.5	3.4	7.6	2.8
IV.2. Aggregate Deposits	91,446	95,567	14.1	10.6	11.2	4.4	5.9	4.5
<b>V. Major Sources of Money Stock (M<sub>3</sub>)</b>								
V.1. Net Bank Credit to Government	30,062	33,781	12.4	-1.3	10.6	-0.5	-0.8	12.4
V.2. Bank Credit to Commercial Sector	70,396	71,627	13.7	9.2	9.0	2.3	6.8	1.7
V.3. Net Foreign Exchange Assets of the Banking Sector	22,506	23,664	17.6	17.0	16.0	3.9	12.6	5.1
M <sub>3</sub> Net of FCNR(B)	102,782	107,009	11.5	11.0	11.1	4.4	6.3	4.1
M <sub>3</sub> Multiplier	5.5	5.8						
M <sub>3</sub> Velocity	1.25	-						

-: Not available; #: Data pertain to July 2015.

**Note:** 1. Data are provisional.

2. FY 15: H1: Growth rate of September 2014 over March 2014, FY 15: H2: Growth rate of March 2015 over September 2014, and FY 16: H1: Growth rate of August 7, 2015 over March 31, 2015.



1.25, indicating stability of the financial system in the post-crisis years. Another commonly referred indicator of financial deepening -  $M_3$  to GDP ratio - which is a reciprocal of velocity, stood at around 80.

### CREDIT

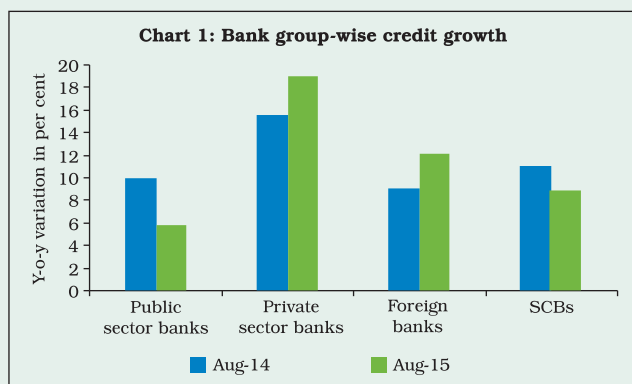
II.3.12 Non-food credit growth decelerated sharply in 2014-15 to 9.3 per cent (y-o-y), with incremental non-food credit declining to ₹5.5 trillion from ₹7.3 trillion in the previous year. A host of factors weighed down on credit off-take, including lower corporate sales, softening of inflation rate, risk aversion by banks due to rise in non-performing loans, and procedural delays in debt recovery (Box II.4). Further, with the availability of alternative sources, both domestic

### Box II.4

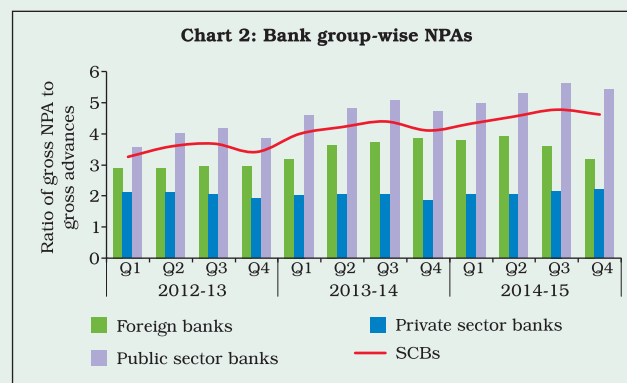
#### Factors Underlying Recent Credit Slowdown: An Empirical Exploration

Credit plays an important role in economic development, particularly in a bank-based financial system. Countries which experienced high growth since 2000 also witnessed a surge in private credit (Claessens *et al.* 2011). An empirical analysis also suggests that credit growth is positively influenced by deposit growth, GDP growth, easy global liquidity conditions and exchange rate depreciation, whereas inflation dampens real credit growth (Guo and Stepanyan 2011). In India's bank-based financial system, credit plays an important role in the overall growth dynamics.

Asset quality concerns resulting in risk aversion are considered to be one of the major factors underlying the current slowdown in credit. Public sector banks, which recorded higher NPA ratios, experienced a sharp decline in credit growth. On the other hand, private sector banks with lower NPA ratios, posted higher credit growth (Chart 1 and 2). At the aggregate level, the NPA ratio and credit growth exhibited a statistically significant negative correlation of 0.8, based on quarterly data since 2010-11.



Note: SCBs exclude RRBs.



Source: Off-site returns as reported by banks, domestic operations.

(Contd....)

Applying the methodology of Guo and Stepanyan (2011) to Indian quarterly data from June 1997 to September 2014, non-food credit was found to be influenced by lagged real GDP growth in a positive and statistically significant manner. The cost of credit proxied by the overnight call rate, as expected, had a negative impact on credit growth. The impact of the interest rate was found to be strong up to two lags, reflecting transmission lags. In line with the theory, the coefficient of gross fiscal deficit (GFD) of the Centre had a negative sign, indicating crowding out effects of fiscal deficit in market for bank credit. Finally, the change in outstanding commercial papers (CPs), a proxy for an alternative source of funds, had a negative and significant coefficient.

$$BC = 7.2 + 0.6 \text{ GDP}(-2) - 0.3 \text{ WCMR}(-2) - 0.2 \text{ GFD} - 0.04 \text{ CP\_Out} + \varepsilon$$

(2.4)\*            (-2.3)\*            (-2.4)\*            (-2.3)\*

Adjusted R<sup>2</sup>=0.30; \*: Significant at 5 per cent;

NPAs were not included in the regression as the series had multiple structural breaks.

**Note:** 1. BC=q-o-q seasonally adjusted growth in bank credit; WCMR=quarterly weighted average call rate; GDP= q-o-q seasonally adjusted growth in GDP (base: 2004-05); GFD: quarterly GFD (Centre) as per cent of GDP at current market price; CP\_out: q-o-q seasonally adjusted growth in CP outstanding.

2. The results were subjected to standard robustness checks.

Thus economic activity, cost of credit, the fiscal position and competitive alternative funding sources turned out to be major factors affecting credit behaviour in India.

**References:**

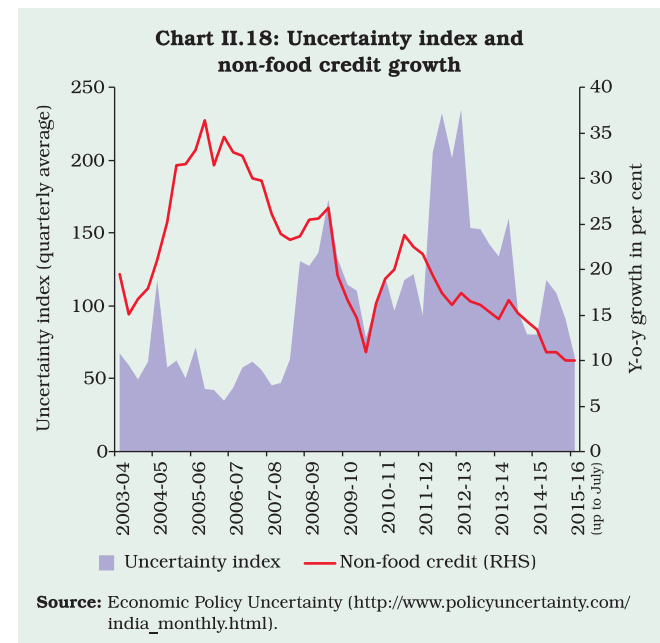
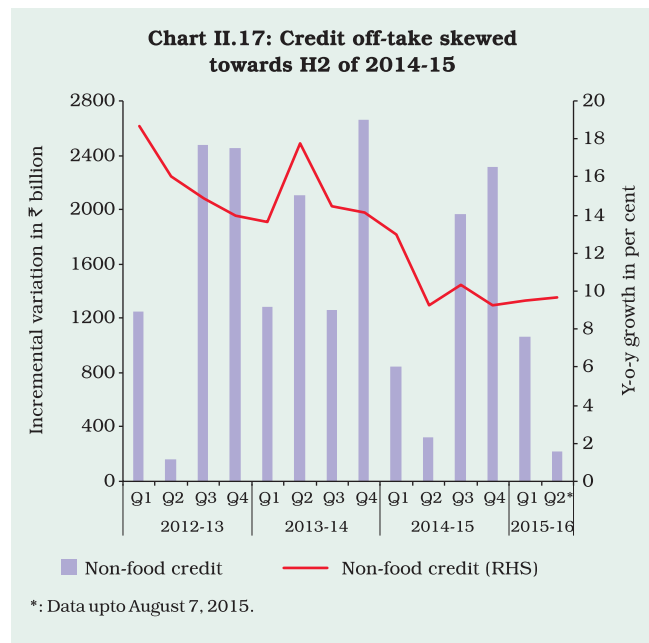
Claessens, S., M. A. Kose and M.E. Terrones (2011), 'How Do Business and Financial Cycles Interact?', IMF Working Paper, No. WP/11/88.

Guo K. and V. Stepanyan (2011), 'Determinants of Bank Credit in Emerging Market Economies', IMF Working Paper WP/11/51.

and foreign, corporates switched some of the demand for financing to non-bank sources. Sale of significantly larger amount of non-performing loans (₹317 billion) by banks to asset reconstruction companies (ARCs) during 2014-15 also contributed to a deceleration in bank credit. Food credit also registered a decline of 4.1 per cent during the year, despite some pick-up in procurement, as a result of enhanced food

subsidies which increased by 28.1 per cent in 2014-15.

II.3.13 With the deceleration in non-food credit growth on a year-on-year basis, nearly 80 per cent of the incremental credit off-take during 2014-15 took place in the second half of the year, reflecting the improving economic environment (Charts II.17 and II.18). Non-food credit growth increased to 7.1



per cent in H2 of 2014-15 from 2.0 per cent in H1, representing an improvement of 5 percentage points in H2 compared with 0.6 percentage point increase a year ago.

II.3.14 In order to create more space for banks to expand credit to the productive sectors of the economy, the statutory liquidity ratio (SLR) was reduced in three stages from 23 per cent to 21.5 per cent of net demand and time liabilities (NDTL) during 2014-15. However, banks continued to maintain SLR investments around 28 per cent of NDTL, the buffer providing access to collateralised borrowings from the wholesale funding market and the Reserve Bank. Maintaining excess SLR securities also helped banks to weather the impact of the current slow phase of the economic cycle on their balance sheets and earnings.

II.3.15 Data on sectoral deployment of credit, which constitutes about 95 per cent of total bank credit by SCBs, indicate that deceleration in credit off-take

in 2014-15 was more pronounced with respect to the industry and services sectors, which together constituted about 68 per cent of total non-food credit. Credit growth in the services sector was weighed down by its major components: trade and non-banking financial companies (NBFCs) that accounted for nearly 48 per cent of the total credit to the services sector. In the industrial sector, growth slowed down across sectors, particularly for infrastructure, basic metals and food processing. The sectors which witnessed lower incidence of NPAs such as personal loans saw higher growth during the year.

II.3.16 Infrastructure accounts for nearly one-third of the credit to the industrial sector. Its main components are power and roads, constituting 60 and 18 per cent of the total infrastructure credit respectively. While deceleration in credit to the power sector was modest, the slowdown was sharp with respect to roads in 2014-15 (Table II.9).

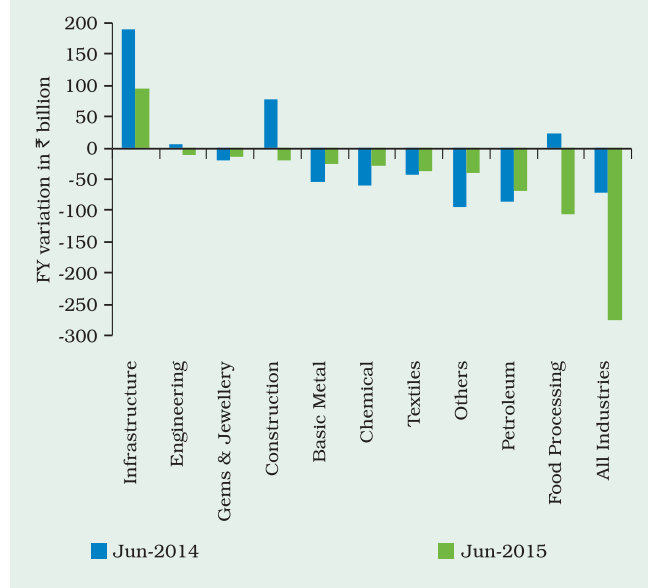
**Table II.9: Trends in Credit Deployment to Select Sectors**

(Variation in per cent)

	Outstanding at 20-Mar-2015 (₹ billion)	2013-14			2014-15			2015-16
		H1	H2	Year	H1	H2	Year	H1
1	2	3	4	5	6	7	8	9
<b>Non-food Credit (1 to 4)</b>	<b>60,030</b>	<b>6.8</b>	<b>6.3</b>	<b>13.6</b>	<b>2.2</b>	<b>6.2</b>	<b>8.6</b>	<b>1.1</b>
<b>1. Agriculture &amp; Allied Activities</b>	<b>7,659</b>	<b>3.4</b>	<b>9.2</b>	<b>12.9</b>	<b>8.8</b>	<b>5.7</b>	<b>15.0</b>	<b>3.8</b>
<b>2. Industry</b>	<b>26,576</b>	<b>6.3</b>	<b>6.1</b>	<b>12.8</b>	<b>-0.1</b>	<b>5.7</b>	<b>5.6</b>	<b>-1.0</b>
<i>Of which:</i>								
(i) Infrastructure	9,245	8.8	5.3	14.6	4.3	6.0	10.5	1.0
<i>Of which:</i> (a) Power	5,576	10.7	5.8	17.1	6.6	7.5	14.5	2.8
(b) Telecommunications	919	-0.6	1.1	0.5	-3.6	8.0	4.2	-2.9
(c) Roads	1,687	9.2	10.1	20.2	3.5	3.3	6.9	-0.7
(ii) Basic Metal & Metal Product	3,854	7.2	7.1	14.9	-0.4	7.2	6.8	-0.6
(iii) Food Processing	1,715	3.5	20.4	24.6	-2.6	20.4	17.3	-6.2
<b>3. Services</b>	<b>14,131</b>	<b>9.0</b>	<b>6.5</b>	<b>16.1</b>	<b>-1.2</b>	<b>6.9</b>	<b>5.7</b>	<b>1.4</b>
<b>4. Personal Loans</b>	<b>11,663</b>	<b>7.5</b>	<b>4.6</b>	<b>12.5</b>	<b>8.0</b>	<b>6.9</b>	<b>15.5</b>	<b>4.0</b>

**Note:** Latest available data for H1 of 2015-16 are up to June 2015.

**Chart II.19: Trends in credit off-take to major industries**

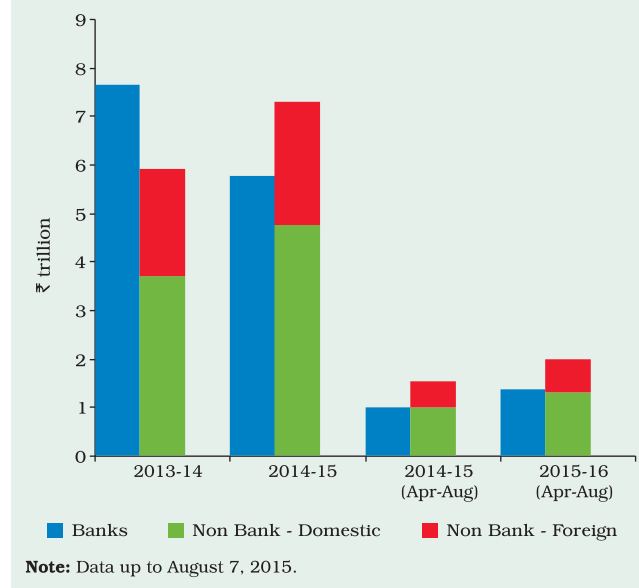


II.3.17 During 2015-16 so far (up to August 7), credit off-take seems to be picking up reflecting an improving economic and policy environment, though it is too early for a conclusive evidence. Incremental non-food credit stood around ₹1,282 billion as against ₹963 billion during the corresponding period last year. Data on sectoral deployment (up to June 2015) reveal a significant pick-up in services mainly supported by trade and professional services, while industry registered a decline. Within industry, although credit to infrastructure shows signs of pick-up, that to roads continues to be weak (Chart II.19).

#### Non-bank funding

II.3.18 Slowdown in credit growth dragged down the overall flow of financial resources to the commercial sector in 2014-15, despite higher recourse to non-bank sources of funds (Chart II.20). Amongst the non-bank domestic sources,

**Chart II.20: Flow of resources to the commercial sector**



**Note:** Data up to August 7, 2015.

net issuance of CPs witnessed a four-fold increase during the year, mainly attributable to competitive pricing *vis-à-vis* banks' lending rates. Further, FDI inflows remained strong and accounted for a major chunk of the non-bank foreign resources to the commercial sector. Reliance on non-bank sources continues during 2015-16 so far (up to August 7) amidst comfortable liquidity conditions and competitive rates.

II.3.19 Regime shifts in the conduct of monetary policy shaped monetary and credit conditions in 2014-15. Money supply and other key monetary aggregates decelerated in line with underlying macroeconomic activity. Overall, credit growth was subdued during 2014-15 owing to various factors, such as risk aversion by banks due to rising NPAs and alternative and cheaper sources of non-bank funding, though there was some evidence that a turnaround in the second half of the year might have set in.

## II.4 FINANCIAL MARKETS

### Global Financial Markets

II.4.1 International financial markets remained generally upbeat during 2014-15, lifted by expectations of a relaxed approach of the US Federal Reserve to monetary policy normalisation, quantitative easing by the European Central Bank (ECB) and the Bank of Japan (BoJ) and decline in crude oil prices. Government bond yields for most of the countries were historically low with some European countries even experiencing negative yields (Chart II.21a). A number of stock markets also reached historical highs during 2014-15 as fears about US monetary policy rates lifting off receded and the ECB and the BoJ enhanced their asset purchase programmes. However, markets experienced some volatility in mid-October 2014 on account of uncertainty on the global recovery, a slew of weak data from the US and the euro area and continuing geo-political tensions in the Middle East. Again in the second half of December 2014, markets were affected by the Ukrainian crisis followed by the Russian currency crisis and large exchange rate depreciation in Venezuela and Argentina (Chart II.21b).

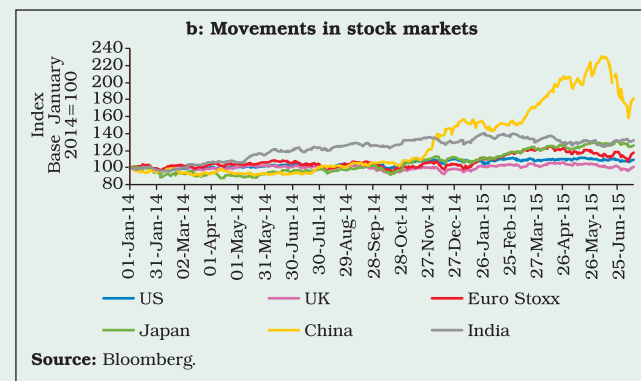
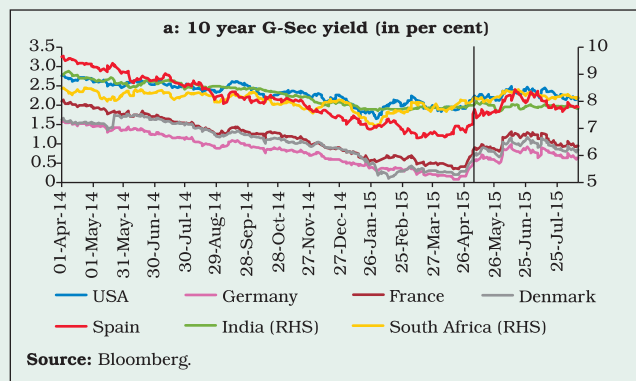
II.4.2 The US dollar index, which measures the dollar's movement against other major currencies, strengthened by 23 per cent from 80.1 at end-March

2014 to 98.4 at end-March 2015. While it strengthened primarily on account of a robust US economic recovery, weak economic recovery in the euro zone and Japan during the year resulted in the euro and the Japanese yen depreciating against the US dollar. In January 2015, as ECB prepared to announce quantitative easing, the Swiss National Bank (SNB) abandoned its cap on the Swiss franc/euro exchange rate which led to heightened exchange rate volatility. During Q4 of 2014-15, a number of emerging markets and developing economies (EMDEs) reduced their policy rates to support economic growth. Interventions in foreign exchange markets to address depreciating pressures also increased.

II.4.3 In May 2015, markets were surprised by the global bond sell-off that started in Germany as the 10-year German Bund yield increased to intra-day high of 0.77 per cent on May 7 from 0.05 per cent on April 17, 2015. Concerns over Greek debt, sustained increase in crude oil prices and profit booking quickly transmitted to US treasury bills as well as emerging market economies.

II.4.4 During June 2015, movements in international financial markets were abuzz with uncertainty relating to the outcome of Greek debt negotiations and meltdown in the Chinese stock market. However, in July financial markets received

Chart II.21: International Financial Markets





support from the announcement of the bailout deal between Greece and the euro zone members and signing of the nuclear deal between Iran and major world powers. In August, the global financial markets were shaken by China's decision to devalue its currency by around 2 per cent.

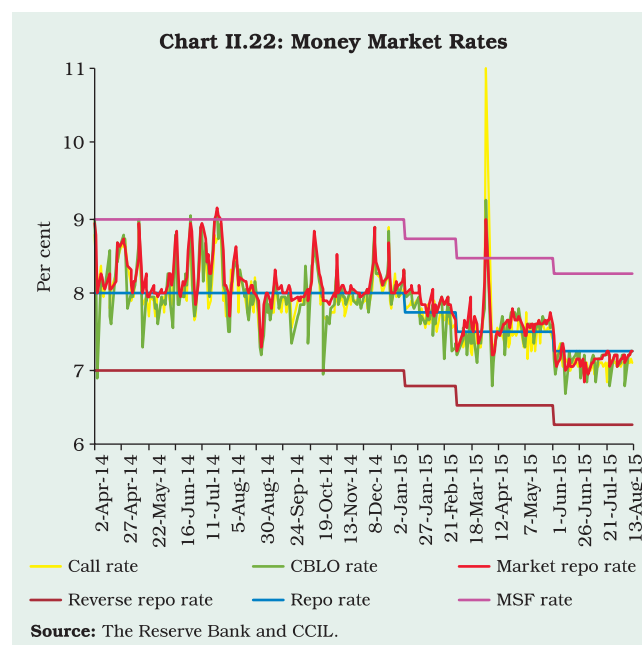
### Indian Financial Markets

II.4.5 Both domestic and global cues were at play in buoying Indian financial markets during 2014-15. Equity markets reached all-time highs during the year. Money markets were stable and liquid with call money rate evolving tightly around the policy repo rate. Yields on government securities (G-secs) declined gradually and activity in the corporate bond market registered an increase mainly due to primary issuances.

### Money Market

II.4.6 Overnight call money rates remained closely aligned to the policy repo rate, with active liquidity management operations under the revised liquidity management framework, except adjustment for the year-end window dressing. Money market rates declined in Q4 in sync with cuts in the policy rate (Chart II.22). With deposit growth generally remaining above credit growth during the year, structural liquidity conditions remained comfortable. During 2015-16 so far, call money rates have remained aligned to the policy repo rate with money market rates declining after the cut in policy rate on June 2, 2015.

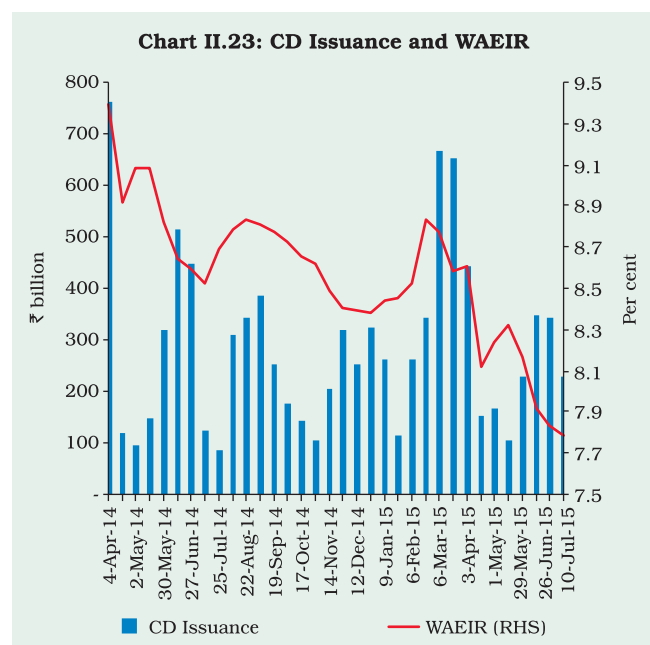
II.4.7 The spread of the daily weighted average call rate (excluding Saturdays) over the policy rate narrowed down significantly during 2014-15 from 30 basis points (bps) to 18 bps after the adoption of the revised liquidity management framework in September 2014. The spread further narrowed down to 16 bps during 2015-16 (upto August 14). The spread of collateralised rates (CBLO and market repo) also narrowed down during this period,



indicating synchronised movement among overnight money market rates. The collateralised segment continued to attract a major portion of the turnover in the overnight market, with the uncollateralised (call money) segment registering relatively thin volumes, rendering it susceptible to bouts of volatility. A large part of the assured liquidity support under the Reserve Bank's liquidity adjustment facility (LAF) is being offered through variable rate term repos with one of its main objectives being development of the term money market. Notwithstanding these initiatives, the turnover in the term money market has remained muted.

### Issuance of CDs and CPs

II.4.8 The average fortnightly issuance of certificates of deposits (CDs) decreased to ₹297 billion during 2014-15 from ₹306 billion during the previous year (Chart II.23). The easing of liquidity conditions, coupled with a reduction in the policy rate and relatively lower issuances of CDs by banks on the back of subdued credit off-take, led to a decrease in the weighted average effective interest rate (WAEIR) on CDs from 9.74 per cent at end-March 2014 to 8.58 per cent at end-March 2015.

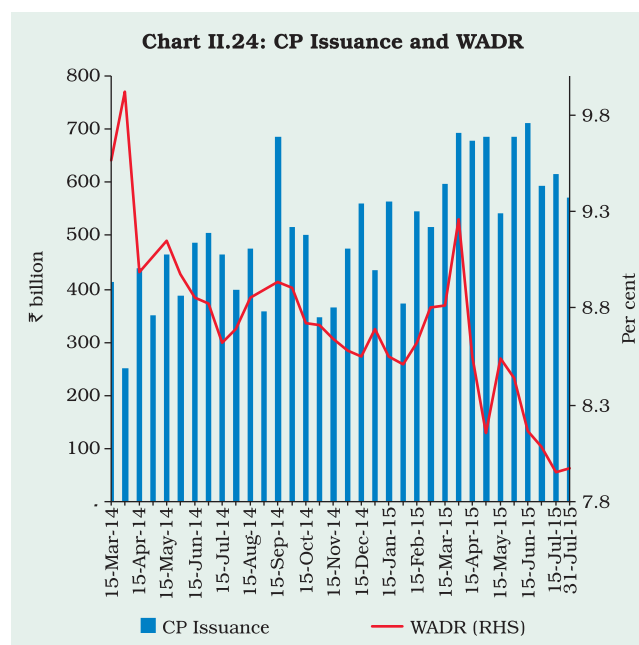


The easing trend has continued during 2015-16 so far with WAEIR declining further to 7.79 per cent by July 10, 2015.

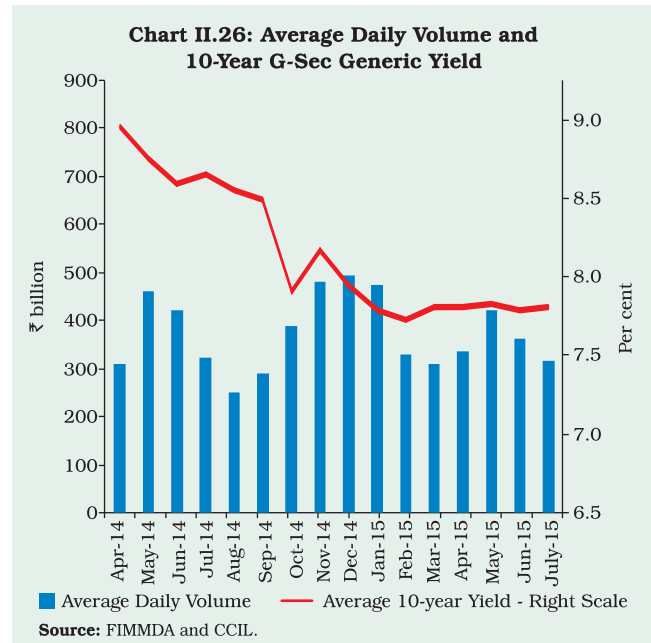
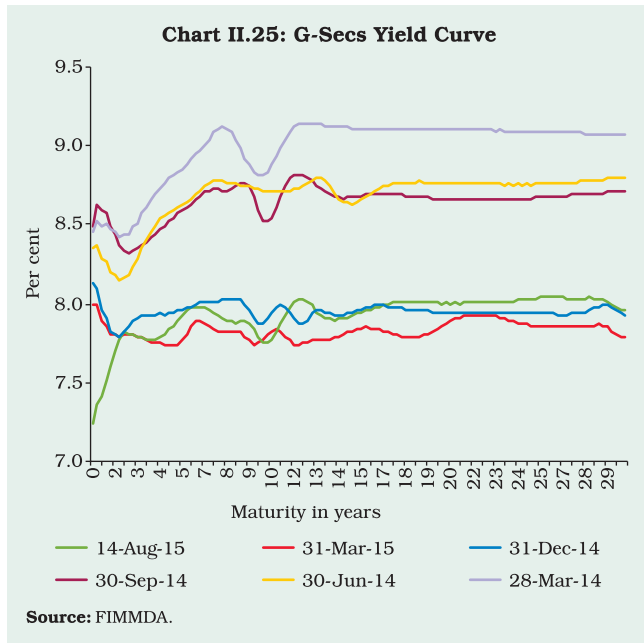
II.4.9 The average fortnightly issuance of commercial papers (CPs) increased by 58 per cent to ₹479 billion during 2014-15, reflecting substitution of short-term bank credit by market based funding on account of the cost effectiveness of CPs for raising funds on the back of significant easing of yields on corporate bonds (Chart II.24). Consequently, the outstanding amount of CPs stood higher at ₹1,933 billion at end-March 2015 as compared to ₹1,066 billion at end-March 2014. The weighted average discount rate (WADR) for CPs decreased to 9.26 per cent at end-March 2015 from 9.92 per cent at end-March 2014, reflecting easing of liquidity conditions during the year and overall downward movement in the interest rate cycle. The declining trend has continued during 2015-16 so far with WADR standing at 7.97 per cent at end-July 2015.

#### *Yields in the G-Secs Market*

II.4.10 G-secs yields generally softened through 2014-15, reflecting easing of US treasury yields,



active buying interest by foreign portfolio investors (FPIs), sharp decline in inflation, improvement in the fiscal situation, positive sentiment after the general elections, steep decline in international oil prices and cuts in policy rate by the Reserve Bank. Some uptick in yields occurred in June and July 2014 due to geo-political tensions in the Middle East as also the announcement of higher net market borrowing in the Union Budget for 2014-15. Yields spiked again in the second half of December 2014 on account of geo-political tensions and the Russian currency crisis. However, the yields softened in Q4 following increased buying by FPIs. Sustained buying interest in government debt by FPIs was discernible as their limit remained almost fully utilised, notwithstanding certain conditions such as debarring FPIs from investing in treasury bills and permitting incremental investment only in G-secs with minimum residual maturity of three years. Notably, the G-secs market weathered the impact of a complete exit from the assets purchase programme by the Federal Reserve in October 2014 with the yields continuing to exhibit a softening bias on the back of buoyant investor sentiment (Chart II.25).



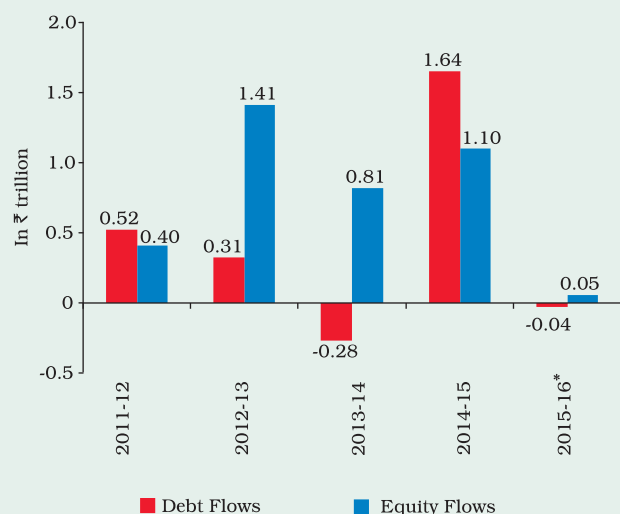
II.4.11 Bearish sentiment took hold in the G-secs market in February 2015 for a variety of reasons, including, but not limited to, a broadly unchanged size of the government market borrowing programme for 2015-16 and rescheduling of the fiscal consolidation plan by a year as announced in the Union Budget for 2015-16. However, the follow-up policy rate cut of 25 bps each on January 15, 2015 and March 4, 2015, coupled with a sharp fall in US treasury yields, buoyed the market sentiment and led to softening of the 10-year G-Sec yield. The improvement in sentiment was short-lived after a status quo on the policy rate was announced in the bi-monthly monetary policy on April 7, 2015. More pertinently, taking cues from hardening of long-term bond yields in most of the advanced economies on the back of improved growth and inflation outlook, and hardening oil prices, the 10-year yield on Indian G-secs rose during the first half of May 2015, touching a high of 8.09 per cent on May 11, 2015. The yield has, however, softened thereafter with the introduction of a new 10-year benchmark security, cut in policy rate and significant decline in inflation. The 10-year yield stood at 7.75 per cent on August 14, 2015. The average volume generally

varied inversely with the movement in 10-year G-sec yield barring the period from October to November 2014 (Chart II.26). The G-secs turnover ratio moved up to 1.95 per cent in 2014-15 from 1.87 per cent in the previous year.

#### FPI Flows into India

II.4.12 FPIs in the equity and debt markets in India revived during 2014-15. While FPI inflows to the debt market turned positive at ₹1.6 trillion facilitated by an increase in the FPI sub-limit by US\$ 5 billion within the overall limit of US\$ 30 billion, FPI investments in equity markets were also higher than they were in 2013-14 (Chart II.27). Currently, FPI investors are permitted to invest only in bonds with the minimum residual maturity of three years so as to encourage investments in long term securities and to contain interest rate volatility at the shorter end. The effective FPI limit was increased by allowing FPIs to invest coupons from G-secs, outside the overall limit, with effect from February 5, 2015. During 2015-16 so far (up to August 13, 2015), FPI flows in the debt and equity markets have been subdued at ₹(-)43.2 billion and ₹47.4 billion, respectively, following the global bond sell-

Chart II.27: FPI Flows to Debt and Equity Markets



\* : Data upto August 13, 2015.

Source: National Securities Depository Limited (NSDL).

off triggered in the European bond markets on May 7, 2015, concerns over weak quarterly earnings reported for Q4, as also over the minimum alternate tax (MAT) and increased uncertainty in the global financial markets.

#### Corporate Bond Market

II.4.13 During 2014-15, turnover in the corporate bond market increased by 12 per cent to ₹10,913 billion (Chart II.28a). On the other hand, the yield spread of 5-year AAA rated corporate bonds over G-secs of corresponding maturity declined until mid-November 2014 following the crash in global crude oil prices, stability in the exchange market

and Moody's outlook upgrade. Subsequently, however, frictional liquidity pressure on account of advance tax payments and concerns over the rise in the current account deficit for Q2 of 2014 led to a widening of the spreads until mid-January 2015. Following the cuts in the policy repo rate and improved liquidity conditions, yield spreads declined in Q4 of 2014-15 (Chart II.28b). During 2015-16 so far, the yield spread remained range bound, indicating easy liquidity conditions.

#### Secondary Equity Market

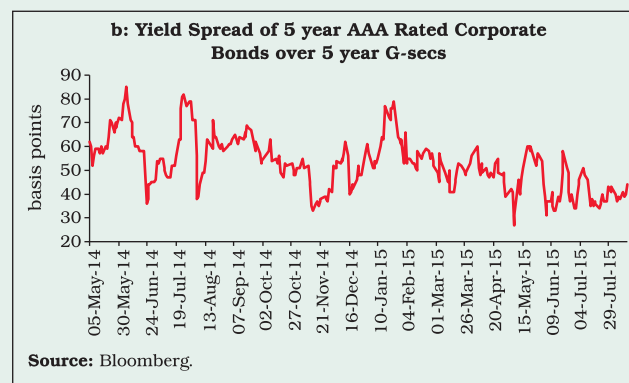
II.4.14 The equity market witnessed heightened activity in 2014-15, scaling new highs on January 29, 2015 (Chart II.29a). During the year, the BSE Sensex rose by 25 per cent on top of the uptick of 19 per cent in 2013-14. Equity market sentiment was supported by political stability, sustained FPI flows, lower international crude oil prices and softening of the policy rate.

II.4.15 The equity market was also supported by global liquidity conditions and the search for yield aided by the US Federal Reserve's commitment to low interest rates, ultra-accommodative monetary policies pursued by the ECB, the BoJ and the People's Bank of China. In US dollar terms, the Sensex rose by 20 per cent, turning out to be one of the best performing markets in the world (Chart II.29b). The domestic equity market also witnessed lower volatility in 2014-15 as compared to equity markets abroad.

Chart II.28: Corporate Bond Market

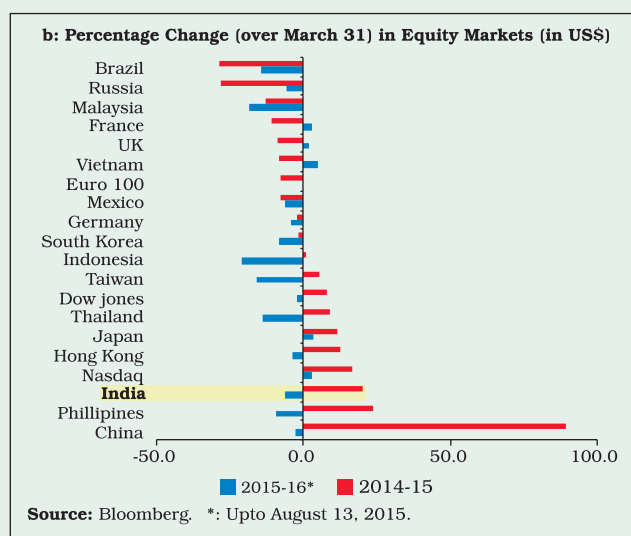
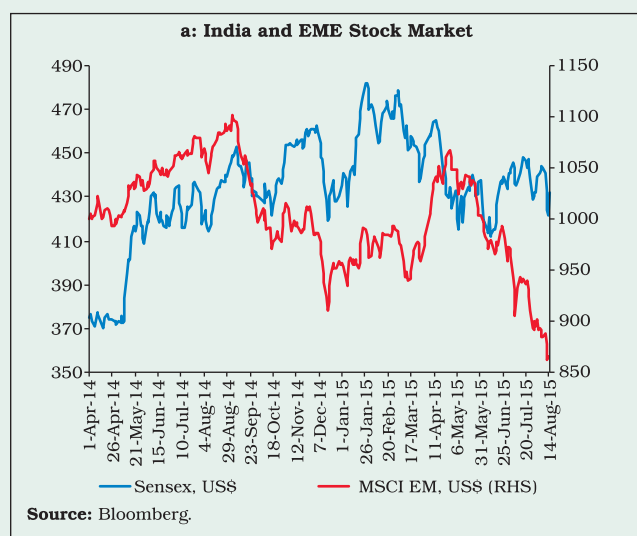


Source: SEBI.



Source: Bloomberg.

Chart II.29: Performance of Indian Equities vis-a-vis other Major Markets



II.4.16 During 2015-16, equity markets had a subdued start on account of FPIs' concern over MAT, weak Q4 corporate earnings and forecast of a below normal monsoon. However, benchmark indices recovered after realisation of above normal rainfall in June. Domestic markets also received support from positive developments relating to Greece and the Iran nuclear deal. In August 2015, the stock markets remained range bound guided, among others, by mixed earnings for Q1 of 2015-16 and global developments such as China's currency devaluation.

#### Primary Equity Market

II.4.17 During 2014-15, resource mobilisation through equity issues, including qualified institutional placement (QIP) rose significantly by 44 per cent (Table II.10). There were signs of renewed interest in initial public offerings (IPOs) with an increase in the number of companies filing draft red herring prospectuses (DRHPs) with the Securities and Exchange Board of India (SEBI) to raise resources in 2015-16. Going forward, positive sentiment in the secondary market, if sustained, will help raise larger resources through the primary market.

#### Private Placement of Corporate Bonds

II.4.18 Mobilisation through private placement of corporate bonds at ₹4,041 billion was significantly higher by 46 per cent during 2014-15, while public issues of non-convertible debentures at ₹97 billion were much lower. Mobilisation through public issues of bonds is set to witness a revival in 2015-16 with the Union Budget 2015-16 proposing to raise resources through tax-free bonds for funding infrastructure.

II.4.19 The Central Government has budgeted a receipt of ₹695 billion through disinvestment in 2015-16, of which ₹285 billion is expected to be mobilised through strategic disinvestments. Measures, such as the introduction of e-IPO norms and allowing firms to launch real estate investment trusts (REITs) and infrastructure investment trusts (InvITs) as also the government's disinvestment measures are expected to provide an impetus to the capital markets going forward.

#### House Price Index (HPI)

II.4.20 Quarterly growth (y-o-y) in HPI went below 16 per cent in Q1 of 2013-14 and further down in

**Table II.10: Primary Capital Market Mobilisation**

(₹ billion)

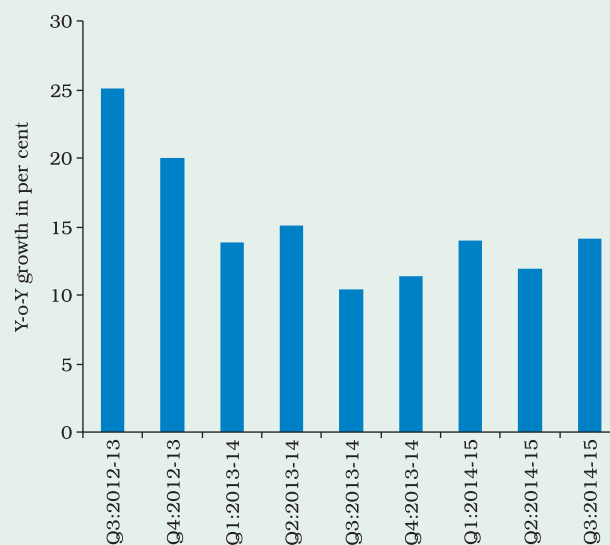
Category	2011-12	2012-13	2013-14	2014-15 (P)
1	2	3	4	5
<b>a. Public Issues (i)+(ii)</b>	<b>460.9</b>	<b>219.2</b>	<b>510.8</b>	<b>127.5</b>
(i) Public Issues (Equity)	104.8	49.4	87.0	30.4
<i>Of which</i>				
IPOs	59.0	49.4	12.4	30.4
FPOs	45.8	0.0	74.6	0.0
(ii) Public Issues (Debt)	356.1	169.8	423.8	97.1
b. Rights Issues	23.7	89.4	45.8	67.5
<b>Total Equity Issues (i+b)</b>	<b>128.6</b>	<b>138.8</b>	<b>132.7</b>	<b>97.9</b>
c. Euro Issues (ADR/GDR)	27.1	10.4	1.2	95.9
d. Mutual Fund Mobilisation (net)	-220.2	765.4	537.8	1032.9
1. Private Sector	-154.5	637.9	488.4	1037.0
2. Public Sector	-65.8	127.5	49.4	-4.1
e. Private placements in the corporate debt market	2612.8	3614.6	2760.5	4041.4
f. QIP	21.6	160.0	136.6	291.0

P: Provisional; IPOs: Initial public offerings; FPOs: Follow on public offers; ADR: American depository receipts; GDR: Global depository receipts; QIP: Qualified institutional placement.

Source: SEBI and Prime database.

Q3 mainly due to subdued demand. However, it moved up in the first three quarters of 2014-15, suggesting a moderate pick up in house price growth, particularly in cities like Delhi and Kolkata (Chart II.30). The demand for residential properties has slowed down in recent times and unsold stock of residential homes has increased considerably at the same time. Genuine home buyers moved away from the housing market due to higher prices and investors stayed away due to the weakening state of the economy. As the economic growth has started to take-off, the overall buyer sentiment is expected to rise. Presumably, developers are counting on this to happen and hence holding the price.

II.4.21 Financial markets in India performed well during 2014-15. Money market rates closely followed the policy repo rate; and in the backdrop of sluggish credit growth and relatively comfortable structural liquidity, coupled with policy rate easing by the Reserve Bank, the rates on CPs and CDs

**Chart II.30: Movement in the House Price Index**

Source: The Reserve Bank.

declined during the year. G-secs yields generally softened in 2014-15 in line with a decline in inflation and continued buying interests by FPIs. Equity markets, primary as well as secondary, fared better than in the previous year.

## II.5 GOVERNMENT FINANCES

II.5.1 Public finances have been gradually improving at the level of both the Centre and the states. The impetus for rectitude has mainly emanated from a re-commitment to calibrated paths of fiscal consolidation in the post-global crisis period. Initially quantity-driven, these efforts have been guided by the imperative to stabilise fiscal consolidation on the chosen trajectories and then to re-order expenditure priorities from subsidies to investment, to raise tax buoyancy, to rationalise non-developmental spending and leakages and to contain public debt at sustainable levels for all layers of the government. With annual budgetary targets for the gross fiscal deficit (GFD) met since 2012-13, attention has increasingly turned to the quality of fiscal consolidation. Key deficit indicators of the Central Government were lower in 2014-15, as per the provisional accounts (PA), than a year ago. GFD was lower than the budgetary target, both in absolute terms and as percentage of GDP.

### *Centre: Receipts and Expenditure*

II.5.2 In 2014-15 (provisional accounts), non-debt receipts were sluggish reflecting tepid domestic activity. While gross tax collection suffered a shortfall of 8.8 per cent from the budget estimates

(BE), net tax inflows turned out to be 7.7 per cent lower than BE, mainly on account of subdued indirect tax receipts. Non-tax revenue was also lower than BE due to lower collections from general, economic, fiscal and social services. Non-debt capital receipts were significantly lower than the budgetary target, reflecting a large shortfall in disinvestment proceeds.

II.5.3 The shortfall in non-debt receipts warranted a sharp cutback in plan expenditure by more than 20 per cent, both on the revenue and capital accounts, in order to meet deficit targets. A marginal reduction in non-plan expenditure over BE was also effected through reduction in capital expenditure and interest payments.

II.5.4 Both overall capital expenditure and capital outlay were lower than budgeted levels and also lower than last year's levels. This has potentially adverse implications for growth in the medium term.

### *Recalibration of the Fiscal Consolidation Path in 2015-16*

II.5.5 Union Budget 2015-16 has carried forward the process of fiscal consolidation, with all the key deficit indicators projected to decline (Table II.11). The targeted reduction in GFD is proposed to be

**Table II.11: Fiscal Performance of the Central Government**

(Per cent of GDP)

Variables	2004-08 (Avg)	2008-10 (Avg)	2010-14 (Avg)	2013-14	2014-15(RE)	2014-15 (PA)	2015-16 (BE)
1	2	3	4	5	6	7	8
<b>Non Debt Receipts</b>	<b>10.4</b>	<b>9.5</b>	<b>9.5</b>	<b>9.3</b>	<b>9.3</b>	<b>9.1</b>	<b>8.7</b>
Tax revenue	7.8	7.5	7.3	7.2	7.2	7.2	6.5
Non-tax revenue	2.1	1.8	1.8	1.8	1.7	1.6	1.6
Non debt capital receipts	0.4	0.3	0.4	0.4	0.3	0.3	0.6
<b>Total Expenditure</b>	<b>14.2</b>	<b>15.8</b>	<b>14.5</b>	<b>13.7</b>	<b>13.4</b>	<b>13.1</b>	<b>12.6</b>
Revenue expenditure	11.9	14.1	12.7	12.1	11.9	11.6	10.9
Capital expenditure	2.3	1.7	1.8	1.7	1.5	1.5	1.7
Plan expenditure	4.0	4.8	4.4	4.0	3.7	3.6	3.3
Non-plan expenditure	10.2	11.0	10.1	9.7	9.7	9.5	9.3
<b>Revenue Deficit</b>	<b>2.0</b>	<b>4.9</b>	<b>3.6</b>	<b>3.1</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>
<b>Gross Fiscal Deficit</b>	<b>3.4</b>	<b>6.2</b>	<b>5.0</b>	<b>4.4</b>	<b>4.1</b>	<b>4.0</b>	<b>3.9</b>

**Note:** 1. Avg: Average; RE: Revised Estimates; PA: Provisional Accounts; BE: Budget Estimates.  
2. GDP 2014-15 is as per Provisional Estimates of CSO.

attained by a compression in revenue expenditure combined with an increase in non-debt capital receipts. The goalpost for achieving the GFD-GDP target of 3.0 per cent under the FRBM Act/Rules has been shifted by a year to 2017-18 mainly to accommodate higher public investment to support growth, and higher devolution to the states following the recommendations of 14<sup>th</sup> Finance Commission as also accounting for uncertainties associated with the implementation of the Goods and Services Tax (GST) and the likely burden of the 7<sup>th</sup> Pay Commission award.

#### *Targets for Indirect Taxes and Disinvestment Proceeds*

II.5.6 With an expected growth of 16.4 per cent in gross tax revenue, the ratio of gross tax revenue to GDP is estimated to improve by 0.4 percentage points to 10.3 per cent in 2015-16. The net tax revenue accruing to the Centre is, however, budgeted significantly lower at 6.5 per cent of GDP – down from 7.2 per cent in 2014-15 (PA) due to higher devolution to the states following the 14<sup>th</sup> Finance Commission award. The implied tax buoyancy for gross tax revenue is significantly higher than the realised buoyancy of less than 1 in the previous two years (Table II.12). Further, the projected increase of 18.9 per cent in indirect taxes as against 9.8 per cent realised in 2014-15 (PA) assumes a buoyancy of about 2 for service tax on

the back of a hike in the service tax rate (inclusive of education cess) by 1.64 per cent, pruning of the Negative List under service tax and withdrawal of certain other exemptions to widen the tax base. The projected buoyancy of 1.73 in the case of excise duty collections is mainly supported by *ad hoc* hikes in excise duty on petrol and diesel in 2014-15, increase in excise duty on select products, such as mobile handsets and cigarettes, imposition of excise duty on hitherto untaxed items like condensed milk and peanut butter, and a general increase in excise duty to 12.5 per cent from the prevailing 12.36 per cent. While these measures will facilitate meeting budgeted targets for indirect tax collections in 2015-16, it is crucial to adhere to the timeline for the rollout of GST for a sustainable increase in tax revenues in the medium term.

II.5.7 Non-tax revenue, which includes dividends from public sector undertakings (PSUs), the Reserve Bank, PSU banks and spectrum charges, is budgeted to grow at 12.6 per cent in 2015-16. Disinvestment proceeds are budgeted higher at ₹410 billion, with an additional inflow of ₹285 billion estimated out of strategic disinvestments. The projected increase of about 179 per cent in disinvestment receipts, despite a track record to the contrary in terms of actual realisation, poses possible risks to overall budgetary targets for 2015-16.

**Table II.12: Tax Buoyancy and Growth Rates in Tax Collections\***

Tax Categories	Tax Buoyancy			Growth Rates (Per cent)		
	2013-14	2014-15(PA)	2015-16 (BE)	2013-14	2014-15(PA)	2015-16 (BE)
1	2	3	4	5	6	7
<b>Gross Tax Revenue</b>	0.73	0.89	1.31	9.9	9.3	16.4
Corporation Tax	0.79	0.82	0.78	10.8	8.7	9.7
Income Tax	1.55	0.82	1.93	21.0	8.6	24.2
Customs Duty	0.30	0.88	0.86	4.1	9.3	10.8
Union Excise Duty	-0.24	1.05	1.73	-3.2	11.1	21.6
Service Tax	1.23	0.81	1.99	16.7	8.5	24.9

\*: Buoyancies are worked out with respect to overall GDP growth rate.



*Expenditure Pattern*

II.5.8 The Centre's total expenditure is budgeted to increase by 8.1 per cent in 2015-16 (BE) with revenue expenditure declining as a proportion to GDP. Capital expenditure is budgeted to increase sharply, reflecting the projected high growth in non-defence capital outlay.

II.5.9 Plan expenditure is expected to increase marginally in 2015-16 reflecting higher capital expenditure. In the non-plan expenditure, subsidies are budgeted to decline on account of around 48 per cent cut in petroleum subsidy following a sharp

fall in international crude prices and the deregulation of the retail sale of diesel that was undertaken in 2014. Food subsidies are budgeted to increase at a modest pace, while fertiliser subsidies are expected to decline.

*Quality of Fiscal Adjustment in 2015-16*

II.5.10 Overall, the Government's plan for fiscal consolidation in 2015-16 through re-orientation of public expenditure in favour of investment rather than subsidies is a welcome move towards improving the quality of fiscal adjustment (Box II.5). Towards achieving this, it will be important to

### Box II.5 Quality of Fiscal Adjustment

In the aftermath of the global financial crisis, government finances deteriorated significantly across the world as fiscal stimulus measures were introduced to reinvigorate the growth process and kick-start national economies worldwide. Both advanced and emerging market economies have embarked on fiscal consolidation since 2010, although the speed and extent of consolidation has been country-specific. In India, fiscal consolidation resumed from the second half of 2012-13, bringing about a steady decline in the centre's gross fiscal deficit (GFD) from 5.8 per cent of GDP in 2011-12 to 4.0 per cent in 2014-15 (PA). Notwithstanding such improvement, the quality of fiscal adjustment has remained a cause for concern.

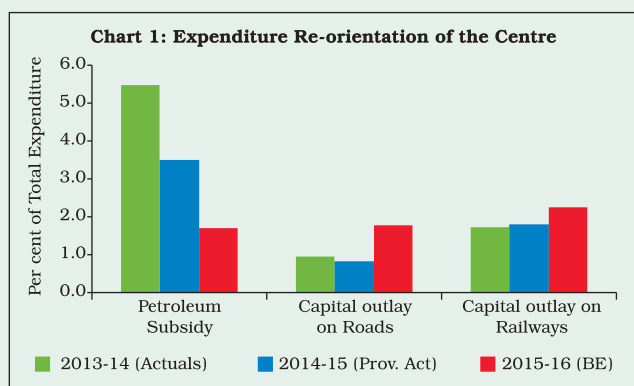
Ideally, a fiscal consolidation strategy should be a mix of rationalisation of expenditure and revenue augmentation so that the welfare burden of consolidation is fairly distributed across society. Apart from obvious steps like reducing government consumption and unproductive expenditure, such as subsidies, a consolidation process must deploy freed-up resources in higher public investment and/or more social spending *via* transfers to the poor. This will induce medium term growth that can compensate the near-term decline in output. Adjustments must necessarily be accompanied by structural reforms to enhance productivity and a credible fiscal consolidation roadmap that will anchor market expectations (Tapsoba 2013).

Fiscal consolidation in India has primarily been effected through aggressive cut-backs in expenditure, both on the revenue and capital accounts due to non-realisation of budgeted non-debt receipts. As a result, the onus of fiscal consolidation has disproportionately fallen on expenditure compression. In the process, certain productive expenditures under the central plan suffered cuts in excess of 20 per cent over budget estimates during 2012-13 to 2014-15 (RE). These include irrigation and flood control, communications, rural development and education. Plan capital expenditure suffered a shortfall of 14.4 per cent, on an average, during this period. Fiscal rectitude based on cutbacks in capital expenditure has adverse effects on sustainable growth since the multiplier effects of capital expenditure are found to be larger and more prolonged than those of revenue expenditure (Jain and Kumar 2013).<sup>1</sup>

Union Budget 2015-16 has envisaged a reorientation of government expenditure with capital expenditure budgeted to grow at 29.1 per cent, while expenditure on subsidies is projected to undergo a decline (Chart 1). This re-prioritisation of government expenditure along with the other initiatives discussed in Section II.1 of this Chapter is expected to facilitate pick up in investment in the economy. While this is indicative of an improvement in the quality of expenditure, it is imperative that budgeted targets are converted into actual realisation. In the past three years, the government has been

(Contd....)

<sup>1</sup> As per Jain and Kumar's (2013) estimates, the impact multipliers of non-defence capital outlay, revenue expenditure and aggregate expenditure for the Central Government are 2.09, 0.19 and 0.40, respectively.



effecting a cut of about 19 per cent in the actual capital outlay over budgeted levels in view of revenue shortfalls. A comprehensive fiscal consolidation strategy will also need sustainable improvement in government revenue.

#### References:

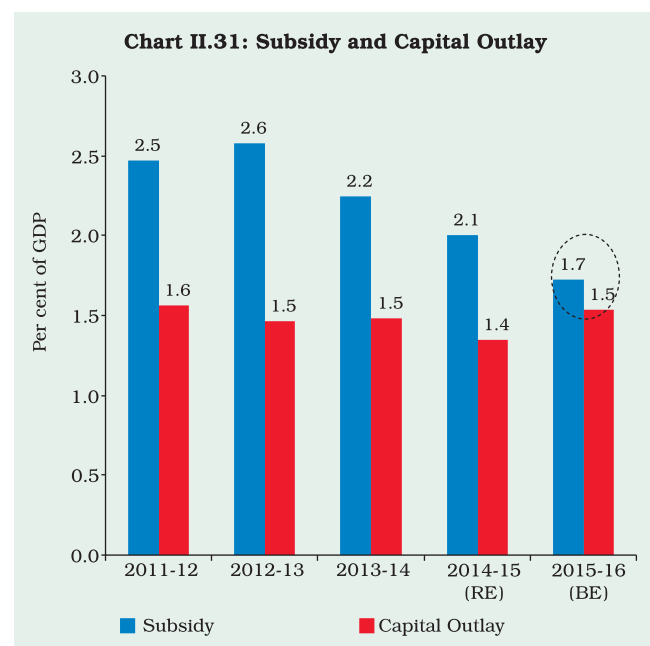
Jain, R., and P. Kumar (2013), 'Size of Government Expenditure Multipliers in India: A Structural VAR Analysis', RBI Working Paper No. 07.

Tapsoba, S. J. (2013), 'Options and strategies for fiscal consolidation in India', IMF Working Paper No.127.

realise the budgeted revenue on the one hand, and adhere to the budgeted expenditure on subsidies on the other (Chart II.31).

II.5.11 Food subsidy is budgeted to increase modestly in 2015-16, despite the proposed expansion in coverage under the National Food Security Act. Capping the food subsidy within the budgeted level will involve a multi-pronged strategy: end-to-end computerisation of the public distribution system, decentralisation of procurement and distribution of food grains and improving the operational efficiency of the Food Corporation of India (FCI). Through direct benefit transfers (DBTs),

the government may economise on food subsidy expenditure by eliminating costs associated with procuring, distributing and storing foodgrains. The recently announced Urea Policy of the government, which aims at maximising indigenous production and promoting energy efficiency in urea production units, so as to reduce import dependency and hydrocarbon inputs respectively, is expected to result in direct savings in the fertiliser subsidy of around ₹26.2 billion and indirect savings of around ₹22.1 billion, respectively, over the next four years on account of reduced energy consumption and import substitution.



II.5.12 As per the latest available information, the key deficit indicators of the Central Government, viz., GFD and RD, as percentages to their budget estimates (BE), were lower during April-June 2015 than in the corresponding period of the previous year. Despite higher total expenditure, robust non-debt receipts resulted in lower GFD during this period. Higher collections under all categories of indirect taxes and higher non-tax revenue provided a boost to the Central Government's receipts. While outgo on major subsidies was lower, capital expenditure was higher on account of higher growth in plan capital expenditure. On July 31, 2015, the Government has approved additional provision of ₹255 billion sought through the first batch of Supplementary Demand for Grants for 2015-16 to

meet priorities like capitalisation of public sector banks, support for social sector and rural development, additional support for metro rail projects, energy sector, food sector, civil aviation, culture and tourism and home affairs.

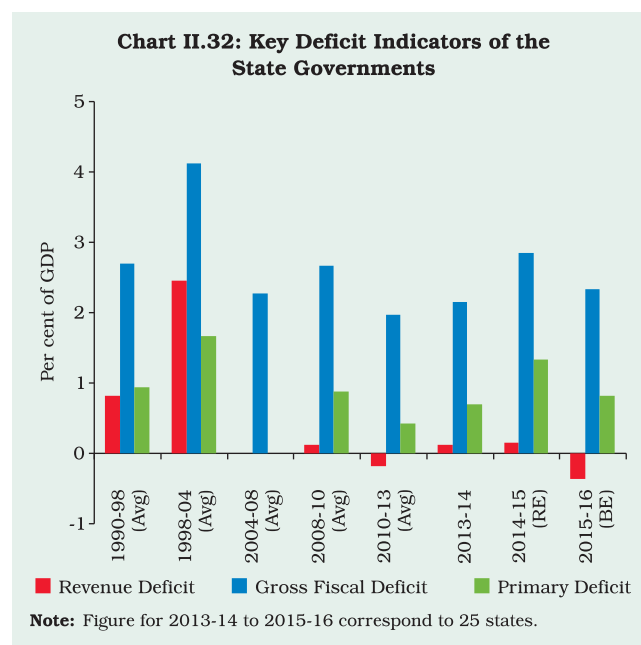
#### States' Fiscal Position in 2015-16<sup>2</sup>

II.5.13 The consolidated position of state finances<sup>3</sup> indicates an increase in the GFD-GDP ratio to 2.9 per cent in 2014-15 (RE) from 2.2 per cent in 2013-14, mainly due to an increase in aggregate expenditure which offset the increase in revenue receipts. The capital outlay ratio increased by 0.7 percentage points of GDP in 2014-15 over the previous year's level. The revenue balance continued to be in deficit at 0.1 per cent of GDP.

II.5.14 The BE for 2015-16 projects a decline in the GFD-GDP ratio to 2.3 per cent and turnaround in revenue account from a deficit to a surplus mode, indicating the states' intention to intensify the process of fiscal consolidation (Chart II.32). Improvement in the fiscal position is budgeted through buoyancy in tax revenues and containment of expenditure. Expenditure patterns of the states indicate stagnancy in committed and non-development expenditure and a decline in development expenditure.

#### Combined Fiscal Outcome in 2014-15

II.5.15 The fiscal position of the general government deteriorated in 2014-15 (RE). The combined fiscal deficit stood at 6.9 per cent of GDP as against 6.6 per cent in 2013-14. The decline in the Central Government's GFD by 0.3 percentage points was more than offset by a 0.7 percentage points increase in the GFD of state governments. The fiscal deficit of the general government, however,



is budgeted to improve to 6.3 per cent in 2015-16 (BE), mainly through a lower growth in expenditure *vis-à-vis* non-debt receipts.

II.5.16 Union Budget 2015-16 was formulated with the two-fold objective of promoting growth through stepping up investment and strengthening the federal structure. Accordingly, the fiscal strategy during 2015-16 is focused on creating space for infrastructure spending through a mix of own resources as well as a sharp increase in investments by central public sector enterprises and a substantial increase in resource transfer to the states. While the increased devolution to the states will constrain the Central Government's finances, it will help the states design, implement and finance programmes according to their specific needs. However, with an increase in the fiscal autonomy of the states, it will be crucial for them to effectively invest their resources.

<sup>2</sup> Data pertain to 25 states.

<sup>3</sup> An aggregative analysis tends to disguise significant differences across states in terms of fiscal position and policies. In this regard, the Reserve Bank's annual publication titled 'State Finances: A Study of Budgets of 2014-15' provides an in-depth analysis of state finances at a disaggregated level.

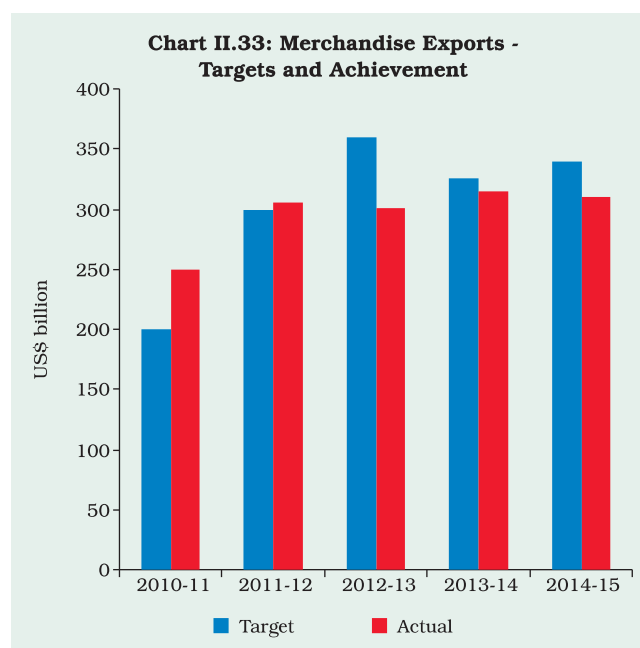
## II.6 THE EXTERNAL SECTOR

II.6.1 Global developments impacted India's external sector significantly in 2014-15. The collapse in international commodity prices, particularly of crude, delivered a positive shock, yielding a large measure of savings in imports. Export performance remained resilient to the commodity price plunge and large movements in G3 exchange rates for the greater part of the year. However, the conjunction of weak global demand, decline in crude prices affecting exports of petroleum products (POL) and persisting real appreciation of rupee, eventually took its toll, resulting in export contraction in the last four months of the year. With import prices falling faster than export prices, however, unexpected terms of trade gains accrued. Imports of gold remained subdued until the liberalisation of restrictions prompted a surge in volumes in the later part of the year. The combination of these factors restrained the current account deficit within sustainable limits.

II.6.2 In response to large macroeconomic adjustments undertaken since the summer of 2013 and also buoyed by ebullient optimism surrounding political change and expectations of structural reforms, foreign investments - both direct and portfolio - recorded substantial inflows. Consequently, the external financing requirement was comfortably met and there was large accretion to the reserves. Indicators of external sustainability, which improved from their levels a year ago, will buffer the Indian economy in light of an increase in policy rates by the US Fed later in the year or in 2016.

### *Merchandise Export Performance*

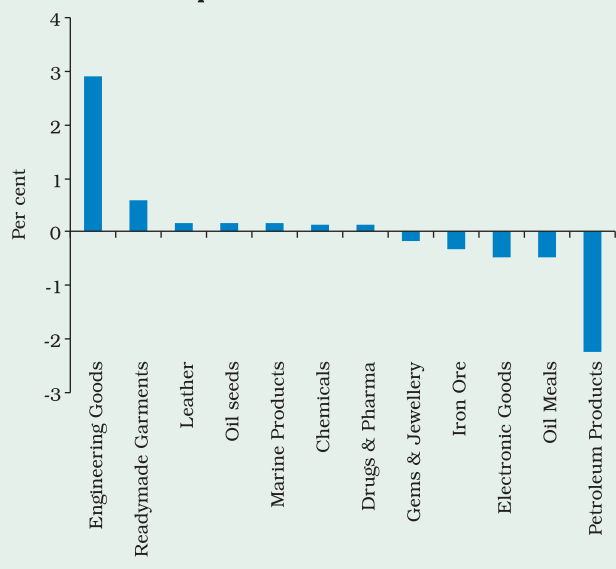
II.6.3 India's merchandise exports fell below the target set by the government for the third successive year (Chart II.33); the modest rise in volumes was eroded by a decline in unit value realisations.



Weighed down by a sharp fall in Q4, the volume of both POL and non-POL exports grew only modestly in 2014-15. Merchandise export growth in US dollar terms held up well in Q1 of 2014-15, but gradually lost momentum in Q2 and Q3, followed by a decline of about 16 per cent in Q4 - the sharpest contraction since Q2 of 2009-10 at the height of the global financial crisis. Export contraction was steeper in Q1 of 2015-16, though the downward drift was slower in July 2015.

II.6.4 Amongst the major sectors, petroleum products, oil meals, electronic goods, iron ore and gems & jewellery dragged down the overall export performance in 2014-15 (Chart II.34). While the fall in exports of petroleum products reflected the softening of international crude oil prices in the last three quarters of 2014-15, weakness in demand for other commodity classes interacted with domestic supply constraints related to infrastructure and other inputs to hit non-oil exports. Destination-wise, exports to China, the EU, Singapore, Japan and Saudi Arabia suffered a larger setback in 2014-15. Given greater trade integration, India's trade

**Chart II.34: Relative Contribution to Export Growth in 2014-15**



seems to have become increasingly responsive to global economic and financial conditions (Box II.6).

*Merchandise Imports*

II.6.5 The plunge in global prices of crude oil by nearly 50 per cent between June 2014 and March 2015 compressed India's POL import bill by 16 per cent yielding a saving of US\$ 26.5 billion in relation to the outgo on this account a year ago. Global crude oil prices stayed modest in Q1 of 2015-16 (Chart II.35). Gold imports, however, recorded an increase in terms of both value (20 per cent) and volume (38 per cent) in response to a surge in demand in H2 of 2014-15. The uptick in gold imports in the later part of 2014-15 could largely be attributed to festival demand, permission to trading

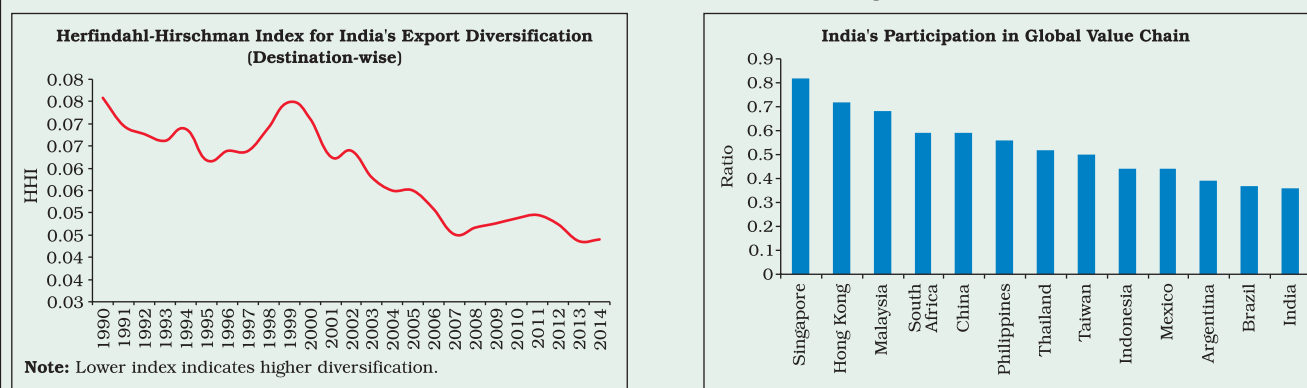
**Box II.6**

**Trade Linkages and Elasticities**

India's cross-border trade linkages have strengthened over time. Not only has India diversified its exports in terms of destinations, but its participation in global value chains (GVCs) has also increased over the years, *albeit* at a lower level than other peer economies (Chart 1), particularly in chemicals and electrical equipment (OECD 2014). Participation in GVC allows domestic firms to enter markets by specialising in niche intermediate activities within a chain and enables suppliers to upgrade production into higher-value segments of their industries. This enhances comparative advantages, productivity growth and development levels in economies.

Greater cross-border linkages through GVCs also tend to increase the sensitivity of trade to external business cycle shocks (Gangnes *et al.* 2014). Since the world is gradually transitioning to a stage in which GVC trade is assuming more importance than it did before, there appears to have been a long-run increase in the elasticity of global trade with respect to world economic activity (Escaith *et al.* 2010). In this context, estimation of country-specific trade elasticities assumes importance, especially in an international environment in which competitive monetary policy stances and exchange rate effects have implications for export competitiveness.

**Chart 1: India's Cross-border Trade Linkages**



(Contd....)

For India, the size of real exchange rate elasticity of real non-oil exports is estimated to be in the range of 0.7 to 0.9 with a lag of less than one year, while the income elasticity of real non-oil exports is 2.1 to 2.7 (Jain and Tewari, 2014). Similarly, the volume of imports is found to be predominantly responsive to domestic demand while its elasticity with respect to the real exchange rate is broadly in the range of 0.3 to 0.5. The estimates of income and exchange rate elasticities are broadly in line with other studies undertaken for India (Table 1). Overall, there appears to be support for the Marshall-Lerner condition implying the efficacy of exchange rate changes in moving the trade balance to the desired level.

In order to improve trade linkages with the rest of the world, India's participation in GVC must improve. Policy focus should be concentrated on cluster development in particular sectors with large presence of MSMEs so that they can integrate effectively in the global production network. Another way for domestic firms to integrate into GVC is through a joint venture or strategic partnership to achieve synergy gains. Cross-border foreign investments should be encouraged. While inward FDI benefits domestic firms in terms of capital, technology transfer and research and development (R&D) capabilities, outward FDI increases their productivity by providing access to scarce raw materials, a skilled labour force and expanding production networks. Firms also need to specialise in logistics, design, assembly and R&D. Thus, further policy attention is warranted to support in-house R&D so as to enable domestic firms to achieve quality standards and specialise in high value added activities. There is ample scope for improvement in the quality and efficiency of services (for example, basic infrastructure and air transport) which will help India raise its share in GVC.

**Table 1: Major studies undertaken for India**

Author (s)	Findings
Hsing (2010)	Marshall-Lerner condition holds
Aziz and Chinoy (2012)	IE (4.0) and ERE (0.6) for exports
UNCTAD (2013)	IE (1.9) and ERE (0.54) for exports
Pandey (2013)	Marshall-Lerner condition holds
Mohan and Kapur (2014)	ERE (0.21 to 0.65) for X and (0.19 to 0.42) for M
Raissi and Tulin (2015)	IE (>1.5)

**Note:** X: Exports; M: Imports; ERE: Exchange rate elasticity; IE: Income elasticity.

Greater participation in GVC also makes a country's trade more susceptible to global economic and financial conditions (that is, demand/supply conditions and exchange rate changes). Given the sensitivity of India's trade to income conditions and exchange rate changes, policymakers need to be cognizant of external shocks especially through capital flows and domestic inflation and productivity levels as they may have significant implications for real effective exchange rate movements which eventually impact India's trade balance.

#### References:

Aziz, Jahangir and Sajjid Chinoy (2012), 'India: More Open Than You Think', Economic Research, J.P.Morgan.

Escaith, Hubert, Nannette Lindenberg, and Sébastien Miroudot (2010), 'International Supply Chains and Trade Elasticity in Times of Global Crisis', Economic Research and Statistics Division Staff Working Paper 2010-08, World Trade Organisation, Geneva.

Gangnes, Byron S., Alyson C. Ma and Ari Van Assche (2014), 'Global Value Chains and Trade Elasticities', UHERO Working Paper No. 2.

Hsing, Y. (2010), 'Test of the Marshall-Lerner Condition for Eight Selected Asian Countries and Policy Implications', *Global Economic Review*, 39 (1): 91-99.

Jain, Rajeev and Soumasree Tewari, 'Estimation of Export and Import Functions for India', Forthcoming, RBI Working Paper.

Kapur, Muneesh and Rakesh Mohan (2014), 'India's Recent Macroeconomic Performance: An Assessment and Way Forward', IMF Working Paper No.14/68.

Pandey, Ritesh (2013), 'Trade Elasticities and the Marshall Lerner Condition for India', *Global Journal of Management and Business Studies*, 3 (4): 423-28.

Raissi, Mehdi and Volodymyr Tulin (2015), 'Price and Income Elasticity of Indian Exports - The Role of Supply-Side Bottlenecks', IMF Working Paper No. 15/161.

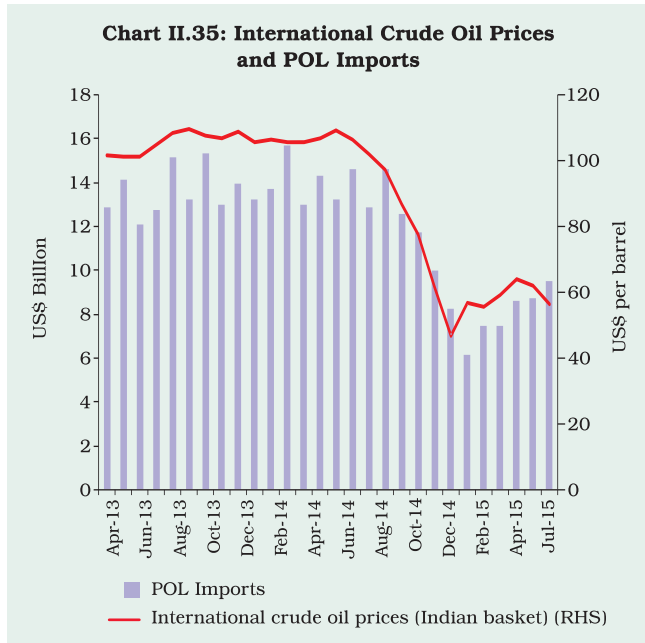
OECD (2014), *India Policy Brief*, November.

UNCTAD (2013), *Impact of the Global Slowdown on India's Exports and Employment*. New York and Geneva: United Nations.

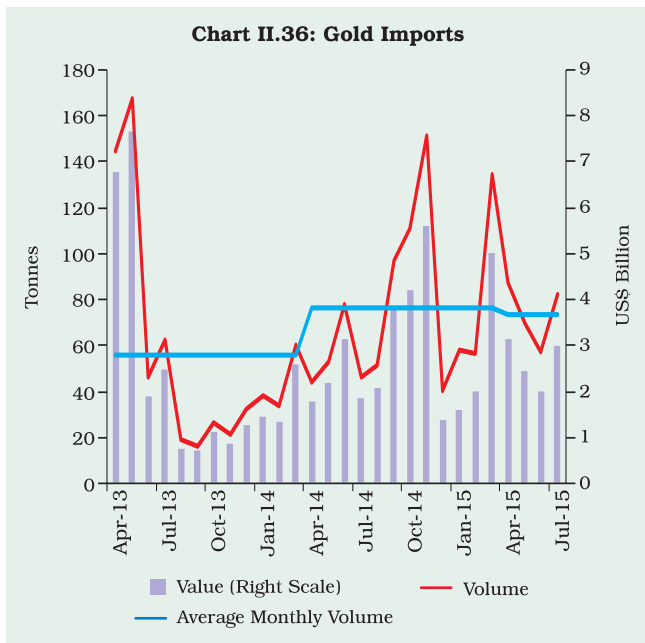
houses to import gold for domestic consumption as well as the withdrawal of the 20:80 scheme and

other restrictions for gold imports.<sup>1</sup> Further, sharp increase in gold imports in March and April 2015

<sup>1</sup> On May 13, 2013, the Reserve Bank restricted the import of gold by banks on a consignment basis to meet the genuine needs of exporters of gold jewellery, followed by the 20:80 scheme on July 22, 2013 under which all nominated banks/agencies were to ensure that at least one-fifth of every lot of import of gold was exclusively made available for the purpose of exports. Effective May 21, 2014, nominated banks/agencies/premier or star trading houses/special economic zone units/export-oriented units were permitted gold imports under the 20:80 scheme. While the gold metal loan scheme was also restored in May 2014, the 20:80 scheme was withdrawn in November 2014. Further, imports on a consignment basis were also restored.

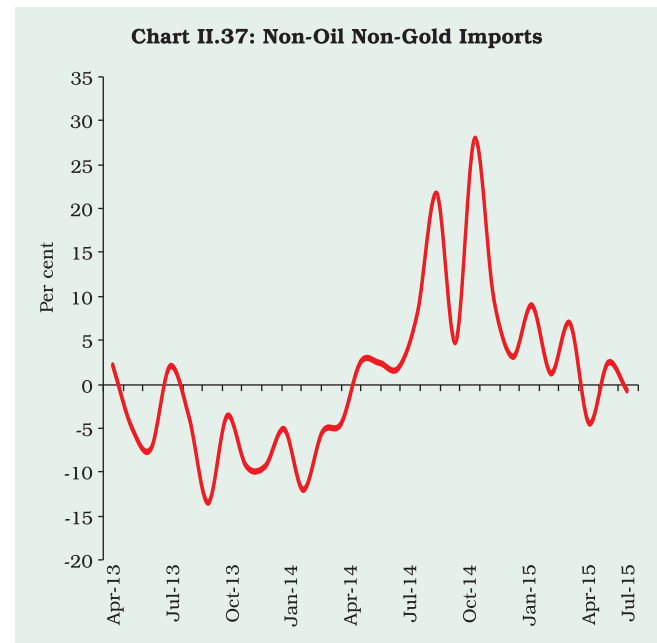


also reflected suppressed demand in preceding months in anticipation of a cut in customs duty in Union Budget 2015-16 and demand surge on account of *Akshaya Trithiya*. After being subdued, gold imports again spiked in the month of July 2015, as gold prices dipped to the lowest level in last four years, stimulating domestic consumption demand (Chart II.36).



II.6.6 Non-oil non-gold imports picked up modestly in 2014-15 largely in response to domestic requirements of industry (Chart II.37). Higher imports of iron and steel, iron ore, coal, non-ferrous metals, chemicals and machinery also resulted from shortfalls in domestic production in certain sectors. In particular, the rise in coal imports reflected higher requirements of power companies which have added capacity to meet growing domestic demand for power. Import of vegetable oils was also driven by shortages in domestic production. Non-oil non-gold imports increased in the current financial year up to July 2015, though at a modest pace.

II.6.7 With the decline in exports exceeding the fall in imports, the merchandise trade deficit widened marginally in 2014-15 from its level in 2013-14. While softening of oil prices compressed India's POL trade deficit, the non-POL trade deficit widened from US\$ 34.2 billion in 2013-14 to US\$ 55.7 billion in 2014-15 (Table II.13). However, the trade deficit at US\$ 45.0 billion during first four months (April-July) of 2015-16 was lower than that in the same period of 2014-15.



**Table II.13: Merchandise Trade Deficit**

(US\$ billion)

Item	2014-15 (P)		2013-14 (R)	
	Value	% Growth	Value	% Growth
1	2	3	4	5
<b>Export</b>	<b>310.5</b>	<b>-1.2</b>	<b>314.4</b>	<b>4.7</b>
<i>Of which:</i>				
POL	57.0	-9.7	63.2	3.8
Non-oil	253.5	0.9	251.2	4.9
<b>Imports</b>	<b>447.5</b>	<b>-0.6</b>	<b>450.2</b>	<b>-8.3</b>
<i>Of which:</i>				
POL	138.3	-16.1	164.8	0.4
Gold	34.4	19.9	28.7	-46.7
NONG	274.8	7.0	256.7	-5.9
<b>Trade Deficit</b>	<b>-137.0</b>		<b>-135.8</b>	
<i>Of which:</i>				
POL	-81.3		-101.6	
Non-POL	-55.7		-34.2	
<i>Memo Item:</i>				
<b>Trade Deficit as % of GDP</b>	<b>-6.7</b>		<b>-7.2</b>	

**Source:** DGCI&S.**Note:** P: Provisional, R: Revised, POL: Petroleum, Oil, Lubricants. NONG: Non-oil non-gold

### Current Account Deficit

II.6.8 The merchandise trade deficit (BoP basis) was partly offset by a rise in net exports of services.

Aided by better growth in the US, higher technology adoption and the strength of the US dollar against the rupee, India's software exports seemed to have benefitted, though appreciation of the rupee against the euro and sluggish demand might have dampened software exports to the euro area. Net exports of travel services recorded a decline largely due to higher payments on account of personal services availed for education, medical reasons and holidays. Notwithstanding the fall in international oil prices, the flow of remittances remained stable.

II.6.9 India's current account deficit (CAD) shrank to 1.3 per cent of GDP in 2014-15 from 1.7 per cent a year ago. Holding the CAD at a sustainable level going forward will hinge on a turnaround in merchandise exports. This will also involve assigning priority to unlocking domestic supply-side bottlenecks in terms of infrastructure and other key inputs, including through active policy interventions to restore productivity and competitiveness across a broad spectrum of leading sectors (Box II.7).

### Financing of CAD

II.6.10 During 2014-15, India became a preferred destination for private capital flows, which responded

## Box II.7

### India's New Foreign Trade Policy 2015-20

On April 1, 2015, the Ministry of Commerce and Industry announced the Foreign Trade Policy 2015-20 (FTP) with a vision to making India a significant participant in world trade by 2020 and to enable the country to assume a leadership position in the international trade discourse. FTP links rules, procedures and incentives for exports and imports with other initiatives (for example, Make in India, Digital India and Skill India) with a view to improving 'ease of doing business' in India. The salient features of FTP are:

- To increase India's exports of merchandise and services from US\$ 465.9 billion in 2013-14 to US\$ 900 billion by 2019-20 and to raise India's share in world exports from 2 per cent to 3.5 per cent during this period.
- A new scheme, the Merchandise Exports from India Scheme (MEIS) aimed at the simplification of the incentive structure, replacing multiple schemes is in place.
- A new scheme, the Services Exports from India Scheme (SEIS) with expanded scope is in place, which will benefit all 'service providers located in India' instead of only 'Indian service providers'.
- Allowing transferability and greater flexibility in using 'duty credit scrips' which exporters will get under MEIS and SEIS.
- Prioritisation of sectors which have domestic manufacturing capabilities and potential demand (for

(Contd....)



example, drugs and pharmaceuticals, chemicals and electronics) where exports need to grow significantly to achieve overall growth targets.

- Other sectors identified with great export potential include engineering, leather, textiles, medical devices, natural resource based items, gems and jewellery, agri products and defence equipment.
- Emphasis on the need to increase India's participation in global supply chains. Adoption of the 'whole-of-government' approach as a significant step towards better coordination with state governments/other departments.
- Indication of the revival of the interest subvention scheme for exports from identified sectors for a period of three years, though sectoral coverage and rate of interest subvention are not indicated.
- Envisages a move towards paperless working in a 24x7 environment to facilitate the ease of doing business in India.

Under the new FTP, the government has expanded the scope of the new schemes to special economic zones (SEZs). Even though the target set for 2019-20 for exports of

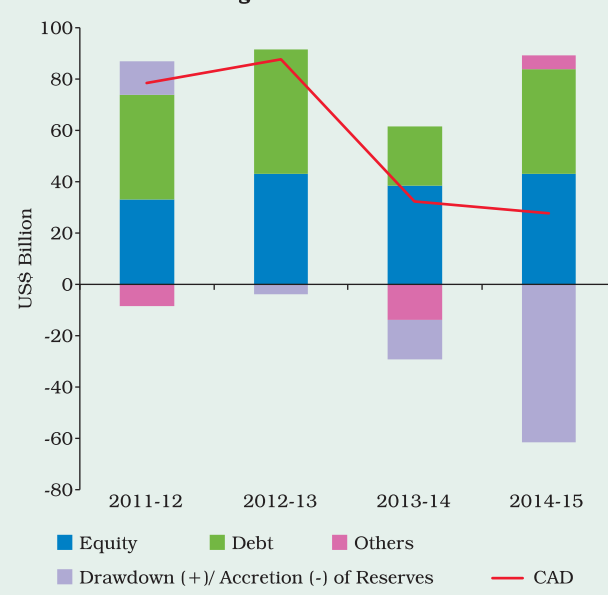
goods and services appears achievable, demand conditions in major trade partner economies will have to be supportive and domestic bottlenecks (both in terms of infrastructure and policy) need to be eased significantly. If the world economy grows faster during 2015-19 than in the 2009-14 period as projected by the IMF (2015), India's exports may fare better than in previous years. Nonetheless, taking exports to the level of US\$ 900 billion by 2019-20 will need a higher compound annual rate of growth (CARG) of about 14 per cent during the FTP period (2015-16 to 2019-20) which could be a challenge (Chart 1).

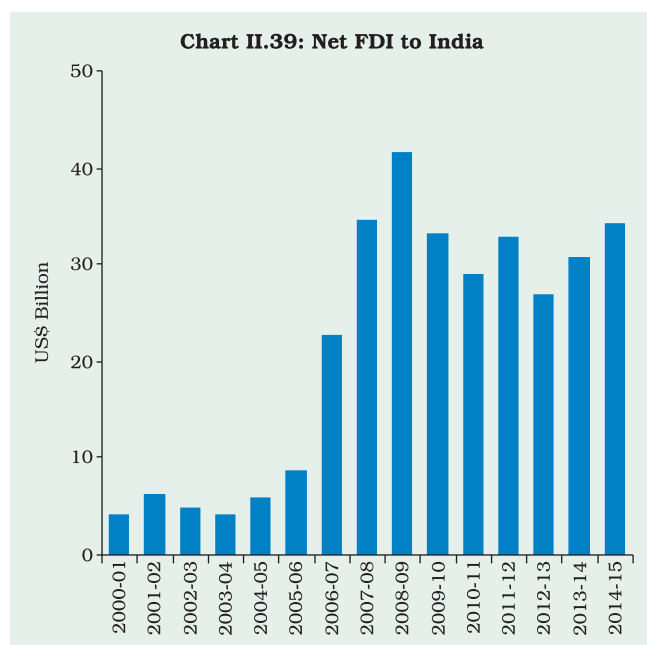


to improved perceptions of fundamentals, optimism engendered by a stable government at the centre and expectations surrounding resurgence of business sentiment in an improved climate for investors, both foreign and domestic. The abundance of global liquidity in view of unconventional monetary policies in advanced economies also emerged as a push factor driving a relentless search for returns. Non-debt creating capital inflows alone far exceeded the financing requirement (Chart II.38). Foreign portfolio investors brought in about US\$ 41 billion to Indian equity and debt markets, making India the most attractive destination among emerging markets. Further, net foreign direct investment (FDI) inflows picked up strongly in response to initiatives that are geared towards a better business environment with policy certainty. In particular, policy measures have been undertaken with regard to easing of norms for FDI in certain sectors, allocation of natural resources, the subsidy

regime, financial inclusion, employment and job creation for the youth and an improved and non-adversarial tax administration. FDI inflows to India, excluding disinvestments, were the highest after

**Chart II.38: Financing Pattern of Current Account Deficit**





2008-09 (Chart II.39). FDI mainly flowed into the manufacturing sector responding to the government's 'Make in India' initiative, followed by financial services, retail and wholesale trade. Within the manufacturing sector, transport equipment and chemical sectors were the major recipients and

accounted for about 50 per cent of the total FDI in 2014-15. Inflows to NRI deposits and in the form of external commercial borrowings were moderate during 2014-15 relative to the preceding year, signifying policy induced inflows in the past. With net capital inflows exceeding CAD sizeably, there was net accretion to reserves to the tune of US\$ 61.4 billion on a BoP basis (that is, excluding valuation effects).

#### *External Sustainability*

II.6.11 External vulnerability indicators improved significantly in 2014-15 on account of both a lower accretion to the external debt stock and the build-up of foreign exchange reserves. Key debt and reserve-related indicators of external vulnerabilities reflected an improved ability to discharge external obligations. While the import cover ratio rose to 8.9 months as at end-March 2015, the ratio of short-term debt (by original as well as residual maturity) to reserves and the ratio of total external debt to reserves declined over the same period (Table II.14).

**Table II.14: India's External Sector Vulnerability Indicators**

(Per cent unless indicated otherwise)

Indicator/Ratios	End-Mar 2011	End-Mar 2012	End-Mar 2013	End-Mar 2014	End-Mar 2015
1	2	3	4	5	6
1. External Debt to GDP ratio	18.2	20.9	22.3	23.6	23.8
2. Short-term to Total Debt (Original Maturity)	20.4	21.7	23.6	20.5	17.8
3. Short-term to Total Debt (residual maturity) #	40.6	40.9	42.1	39.6	38.9
4. Concessional Debt to Total Debt	14.9	13.3	11.1	10.4	8.8
5. Reserves to Total Debt	95.9	81.6	71.3	68.2	71.8
6. Short-term Debt to Reserves	21.3	26.6	33.1	30.1	24.8
7. Short-term Debt (residual maturity) to Reserves #	42.3	50.1	59.0	57.4	54.2
8. Reserves Cover of Imports (in months)	9.5	7.1	7.0	7.8	8.9
9. Debt-Service Ratio	4.4	6.0	5.9	5.9	7.5
10. External Debt (US\$ billions)	317.9	360.8	409.4	446.3	475.8
11. Net International Investment Position (NIIP) (US\$ billion)	-207.0	-264.7	-326.7	-336.8	-363.0
12. NIIP/GDP ratio*	-12.1	-14.4	-17.8	-17.8	-18.1
13. CAD/GDP ratio	2.8	4.2	4.8	1.7	1.3

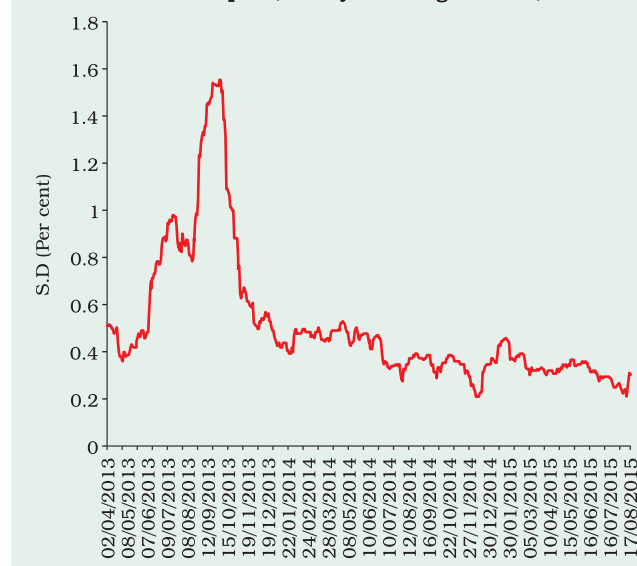
**Note:** #: RBI estimate; \*: Based on US\$ terms.

### Exchange Rate Movements

II.6.12 The US dollar gained significantly against most international currencies during the year. The Indian rupee, however, depreciated only marginally against the US dollar; therefore, by the same token, it gained strongly against other major currencies, viz., euro, GBP and Japanese yen, reflecting the weak economic outlook for these economies and their ultra-accommodative monetary policies. Reflecting persisting inflation differentials and appreciation of the rupee in nominal terms *vis-à-vis* India's major trade partners, the real effective exchange rate of the rupee during 2014-15, on average, appreciated by 6.1 per cent and by 5.5 per cent (y-o-y) for the basket of 6 and 36 currencies respectively. The rupee exchange rate also witnessed lower volatility in 2014-15 and 2015-16 so far than in the earlier period (Chart II.40).

II.6.13 Going forward, external sector sustainability will need close monitoring, especially in a global environment characterised by high volatility in financial markets, asynchronicity in monetary policies of major advanced economies and in particular, the widely expected lift-off of US interest rates, and still high geo-political risks. Although international crude oil prices stayed at modest levels in Q1 of 2015-16 and dropped sharply in August 2015 due to excess supply and subdued demand, continuation of benign conditions for the remaining part of the year still remains uncertain.

**Chart II.40: Volatility in Daily Movements in Indian Rupee (30 days-moving window)**



II.6.14 For India, every US\$ 1 increase in international crude prices broadly translates into an increase in the net POL import bill by US\$ 1 billion. Second, following the withdrawal of gold import related measures, the import demand for gold seems to be bouncing back as evident from a growth (volume terms) of 38.5 per cent in 2014-15 and 34.3 per cent in April-July 2015. Third, key to ensuring the viability of the external sector in this backdrop is a renewed thrust on exports in terms of both products and markets. Export diversification has provided a means of insulation in the face of sluggish global economic conditions and this should be vigorously pursued to strengthen resilience and to minimise the spillovers of external shocks.