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NOTES

The following figures/units are used in the Economic Survey:

BCM	billion cubic metres	kg	kilogram
BU	billion units	ha	hectare
MT	million tonnes	Bbl	billion barrels per litre
lakh	1,00,000	billion	1,000 million/100 crore
million	10 lakh	trillion	1,000 billion/100,000 crore
crore	10 million		

Acknowledgements

The Economic Survey is a result of teamwork and collaboration. I was assisted in the coordination tasks by Anandi Subramanian and N.K. Sinha. Contributors to the Survey from the Economic Division include: H.A.C Prasad, D.S. Kolamkar, Ila Patnaik, Anandi Subramanian, K.L Prasad, A.S. Sachdeva, Rajat Sachhar, Rajasree Ray, Antony Cyriac, R. Sathish, P. K. Abdul Kareem, N. K. Sinha, Priya Nair, Rajmal, J.K. Rathee, K.M. Mishra, Rangeet Ghosh, Abhishek Acharya, Kapil Patidar, Syed Zubair Husain Noqvi, Neha Yadav, Aakanksha Arora, Rabi Ranjan, Deepak Kumar Das, Vijay Kumar, M. Rahul, Rohit Lamba, Siddharth Eapen George, Sutirtha Roy, V.K. Mann, Riyaz A. Khan, Shobeendra Akkayi, Salam Shyamsunder Singh, Md. Aftab Alam, Sanjay Kumar Das, Subhash Chand, Praveen Jain, Narendra Jena, Pradyut Kumar Pyne, Jyotsna Mehta, Kanika Grover and Rajesh.

The survey has greatly benefited from the comments and inputs of officials, specifically, Rajiv Mehrishi, Saurabh Chandra, Sudhir Kumar, Arbind Modi, K.P.Krishnan, UKS Chauhan and Arunish Chawla; and a number of external collaborators, including Anant Swarup, Apoorva Gupta, Bimal Jalan, Devesh Kapur, Fan Zhang, Harsha Vardhana Singh, Jean Dreze, Josh Felman, Karthik Muralidaran, Krishnamurthy Subramanian, Manish Sabharwal, Mohit Desai, Muthukumar Mani, Namita Mehrotra, Nandan Nilekani, Nick Stern, Nisha Agrawal, P.S Srinivas, Partha Mukhopadhyay, Pranjul Bhandari, Pratap Bhanu Mehta, Raghuram G. Rajan, Rajiv Lall, Rakesh Mohan, Reetika Khera, Richard Bullock, Rohini Malkani, Sajjid Chinoy, Sandip Sukhtankar, Sonal Verma, T.V.Somanathan Tushar Poddar and Vijay Kelkar.

Apart from the above, various ministries, departments, and organisations of the Government of India made contributions on their respective sectors. Able administrative support was given by Agam Aggarwal, Sadhna Sharma, Suresh Arora, Amit, Rajat Verma and staff members of the Economic Division. Amarnath and his team of translators carried out the Hindi translation, while Shalini Shekhar adeptly edited the document. The Government of India Press, Minto Road and Mayapuri undertook the printing of the English and Hindi versions of the survey.

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ABBREVIATIONS

AAY	Antyodaya Anna Yojana
AAY	Antyodaya Anna Yojana
AE	Advance Estimates
ADR	American Depository Receipt.
AFOLU	Agriculture, Forestry and Other Land Use
APMC	Agricultural Produce Marketing Committee.
AR5	Assessment Report 5
ASEAN	Association of South East Asian Nations
AT & C	Aggregate Technical & Commercial
BBP	Beti Bachao Beti Padhao
BCBS	Basel Committee on Banking Supervision.
BCD	Bond-Currency-Derivative.
BDI	Baltic Dry Index
BPLR	Base Prime Lending Rate
BPM	Business Process Management
CACP	Commission for Agricultural Costs & Prices
CASA	Current and Savings Account.
CAGR	Compound Annual Growth Rate
CCFS	Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households.
CCP	Central counter party.
CES	Consumer Expenditure Survey
CLA	Central Loan Assistance
CMIE	Centre for Monitoring Indian Economy
COP	Conference of Parties
CPI-NS	Consumer Price Index-New Series
CRAR	Capital to Risk Weighted Assets Ratio.
CRIS	Centre for Railway Information Systems
CSMS	Core Subsidy Management System
CTT	Commodities Transaction Tax.
CWC	Central Water Commission
CWC	Central Warehousing Corporation
CFPI	Consumer Food Price Index
DDA	Doha Development Agenda
DDUGJY	Deendayal Upadhyaya Gram Jyoti Yojana
DDU-GKY	Deen Dyal Upadhya grameen Kaoshalya Yojana
DGH	Directorate General of Hydrocarbons
DISE	District Information System for Education
DFTP	Duty Free Tariff Preference
DGCIS	Directorate General of Commercial Intelligence and Statistics.
DRM	Domestic Resource Mobilization
DWT	Deadweight Tonnage
DRT	Debts Recovery Tribunal.
DWT	Dead Weight Tonnage
ECGC	Export Credit Guarantee Scheme.
EFTA	European Free Trade Association
EMDEs	Emerging Market and Developing Economies
EMEs	Emerging Market Economies
EOU	Export-Oriented Unit
ETA	Electronic Travel Authorization
FCNR (B)	Foreign Currency Non-Resident Deposit (Banks)
FEE	Foreign Exchange Earnings
FIT	Flexible Inflation Targeting.
FMS	Focus Market Scheme
FOMC	Federal Open Market Committee.
FPI	Foreign Portfolio Investor.
FPS	Focus Product Scheme
FSAT	Financial Sector Appellate Tribunal.
FSLRC	Financial Sector Legislative Reforms Commission.
GBS	Gross budgetary support
GRDI	Global Retail Development Index
GSPR	Global R&D Service Providers
G2B	Government to Business
GDR	Global Depository Receipt.
GEF	Global Environment Facility
GERD	Gross Expenditure on Research and Development
GNPA	Gross non-performing assets.
GRDI	Global Retail Development Index
G-Sec	Government securities.
GT	Gross Tonnage
GTR-	Gross tax revenue
HITS	Headend in The Sky
HKMD	Hong Kong Ministerial Declaration
HRIDAY	Heritage City Development and Augmentation Yojana
IEM	Industrial Entrepreneur Memorandum
ICD	Inland Container Depots
ICPs	Integrated Check Posts
ITAs	*International Tourist Arrivals*
ITeS	Information Technology Enabled Services
ITRs	*International Tourism Receipts*
IFC	Indian Financial Code.
IIP	International Investment Position
IPP	Institutional Placement Programme.
IISER	Indian Institute of Science Education & Research
INDC	Intended Nationally Determined Contributions
IPDS	Integrated Power Development Scheme
IPP	Institutional Placement Programme.
IT-ITeS	Information Technology Information Technology Enabled Services
ITA	Information Technology Agreement
JMC	Joint Ministerial Commission
LAF	Liquidity Adjustment Facility.
LCOs	Local Cable Operators
LULUCF	Land use, Land-use Change and Forestry
MANAS	Maulana Azad National Academy for Skills
MAT	Minimum Alternative Tax
MIS	Management Information System.
MMSCMD	Million Metric Standard Cubic Metre per Day
MSF	Marginal Standing Facility.
MSOs	Multi System Operators
MPS	Minimum Public Shareholding.
MSF	Marginal Standing Facility.
MSMED Act	Micro,Small and Medium Enterprises Development Act
MT	Metric Tonne.
MTFPS	Medium Term Fiscal Policy statement
NASSCOM	National Association of Software and Service Companies
NALSA	National Legal Services Authority
NAM	National AYUSH Mission
NAPCC	National Action Plan on Climate Change
NBFI	Non banking financial institution.
NBS	Nutrient Based Subsidy.
NBFC-ND-SI	Systemically Important Non-Deposit taking Non-Banking Financial Company
NCEF	National Clean Energy Fund
NCEUS	National Commission on Enterprises in the Unorganised Sector
NCVT	National Council for Vocational Training
NDA	Net Domestic Assets.
NDR	National Data Repository
NDTL	Net Demand and Time Liability.
NEER	Nominal Effective Exchange Rate
NeGP	National e-Governance Plan.
NELP	New Exploration Licensing Policy
NDTL	Net Demand and Time Liability.
NFM	Non-food manufactured
NFA	Net Foreign Assets.

NFSM	National Food Security Mission
NHPC	National Hydro-Electric Power Corporation
NIAEs	Newly Industrialized Asian Economies
NIDC	National Industrial Development Corporation Limited
NMCC	National Manufacturing Competitive Council
NMDFC	National Minorities Development and Finance Corporation
NOFN	National Optical Fibre Network
NPAG	Nutrition Programme for Adolescent Girls
NPCBB	National Project for Cattle and Buffalo Breeding
NPIT	National Policy on Information Technology
NWR	Negotiable Warehouse Receipt
ODF	Open Defecation Free
OMO	Open Market Operation.
OWG	Open Working Group
PAT	Perform Achieve Trade
PCT	Patent Cooperation Treaty
PDMA	Public Debt Management Agency.
PDSN	Public Distribution System Network
PE	Private Equity.
PEG	Private Entrepreneurs Guarantee
PISA	Programme for International Student Assessment.
PLF	Plant Load Factor
PMI	Purchasing Managers Index.
PNGRB	Petroleum & Natural Gas Regulatory Board
QE	Quantitative easing.
QFI	Qualified Foreign Investor.
QIP	Qualified institutional placement
R-APDRP	Restructured Accelerated Power Development and Reforms Programme
RCEP	Regional Comprehensive Economic Partnership
REC	Renewable Energy Certificates
REER	Real Effective Exchange Rate
REITs	Real Estate Investment Trusts
RFPI	Registered Foreign Portfolio Investor.
RoE	Return on Equity.
SAAR	Seasonally Adjusted Annualized Rate
SAC	Space Applications Centre
SAPCC	State Action Plan on Climate Change
SARFESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest.
SBM	Swachh Bharat Mission
SSCs	Sector Skill Councils
CRR	Securities Contracts (Regulation) rules.
SAGY	Sansad Adarsh Gram Yojna
SDGs	Sustainable Development Goals
SMA	Special Mention Accounts.
SPI	Services Price Index
SRS	Sample Registration System
STT	Securities Transaction Tax.
STU	State Transmission Utility
SWC	State Warehousing Corporations
SWMA	Special Ways and Means Advances.
TAFTA	Transatlantic Free Trade Area/Agreement
TCF	Trillion Cubic Feet
TEE	Town of Exports Excellence
TEUs	Twenty Foot Equivalent Units
TiVA	Trade in Value Added
TMM	Trade Monitoring Mechanism
TNC	Trade Negotiating Committee
TPF	*Trade Policy Forum*
TSA	Tourism Satellite Account
UNFCCC	United Nations Framework Convention on Climate Change
UNSC	United Nations Statistical Commission
UNWTO	United Nations World Tourism Organization
USTTAD	Upgrading the Skills and Training Arts/Crafts for Development
VKGUY	Vishesh Krishi and Gram Udyog Yojana
WALR	Weighted average lending rate.
WEO	World Economic Outlook.
WHT	Withholding Tax.
WIOD	World Input-Output Database
WMA	Ways and Means Advances.
WTTC	World Travel and Tourism Council

सत्यमेव जयते

Economic Survey 2014-15

Volume II

Government of India
Ministry of Finance
Department of Economic Affairs
Economic Division
February, 2015

State of the Economy-An Overview

01

CHAPTER

One of the redeeming features, while comparing economic performance across different countries for the year 2014-15, has been the emergence of India among the few large economies with propitious economic outlook, amidst the mood of pessimism and uncertainties that engulf a number of advanced and emerging economies. Brighter prospects in India owe mainly to the fact that the economy stands largely relieved of the vulnerabilities associated with an economic slowdown, persistent inflation, elevated fiscal deficit, slackening domestic demand, external account imbalances, and oscillating value of the rupee in 2011-12 and 2012-13. From the macroeconomic perspective, the worst is clearly behind us. The latest indicators, emerging from the recently revised estimates of national income brought out by the Central Statistics Office, point to the fact that the revival of growth had started in 2013-14 and attained further vigour in 2014-15. Factors like the steep decline in oil prices, plentiful flow of funds from the rest of the world, and potential impact of the reform initiatives of the new government at the centre along with its commitment to calibrated fiscal management and consolidation bode well for the growth prospects and the overall macroeconomic situation. Encouraged by the greater macro-economic stability and the reformist intent and actions of the government, coupled with improved business sentiments in the country, institutions like the IMF and the World Bank have presented an optimistic growth outlook for India for the year 2015 and beyond. The possible headwinds to such promising prospects, however, emanate from factors like inadequate support from the global economy saddled with subdued demand conditions, particularly in Europe and Japan, recent slowdown in China, and, on the domestic front, from possible spill-overs of below normal agricultural growth and challenges relating to the massive requirements of skill creation and infrastructural upgradation. The encouraging results from the Advance Estimates for 2014-15 suggest that though the global sluggishness has partly fed into the lacklustre growth in foreign trade; yet this downward pressure has been compensated by strong domestic demand, keeping the growth momentum going.

Recent Growth Record

1.2 Before analysing the recent macroeconomic trends, it may be mentioned that the Central Statistics Office (CSO) has recently revised the national accounts aggregates by shifting to the new base of 2011-12 from the earlier base of 2004-05 (see Box 1.1 for details). Given the provisional

Table 0.1 : Key Indicators

Data categories	Unit	2011-12	2012-13	2013-14	2014-15
1. GDP and Related Indicators					
GDP (constant market prices)	₹ Crore	8832012[NS]	9280803[NS]	9921106[NS]	10656925[AE]
Growth Rate	%	—	5.1	6.9	7.4
GVA at Basic prices (2011-12 prices)	₹ Crore	8195546[NS]	8599224[NS]	9169787[NS]	9857672[AE]
Growth Rate	%	—	4.9	6.6	7.5
Saving Rate	% of GDP	33.9	31.8	30.6	na
Capital Formation (rate)	% of GDP	38.2	36.6	32.3	na
Per Capita Net National Income (At current market prices)	₹	64316[NS]	71593[NS]	80388[NS]	88533[AE]
2. Production					
Food grains	Million tonnes	259.3	257.1	265.6	257.1[a]
Index of Industrial Production[b] (growth)	%	2.9	1.1	-0.1	2.1[f]
Electricity Generation (growth)	%	8.1	4.0	6.0	9.9[f]
3. Prices					
Inflation (WPI) (average)	%	8.9	7.4	6.0	3.4[f]
Inflation CPI (IW) (average)	%	8.4	10.4	9.7	6.2[f]
4. External Sector					
Export growth (US$)	%	21.8	-1.8	4.7	4.0[f]
Import growth (US$)	%	32.3	0.3	-8.3	3.6[f]
Current Account Balance (CAB)/GDP	%	-4.2	-4.7	-1.7	-1.9 (H1)
Foreign Exchange Reserves[g]	US$ billion	294.4	292.0	304.2	328.7
Average Exchange Rate[c]	₹ /US$	47.92	54.41	60.50	60.78[f]
5. Money and Credit					
Broad Money (M3) (annual)	% change	13.5	13.6	13.2	11.5[h]
Scheduled Commercial Bank Credit	% change	17.0	14.1	13.9	10.7[h]
6. Fiscal Indicators (Centre)					
Gross Fiscal Deficit	% of GDP	5.7	4.8	4.5[d]	4.1[e]
Revenue Deficit	% of GDP	4.4	3.6	3.2[d]	2.9[e]
Primary Deficit	% of GDP	2.7	1.8	1.2[d]	0.8[e]

Note: na : Not Available, NS : New Series Estimates. AE : Advance Estimate.
H1: April-September 2014.
[a] 2nd Advance Estimates.
[b] Base (2004-05=100).
[c] Indicative rates announced by Foreign Exchange Dealers Association of India (FEDAI) and from May 2012 onwards are RBI's reference rates.
[d] Fiscal indicates for 2013-14 are based on the provisional actual.
[e] Budget Estimates
[f] April-December 2014.
[g] Figures for 2011-12 to 2013-14 relate to end of financial year and the figure for 2014-15 is at end January 2015.
[h] As on January 9, 2015.

Box 1.1 : Revision of the Base Year of National Accounts from 2004-05 to 2011-12

The current base year revision follows the revision undertaken in January 2010. The following are the major changes incorporated in the just-concluded base-year revision:

(i) Headline growth rate will now be measured by GDP at constant market prices, which will henceforth be referred to as 'GDP', as is the practice internationally. Earlier, growth was measured in terms of growth rate in GDP at factor cost at constant prices.

(ii) Sector-wise estimates of gross value added (GVA) will now be given at basic prices instead of factor cost. The relationship between GVA at factor cost, GVA, at basic prices, and GDP (at market prices) is given below:

GVA at basic prices = CE + OS/MI + CFC + production taxes less production subsidies

GVA at factor cost = GVA at basic prices - production taxes less production subsidies

GDP = $\sum$ GVA at basic prices + product taxes - product subsidies

(where, CE : compensation of employees; OS: operating surplus; MI: mixed income; and, CFC: consumption of fixed capital. Production taxes or production subsidies are paid or received with relation to production and are independent of the volume of actual production. Some examples of production taxes are land revenues, stamps and registration fees and tax on profession. Some production subsidies are subsidies to Railways, input subsidies to farmers, subsidies to village and small industries, administrative subsidies to corporations or cooperatives, etc. Product taxes or subsidies are paid or received on per unit of product. Some examples of product taxes are excise tax, sales tax, service tax and import and export duties. Product subsidies include food, petroleum and fertilizer subsidies, interest subsidies given to farmers, households, etc. through banks, and subsidies for providing insurance to households at lower rates).

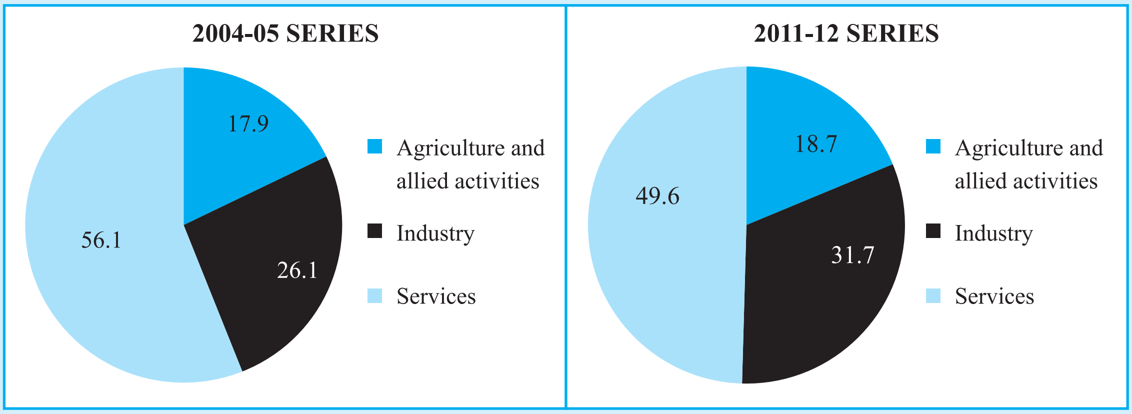
(iii) Comprehensive coverage of the corporate sector both in manufacturing and services by incorporation of annual accounts of companies as filed with the Ministry of Corporate Affairs (MCA) under their e-governance initiative, MCA21. Use of MCA21 database for manufacturing companies has helped account for activities other than manufacturing undertaken by these companies.

(iv) Comprehensive coverage of the financial sector by inclusion of information from the accounts of stock brokers, stock exchanges, asset management companies, mutual funds and pension funds, and the regulatory bodies including the Securities and Exchange Board of India (SEBI), Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory and Development Authority (IRDA).

(v) Improved coverage of activities of local bodies and autonomous institutions, covering around 60 per cent of the grants/transfers provided to these institutions.

Owing to these changes, estimates of GVA both at aggregate and sectoral levels have undergone changes. The sector-wise shares in aggregate GVA have undergone significant revision especially in the case of manufacturing and services (Figure 1). Changes have also been observed in the growth rates in GVAs of individual sectors and contribution of each sector to overall GVA due to use of sales tax and service tax data for estimation in the years 2012-13 and 2013-14. Caution needs to be exercised while comparing estimates and growth rates from the earlier series to the new series.

Figure 1: Percentage Share of Sectors in GVA at factor cost at current prices-Average of 2011-12 to 2013-14



and preliminary nature of the available information that may take time to stabilize and the fact that information for growth-related parameters is available only for three years on the revised base, it becomes difficult to objectively analyse the broad macroeconomic trends on a longer term horizon. The new set of information also cannot be compared with the information and analysis based on the 2004-05 series.

1.3 The economic scenario presented by the new series (with 2011-12 as base year) reveals that there was perceptible improvement in some of the macro-aggregates of the economy in 2013-14, which got strengthened in 2014-15. Economic growth, measured by growth in gross domestic product (GDP) at constant market prices, estimated at 5.1 per cent and 6.9 per cent respectively during 2012-13 and 2013-14, was higher than the corresponding figures of 4.7 per cent and 5.0 per cent released under the 2004-05 series in May 2014. That this high growth occurred in a year when the both the savings and investment to GDP ratios were lower than the average of a number of years and when the level of imports (that are generally positively associated with GDP) actually declined by 8.4 per cent in real terms, is somewhat puzzling. One of the reasons why the real GDP growth rate for 2013-14 appears to be strong is the lower GDP level in 2011-12 and 2012-13 along with lower GDP deflators than were thought hitherto.

Table 1.1 : Comparison of Old Series and New Series

Item	Year	Difference between new series and old series in percentage points
Growth in GVA at factor cost	2012-13	0.4
	2013-14	1.9
Growth in deflator	2012-13	0.5
	2013-14	-0.3
Level of GVA at factor cost at current prices	2011-12	-2.2
	2012-13	-1.3
	2013-14	0.2

Source: **CSO.**

1.4 The table 1.1 captures these effects separately based on the new and old series of the GVA at factor cost. The level of GVA was lower in 2011-12 and 2012-13 in the new series vis-à-vis the old series, with the degree of change tapering off in successive years. [This cannot be verified for the Advance Estimates (AE) for 2014-15, for which only the data from new series is available]. A greater decline in the level of GDP in 2011-12 and 2012-13, has given an upward push to the growth rate in the 2013-14. On the other hand, the upward revision of inflation in 2012-13, measured by the GDP deflator, gave a downward push to growth, but not to the extent of nullifying the positive effect of relative revisions in absolute levels. In 2013-14, the downward revision in the deflator pushed up real growth in the new series.

Table 1.2 : Growth in GVA at Constant (2011-12) Basic Prices (per cent)

	2012-13	2013-14	2014-15
Agriculture, forestry & fishing	**1.2**	**3.7**	**1.1**
Industry	**2.3**	**4.5**	**5.9**
Mining & quarrying	-0.2	5.4	2.3
Manufacturing	6.2	5.3	6.8
Electricity, gas, water supply,& other utility services	4.0	4.8	9.6
Construction	-4.3	2.5	4.5
Services	**8.0**	**9.1**	**10.6**
Trade, hotels & restaurants, transport &communication	9.6	11.1	8.4
Financing, insurance, real estate & business services	8.8	7.9	13.7
Community, social,& personal services	4.7	7.9	9.0
GVA at basic prices	**4.9**	**6.6**	**7.5**
GDP (at market prices)	**5.1**	**6.9**	**7.4**

Source: **Based on the CSO's Press Notes dated 30 January 2015 and 9 February 2015.**

1.5 The estimates at disaggregated level (Table 1.2) indicate that agriculture and allied sectors—including crops, livestock, forestry and logging, and fishing—picked up growth in 2013-14. This was not unexpected as 2013-14 happened to be an exceptionally good year from the point of view of rainfall.

1.6 The manufacturing sector registered a growth of 6.2 per cent and 5.3 per cent respectively in 2012-13 and 2013-14 (6.1 per cent and 5.3 per cent in terms of GVA at factor cost). As per the pre-revised series, this growth was 1.1 per cent and - 0.7 per cent. This surprising change in growth rate can be ascribed to normal data revisions that take place as per revision schedules, the effect of base change as well as more comprehensive coverage of the corporate sector with the incorporation of MCA21 database of the Ministry of Corporate Affairs. For instance, on the basis of earlier methodology and the 2004-05 series, growth rate of the manufacturing sector for 2011-12 was 3.9 per cent as per estimates released in February 2012, which was later revised to 2.7 per cent in January 2013 and 7.4 per cent in January 2014. This implies that some revision in manufacturing growth could have taken place in 2012-13 and 2013-14, even without the base revision. The upward revision in manufacturing growth in the new series also owes to inclusion of trade carried out by manufacturing companies in the manufacturing sector itself, which was earlier part of the services sector.

1.7 At the disaggregated level of the new series, the growth in manufacturing sector was chiefly on account of robust growth in textiles, apparels, and leather products, averaging 17.7 per cent during 2012-13 and 2013-14, and the machinery and equipment sector averaging 9.3 per cent. Food products are yet to pick up momentum.

1.8 The services sector triggered the growth momentum in 2013-14. Services like trade and repair services, rail transport, communication and broadcasting services and miscellaneous services achieved double-digits/close to double-digits growth during the year. However, sectors like water transport and storage services lagged behind.

1.9 The AE of national income for the current year indicate that the positive growth trends that unravelled in 2013-14 appear to have strengthened in 2014-15 in the industrial and services sectors, with the result that the growth in GVA at basic prices improved by 0.9 percentage points and the GDP by 0.5 percentage points in 2014-15. While electricity, gas, and water supply and other utility services are projected to achieve robust growth, manufacturing has gained momentum. Construction has done better while mining and quarrying activities still exhibit a tentative pattern. With appropriate policy changes, coal sector has broken shackles and grew by 9.1 per cent during April-December 2014. However, crude oil, natural gas and refinery products continued the slump, damaging the overall mining story. It is difficult to reconcile the results for the industrial sector, particularly manufacturing, from the new series of the national accounts with the indications from the Index of Industrial Production (IIP). The IIP is based on a limited sample of producing units, while the new series of national accounts employs varied data sources including Annual Survey of Industries, MCA21 and IIP.

1.10 All major service-sector activities are estimated to have done well in the current year too. Financing, insurance, real estate, and business services, one of the most dynamic sector in the economy in recent years, is reckoned to have driven growth in the current year.

1.11 The base revision has also shown that the contribution of the agriculture sector to overall GVA at factor cost is somewhat higher than was hitherto being shown on the basis of the earlier (2004-05) series. In addition, despite higher growth in services, there has been a realignment of sectoral shares in favour of the industrial sector mainly on account of the correction for underestimation of manufacturing GVA in the old series and overestimation of the trade sector GVA in services (Table 1.3).

Table 1.3 : Share in GVA at Factor Cost at Current Prices

Sector	2004-05 series			2011-12 series			
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2014-15
Agriculture and allied activities	17.9	17.5	18.2	18.9	18.7	18.6	17.6
Industry	27.2	26.2	24.8	32.9	31.7	30.5	29.7
Services	54.9	56.3	57.0	48.2	49.6	50.9	52.7

Source **: CSO's Press Releases of 30 January 2015 and 9 February 2015 on New Series Estimates of National Income.**

1.12 Overall, the average share of the industrial sector was revised upwards by 5.6 percentage points from 26.1 per cent in the old series to 31.7 per cent under the new series, for the three- year block, 2011-12 to 2013-14. Corresponding to this, there was a downward revision in the average share of services by 6.5 percentage points from 56.1 per cent to 49.6 per cent. Agriculture and allied sectors also had a share gain of 0.9 percentage point during the period. Despite reasonable growth in the industrial sector, its GVA share declined in 2014-15 because of the robust growth in the services sector. It is observed that the contribution of the services sector to total GVA growth (at basic prices) increased from 68.2 per cent in 2013-14 to 72.4 per cent in 2014-15, while the corresponding figures for agriculture and allied sectors and the industrial sector changed from 9.8 per cent to 2.6 per cent and from 22.1 per cent to 25.1 per cent respectively.

Quarter-wise Trends

1.13 Quarter-wise numbers of growth are useful in tracing the under lying momentum. Comparing the AE of growth for the full year 2014-15 and the estimates for the first three quarters, it is observed that an implied growth rate of 7.8 per cent is estimated in GVA at constant basic prices for Q4 2014-15 (Table 1.4).

1.14 The quarter-wise figures of growth suggest that the momentum has been kept up in all quarters of 2014-15.The mild decline in growth in Q3 could be on account of the dampening impact of agriculture and allied sectors and the moderation in the industrial sector.

1.15 Some variations in the quarterly contribution to the country's GDP have been observed in the 2004-05 series as well as in the revised (2011-12) series of national accounts. In the revised series is noticed that the first half of the financial year accounts for about 47 per cent of the total GDP at current prices, whereas the second half accounts for 53 per cent. A similar pattern of variations was noticed in the GDP at current market prices for 2004-05 series, in which the first half accounted for around 46 per cent of total GDP, while the balance 54 per cent was accounted for by the second half.

Value of Output and Value Added

1.16 The difference between gross value of output (GVO) and gross value added (GVA) is intermediate consumption. Contrasts in the sectoral shares in GVA and GVO presented in Table 1.5

Table 1.4 : Quarter-wise Growth in GVA at (2011-12) Basic Prices (year-on-year)

	2013-14				2014-15		
Sector	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Agriculture, forestry, and fishing	2.7	3.6	3.8	4.4	3.5	2.0	-0.4
Industry	4.8	4.0	5.0	4.3	6.1	6.0	3.9
Services	10.2	10.6	9.1	6.4	8.6	10.1	13.5
GVA at basic prices	7.2	7.5	6.6	5.3	7.0	7.8	7.5

Source **: CSO's Press Release dated 9 February 2015.**

Table 1.5 : Relationship between GVA and GVO (at constant prices)

Item	Ratio of Sectoral GVA to Sectoral GVO			Ratio of sectoral GVO to total GVO*	Ratio of sectoral GVA to total GVA*	Growth in GVO (per cent)	
	2011-12	2012-13	2013-14			2012-13	2013-14
1	2	3	4	5	6	7	8
Agriculture & allied	77.1	77.2	77.3	10.4	17.8	1.0	3.6
Industry	25.4	26.4	26.5	55.9	32.4	-1.6	3.9
Manufacturing	20.5	22.2	22.4	37.7	18.2	-1.8	4.3
Services	65.7	66.6	67.6	33.7	49.9	6.5	7.4
Total	43.8	45.4	46.0	100.0	100.0	1.3	5.1

***Notes* : Calculations based on CSO data; * average for 2011-12 to 2013-14.**

(columns 5 and 6) echo the differences in the value addition ratios presented in Columns 2 to 4 of the table.

1.17 The ratio of GVA to GVO shows that value addition is the highest in agriculture and lowest in manufacturing. The differences between the GVO shares and GVA shares are stark among all the sectors, particularly manufacturing. The low ratio of GVA to GVO in manufacturing signifies, on the one hand, that the sector creates substantial demand for the output of other sectors and, on the other, that Indian manufacturing needs to move up the value chain to improve its contribution to overall GVA.

1.18 From the data presented in Tables 1.2 and 1.5, it turns out that in the case of manufacturing, the GVO (at constant prices) declined by 1.8 per cent in 2012-13, while the real GVA grew by 6.2 per cent. Simultaneously, the ratio of GVA to GVO increased significantly (Table 1.5). Furthermore, the ratio of consumption of fixed capital to GVA at constant prices in manufacturing declined from 17.5 per cent in 2011-12 to 17.1 per cent in 2012-13. Hence, despite an output contraction, the factor incomes increased significantly in manufacturing leading to a 6.2 per cent growth in the sector's GVA in 2013-14. Similarly, in the services sector, the growth in GVA in 2012-13 was 1.5 percentage points higher than the growth in GVO.

1.19 From Tables 1.1 and 1.5, it can further be observed that the outcome of the growth in GVA outstripping the growth in GVO in manufacturing and services continued in 2013-14. In manufacturing, GVO growth turned positive (4.3 per cent) in 2013-14, but it was outpaced by the growth in GVA. These emerging trends in manufacturing and services, indicating improving value addition and hence, in a way, greater efficiency in production, are encouraging.

Aggregate Demand

1.20 The Indian economy underwent serious demand and supply constraints in recent years. With the firming up of growth in 2013-14, the final consumption expenditure in the economy (expressed at constant prices) also got strengthened (Table 1.6).

1.21 There was a downward pressure on aggregate demand due to the steep decline in the rate of capital formation (Table 1.6), constraining domestic absorption (consumption plus investment) to grow by only 2.8 per cent in 2013-14. Despite this, a growth close to 7 per cent was achieved in 2013-14 on the back of the robust 7.3 per cent growth in exports of goods and services and 8.4 per cent downslide in imports.

1.22 The decline in the rate of gross fixed capital formation (GFCF) during 2013-14 was much less pronounced than in the overall investment rate

Table1.6 : Growth in GDP at Constant (2011-12) Market Prices (per cent)

	2012-13	2013-14	2014-15(A)
Total final consumption expenditure	4.9	6.5	7.6
Private final consumption expenditure	5.5	6.2	7.1
Government final consumption expenditure	1.7	8.2	10.0
Gross capital formation*	2.6	-4.0	NA
Gross fixed capital formation	-0.3	3.0	4.1
Changes in stock	-6.2	-21.4	3.9
Valuables	3.3	-48.7	28.2
Exports	6.7	7.3	0.9
Imports	6.0	-8.4	-0.5
Growth in GDP at constant market prices	5.1	6.9	7.4

***Source* : CSO.**
***Notes* : A : Advance Estimates; * Gross Capital Formation adjusted for errors and omissions.**
NA : Not available

(gross capital formation-GCF), because the other two components of GCF, viz. changes in stock and valuables, declined significantly (Tables 1.6 and 1.7). The correction in the stock of inventories is an ongoing process that is determined by the demand and supply conditions and is not, in a big way, related to the capital base of the economy. Likewise, valuables, i.e. the accumulation of gold, silver, and other precious metals, do not add much to the productive base either. Hence the decline in these items in 2013-14, though in accounting sense leads to a moderation in investment, need not be read much into. However, the almost five percentage point reduction in the rate of fixed investment (Table 1.7) from 2011-12 to 2014-15 would need to be reversed for growth to be sustained and augmented. Contrary to the long-term trends in consumption, the average propensity to consume increased visibly (Table 1.7) during the last three years, mainly on account of higher growth in government consumption expenditure. This is expected to partially provide the required demand impetus to growth.

1.23 The demand side of the GDP presented mixed signals in 2014-15. First, the increasing trends in consumption have gradually firmed up, with both private and government consumption growing in strength (Tables 1. 6 and 1.7). Second, the fixed capital formation in the economy has picked up growth but lost share in aggregate demand. Third, there is hardly any support to growth from exports. The deceleration in imports owes substantially to the sharp decline in international oil prices in the current year that compressed the oil import bill. Hence one cautious conclusion could be that the ongoing growth revival is predominantly domestic consumption-driven.

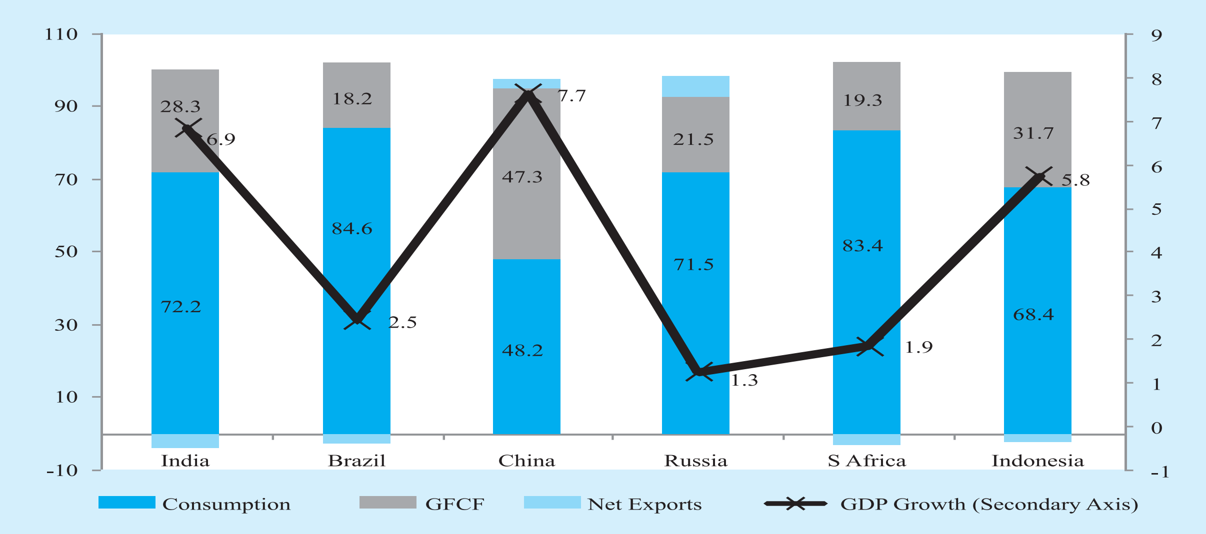
Table 1.7 : Rates of Expenditure Components to GDP at Current Prices

		2011-12	2012-13	2013-14	2014-15
1.	Final consumption expenditure	68.8	69.7	71.0	72.1
2.	Gross capital formation	38.2	36.6	32.3	NA
	Gross fixed capital formation	33.6	31.4	29.7	28.6
	Changes in stock	2.4	2.1	1.6	1.5
	Valuables	2.9	2.8	1.3	1.3
3.	Net export of goods and services	-6.4	-6.7	-2.9	-2.4

***Source* : CSO.**

***Note:* Shares will not add up due to statistical discrepancies, NA=Not available.**

Figure 1.1: Demand side Components as percent of GDP in BRICS countries and Indonesia in 2013



Source **: World Bank data base, except for India's growth rate which is fromthe CSO.**

Note **: For India, figures are for the financial year 2013-14.**

1.24 Comparison of the growth rates and ratios of GFCF to GDP among countries from Figure 1.1 conveys that India operates at the lowest incremental capital output ratios (ICOR-based on GFCF) among the BRICS countries (and Indonesia). Given an average fixed investment rate of 30.5 per cent for 2012-13 and 2013-14, and given the average GDP growth of 6 per cent for these years, the ICOR works out to 5.1. With growth improving to 7.4 per cent in 2014-15 and with the ratio of GFCF declining slightly (despite acceleration in the rate of growth of GFCF), the ICOR for India may have declined further.

1.25 From the past trends in the saving rate (gross domestic savings as percentage of GDP) available from the pre-revised series, it is observed that it reached its historical peak in 2007-08 (36.8 per cent) and then remained volatile, with a general downward movement. While private corporate savings steadily declined, household savings witnessed realignment in favour of accumulation of physical assets at the cost of financial savings. Indications of compositional changes in savings can be seen from the data for three years based on the new series.

1.26 While the old series of savings is not strictly comparable with the new series (2011-12 base) for many reasons, including on account of the inclusion of 'valuables' as part of savings, the three years' data from the new series suggests that households' acquisition of physical assets is on the decline (Table 1.8). Disaggregated data further shows that despite the annual addition to financial assets of households growing from 31.2 per cent of gross savings in 2011-12 to 36.8 per cent in 2013-14, the rate of financial savings of households did not pick up (Table 1.8) because their financial liabilities increased simultaneously from 9.7 per cent of gross savings to 13.2 per cent. Data from the Reserve Bank of India (RBI) shows that, on one side, additional bank deposits of households increased by 27.8 per cent during 2011-12 to 2013-14, while, on the other side, bank advances to households increased by 25.9 per cent.

Table 1.8 : Gross Savings as Percentage of GDP at Market Prices

	2011-12	2012-13	2013-14
Gross savings	33.9	31.8	30.6
Public	1.4	1.7	1.6
Private corporate	9.7	10.0	10.9
Household	22.8	20.2	18.2
Physical*	15.5	13.2	11.0
Financial	7.3	7.0	7.2

Source **: CSO.**

Note: ***Household physical savings include valuables.**

1.27 The retained profits of the private corporate sector adjusted for non-operating surplus/ deficit, defined as their savings under the national accounts, increased during 2011-12 to 2013-14 (Table 1.8).This is in contrast to the trends revealed by the old series which had shown that private corporate saving was only 7.3 per cent of the GDP in 2011-12 and it declined to 7.1 per cent in 2012-13.The reliance on the MCA21 database with a much larger coverage of companies than the RBI's sample studies on finances of non-financial corporations (which was the data source for the old series) may have led to the afore-shown revision in the ratios and their trends. As per the new series, the ratio of the savings of private non-financial corporations to GDP increased from 8.5 per cent in 2011-12 to 9.5 per cent in 2013-14, while the change in the saving rate of private financial corporations was only marginal.

1.28 There was no significant change in the inter se composition of public-sector savings from 2011-12 to 2013-14, except that the dissaving of the general government got reduced, which is consistent with the reduction in the combined revenue deficit of the central and state governments during the period. The combined revenue deficits of the centre and states declined from 4.1 per cent in 2011-12 to 3.7 per cent (RE) in 2012-13 and further to 2.9 per cent (BE) in 2013-14 (Source : Reserve Bank of India).

Table 1.9 : Ratio of Investment to GDP (at current market prices-per cent)

	2011-12	2012-13	2013-14
Gross capital formation	38.2	36.6	32.3
Public sector	7.6	7.2	8.0
Private sector	28.4	26.3	23.3
Corporate sector	13.3	13.5	12.6
Household sector	15.1	12.9	10.7
Gross savings	33.9	31.8	30.6
Saving investment gap	-4.3	-4.8	-1.6
Net capital inflow	4.3	4.8	1.6

Source **: CSO.**
Note**: Totals may not tally due to adjustment for errors and omissions.**

1.29 Juxtaposing savings with investment (Tables 1.8 and 1.9), it becomes clear that it was the large saving-investment gap of the consolidated public sector, complemented by a less pronounced gap in the private corporate sector, which could not be fully defrayed by the savings of households, that constituted the aggregate saving-investment gap. The gap between domestic savings and domestic investment is definitionally equal to the current account balance (net capital inflows in Table 1.9). In view of the above, it is clear that household financial savings need to be raised to keep the saving-investment gap at acceptable levels.

1.30 The composition of capital formation is important in determining its productivity. This will be determined largely by the complementarities required between machinery and built-in structures. Table 1.10 conveys that the addition to intellectual property products, which is separately shown as part of capital formation in the new series, is gradually picking up. It further shows that construction forms the major part of addition to fixed capital. The erection of dwelling units adds to income and employment significantly during the period of construction and generates large forward and backward linkages through creation of demand in the input sectors and real estate services. (The input output tables 2007-the latest available-indicate that among various sectors, construction has the highest linkages in the economy.)

1.31 However, construction of dwelling units cannot be perceived to make a direct permanent addition to the productive capacity of the economy. Data does not permit examination of such

Table 1.10 : Components as Percentage of Total GFCF

	2011-12	2012-13	2013-14
Dwellings, other buildings & structures	59.3	58.2	58.6
Machinery & equipment	35.6	36.7	35.6
Cultivated biological resources	0.2	0.2	0.2
Intellectual property products	4.8	4.9	5.6

Source **: CSO.**

Table 1.11 : Household GFCF as Percentage of GDP

	2011-12	2012-13	2013-14
Household GFCF	15.0	12.6	10.6
Of which, dwellings, other building and structures	12.7	10.6	8.9

Source : CSO.

construction separately from other construction like roads, rail network, irrigation structures, etc.

1.32 The erection of dwelling units, other buildings and structures by households accounted for about 34 per cent of the total GFCF in the economy and 84 per cent of households' own GFCF during 2011-12 to 2013-14. Table 1.11 shows that the share of household construction as a ratio of GDP declined by 3.8 percentage points between 2011-12 and 2013-14. Simultaneously, the ratio of total GFCF to GDP came down by 3.9 percentage points (Table1.6), implying that the reduction in the rate of fixed capital formation during the period was almost fully accounted for by the deceleration in household construction. This may be one of the reasons why a higher growth could be reaped, despite a reduction in fixed capital formation in 2012-13 and 2013-14. Table 1.12 shows that all major sectors have been affected by the reduction in rate of capital formation.

Table 1.12 : Sector-wise Distribution of Investment

Sector	GCF to GDP ratio (%)		
	2011-12	2012-13	2013-14
Agriculture & allied	3.1	2.6	2.5
Industry	13.5	12.9	11.7
Manufacturing	7.1	6.9	6.0
Other industrial sectors	6.4	6.0	5.8
Services	19.5	18.0	17.1

Source : CSO.

Note : This does not include valuables and the adjustment factor from flow of funds and hence will not match with GCF.

Factor shares in GVA

1.33 In line with the income approach to GDP, the GVA at basic prices in a year can be expressed as the sum of the compensation of employees (CE), operating surplus (OS) / mixed income of the self-employed (MI), consumption of fixed capital (CFC) and taxes net of subsidies on production (Table 1.13). CE is the composite value of wages and salaries paid in the sector, including the social

Table 1.13 : The Income Components of GVA and Income and Employment Shares

Sector	CE to GVA	OS & MI to GVA	CFC to GVA	GVA share of the sector	Employment share
	Average 2011-13				2011
Agriculture & allied	**15.3**	**81.6**	**6.6**	**18.1**	**48.9**
Industry	**35.7**	**49.1**	**14.6**	**31.9**	**24.3**
Mining & quarrying	23.9	62.5	12.8	3.0	0.5
Manufacturing	23.6	58.4	17.0	17.8	12.6
Electricity, gas, & water supply	31.7	36.5	34.1	2.3	0.5
Construction	65.2	29.1	5.1	8.8	10.6
Service sector	**38.9**	**50.0**	**10.4**	**50.0**	**26.9**
Trade, hotels, & restaurants	23.5	69.9	5.2	11.4	11.0
Transport, storage, & communication	37.9	49.8	15.0	6.6	4.8
Financial, real estate, & business services	26.1	61.4	10.8	19.4	2.3
Community, social, & personal services	72.7	14.9	12.3	12.7	8.7
Total	**33.6**	**55.5**	**11.1**	**100.0**	**100**

Source : CSO.

contributions made by the employer, representing the income share of employees in the GVA. In the organized sector, OS is the difference between net value added and compensation of employees. As a result of the existence of unincorporated enterprises and household industries in the unorganized sector, which either do not maintain accounts or are wholly managed by self-employed workers, net value added (NVA) cannot be separated as income of labour and entrepreneurship. This necessitated the introduction of an item called mixed income of self-employed to complete the account.

1.34 In the agricultural sector, CE represents only the share of wages to hired labour and hence the total returns to farmers working on their own fields/fields hired by them, becomes part of MI. Hence it is difficult to relate the employment share in agriculture to CE in agriculture. The presence of a large unorganized segment in manufacturing and certain services also makes it difficult to establish correspondence between their employment shares and the CE to GVA ratios. It may be noted that the employment share of the construction sector is higher than its GVA share, and the same gets reflected in the sector's CE to GVA ratio. Apart from agriculture, construction is the only sector whose employment share is higher than GVA share. As per the AE for 2014-15, the growth in construction is gradually picking up, which should auger well for employment generation.

1.35 Among service-sector activities, two sectors with comparatively lower presence of the unorganized segment include financial, real estate, and business services and community, social, and personal services. Consistent with the contrast in their GVA and employment shares, the ratio of CE to GVA is also vastly different in these sectors. Community, social, and personal services have a majority government presence.

Per capita income

1.36 During 2012-13 to 2013-14, the average growth in per capita income, i.e. 4.3 per cent as per the new series (Table 1.14), is much higher than the corresponding growth of 2.4 per cent presented by the old series.

1.37 Having analysed the trends in growth, savings, and investment, certain other key macro-parameters relating to the fiscal situation, balance of payments (BoP), prices, and monetary management, are discussed in the following paragraphs.

Public Finance

1.38 In 2013-14, proactive policy decisions of the government with firm commitment to the policy of fiscal rectitude improved the year-end performance of the fiscal deficit target set for year. The first nine months of 2014-15 have witnessed some major policy reforms in the subsidy regime; the modified direct benefit transfer scheme has been launched; the new domestic gas pricing policy has been approved; and diesel prices have been deregulated. An Expenditure Management Commission has been constituted to look into various aspects of expenditure reforms to achieve the goal of fiscal consolidation. It will review the allocative and operational efficiencies of government expenditure to achieve maximum output.

1.39 As per provisional accounts, the fiscal deficit for 2013-14 worked out at 4.5 per cent of GDP as opposed to the Budget Estimate (BE) of

Table 1.14 : Per Capita Net National Income

	(₹)				Growth (in per cent)		
	2011-12	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
At current prices	64316	71593	80388	88533	11.3	12.3	10.1
At constant (2011-12) prices	64316	66344	69959	74193	3.2	5.4	6.1

Source : CSO.

4.8 per cent. Fiscal deficit and revenue deficit were budgeted at ₹ 5, 31,177 crore (4.1 per cent of GDP) and ₹ 3, 78,348 crore (2.9 percent of GDP) respectively in 2014-15.

1.40 The BE for 2014-15 aimed at achieving tax to GDP and non-debt receipt to GDP ratios of 10.6 per cent and 9.8 per cent respectively as against a 13.9 per cent total expenditure to GDP ratio. The envisaged growth for gross tax revenue was 17.7 per cent over the Revised Estimates (RE) for 2013-14 and 19.8 per cent over the Provisional Actuals (PA) 2013-14. Total expenditure was estimated to increase by 12.9 per cent and 14.8 per cent in BE 2014-15 over RE 2013-14 and PA 2013-14 respectively.

1.41 As per the data on union government finances for April-December 2014 released by the Controller General of Accounts (CGA), the gross tax revenue increased by 7 per cent in comparison to the corresponding period of the previous year and is at 58.3 per cent of BE in April-December 2014. The non-tax revenue during April-December 2014 registered an increase of 27.3 per cent over the corresponding period of the previous year due to increase in interest receipts and dividends and profits. In non-debt capital receipts, there is significant shortfall as of December 2014, mainly on account of shortfall in disinvestment receipts, as only ₹ 1952 crore of the budgeted amount of ₹ 58,425 crore has been realized. A number of disinvestment proposals are on the anvil and are expected to bring in revenue in the remaining period of fiscal year 2014-15.

1.42 On the expenditure side of Union Government accounts, the notable trends during April-December 2014 include a shortfall in growth in Plan and non-Plan expenditure vis-à-vis the corresponding period of the previous year. Major subsidies during April-December 2014 have increased by 12.5 per cent compared to April-December 2013 due to increase in food subsidy (₹ 21,807 crore) and fertilizer subsidy (₹ 6620 crore). A significant positive outcome in 2014-15 so far is a decline in petroleum subsidy by ₹ 4908 crore compared to the corresponding period in 2013-14 due to fuel pricing reforms and fall in the global prices of petroleum products.

1.43 Fiscal deficit at 100.2 per cent of BE in 2014-15 (April-December) is much higher than the five-year -average of 77.7 per cent. The revenue deficit for April-December 2014 is estimated at 106.2 per cent of BE and is significantly higher than the five-year -average of 81.4 per cent.

PRICES AND MONETARY MANAGEMENT

1.44 Headline inflation measured in terms of the Wholesale Price Index (WPI) (base year 2004-05=100) which remained persistently high at around 6-9 per cent during 2011-13 moderated to an average of 3.4 per cent in 2014-15(April-December) on the back of lower food and fuel prices. During the first quarter of 2014-15, WPI headline inflation was at 5.8 per cent mainly because food and fuel prices continued to be high. In the second and third quarters of 2014-15, WPI inflation declined to 3.9 per cent and 0.5 per cent respectively. WPI headline inflation declined by 0.4 per cent in January 2015 as compared to January 2014. WPI food inflation (weight: 24.3 per cent), which remained high at 9.4 per cent during 2013-14, moderated to 4.8 per cent during April-December 2014 following sharp correction in vegetables prices since December 2013 (except March 2014) and moderation in prices of cereals, eggs, meat and fish. As fuel has larger weight in the WPI, the decline in fuel prices led to a sharper reduction in the WPI as compared to the Consumer Price Index (CPI). Inflation in manufactured products has remained within a narrow range since 2013-14.

1.45 Retail inflation as measured by the CPI (combined) (base year 2010=100) had remained stubbornly sticky around 9-10 per cent during 2012-13 and 2013-14. Like the WPI inflation, CPI inflation has also moderated significantly since the second quarter of 2014-15, with moderation in inflation observed in all the three major sub-groups, viz. food and beverages, and tobacco; fuel and light; and others. The CPI (combined) inflation

Table 1.15 : Quarter-wise Inflation in CPI (base 2010=100) Broad Groups (in per cent)

	Weights	2013-14				2014-15		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3 (P)
General	**100.0**	**9.5**	**9.7**	**10.4**	**8.4**	**8.1**	**7.4**	**5.0**
I. Food and beverages & tobacco	49.7	11.0	11.1	12.9	9.2	8.9	8.6	4.8
II. Fuel and Light	9.5	8.4	7.9	7.0	6.3	5.2	4.0	3.4
III. Others	40.8	7.9	8.2	8.0	7.9	7.6	6.7	5.5
Food (CFPI)	42.7	11.1	11.4	13.6	9.3	9.1	8.8	4.5
Core inflation (Non-food non-fuel)	42.9	8.0	8.2	8.1	8.0	7.7	6.8	5.7

***Source*: CSO. P : Provisional.**

declined to a low of 5 per cent in Q3 of 2014-15 (Table 1.15). As per the revised CPI (new series) with the base year 2012, headline CPI inflation stood at 5.1 per cent in January 2015.

1.46 The decline in inflation during the year turned out to be much faster than was anticipated in the initial months of the year. Global factors, namely persistent decline in crude prices, soft global prices of tradables, particularly edible oils and even coal, helped moderate headline inflation. The tight monetary policy was helpful in keeping the demand pressures contained, creating a buffer against any external shock, and keeping volatility in the value of the rupee under check. During the last one year, the rupee remained relatively stable vis-à-vis the major currencies, which too had sobering influence on inflation. Moderation in wage rate growth reduced demand pressures on protein-based items. Base effect also contributed to the decline in headline inflation.

Monetary Developments

1.47 The RBI kept policy rates unchanged during the year till January 2015. With the easing of inflationary conditions, the RBI has signalled softening of the monetary policy stance by cutting policy repo rates by 25 basis points to 7.75 percent in January 2015. Subsequently, the RBI also reduced the statutory liquidity ratio (SLR) by 50 basis points from 22.0 per cent of net demand and time liabilities (NDTL) to 21.5 per cent. The RBI adopted the new CPI (combined) as the measure of the nominal anchor - for policy communication from April 2014.

1.48 With a view to ensuring flexibility, transparency, and predictability in liquidity management operations, the Reserve Bank revised its liquidity management framework in September 2014. Liquidity conditions have remained broadly balanced during 2014-15 so far, except transient tight conditions. The revised liquidity management framework helped the weighted average cut-off rates in the fourteen-day term repo auctions as well as in the overnight variable rate repo auctions to remain close to the repo rate.

External Sector

1.49 After a turbulent initial phase in 2013-14, the outcome for the year as a whole was robust owing to the policies that were put in place to correct the extraordinary situation. A continuance of the robust external sector outcome through the current financial year facilitated the lifting of restrictions on gold and, in tandem with lower international prices of crude petroleum, helped usher in reform in diesel pricing. The lack of full pass-through of global crude petroleum prices to domestic diesel prices was a major factor in the elevated levels of twin deficits. Going forward, the robustness of the external outcome is on a sustainable reform anchor.

International Trade

1.50 Over the last ten years, India's merchandise trade (on customs basis) increased manifold from US$ 195.1 billion in 2004-05 to US$ 764.6 billion in 2013-14 helping India's share in global exports and imports improve from 0.8 per cent and 1.0 per cent respectively in 2004 to 1.7 per cent and 2.5 per cent in 2013. Its ranking amongst the leading exporters and importers improved from 30 and 23 in 2004 to 19 and 12 respectively in 2013.

1.51 After growing by 4.7 per cent in 2013-14, India's merchandise exports growth moderated to 2.4 per cent to reach US$ 265 billion in 2014-15 (April-January). During 2013-14, India's merchandise imports contracted by 8.3 per cent to US$ 450.2 billion. In 2014-15 (April-January), imports grew by 2.2 per cent to US$ 383.4 billion as compared to US$ 375.3 billion in 2013-14 (April-January). The value of petroleum, oil, and lubricants (POL) imports, which accounted for 36.6 per cent of India's total imports in 2013-14, declined by 7.9 per cent in 2014-15 (April-January) as a result of decline in the price of international crude petroleum products. The growth in imports of POL was 5.9 per cent and 0.4 per cent respectively in 2012-13 and 2013-14. Given the less than adequate pass-through, the level of POL imports continued to be elevated till the first quarter of the current financial year. There was moderation in international crude oil prices (Brent) from US$109.8 per barrel in the first quarter of 2014-15 to US$ 76.0 per barrel in the third quarter which resulted in the value of POL imports declining by 7.9 per cent in 2014-15 (April-January).

1.52 The share of gold and silver imports in India's total imports was 11.4 per cent in 2012-13 and 7.4 per cent in 2013-14. Gold and silver imports that declined by 9.6 per cent and 40.4 per cent respectively in 2012-13 and 2013-14 grew by 8.0 per cent in 2014-15 (April-January). Capital goods imports declined continuously from 2011. Non-POL and non-gold and silver imports, which largely reflect the imports needed for industrial activity, grew by 7.8 per cent in 2014-15 (April-January), after registering a decline of 0.7 per cent and 6.9 per cent respectively in 2012-13 and 2013-14.

1.53 Manufactured goods constituted the bulk of exports—over 63 per cent in recent years—followed by crude and petroleum products (including coal) with 20 per cent share and agriculture and allied products with 13.7 per cent share. After crossing US $ 300 billion in 2011-12, there has been significant deceleration in growth rates of exports which is somewhat a global phenomenon as global trade volumes have not picked up significantly since the 2011 Eurozone crisis. Growth in exports of petroleum and agriculture and allied products which were in positive territory for the last four years turned negative in 2014-15 (April-January). Gems and jewellery exports which exhibited a declining trend in 2012-13 and 2013-14, continued to decline in 2014-15 (April-January). Similarly, the decline in electronic goods exports since 2012-13 continued in 2014-15. During 2014-15 (April-January), some sectors like transport equipment; machinery and instruments; manufactures of metals; and ready-made garments registered positive growth in exports. Marine products and leather and leather manufactures recorded relatively higher growth in 2012-13, 2013-14, and 2014-15 (April-January).

1.54 There has been significant market diversification in India's trade in recent years—a process that has helped cope with the sluggish global demand, which owes to a great extent to the weakness in the Eurozone. Region-wise, India's export shares to Europe and America have declined over the years from 23.6 per cent and 20.1 per cent respectively in 2004-05 to 18.6 per cent and 17.2 per cent respectively in 2013-14. Conversely, shares of India's exports to Asia and Africa have increased from 47.9 per cent and 6.7 per cent respectively in 2004-05 to 49.4 per cent and 9.9 per cent respectively in 2013-14.

1.55 In 2014-15 (April-January), trade deficit increased marginally by 1.6 per cent to US$ 118.4 billion as against US$ 116.5 billion in 2013-14

(April-January). Lower growth of exports (2.4 per cent) and imports (2.2 per cent) in 2014-15 (April-January) has resulted in a marginal increase of US $ 1.9 billion in the trade deficit.

BoP

1.56 The widening of the current account deficit (CAD) in 2011-12 and 2012-13 owed to elevated levels of imports and its financing had implications in terms of larger outgo as investment income in the invisibles account. As a proportion of the level of CAD, such outgo rose from 28.2 per cent in 2007-08 to 72.6 per cent in 2013-14. One of the important considerations for reduction in CAD was that even with its full financing, the levels of CAD have a cascading impact through investment income outgo.

1.57 In the first half of 2014-15, India's external-sector position was benign and comfortable. Two important developments were: (i) lower trade deficit along with moderate growth in invisibles that resulted in lower CAD and (ii) surge in capital inflows, enabled by higher portfolio investment, foreign direct investment (FDI), and external commercial borrowings (ECB).

1.58 Capital inflows were in excess of the financing requirement of the CAD and resulted in accretion in foreign exchange reserves. The CAD was placed at US $ 17.9 billion in 2014-15 (April-September) as against US $ 26.9 billion in the same period of 2013-14. As a proportion of GDP, the CAD declined from 3.1 per cent in the first half of 2013-14 to 1.9 per cent in the first half of 2014-15. Net financial flow was at US$ 36.0 billion in the first half of 2014-15 compared to US$ 16.3 billion in the first half of 2013-14. Net foreign investment surged from US$ 7.8 billion in 2013-14 (April-September) to US$ 38.4 billion in 2014-15 (April-September). Net ECB also improved from US$ 2.5billion in 2013-14 (April-September) to US$ 3.4 billion in 2014-15 (April-September). Net banking capital witnessed a decline from US$ 11.5 billion to US $(-) 0.5 billion during the same period. With net capital flows remaining higher than the CAD, there was net accretion of US$ 18.1 billion to India's foreign exchange reserves (on BoP basis) in H1 of 2014-15 as against a drawdown of US$ 10.7 billion in H1 of 2013-14.

1.59 Among the major economies with a CAD, India is the second largest foreign exchange reserve holder after Brazil**.** India's foreign exchange reserves at US$ 330.2 billion as on 6 February 2015 mainly comprised foreign currency assets amounting to US$ 305.0 billion, accounting for about 92.5 per cent of the total. With increase in reserves in the first half of 2014-15, all reserve-based traditional external sector vulnerability indicators have improved. For instance, the ratio of short-term external debt to reserves declined from 29.3 per cent at end-March 2014 to 27.5 per cent as at end-September 2014 and the reserve cover for imports also increased from 7.8 months at end-March 2014 to 8.1 months as at end-September 2014.

1.60 The rupee-US dollar exchange rate has remained broadly stable during the year thanks to the huge inflow of FDI and foreign institutional investment (FII) in the equity and bond markets. Due to the weak economic outlook in Europe and Japan, the rupee has appreciated against the euro and yen since September 2014 in tandem with cross-currency movements of the euro and yen vis-à-vis the US dollar. On point-to-point basis the rupee has depreciated by 3.3 per cent from the level of ₹ 60.10 per US dollar on 28 March 2014 to ₹ 61.76 per US dollar on 13 February 2015. The rupee touched a low of ₹ 63.75 per US dollar on 30 December 2014 and a peak of ₹ 58.43 per US dollar on 19 May 2014.

External Debt

1.61 India's external debt stock increased by US$ 13.7 billion (3.1 per cent) to US$ 455.9 billion at end-September 2014 over the end-March 2014level. The rise in external debt was on account of higher long-term debt particularly commercial borrowings and non-resident Indian (NRI) deposits. The maturity profile of India's external debt indicates the dominance of long-term borrowings. At end-September 2014, long-term debt accounted for 81.1 per cent of the total external debt as against 79.8 per cent at end-March 2014. India's external debt has remained within manageable limits as indicated by the external debt to GDP ratio of 23.5 per cent and debt service ratio of 5.9 per cent in 2013-14. The prudent external debt management policy of the Government of India has helped maintain a comfortable external debt position.

Outlook for 2015-16

1.62 The macroeconomic situation in India has improved significantly during the current year. The release of the new series of national accounts revealed that the economy has been performing much better than what was being depicted earlier. The steady acceleration in services and manufacturing growth in the face of subdued global demand conditions point to the strengthening of domestic demand. Most of the buoyancy in domestic demand can be traced to consumption. Investment activity, which is slowly picking up, needs to be grounded on a stronger footing. The savings-investment dynamics will be crucial for the growth to strengthen further in the coming years, in addition to reversal of the subdued export performance being currently witnessed. The key will be the response of savings to improved price and financial market stability, and of investment, particularly in the crucial infrastructure sector, to reform efforts of the Government that are underway.

1.63 On the supply side, there are concerns about tentative growth patterns in construction and mining activities that need to be addressed to. This is particularly important in view of the strong inter-sectoral linkages that these sectors have. The farm sector suffered from a relatively poor monsoon, but there are no indications of its spillover to be next year. The improving rate of value addition in the economy, represented by the ratio of value added to output, and the falling incremental capital output ratio indicate better resource use in production.

1.64 On the global front, the United States radiates confidence and strength, while some other structurally important economies like China, Russia, Euro area and Japan face uncertain prospects, thereby affecting global growth and investment outlook. The sharp decline in oil prices has provided an incentive for overall global growth and stability. At the same time, it has diminished fortunes of oil exporting countries that can influence economic activity adversely.

1.65 In the light of the Government's commitment to reforms, along with the improvements in the price and external sector scenarios including the possibility of international oil prices remaining generally benign, the outlook for domestic macroeconomic parameters is generally optimistic, notwithstanding the uncertainties that could also arise from an increase in the interest rates in the United States and situation prevailing in Greece within Euro-zone. Given the above, and assuming normal monsoons better prospects in the world economy that could provide impetus to higher exports for Indian products and services, a growth of around 8.5 per cent is in the realm of possibility in 2015-16.

Sectoral Developments

Agriculture

1.66 During the Tenth Plan, the contribution of agriculture and allied sectors to the GDP (at 2004-05 prices) of the country was 19 per cent and it declined to 15.2 per cent during the Eleventh Plan. This is in accordance with the typical past pattern of structural transformation of the economies in transition. Agriculture and allied sectors registered a growth of 2.5 per cent in the Ninth Plan, 2.4 per cent in Tenth Plan, and 4.1 per cent in the Eleventh Plan.

1.67 For the year 2013-14, total foodgrain production has been estimated at 265.6 million tonnes, which is higher by 8.5 million tonnes than the previous year's production and 22.1 million tonnes than the average production of foodgrains during the last five years. As per the second AE released by the Ministry of Agriculture on 18 February 2015, total production of foodgrains during 2014-15 is estimated at 257.1 million tonnes.

Table 1.16 : Agriculture Sector: Key Indicators (per cent at current prices)

Item	2011-12	2012-13	2013-14
Share of agriculture & allied sectors in total GVA	18.4	18.0	18.0
Crops	12.0	11.7	11.8
Livestock	4.0	4.0	3.9
Forestry and logging	1.6	1.5	1.4
Fishing	0.8	0.8	0.9
Share of agriculture & allied Sectors in total GCF	8.6	7.7	7.9
Crops	7.4	6.5	6.6
Livestock	0.8	0.7	0.7
Forestry and logging	0.1	0.1	0.1
Fishing	0.4	0.4	0.5
GCF in agriculture & allied sectors as per cent to GVA of the sector (at current prices)	18.3	15.5	14.8

Source **: CSO.**

1.68 The following are some of the challenges and policy recommendations for Indian agriculture:

- Agriculture and food sectors need huge investment in research, education, extension, irrigation, fertilizers, and laboratories to test soil, water, and commodities, and warehousing and cold storage. Rationalization of subsidies and better targeting of subsidies would generate part of the resources for public investment.
- There are wide differences in yields between states. Even the best of states have much lower yield in different crops when compared to the best in the world. This provides ample opportunity to increase production by bridging the yield gap to the extent feasible within the climatic zone.
- Providing irrigation can improve yield substantially, as vast cropped area is still unirrigated. For a shift in production function, investment in basic research would be necessary.
- Recommendations of the Shanta Kumar Committee provide useful suggestions for the future road-map of food policy. Every effort should be made to bring states on board for creating a national common market for agricultural commodities.
- Distortions emerging from various policies, including exempting user charges for electricity and water should be removed.
- For providing efficient advance price discovery to farmers and enabling them to hedge price risk, the Forward Markets Commission should be strengthened and empowered to regulate the market more effectively.

Industrial, Corporate, and Infrastructure Performance

1.69 As per recently released national accounts data, with 2011-12 as the base year, industrial growth was much better in 2012-13 and 2013-14 at 2.4 per cent and 4.5 per cent respectively than earlier estimated, with 2004-05 as the base year. The declining trend was attributed to moderation in domestic demand, inflationary pressures, increase in input costs, and slowdown in the world economy. Further, the 1.4 per cent growth in GCF in industry in 2013-14 implies that recovery in industrial growth had commenced last year.

1.70 The industrial growth picture as per the IIP suggests that industrial production which had slowed down since 2011-12, reversed the trend in 2014-15. In terms of use-based classification of the IIP, basic goods and capital goods witnessed marked improvement in growth during April-December 2014-15. While the growth in intermediate goods remained sluggish, consumer goods contracted in April-December 2014-15, particularly due to contraction in the consumer durables sector.

1.71 Growth in infrastructure, based on an index of eight core industries, has improved slightly to 4.4 per cent during April-December 2014-15 as compared to 4.1 per cent in the same period in 2013-14. The performance of coal, electricity, and cement has shown marked improvement, steel and refinery products have grown marginally by 1.6 per cent and 0.2 per cent, while crude oil, gas, and fertilizers have seen negative growth. In the transport sector, growth in the first nine months of 2014-15 has improved in railway freight (5.1 per cent), domestic air passenger traffic (7.1 per cent), international passenger traffic (10.3 per cent), international cargo (8.3 per cent), domestic cargo (19.3 per cent), and cargo throughput at major and non-major ports (6.8 per cent)as compared to the same period in the 2013-14.

1.72 The performance of listed manufacturing companies in the private sector in terms of growth of sales and net profit appeared to turn around in Q1 2014-15. However, the performance in Q2 2014-15 dampened expectations of sustained improvement. There is no discernible improvement in capacity utilization in the first two quarters of 2014-15, as per the RBI's twenty-seventh round of the Order Books, Inventories, and Capacity Utilization Survey.

1.73 Of the total 246 central infrastructure projects costing Rs 1000 crore and above, 124 are delayed with respect to the latest schedule and 24 have reported additional delays vis-à-vis the date of completion reported in the previous month (Flash Report for October 2014, Ministry of Statistics and Programme Implementation).

1.74 All the other major industrial sectors except mining have witnessed slowdown in the growth of credit in 2014-15 as compared to 2013-14. The growth of credit flow to the manufacturing sector at 13.3 per cent in 2014-15 is lower than the growth of 25.4 per cent in 2013-14. Chemicals, food processing, and textiles have seen a sharp decline in growth of credit in 2014-15.

1.75 During April-November 2014-15, total FDI inflows (including equity inflows, reinvested earnings, and other capital) were US$ 27.4 billion, while FDI equity inflows were US$ 18.9 billion. Cumulative FDI inflows from April 2000 to November 2014 were US$ 350.9 billion. Services, construction, telecommunications, computer software and hardware, drugs and pharmaceuticals, automobile industry, chemicals, and power have attracted a disproportionately high share of total inflows.

Services Sector

1.76 India's services sector remains the major driver of economic growth contributing 72.4 per cent of GDP growth in 2014-15. Services-sector growth has increased from 8.0 per cent in 2012-13 to 9.1 per cent in 2013-14 and further to 10.6 per cent in 2014-15. This is mainly due to growth acceleration in financial, real estate, and professional services to 13.7 per cent from 7.9 per cent and public administration, defence, and other services to 9.0 per cent from 7.9 per cent in the previous year. Growth in trade, hotels, transport, communication, and related services was 8.4 per cent in 2014-15 compared to 11.1 per cent in 2013-14. Data available for the beginning months of 2015 indicates pick-up in the services sector with expansion in business activity as indicated by services PMI data. This growth momentum is expected to continue in 2015-16.

1.77 The services sector is also the dominant sector in most of the states of India with a more than 40 per cent share in the gross state domestic product (GSDP) in 2013-14 for almost all states. This sector has made substantial contribution to FDI inflows, exports, and employment. During the last twelve years, with a compound annual growth average (CAGR) of 8.7 per cent, India had the second fastest growing services sector, just below China's 10.7 per cent. In commercial services exports, India had the highest CAGR of 20 per cent during this period. India's share in global exports of commercial services increased to 3.2 per cent in 2013 from 1.2 per cent in 2000. Its ranking among the leading exporters in 2013 was sixth. In the first half of 2014-15, services exports grew by 3.7 per cent to US$ 75.9 billion and import of services grew by 5.0 per cent to US$ 39.9 billion, resulting in net services growth of only 2.4 per cent. The services value-added content in exports has also been rising. India is very active in the services negotiations in the World Trade Organization (WTO) and has recently provided more liberal offers to least developed countries.

1.78 Among the sub-sectors, computer and related services with a share of 3.3 per cent in India's GDP grew by 14.4 per cent in 2013-14. The contribution of tourism to total income and employment of the country during 2012-13 was 6.9 per cent and 12.5 per cent respectively. In 2014, foreign tourist arrivals and foreign exchange earnings increased by 7.1 per cent and 6.6 per cent respectively.

Banking and Insurance

1.79 Asset quality of banks showed some signs of stress during the year. The gross non-performing advances (NPAs) of scheduled commercial banks (SCB) as a percentage of the total gross advances increased to 4.5 per cent in September 2014 from 4.1 per cent in March 2014. Stressed advances increased to 10.7 per cent of the total advances from 10.0 per cent between March and September 2014. RBI has taken a number of steps to resolve the NPA issue.

1.80 The growth of aggregate deposits of SCBs decelerated during 2014-15 till December mainly due to base effect, i.e. high accretion to NRI deposits last year during September-November and lower deposit mobilization during this year. The growth in non-food credit also decelerated.

1.81 To achieve the objective of financial inclusion, the Pradhan Mantri Jan-Dhan Yojana (PMJDY) was launched on 28 August 2014. The Yojana envisages universal access to banking facilities with at least one basic banking account for every household. The scheme is expected to provide a big push to the Direct Transfer Benefit scheme.

1.82 The year 2014-15 saw other reform initiatives in the banking and insurance sector, which include allowing banks to raise capital from the market to meet capital adequacy norms by diluting the government's stake up to 52 per cent and notifying of an ordinance to enhance the foreign equity cap in the insurance sector.

1.83 Equity markets continued to do well during the year. The benchmark indices BSE Sensex and Nifty showed a general upward trend in the current year. A number of steps such as improvement in corporate governance norms and establishment of foreign portfolio investor (FPI) regulation framework were taken by the Securities and Exchange Board of India (SEBI) to improve functioning of both primary and secondary markets.

Social Infrastructure, Employment, and Human Development

1.84 India is projected to be the youngest nation in the world by 2020. While this provides great opportunities, it also poses challenges before the nation. India's total fertility rate (TFR) has been steadily declining and is currently at 2.3 although state-wise disparities exist. As per Sample Registration System (SRS) data for 2013, there has been a gradual decline in the share of population in the age group 0-14 from 41.2 to 38.1 per cent during 1971 to 1981 and from 36.3 to 28.4 percent during 1991 to 2013, whereas the economically active population (15-59 years) has increased from 53.4 to 56.3 per cent during 1971 to 1981 and from 57.7 to 63.3 per cent during 1991 to 2013. Of concern is the secular decline in the child sex ratio (CSR). A new scheme, Beti Bachao Beti Padhao, for promoting survival, protection, and education of the girl child was launched in January 2015. It aims to address the declining CSR through a mass campaign targeted at changing social mindset and creating greater awareness.

1.85 In 2020 the average age of India's population at around 29 years is expected to be among the lowest in the world. Consequently, while the global economy is expected to witness a shortage of young population of around 56 million by 2020, India will be the only country with a youth surplus of 47 million. These young people need to be healthy, suitably educated, and appropriately skilled to contribute optimally to the economy

1.86 **Educational Challenges:** While only 73 per cent literacy has been achieved (Census 2011), there is marked improvement in female literacy. Male literacy at 80.9 per cent is still higher than female literacy at 64.6 per cent but the latter increased by 10.9 percentage points compared to the 5.6 percentage points for the former. Total enrolment in primary schools has declined in 2013-14 while upper primary enrolment has grown. This is in line with the demographic changes in the age structure. However, the overall standard of the education system is well below global standards. The single most significant finding of the Annual Status of Education Report (ASER) is that learning levels across the country, whether in public or private schools, have not improved. Clearly, the policy prescription lies in shifting attention away from inputs to outcomes and focus on building quality education and skill development infrastructure. The Padhe Bharat Badhe Bharat initiative to create a base for reading, writing, and math fluency is a good step in this direction.

1.87 **Skilling the Youth:** As per the Labour Bureau Report 2014, the current size of India's formally skilled workforce is small, approximately 2 per cent; this number compares poorly with smaller countries like South Korea and Japan which report figures of 96 and 80 per cent respectively. At all-India level, around 6.8 per cent of persons aged 15 years and above are reported to have received/are receiving vocational training. As per the National Skill Development Corporation (NSDC), for the period between 2013 and 2022 there is an incremental requirement of 120 million skilled persons in the non-farm sector. A dedicated Department of Skill Development and Entrepreneurship has been createdfor focused attention to skill development. Besides, skilling of rural youth has now been refocused and reprioritized towards building the capacity of poor rural youth. New programmes have also been started for bringing minorities into mainstream development.

1.88 **Sluggish employment growth:** A cause for concern is deceleration in the CAGR of employment during 2004-05 to 2011-12 to 0.5 per cent from 2.8 per cent during 1999-2000 to 2004-05 as against CAGRs of 2.9 per cent and 0.4 per cent in the labour force respectively for the same two periods. During 1999-2000 to 2004-05, employment on usual status (US) basis increased by 59.9 million persons from 398.0 million to 457.9 million as against the increase in labour force by 62.0 million persons from 407.0 million to 469.0 million. After a period of slow progress during 2004-05 to 2009-10, employment generation picked up during 2009-10 to 2011-12, adding 13.9 million persons to the workforce, but not keeping pace with the increase in labour force (14.9 million persons). A major impediment to the pace of quality employment generation in India is the small share of manufacturing in total employment. However data from the sixty-eighth National Sample Survey (NSS) round indicates a revival in employment growth in manufacturing from 11 per cent in 2009-10 to 12.6 per cent in 2011-12. Promoting growth of micro, small, and medium enterprises (MSME) is critical from this perspective.

1.89 **Labour Reforms:** Multiplicity of labour laws and difficulty in their compliance has been an impediment to industrial development. In a major initiative for bringing compliance in the system and ensuring ease of doing business, a set of labour reform measures has been put forth by the government.

1.90 **Towards a Healthy India:** The Swachh Bharat Mission (Gramin) launched in October 2014, aims at attaining an Open Defecation Free India by 2 October 2019. Besides, Mission Indradhanush launched in December 2014 will cover all children by 2020 who are either unvaccinated or are partially vaccinated against seven vaccine-preventable diseases. The erstwhile Department of AYUSH (Ayurveda,Yoga and Naturopathy, Unani, Siddhi, and Homoeopathy) has now been elevated to a full-fledged Ministry.

1.91 **Poverty:** The latest estimates of poverty are available for the year 2011-12. These estimates have been made following the Tendulkar Committee methodology using household consumption expenditure survey data. For 2011-12, the percentage of persons living below the poverty line is estimated as 25.7 percent in rural areas, 13.7 percent in urban areas, and 21.9 percent for the country as a whole

1.92 **Human Development: International Comparison:** The 2014 Human Development Report (HDR) presents the Human Development Index (HDI)—values and ranks—for 187 countries. India's HDI value for 2013 is 0.586, ranking it 135 out of 187 countries and territories, the lowest among the BRICS countries with Russia at 57, Brazil at 79, China at 91, and South Africa at118, and slightly ahead of Bangladesh and Pakistan. India also ranks low with respect to the Gender Development Index (GDI). The GDI value for India is 0.828 and it is ranked 132 among 148 nations. In comparison, Bangladesh and China are ranked higher.

1.93 **Fostering Inclusive Growth:** The PMJDY launched in August 2014 and the RuPay Card, which is a payment solution, are important new measures for financial inclusion. Besides, the government has restructured a number of ongoing programmes based on field experience to make them need based. To facilitate coordinated functioning of various social infrastructure and human development programmes, the Sansad Adarsh Gram Yojna (SAGY) has been launched which will be implemented through convergence of existing programmes. Another scheme launched is the Vanbandhu Kalyan Yojna that will be implemented in one block of each of the ten states having schedule V areas. Given the multiple schemes implemented to foster inclusive growth, the role of Panchayati Raj institutions is critical and there is need to strengthen the panchayats and urban local governments. RBI data on social services shows that there was a consistent rise in absolute social-sector expenditure by the general government (centre+state) even in the time of the 2008-09 global crisis and 2011-12 Euro area crisis.

1.94 A unique feature of India is the lag in demographic transition between different states. Due to the substantial fertility decline in the south during the last two decades, the south is ahead in the demographic transition compared to the north. For instance, the projected average age of population in 2020 of 29 years has already been surpassed in some states like Kerala (33 years), Goa (32.3), Tamil Nadu (31.3), Himachal Pradesh (30.4), Punjab (29.9), Andhra Pradesh (29.3) and West Bengal (29.1).

Climate Change and Sustainable Development

1.95 The year 2015 is likely to be a momentous year with the world set to witness new agreements on climate change and sustainable development. This will determine the course for international development and environmental policy agenda for the global community for the next fifteen years. The negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) are expected to result in a global agreement by December 2015, applicable to all countries to take action on climate change from 2020. Simultaneously, the governments are due to agree to a new post-2015 development agenda including a set of sustainable development goals (SDGs), replacing the Millennium Development Goals, which are coming to an end in 2015.

1.96 The latest scientific findings (IPCC AR5) have estimated that to remain below 2°C, the world can emit only about 2900 giga-tonne (Gt) of CO_2 from all sources from the industrial revolution till 2100. Till 2011, the world has already emitted 1900 Gt of CO_2 and consumed around two-third of this budget. This means that out of the budget of 2900 Gt, only 1000 Gt remains to be used between now and 2100. The key issue therefore for designing emission reduction commitment is how we should allocate this remaining sparse carbon budget between countries in a manner which is both fair and achievable.

1.97 There are substantial variations in total and per capita emissions of different countries. In terms of absolute CO_2 emissions in 2013, China, the USA, and EU hold the first three positions respectively with India a distant fourth. However, in terms of per capita CO_2 emissions in 2013, countries like India, Brazil, and South Africa fall in the bottom 100 among 196 countries.

1.98 As a responsible country India has on its own chalked out policies on sustainable development and climate change. India was one of the early adopters of a National Action Plan on Climate Change (NAPCC). It is now revisiting National Missions under the NAPCC in the light of new scientific information and technological advances with a view to undertaking additional interventions in areas like greenhouse gas (GHG) mitigation in power generation, other renewable energy technology programmes, and disaster management and exploring possibilities of new missions on wind energy, health, and waste to energy. Efforts are also under way by the government to build India's institutional capacity for mobilizing climate change finance. A National Adaptation Fund with an initial corpus of ₹ 100 crore has been set up to support adaptation actions to combat the challenges of climate change in sectors like agriculture, water, and forestry. Other recent key initiatives include scaling up of the Solar Mission fivefold from 20,000 megawatts to 100,000 megawatts requiring an additional investment of US$ 100 billion, development of 100 Smart Cities with integrated policies for sustainable development, and preparations for developing a National Air Quality Index and a National Air Quality Scheme.

1.99 The challenge for India is manifold. India is at the threshold of an urban flare-up. As population increases, demand for every key service will increase five-to sevenfold. These trends combined with the current challenges of poverty eradication, food and energy security, urban waste management, and water scarcity will put further pressure on our limited resources which will add to greater energy needs and cause a parallel increase in emission if decoupling does not take place. At the same time, hidden in this challenge are great opportunities. Unlike many countries, India has a young population and therefore can reap the fruits of demographic dividend. With more than half of the India of 2030 yet to be built, we have an opportunity to avoid excessive dependence on fossil fuel-based energy systems and carbon lock-ins that many industrialized countries face today. A conscious policy framework which takes into account both developmental needs and environmental considerations could help turn the challenges into opportunities.

1.100 The sum up, as we put our acts together towards a post-2015 global agreement on climate change, it is absolutely critical to ensure that the new agreement is comprehensive, balanced, equitable, and pragmatic. It should address the genuine requirements of developing countries like India by providing them equitable carbon and development space to achieve sustainable development and eradicate poverty. To achieve this, adherence to the principles and provisions of the UNFCCC is the key. Importantly, global climate action rests heavily on the means of implementation, especially on finance and technology, which needs to be addressed adequately in the agreement. As India's Prime Minister Shri Narendra Modi said in the UN General Assembly in September 2014, "We should be honest in shouldering our responsibilities in meeting the challenges. The world community has agreed on a beautiful balance of collective action—common but differentiated responsibilities. That should form the basis of continued action."

Public Finance

02

CHAPTER

Outlining the roadmap for fiscal consolidation, the Budget for 2014-15 envisaged a fiscal deficit target at 4.1 per cent of GDP and sought to reduce it further to 3 per cent of GDP by 2016-17. Achieving this target is daunting in the backdrop of only a moderate increase in indirect taxes and a large subsidy bill despite significant decline in the subsidies burden in 2014-15, mainly due to lower prices of crude oil in the international market in the second half of 2014-15. Considering the fact that the desired fiscal targets in the previous two years were achieved by counterbalancing the shortfall of tax revenue by a higher or equivalent cut in expenditure, the challenge in the current year was to achieve the deficit targets without resorting to a cut in public expenditure. Therefore, while the fiscal deficit in the Budget 2014-15 was retained at the interim budget level, additional resources were provided in sync with the objective of the government to meet its social and welfare commitments and to remain focused on the development agenda. It is noteworthy that the government remains committed to fiscal consolidation. However, should the revenues not pick up sufficiently, there is need to persist with some compression in expenditure, so as to meet the deficit target.

2.2 The Budget for 2014-15 sought to contain the fiscal deficit at ₹ 5,31,177 crore (4.1 per cent of gross domestic product—GDP[1]) against ₹ 5,08,148 crore (4.5 per cent of GDP) in 2013-14 (Provisional Actuals —PA). Revenue deficit (RD) was placed at ₹ 3,78,348 crore (2.9 per cent of GDP) in 2014-15 (Budget Estimates—BE) against ₹ 3,60,311 crore (3.2 per cent of GDP) in 2013-14 (PA). The effective RD, a refined version of RD that captures the shortfall in current receipts over current expenditure and is equal to the difference between the RD and grants given for creation of capital assets, was also expected to come down (Table 2.1).

Table 2.1 : Trends in Deficit of Central Government (as per cent of GDP)

	FD	RD	GCC	ERD	PD
2010-11	4.8	3.2	1.1	2.1	1.8
2011-12	5.7	4.4	1.5	2.9	2.7
2012-13	4.8	3.6	1.1	2.5	1.8
2013-14 PA	4.5	3.2	1.1	2.0	1.2
2014-15 BE	4.1	2.9	1.3	1.6	0.8

Source **: Budget Documents.**

Notes **: FD= Fiscal Deficit, RD= Revenue Deficit, GCC=Grants for Creation of Capital Assets ERD= Effective Revenue Deficit, PD=Primary Deficit, BE= Budget Estimates, PA= Provisional Actuals**

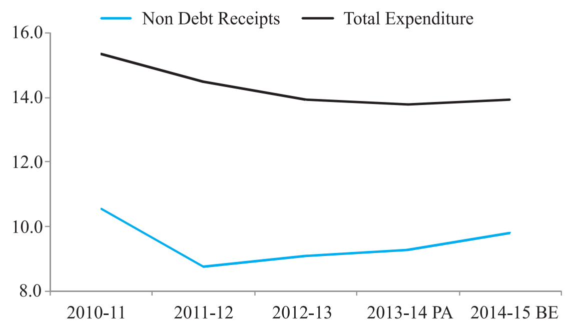
The ratios to GDP at current market prices are based on the Central Statistics Office's (CSO) National Accounts 2004-05 Series.

[1] For calculating ratios with respect to GDP at current market price, we have used National Accounts series of 2004-05 prices released by CSO.

Fiscal Policy for 2014-15

2.3 At the time of presentation of the Budget for 2014-15, as per the then available information, the macroeconomic outlook was mixed. Growth had been sub-par for two years 2012-13 and 2013-14 and inflation was moderating gradually, reflecting the compression in aggregate demand and a robust external sector outcome. The Budget for 2014-15 had indicated that while containing the fiscal deficit at 4.1 per cent of GDP was a daunting challenge given the then macroeconomic conjecture, it outlined the importance of adherence to fiscal consolidation and it accepted the challenge. The fiscal consolidation plan as enunciated in BE 2014-15 entailed an increase in the tax to GDP and non-debt receipts to GDP ratios to 10.6 per cent and 9.8 per cent respectively and a continuance of the low level of total expenditure to GDP ratio at 13.9 per cent (Table 2.2 and Figure 2.1). The envisaged growth in gross tax revenue (GTR) was 17.7 per cent over Revised Estimates (RE) 2013-14 and 19.8 per cent over PA 2013-14. Total expenditure was estimated to increase by 12.9 per cent and 14.8 per cent in BE 2014-15 over RE 2013-14 and PA 2013-14 respectively. The expectation of better performance of gross tax revenue vis-à-vis total expenditure, resulted in a projection of decline in fiscal deficit to 4.1 per cent of GDP in BE 2014-15.

Figure 2.1: Trends in Non-Debt Receipts and Total Expenditure (as percent of GDP)



***Source*: Budget Document and CSO.**

Trends in Revenue

Non-debt Receipts

2.4 Typically, certain assumptions have to be made about the overall macroeconomic outcome, growth in revenues, and at the levels of expenditure that could yield the desired fiscal target. The Budget for 2014-15 envisaged a growth of 18.6 per cent over RE 2013-14 in non-debt receipts which include tax revenue net to centre, non-tax revenue, and non-debt capital receipts (mainly recovery of loans and disinvestment receipts). Revenue receipts

Table 2.2 : Trends in Receipts and Expenditure of Central Government as a Ratio of GDP

	2010-11	2011-12	2012-13	2013-14 PA	2014-15 BE
1. Revenue receipts	10.1	8.3	8.7	8.9	9.2
Gross tax revenue	10.2	9.9	10.2	10.0	10.6
2. Capital receipts	5.2	6.1	5.3	4.8	4.7
3. Non-debt receipts	10.6	8.8	9.1	9.3	9.8
4. Total receipts	15.4	14.5	13.9	13.8	13.9
5. Total expenditure	15.4	14.5	13.9	13.8	13.9
(a) Revenue expenditure	13.4	12.7	12.3	12.1	12.2
(b) Capital expenditure	2.0	1.8	1.6	1.7	1.8
(A) Non-Plan expenditure	10.5	9.9	9.9	9.8	9.5
(B) Plan expenditure	4.9	4.6	4.1	4.0	4.5

***Source* : Budget Document and CSO.**

***Note* : GDP at current market prices is at 2004-05 base.**

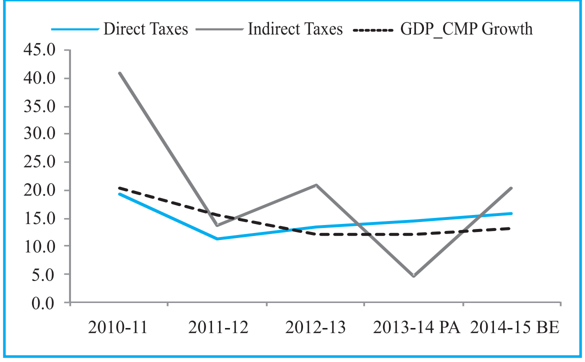
PA= Provisional Actuals, BE=Budget Estimates.

were estimated at ₹ 11.90 lakh crore in BE 2014-15, of which the net tax revenue to the centre was ₹ 9.77 lakh crore and non-tax revenue was ₹ 2.12 lakh crore. The total non-debt receipts inclusive of non-debt capital receipts of ₹ 0.74 lakh crore were estimated at ₹ 12.64 lakh crore.

Tax Revenue

2.5 In the immediate post-Fiscal Reforms and Budget Management Act 2003 (FRBMA) period (2004-05 to 2007-08) significant fiscal consolidation was achieved largely due to growth in tax revenues. Post-2008 crisis, growth in overall gross tax revenue (GTR) as well as its major components (with the exception of personal income tax) was not buoyant enough to facilitate encore performance in terms of revenue-led fiscal consolidation. The Budget for 2014-15 envisaged a growth of 15.8 per cent and 20.3 per cent in direct taxes and indirect taxes respectively over RE 2013-14. The growth in direct and indirect taxes along with the growth of GDP-CMP (GDP at current market prices) is plotted in Figure 2.2 A, indicating that the growth in indirect taxes has not been in tandem with the growth in GDP_CMP. The Budget for 2014-15 estimated GDP growth of 13.4 per cent and growth in GTR at 19.8 per cent over PA 2013-14 which implies a tax buoyancy of 1.5. This seems to be an overestimation, given the trends in GDP growth and growth in GTR (for details see the Mid Year Economic Analysis 2014-15).

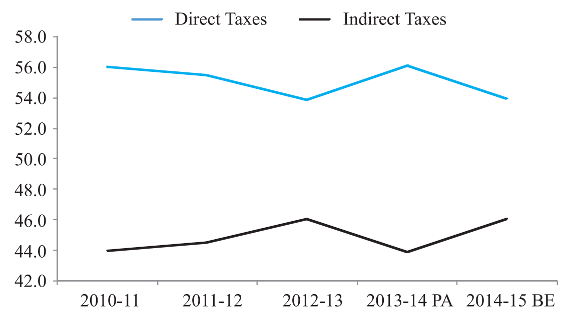
Figure 2.2A: Growth of Direct and Indirect Taxes and GDP_CMP Growth.



Source **: Budget documents, CSO & CGA.**

2.6 The composition of GTR has been plotted in Figure 2.2 B, indicating that from 2010-11 to 2012-13 the share of indirect taxes had been increasing mainly on account of the growing share of service taxes (average annual growth of 31.6 during 2010-13). As a proportion of GDP, direct and indirect taxes estimated at 5.7 per cent and 4.8 per cent respectively in 2014-15 (BE), were slightly higher than the 5.6 per cent and 4.6 per cent respectively in 2013-14 (RE). The total direct and indirect taxes for 2014-15 were estimated at ₹ 7.3 lakh crore and ₹ 6.2 lakh crore respectively (Table 2.3).

Figure 2.2B: Share of Direct and Indirect Taxes in GTR



Source **: Budget documents & CGA.**

Table 2.3 : Sources of Tax Revenue (in ₹ lakh crore)

	GTR	CT	IT	CD	UNE	ST
2010-11	7.93	2.99	1.39	1.36	1.38	0.71
2011-12	8.89	3.23	1.64	1.49	1.45	0.98
2012-13	10.36	3.56	1.97	1.65	1.76	1.33
2013-14 PA	11.39	3.95	2.38	1.72	1.69	1.55
2014-15 BE	13.65	4.51	2.78	2.02	2.06	2.16

Source **: Budget documents & CGA.**

Notes **: GTR= Gross Tax Revenue, CT= Corporation Tax, IT= Income Tax, CD= Custom Duty, UNE= Union Excise Duty, ST= Service Tax.**

2.7 While the rates of growth of tax revenues envisaged by BE 2014-15 might look optimistic given the outcome in the first nine months of the current fiscal, it might be instructive to note that growth in excise duties and service tax was 21.4 per cent and 36.0 per cent respectively in 2012-13. As such, given the low base effect (of low growth), these assumptions were not that optimistic. These were premised on the expected better macroeconomic outcome and endeavour at broadening the tax base and providing an equitable tax regime that has been the underlying theme of the tax policy of the government. Several measures were initiated for both direct and indirect taxes which are enumerated in Box 2.1. Even within the limited fiscal space, several important and path-breaking initiatives for reviving the economy and promoting investment in the manufacturing sector were taken, and measures for rationalizing tax provisions so as to reduce litigation were introduced through the Finance (No.2) Act 2014.

Box 2.1 : Measures Introduced in Budget 2014-15

DIRECT TAXES

- Budget 2014-15 raised the basic exemption limit of personal income tax in case of every individual (below the age of 60 years), or Hindu undivided family (HUF) or association of persons or body of individuals, whether incorpo-rated or not, or every artificial juridical person from ₹ 2 lakh to ₹ 2.5 lakh. The basic exemption limit in the case of an individual resident in India, who is of the age of 60 years or more but less than 80 years was raised from ₹ 2.5 lakh to ₹ 3 lakh.
- Investment allowance at the rate of 15 per cent of the cost of new plant and machinery extended up to 31.03.2017 and threshold of investment reduced to ₹25 crore.
- Ten-year tax holiday extended to undertakings which begin generation, distribution, and transmission of power by 31.03.2017.
- Income to foreign portfolio investors arising from transactions in securities to be treated as capital gains.
- Concessional tax rate of 15 per cent on foreign dividends without any sunset date to be continued.
- The eligible date of borrowing in foreign currency extended from 30.06.2015 to 30.06.2017 for a concessional tax rate of 5 per cent on interest payments. Tax incentive extended to all types of long-term bonds instead of only long-term infrastructure bonds.
- Introduction of a ‘roll back’ provision in the Advanced Pricing Agreement (APA) scheme so that an APA entered into for future transactions is also applicable to international transactions undertaken in the previous four years in specified circumstances.
- Introduction of range concept for determination of arm’s length price in transfer pricing regulations.
- Use of multiple-year data allowed for comparability analysis under transfer pricing regulations.
- Resident taxpayers enabled to obtain an advance ruling in respect of their income tax liability above a defined threshold.
- The scope of the Income-tax Settlement Commission enlarged.

INDIRECT TAXES

A. CUSTOMS

Agriculture/agro processing/plantation sector: full exemption from customs duty granted to de-oiled soya extract, groundnut oil cake/oil cake meal, etc. up to 31.12.2014.

Basic customs duty (BCD) reduced in the chemicals and petrochemicals sector.

Energy sector: The duty structure on non-agglomerated coal of various types rationalized at 2.5% BCD and 2% countervailing duties (CVD).

Textiles and Exports: The duty free entitlement for import of trimmings and embellishments used by the readymade textile garment sector for manufacture of garments for export increased from 3% to 5%.

(Contd...)

Box 2.1 : Measures Introduced in Budget 2014-15 *(Contd...)*

Metals: The BCD on certain stainless steel flat products increased from 5% to 7.5%. Export duty on bauxite increased from 10% to 20%.

Precious Metals: BCD on half-cut or broken diamonds increased from NIL to 2.5% and on cut and polished diamonds and coloured gemstones increased from 2% to 2.5%.

Electronics/Hardware: BCD on LCD and LED TV panels of below 19 inches and on colour picture tubes for manufacture of cathode ray TVs reduced from 10% to NIL. Education cess and Secondary and Higher Education (SHE) cess levied on imported electronic products.

Renewable Energy: BCD reduced for equipment used in wind-operated electricity generators and. solar energy production projects.

Health: Full exemption from customs and excise duty provided for HIV/AIDS drugs and diagnostic kits imported under the National AIDS Control Programme funded by the Global Fund to Fight AIDS, TB and Malaria.

B. EXCISE

Agriculture/agro processing/plantation sector: Excise duty on machinery for the preparation of meat, poultry, etc. reduced from 10% to 6%.

Metals: Excise duty on winding wires of copper increased from 10% to 12%.

Textiles: Excise duty at the rate of 2% (without central value added tax—CENVAT) or 6% (with CENVAT) imposed on polyester staple fibre and polyester filament yarn manufactured from plastic waste or scrap or plastic waste.

Health: Excise duty on cigarettes increased by 72% for cigarettes of length not exceeding 65 mm and by 11% to 21% for cigarettes of other lengths. Similar increases made on cigars, cheroots, and cigarillos. Basic excise duty s increased from 12% to 16% on pan masala, from 50% to 55% on unmanufactured tobacco, and from 60% to 70% on jarda-scented tobacco, gutkha, and chewing tobacco.

Full exemption from excise duty provided to DDT manufactured by Hindustan Insecticides Limited for supply to the National Vector Borne Diseases Control Programme (NVBDCP) of the Ministry of Health and Family Welfare.

Electronics/hardware: Excise duty on recorded smart cards increased from 2% without CENVAT and 6% with CENVAT to a uniform rate of 12%.

Renewable energy: Full exemption from excise duty provided for machinery required for setting up of solar energy production projects and compressed biogas plant (Bio-CNG).

Energy sector: Central excise duty on branded petrol reduced from ₹7.50 per litre to ₹ 2.35 per litre, so as to reduce the price differential between branded and unbranded petrol. Rate of clean energy cess levied on coal, lignite, and peat increased from ₹50 per tonne to ₹ 100 per tonne.

C. SERVICE TAX

Negative list of services and service tax exemptions were reviewed for broadening the tax base and also as a preparation for introduction of the goods and services tax (GST). Services like online and mobile advertising and services provided by radio taxis or radio cabs have been brought under the tax net whereas for services like clinical research on human participants and services provided by air-conditioned contract carriages tax exemption has been withdrawn.

Measures Taken Post-Budget 2014-15

CUSTOMS: Basic Customs Duty on raw and refined / white sugar was increased from 15% to 25%.

EXCISE: The basic excise duty on petrol and diesel (both branded and unbranded) was increased as under:

- Unbranded petrol from ₹1.20 per litre to ₹4.95 per litre;
- Branded petrol from ₹2.35 per litre to ₹6.10 per litre;
- Unbranded diesel from ₹1.46 per litre to ₹3.96 per litre; and
- Branded diesel from ₹3.75 per litre to ₹6.25 per litre.

Source **: Department of Revenue, Ministry of Finance.**

2.8 In order to raise revenue and to improve the ease of doing business, a non-adversarial and non-intrusive tax regime is being promoted through modernization of the business processes of tax administration. Extensive use is being made of information technology for e-enablement of tax payer services and filing of income tax returns, various forms, audit reports, etc. Statements of tax deduction at source have been made compatible with electronic filing and computerized processing. The Centralized Processing Centre for income tax returns at Bengaluru and Centralized Processing Centre –TDS (tax deduction at source) at Vaishali, Ghaziabad have also been made fully functional. These measures would enable the tax administration to function in a more efficient and automated environment and reduce the compliance burden on taxpayers.

2.9 Another important development in 2014-15 was the introduction of the Constitution (122nd Amendment) Bill in the Lok Sabha on 19 December 2014, which provides for levy of a goods and services tax (GST) on all goods or services except those specified. The broad framework of the GST is presented in Box 2.2.

Collection Rates

2.10 Customs duty is collected on imports of goods but there are number of exemptions to the application of the statutory rate. Therefore, increase in the value of imports does not necessarily imply similar change in customs duty collection. The collection rate is an indicator of overall incidence of customs duty and is computed as the ratio of total customs revenue collection to the value of imports in the fiscal year. The trend in these ratios for important commodity groups as well as for all commodities taken together over the years is depicted in Table 2.4. A major reason for the decline in collection rates has been a reduction in duties on many items which have significant import value, including petroleum, oil, and lubricants (POL), some of which continued until the recent hike, and of course the impact of various exemptions.

Tax expenditure

2.11 There is a significant divergence between the statutory rates of taxes as notified in the various schedules and the actual or effective rate of

Table 2.4 : Collection Rates for Selected Import Groups

S.No.	Commodity group	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Food products	4.2	2.5	3.1	2.9	3.2	5.3
2	POL	2.7	1.9	5.6	2.8	1.5	1.6
3	Chemicals	16.4	13.9	16.9	14.0	16.3	16.3
4	Man-made fibre	17.0	22.0	29.6	21.9	31.3	29.5
5	Paper and newsprint	8.4	7.7	7.9	7.0	7.3	7.3
6	Natural fibre	5.6	4.3	4.6	3.3	4.5	5.6
7	Metals	16.8	17.4	22.0	19.7	22.7	22.9
8	Capital goods	12.5	11.3	12.9	11.5	11.7	11.9
9	Others	4.0	3.8	3.9	3.7	4.7	5.4
10	Non POL	8.7	7.6	8.5	7.4	8.2	8.8
	Total	6.9	5.9	7.7	6.0	6.0	6.1

Source: Department of Revenue, Ministry of Finance.

Notes: SN1 includes cereals, pulses, tea, milk and cream, fruits, vegetables, animal fats, and sugar.
SN3 includes chemical elements, compounds, pharmaceuticals, dyeing and coloring materials, plastic, and rubber.
SN5 includes pulp and waste paper newsprint, paperboards and manufactures, and printed books.
SN6 includes raw wool and silk.
SN7 includes iron and steel and non-ferrous metals.
SN8 includes non-electronic machinery and project imports, electrical machinery.

Box 2. 2 : Goods & Services Tax (GST)

The introduction of the GST would be a significant step in the field of indirect tax reforms in India. By subsuming a large number of central and state taxes into a single tax, it would mitigate cascading or double taxation in a major way and pave the way for a common national market. From the consumer's point of view, the biggest advantage would be in terms of a reduction in the overall tax burden on goods, which is currently estimated at 25 per cent-30 per cent. Introduction of the GST is also expected to make Indian products competitive in domestic and international markets. Studies show that this would instantly spur economic growth. Because of its transparent character, it is expected that the GST would be easier to administer.

The broad features of the proposed GST model are as follows:

(i) GST would be applicable on supply of goods or services as against the present concept of tax on the manufacture or on sale of goods or on provision of services.

(ii) GST would be a destination-based tax as against the present concept of origin-based tax.

(iii) It would be a dual GST with the centre and the states simultaneously levying it on a common base. The GST to be levied by the centre would be called central GST (CGST) and that to be levied by the states would be called state GST (SGST).

(iv) An integrated GST (IGST) would be levied on inter-state supply (including stock transfers) of goods or services. This would be collected by the centre so that the credit chain is not disrupted.

(v) Import of goods or services would be treated as inter-state supplies and would be subject to IGST in addition to the applicable customs duties.

(vi) A non-vatable additional tax, not exceeding 1 per cent on inter-state supply of goods would be levied by the centre and retained by the originating state at least for a period of two years.

(vii) CGST, SGST, and IGST would be levied at rates to be recommended by the Goods and Services Tax Council (GSTC) which will be chaired by the Union Finance Minister and will have Finance Ministers of states as its members.

(viii) GST would apply to all goods and services except alcohol for human consumption.

(ix) GST on petroleum products would be applicable from a date to be recommended by the GST Council.

(x) Tobacco and tobacco products would be subject to the GST. In addition, the centre could continue to levy central excise duty.

(xi) A common threshold exemption would apply to both CGST and SGST. Taxpayers with a turnover below it would be exempt from GST. A compounding option (i.e.to pay tax at a flat rate on turnover without credits) would be available to small taxpayers below a certain threshold. However, a taxable person falling within the limit of threshold or compounding could opt to pay tax at the normal rate in order to be part of the input tax credit chain.

(xii) The list of exempted goods and services would be kept to a minimum and it would be harmonized for the centre and states as far as possible.

(xiii) Exports would be zero-rated.

(xiv) Credit of CGST paid on inputs may be used only for paying CGST on the output and the credit of SGST paid on inputs may be used only for paying SGST. In other words, the two streams of input tax credit (ITC) cannot be cross utilized, except in specified circumstances of inter-state supplies, for payment of IGST.

Over the past four decades, the value added tax (VAT) has been an important instrument of indirect taxation, with 130 countries having adopted it, resulting in one-fifth of the world's tax revenue. Tax reform in many of the developing countries has focused on moving to VAT. Federal countries like Canada, New Zealand, and Australia have successfully adopted the GST into their structure. Implementation of a comprehensive GST in India is expected, ceteris paribus, to lead to efficient allocation of factors of production thus bringing about gains in GDP and exports. This would translate into enhanced economic welfare and higher returns to the factors of production, viz. land, labour, and capital. However, in the near term, as GST replaces a number of state-level and central taxes, revenue gains may not be significant.

Source : **Department of Revenue and and NCAER Working Paper No. 103 titled 'Moving to Goods and Services Tax in India-Impact on India's growth and International Trade', 2009.**

taxation, which is essentially a simple ratio of tax revenue collected to the total taxable income (tax base). The tax expenditure or tax foregone estimates are intended to indicate the revenue foregone. Typically, there is an overstatement of the revenue foregone as most emerging markets have high rates on their statutory schedule of taxes and effectively tax collections at much lower rates systematically for a number of years For instance, the peak rate of customs duty on non-agricultural goods has been 10 per cent for a number of years now as against schedule rates that are manifold higher. In the Receipts Budget for 2014-15, tax forgone on account of exemptions under corporate income tax for 2012-13 was estimated at ₹ 68,720 crore and for 2013-14 was projected at ₹ 76116 crore (after taking into account additional liability collected through the minimum alternate tax—MAT). Though termed as revenue foregone, it does not imply that this quantum of revenue has been waived by the government. Rather, in some cases, this could be seen as targeted incentives for the promotion of certain sectors that may not otherwise, in the absence of such incentives, have come up. Further, the positive externalities by the way of ancillary economic gains due to the progress of any sector are also not factored in the determination of revenue foregone of any sector. However, in spite of these benefits accruing, there is a case for rationalizing some of the entries under this head.

2.12 Table 2.5 shows trends in revenue foregone from 2010-11 to 2013-14. The tax foregone estimates are for FY 2012-13, the most recent year for which data is available. However, an attempt has also been made to estimate the revenue to be foregone during FY 2013-14 on the basis of the revenue foregone figures of FY 2012-13. The aggregate revenue foregone from central taxes (both direct and indirect) is ₹ 5.66 lakh crore for 2012-13 and is projected to be ₹ 5.73 lakh crore for 2013-14.

Non-Tax Revenue

2.13 Non-tax revenue mainly consists of interest and dividend receipts and the receipts from services provided by the central government. After remaining at around 1.4 per cent of GDP in 2011-12 and 2012-13, non-tax revenue was at 1.8 per cent of GDP in 2013-14 (PA) and the Budget 2014-15 sought to maintain it around 1.7 per cent of GDP. The non-tax revenues were estimated to contribute about 17.9 per cent and 16.8 per cent of revenue receipts and non-debt receipts of the central government respectively in BE 2014-15. The lower estimates of non-tax revenue growth in 2014-15 (BE) over 2013-14(PA) were mainly on account of higher base in 2013-14 due to higher dividends and profits and interest receipts.

Non-debt Capital Receipts

2.14 Recoveries of loans and disinvestment are the two main constituents of non-debt capital receipts. As against ₹ 40,057 crore in PA

Table 2.5 : Trends in Revenue Forgone/Tax Expenditure

Tax Head	2010-11	2011-12	2012-13	2013-14P	2012-13	2013-14P
	₹ crore				% of GTR	
Corporate tax	57912	61765	68720	76116	6.6	6.7
Personal income-tax	36826	39375	33536	40414	3.2	3.5
Excise duty	192227	195590	209940	195679	20.3	17.2
Customs duty	172740	236852	254039	260714	24.5	22.9
Total	459705	533583	566235	572923	54.6	50.3
Gross Tax Revenue	793072	889177	1036235	1138832		

Source **: Receipts Budget of various years.**

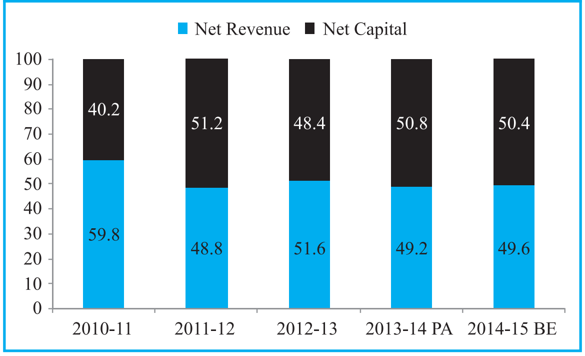
Note **: P=Projected.**

2013-14, the Budget 2014-15 placed non-debt capital receipts at ₹ 73,952 crore, comprising ₹ 10,527 crore of recovery of loans and ₹ 63,425 crore of other receipts (mainly disinvestment). The recovery of loans has been declining and has become a minor source of non-debt capital receipts mainly because of the Twelfth Finance Commission's recommendation against loan intermediation from the centre to states. Over the years, disinvestment receipts have assumed greater importance under this head. The Budget for 2014-15 estimated that ₹ 58,425 crore would accrue during the fiscal year, of which ₹ 43,425 crore would be through disinvestment in central public-sector enterprises (CPSE) and ₹ 15,000 crore through disinvestment of government stake in non-government companies. In the current financial year, the government has disinvested its equity in SAIL, Coal India and others and realized about ₹ 24000 crore so far.

Trends in Expenditure

2.15 The two pillars of fiscal reforms, as mentioned earlier, are revenue augmentation and expenditure rationalization. Efficient and effective expenditure management is a key component of the Fiscal Responsibility and Budget Management Act. Budget 2014-15 estimated total expenditure at ₹ 17.95 lakh crore which was 12.9 per cent higher than the 2013-14 (RE) and 14.8 per cent higher than 2013-14 (PA). Within this, the expected growth in capital expenditure was 18.8 per cent and growth in revenue expenditure was 12.0 per cent over RE 2013-14. At disaggregated level, the BE 2014-15 estimated Plan and non-Plan expenditure at ₹ 5.75 lakh crore and ₹ 12.20 lakh crore respectively, which amounted 4.5 per cent and 9.5 per cent of budgeted GDP (Table 2.2), reflecting a growth of 20.9 per cent and 9.4 per cent respectively over RE 2013-14.

Figure 2.3: Decomposition of Plan Expenditure



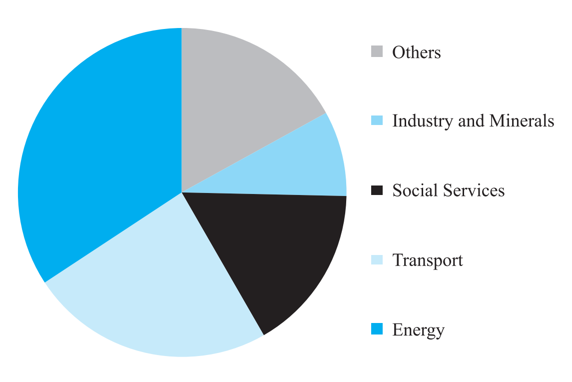
Source **: Budget documents & CGA.**

Note **: Net Revenue Expenditure are net of grant given for creation of capital assets. The same head is added in Capital Expenditure and termed as net capital Expenditure.**

Plan Expenditure

2.16 In 2014-15, the centrally sponsored schemes were restructured into 66 programmes for greater synergy and effective implementation and reclassified whereby the funds under these programmes are now being released as central assistance to state plans giving the states greater autonomy, authority, and responsibility in implementation of schemes. As a result, central assistance to state and union territory (UT) plans recorded an increase from ₹ 1.19 lakh crore in RE 2013-14 to ₹ 3.38 lakh crore in BE 2014-15. Further, the composition of net revenue and net capital expenditure has broadly remained the same since 2012-13, with both these components individually contributing roughly half of Plan expenditure (Figure 2.3). Furthermore, the broad sector-wise allocations of central Plan outlay (gross budgetary support in central Plan plus internal and extra-budgetary resources of the CPSEs) indicate that the energy, transport, social service, and industry and minerals, got the maximum share in BE 2014-15 (Figure 2.4).

Figure 2.4: Central Plan Outlay 2014-15 by Sectors



Source **: Budget 2014-15.**

Non-Plan Expenditure

2.17 Non-Plan expenditure constituted around 68 per cent of total expenditure in BE 2014-15 which is 3 percentage points less than the levels of 2013-14 (PA). Out of the total non-Plan expenditure in BE 2014-15, the share of non-Plan revenue expenditure is 91.4 per cent, with the balance, a mere 8.6 per cent, being accounted for by capital non-Plan expenditure. Within capital non-Plan expenditure, it is defence expenditure which had the maximum share.

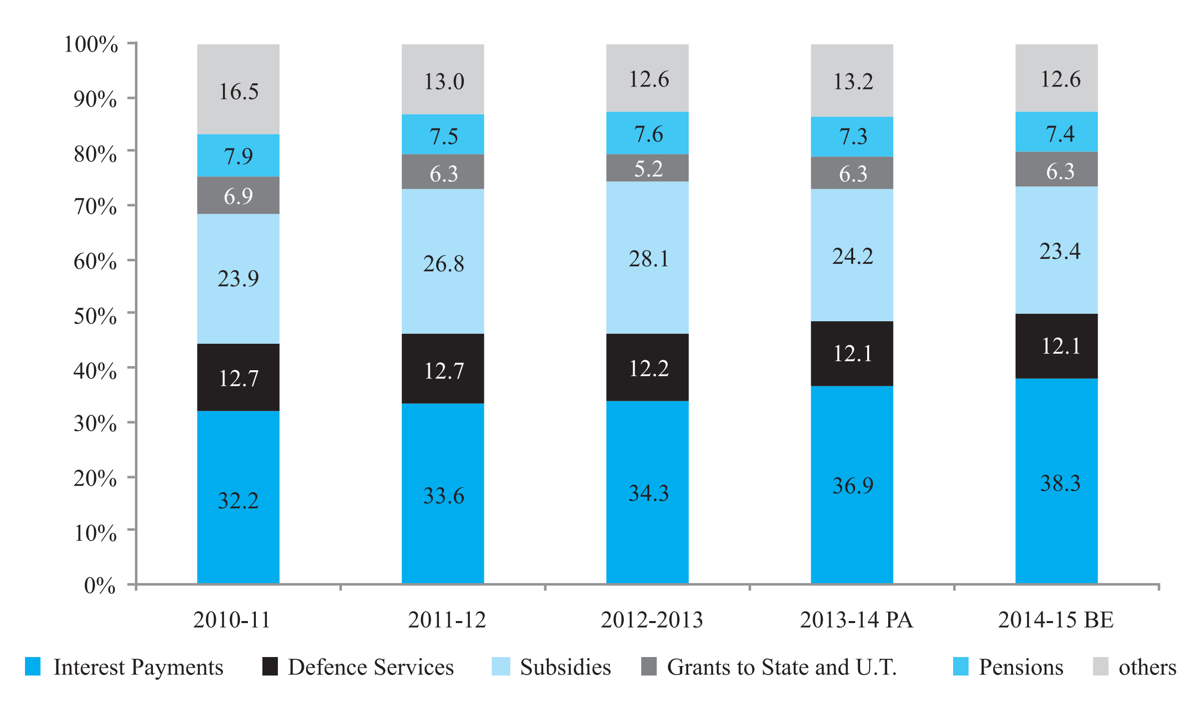
2.18 As a strategy for achieving fiscal consolidation, expenditure rationalization has major constraints on account of expenditures like interest payments, subsidies, defence services, pension, and non-Plan grants and aid to states and UTs, which constituted around 87.4 per cent of total non-Plan revenue expenditure in BE 2014-15 (Figure 2.5). The rationalization and reprioritization of non-Plan revenue expenditure is expected to play a vital role in the process of fiscal consolidation and targeting expenditure more towards inclusive and sustained development.

Subsidies

2.19 The subsidy bill for BE 2014-15 was placed at ₹ 2.60 lakh crore which was 23.4 per cent of non-Plan revenue expenditure and 2.0 per cent of GDP. In the post financial crisis period, the subsidy bill had increased from 2.2 per cent of GDP in 2009-10 to 2.5 per cent of GDP in 2012-13 (Table 2.6). The main items under this head from 2009-10 to 2012-13 were food and petroleum subsidies. The deregulation of diesel price in October 2014, along with the introduction of direct benefit (subsidy) transfer into the bank accounts of domestic LPG consumers, coupled with a sharp decline in global crude oil prices will help contain the petroleum subsidy bill. The under-recoveries on petroleum products are expected to be ₹ 74,664 crore during 2014-15 against ₹ 1,39,869 crore in 2013-14 (Box 2.3).

2.20 The rationalization of food subsidies is still an area where more effort is required. Recently, the High level Committee for Restructuring of Food Corporation of India recommended several measures including cash transfers to the beneficiaries of the public distribution system

Figure 2.5: Trends in Revenue Non-Plan Expenditure



Source : **Budget documents & CGA.**

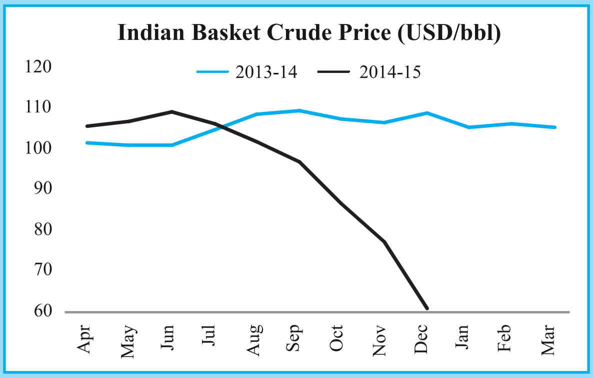
Table 2.6 : Trend in Subsidies (in ₹ crore)

Subsidy Head	2009-10	2010-11	2011-12	2012-13	2013-14 PA	2014-15 BE
Food	58443	63844	72822	85000	92318	115000
Fertilizer	61264	62301	70013	65613	71280	72970
Petroleum	14951	38371	68484	96880	83998	63427
Major subsidies	134658	164516	211319	247493	247596	251397
Total subsidies	141351	173420	217941	257079	NA	260658
Major subsidies as % of GDP	2.08	2.11	2.35	2.45	2.18	1.95
Total subsidies as % of GDP	2.18	2.22	2.42	2.54	NA	2.02

Source : **Union Budget documents.**

Box 2.3 : Impact of Falling Global Crude Prices and Fuel Policy Reforms

Recent Trends in Prices of Crude Oil: Global prices of crude had stayed above \$100/bbl since 2010. However, there has been a sharp downturn in these prices since September 2014. From July 2014 when they stood at \$106.30/bbl, they have fallen to below \$50/bbl in January 2015. This sharp fall can be attributed to weakening of demand in the economies of Asia, especially China, and Europe. In addition, exploration of shale gas by countries like the United States and Canada to reduce their dependence on oil imports has led to lower demand for oil. This has also resulted in reduced retail prices of diesel, domestic LPG, and kerosene. The month-wise trend in prices for the year 2014-15 is shown in Figure below:



During the last few years, the contribution towards under-recovery / subsidies had gone up substantially, adversely affecting the government's fiscal position and thus contributing substantially to inflationary pressure. However, in October 2014, the government has made a move towards major pricing reforms in order to rationalize the subsidy structure in the oil and gas sector. The prices of diesel have been deregulated and have become market-determined at retail level and at the refinery gate. Deregulation is expected to result in better service delivery on account of increased competition. Besides direct gain, lower diesel prices have also benefited consumers indirectly as cost of transportation of goods has come down.

Under-recoveries: Regulated prices of petroleum products resulted in under-recoveries to the oil marketing companies (OMCs) as they paid refinery gate prices based on import parity price (IPP)/ trade parity price (TPP) for purchase of products from the refinery but could not recover the same from domestic prices. Public-sector OMCs continued to pay TPP based on international prices for purchase of diesel and IPP for purchase of PDS kerosene and domestic LPG to refineries until 18 October 2014 when diesel was deregulated. In order to insulate the common man, the government continues to modulate the retail selling prices (RSPs) of PDS kerosene and domestic LPG.

The estimated under-recoveries during 2014-15 are ₹ 74,664 crore with diesel contributing ₹ 10,935 crore, PDS kerosene ₹ 24,412 crore, and domestic LPG ₹ 39,317 crore. In 2013-14, there were under-recoveries of ₹1,39,869 crore with diesel contributing ₹ 62,837 crore, PDS kerosene ₹ 30,574 crore, and domestic LPG ₹ 46,458 crore. During 2014-15, with de-administration of diesel and also lower crude oil prices, the under-recoveries are likely to come down by about 47 per cent.

The under-recoveries incurred by the OMCs have been shared by the upstream national oil companies and the government. During 2013-14, the national oil companies provided ₹ 67,021 crore of the total under-recoveries of ₹ 1,39,869 crore.

In view of the importance of household fuels, namely PDS kerosene and domestic LPG, subsidies are provided for these products under a scheme of 2002 (₹ 2930 crore in 2014-15 BE). In addition, support is provided for transport of fuel to far-flung areas (₹ 23 crore in 2014-15 BE).

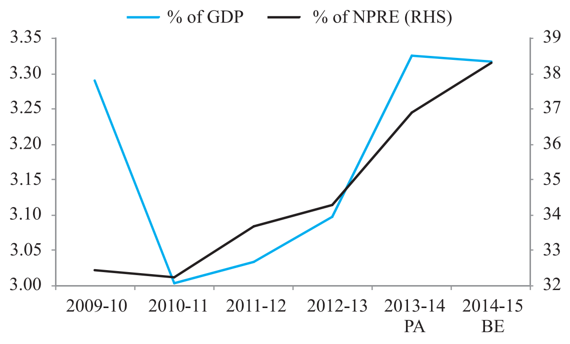
Source : **Ministry of Petroleum and Natural Gas.**

(PDS), which will pave the way for rationalization of food subsidies.

Interest Payment

2.21 Fiscal deficit is a flow variable which gets added into the stock variable (public debt and liabilities) every year, thus attracting interest liability. Interest payments were placed at ₹ 4.27 lakh crore in BE 2014-15, accounting for 38.31 per cent of non-Plan revenue expenditure and 3.3 per cent of GDP. As a proportion of GDP, interest payments had been declining in the post-FRBM period. However, due to expansionary fiscal policy to obviate the adverse impact of the global crisis, interest payments as a proportion of GDP increased somewhat in the post-crisis period (Figure 2.6). The average cost of borrowing is placed at 8.4 per cent in 2014-15 (BE) as against 7.7 per cent in 2012-13 (Table 2.7).

Figure 2.6: Interest Payment Trends



Note : **NPRE-Non Plan Revenue Expenditure.**

Table 2.7 : Average Cost of Borrowings

	OIL	IIL	ACB
	In ₹ crore		
2009-10	2874683	192567	7.50
2010-11	3212521	212707	7.40
2011-12	3765153	251634	7.83
2012-13	4295575	290278	7.71
2013-14(RE)	4782585	355438	8.27
2014-15(BE)	5387174	402143	8.41

Source : **Union Budget documents.**
OIL=Outstanding Internal Liabilities excluding NSSF
IIL= Interest on Internal Liabilities excluding NSSF
ACB= Average cost of borrowing

Provisional Outcome in 2014-15 vis-à-vis BE 2014-15

2.22 The provisional outcome of April-December 2014-15 was released on 30 January 2015 by the Controller General of Accounts (CGA). Fiscal deficit stood at ₹ 5.32 lakh crore which is 100.2 per cent of BE and higher than the last five years' average of 77.7 per cent (Table 2.8).

2.23 For 2014-15, the GTR till the month of December 2014 shows a growth of 7.0 per cent which is way below the 17.7 per cent envisaged by the BE. As a proportion of the BE, direct taxes collected in April-December 2014 are broadly at the same levels as in the corresponding period of the previous year and given that last year the overall collection was close to the RE (lower only by ₹ 30,568 crore vis-à-vis the BE) implies that the same can be achieved this year too. The growth in indirect taxes at 6.2 per cent in 2014-15 (April-December) is much lower than of the 25.8 per cent envisaged over the PA of 2013-14. The outcome in April-December 2014 in terms of non-tax revenue collected as a proportion of the BE at 69.7 per cent is higher than in the corresponding period last year. However, a 6.2 per cent growth in expenditure in April-December 2014 over the corresponding period in the previous year as compared to BE of 12.9 per cent has helped in containing fiscal deficit for the first three quarters of the current fiscal. This implies that for fiscal marksmanship this year too, some expenditure compression may have to be made. In order to obviate the need for large-scale expenditure reduction, the government has however put in place some revenue augmentation and mobilization efforts.

2.24 Some of the measures to boost revenue included increases in excise duty on petrol and diesel, amid a dip in global oil prices. The four excise duty hikes since November 2014 are expected to bring in ₹ 20,250 crore in additional revenue this financial year. The government recently announced stake sales in four companies, including 10 per cent in Coal India which at current

Table 2.8 : Provisional outcome for 2014-15 (Till December 2014)

	BE (₹ crore)	April-December					
		Absolute number (₹ crore)		Per cent of respective BE		Per cent change over previous year	
	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
1. Revenue receipts	1189763	633933	693773	60.0	58.3	11.1	9.4
Gross tax revenue	1364524	743709	795686	60.2	58.3	9.2	7.0
Tax (net to centre)	977258	517661	545714	58.6	55.8	6.9	5.4
Non-tax revenue	212505	116272	148059	67.5	69.7	34.6	27.3
2. Capital receipts	605129	529858	542615	87.0	89.7	26.0	2.4
Recovery of loans	10527	8038	8282	75.4	78.7	4.3	3.0
Other receipts	63425	5430	1952	9.7	3.1	-33.6	-64.1
3. Total receipts	1794892	1163791	1236388	69.9	68.9	17.4	6.2
4. Non-Plan expenditure	1219892	812528	883757	73.2	72.4	16.9	8.8
(a) Revenue account	1114609	731159	813270	73.6	73.0	16.9	11.2
Interest payments	427011	248464	275220	67.0	64.5	23.0	10.8
Major subsidies	251397	188899	212418	85.5	84.5	13.2	12.5
Pensions	81983	53890	68104	76.2	83.1	20.2	26.4
(b) Capital account	105283	81369	70487	69.5	67.0	16.9	-13.4
5. Plan expenditure	575000	351263	352631	63.3	61.3	18.7	0.4
(a) Revenue account	453503	274016	282278	61.8	62.2	12.8	3.0
(b) Capital account	121497	77247	70353	68.9	57.9	46.0	-8.9
6. Total expenditure	1794892	1163791	1236388	69.9	68.9	17.4	6.2
(a) Revenue expenditure	1568112	1005175	1095548	70.0	69.9	15.7	9.0
(b) Capital expenditure	226780	158616	140840	69.2	62.1	29.4	-11.2
7. Revenue deficit	378349	371242	401775	97.7	106.2	24.6	8.2
8. Effective revenue deficit	210245	275183	303912	134.1	144.6	23.0	10.4
9. Fiscal deficit	531177	516390	532381	95.2	100.2	27.6	3.1
10. Primary deficit	104166	267926	257161	155.9	246.9	32.2	-4.0

***Source* : CGA monthly account and Budget Documents.**

market prices has yielded the government ₹ 22,557 crore. The government is also expecting a surge in revenue through spectrum sales and auction of coal blocks by March this financial year. The forthcoming recommendations of the Expenditure Management Commission will also be helpful in reprioritizing expenditure and curtailing expenditure leakages.

Government debt

2.25 The debt policy emphasizes maintaining a longer-term and sustainable debt structure at lowest possible cost and is progressively resorting to market-oriented active debt management. To adhere to the debt policy objectives, the government started conducting buyback and switching of securities in 2013-14 in order to improve liquidity in securities and reduce rollover risk as well as utilizing the cash surplus. The total outstanding liabilities of the central government were ₹ 55.87 lakh crore, accounting for 49.2 per cent of GDP, comprising 39 per cent public debt and 10.2 per cent other liabilities at end-March 2014 (Table 2.9). Of total public debt,

Table 2. 9 : Outstanding Liabilities of the Central Government as Per Cent of GDP (at end-March)

	2009-10	2010-11	2011-12	2012-13	2013-14(RE)	2014-15 (BE)
1. Internal liabilities (a)+(b)	52.4	48.6	48.2	48.4	47.6	46.9
a. Internal debt	35.9	34.3	35.9	37.2	37.4	37.1
i. Market borrowings	27.0	26.6	27.9	29.5	30.3	30.4
ii. Others	9.0	7.6	7.9	7.7	7.1	6.7
b. Other internal liabilities	16.5	14.3	12.4	11.2	10.2	9.8
2. External debt #	2.1	2.0	1.9	1.8	1.6	1.5
3. Total outstanding liabilities	54.5	50.6	50.1	50.1	49.2	48.3

Source **: Union Budget Documents.**
Notes **: # External debt figures represent borrowings by central government from external sources and are based upon historical exchange rates.**
The ratios to GDP at current market prices are based on the CSO's National Accounts 2004-5 series.

internal debt constituted 95.9 per cent and the remaining was external debt (at book value). Total outstanding liabilities were estimated at ₹ 62.22 lakh crore in BE 2014-15.

Performance of Departmental Enterprises of the Central Government

Department of Posts

2.26 The gross receipts of the Department of Posts in 2013-14 were placed at ₹ 10,730 crore. The gross and net working expenses during the year were ₹ 16,797 crore and ₹ 16,204 crore respectively, yielding a deficit of ₹ 5,473 crore. In RE 2014-15, the gross receipts are budgeted to go up to ₹ 10,902 crore with gross and net working expenses estimated at ₹ 18,490 crore and ₹ 17,846 crore respectively. The deficit is projected to be ₹ 6,944 crore.

Railways

2.27 Indian Railways is steadily moving towards developing a strategy to become part of an effective multi-modal transport system, so as to ensure environment-friendly and economically efficient transport movement. Freight earnings during 2013-14, at ₹ 93,906 crore, registered a growth of 10.1 per cent over 2012-13. Passenger earnings (including other coaching earnings) at ₹ 40,211 crore registered an increase of 17.0 per cent during 2013-14. The gross traffic receipts of the Railways for 2013-14 stood at ₹ 1.39 lakh crore as against ₹ 1.24 lakh crore in 2012-13. BE for gross traffic receipts and total working expenses for 2014-15 were ₹ 1.60 lakh crore and ₹ 14.80 lakh crore. An improvement is envisaged in the operating ratio of the Railways, from 93.6 per cent in 2013-14 to 92.5 per cent in 2014-15 (BE). Net revenue as a proportion of capital-at-charge and investment from the Capital Fund, which stood at 5.6 per cent in 2013-14, is budgeted to improve to 6.3 per cent during 2014-15.

Fiscal Performance of the States[2]

2.28 Fiscal consolidation of states during recent years was largely revenue-led, with significant increases in both own tax revenue as well as current transfers from the centre, the latter reflecting the enhancements recommended by the Thirteenth Finance Commission. However, some deterioration in state government finances was seen in 2013-14, while improvement is budgeted in 2014-15. Revenue surplus as a proportion of GDP during 2013-14 (RE) was negligible compared to the previous year's 0.2 per cent. Capital outlay-GDP ratio during 2013-14 (RE) increased

[2] Based on Budgets of twenty-six state governments, out of which five are based on Vote on Account.

marginally by 0.4 per cent over the previous year, indicating improvement in the quality of expenditure. For the year 2014-15, the consolidated revenue surplus is projected to increase to 0.4 per cent of the GDP. Gross fiscal deficit (GFD) and primary deficit as proportions to GDP are budgeted to decline to 2.3 per cent and 0.8 per cent respectively in 2014-15 from 2.4 per cent and 0.9 per cent respectively in 2013-14 (RE) pointing out the intent for fiscal consolidation by states. The projected decline in GFD-GDP ratio in 2014-15 is mainly due to an increase in the revenue receipts resulting from current transfers from the centre. The expenditure pattern shows that the committed expenditure-GDP ratio (comprising interest payments, administrative services, and pension) will broadly remain unchanged during 2014-15 (BE), while overall expenditure as a ratio to GDP is budgeted to increase.

Consolidated general government

2.29 The fiscal deficit of the centre was estimated at 4.8 per cent of GDP in BE 2013-14 and revised to 4.6 per cent in RE 2013-14. With the fiscal deficit of states at 2.4 per cent of GDP in RE 2013-14, the fiscal deficit of consolidated general government (centre and states combined) was placed at 7.0 per cent of GDP in 2013-14 (RE) and estimated to decline to 6.4 per cent of GDP in BE 2014-15.

Outlook

2.30 Despite domestic challenges and external vulnerabilities, the government adhered to fiscal consolidation in 2013-14. The 4.1 per cent fiscal deficit target of 2014-15 seems achievable in spite of slow growth of revenues and delayed disinvestment. To meet this target, the government may have to resort to some expenditure compression. Nevertheless, declining global oil prices, along with the diesel-price deregulation and direct transfer of domestic LPG subsidies to bank accounts, are expected to help lower the fuel subsidy bill. Increased revenues are expected through increase in excise duties on petroleum and diesel.

2.31 Going forward, enhanced revenue generation is a priority. To some extent this will be helped by raising the growth rate of the economy. The implementation of a well-designed GST and other tax reforms would also play a crucial role in this regard. Overhauling the subsidy regime which should entail further reducing fuel (LPG and kerosene) subsidies, tackling fertilizer subsidies, and moving to Aadhaar-based direct cash transfers of food subsidy and other transfers would pave the way for expenditure rationalization. Fiscal consolidation is a necessity but the quality of consolidation is imperative to make it sustainable. To achieve this end, it would be necessary to put in place a medium-to-long- term fiscal policy framework with explicit revenue, expenditure, and deficit targets.

Monetary Management and Financial Intermediation

03

CHAPTER

Several reform initiatives were taken in the banking and insurance sector in 2014-15. These include allowing banks to raise capital from the market to meet capital adequacy norms by diluting the government's stake up to 52 per cent, launching of the Pradhan Mantri Jan Dhan Yojana to provide universal access to banking facilities with at least one basic banking account for every household, and notifying of an ordinance to enhance the foreign equity cap in the insurance sector. Equity markets continued to do well and a number of steps such as improvement in corporate governance norms and establishment of a foreign portfolio investor regulation framework were taken by the Securities and Exchange Board of India for better functioning of both primary and secondary markets.However, asset quality of banks showed some signs of stress during the year. Gross non-performing advances of scheduled commercial banks as a percentage of total advances showed an increase during the year. The year also saw a decline in the growth of bank credit.

Monetary Developments during 2014-15

3.2 The Reserve Bank of India (RBI) adopted the new Consumer Price Index (combined) as the measure of the nominal anchor (headline CPI) for policy communication. Policy rates were kept unchanged during the year till January 2015. In view of continuing easing of inflationary pressures, on 15 January 2015 the RBI reduced the policy repo rate under the liquidity adjustment facility (LAF) from 8.0 per cent to 7.75 per cent. Table 3.1 and Figure 3.1 show revisions and movements in policy rates from 2013 to 2015.

Trends in Monetary Aggregates

3.3 During 2014-15, both reserve money (M_0) and broad money (M_3) decelerated, compared to the previous year. The moderation in M_0 primarily reflects adjustments in bankers' deposits with the

Table 3.1 : Revision in Policy Rates

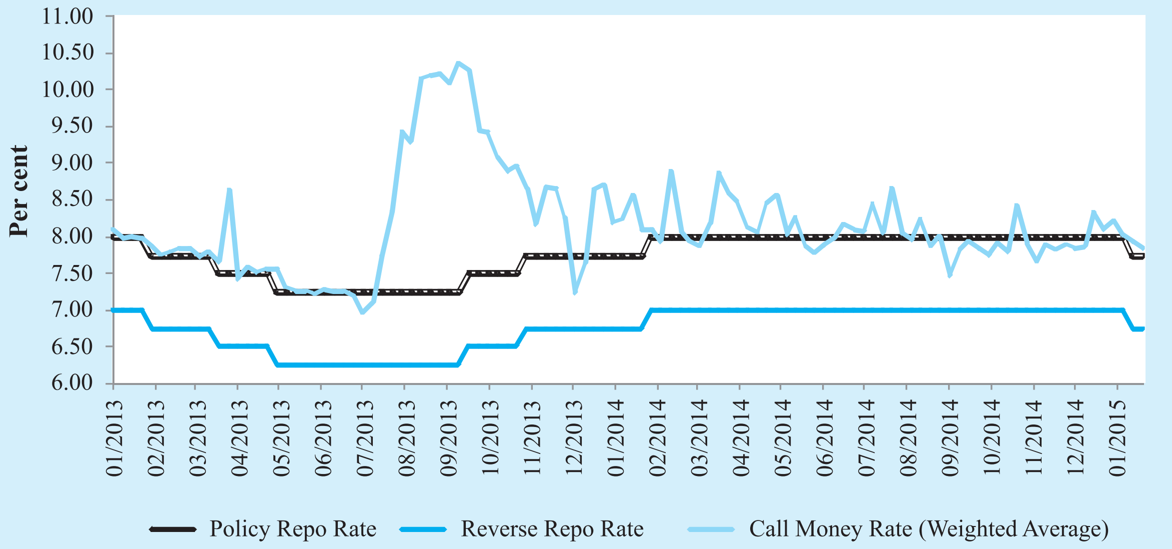
Effective date	Bank rate/ MSF rate* (percent)	Repo rate (per-cent)	Reverse repo rate (per-cent)	CRR (per cent of NDTL)	SLR (per cent of NDTL)
19-03-2013	8.50	7.50	6.50	4.00 $	
03-05-2013	8.25	7.25	6.25		
15-07-2013	10.25				
20-09-2013	9.50	7.50	6.50		
07-10-2013	9.00				
29-10-2013	8.75	7.75	6.75		
28-01-2014	9.00	8.00	7.00		
14-06-2014					22.50
09-08-2014					22.00
15-01-2015	8.75	7.75	6.75		
7-02-2015					21.50

Source **: RBI.**

Notes **: * Bank rate was aligned to MSF rate w.e.f 13.2. 2012; $ w.e.f 09.02.2013.**

MSF is marginal standing facility; CRR is cash reserve ratio; SLR is statutory liquidity ratio; NDTL is net demand and time liability.

Figure 3.1: Movement of Policy Rates



Source : RBI

RBI following larger year-end accretion in deposits. On the sources side, the increase in the net foreign exchange assets (NFA) of the RBI was mostly offset by the decrease in its net domestic assets (NDA), reflecting a lower net liquidity injection by the RBI in the absence of strong demand for liquidity (Table 3.4). The trends in currency in circulation reflected weaker economic activity (Table 3.2).

3.4 Deceleration in credit (Table 3.3) could be attributed to economic slowdown, availability of alternative sources of funds, deterioration in asset quality of banks, especially public-sector banks (PSB), and selling of stressed loans by a few banks to asset reconstruction companies. Net bank credit is also lower due to repayment of loans by entities that received payments by government departments and public enterprises, and lower borrowing by oil marketing companies.

Liquidity Management

3.5 With a view to ensuring flexibility, transparency and predictability in liquidity management operations, RBI revised its liquidity management framework with effect from 5 September 2014. Its main features are: (a) assured access to liquidity of 1 per cent of NDTL (excluding export credit refinance) through bank-wise overnight fixed rate repos of 0.25 per

Table 3.2 : Sources of Change in Reserve Money (M_0) (in per cent)

	Financial year		
	2013-14	3 January 2014 over 31 March 2013	2 January 2015 over 31 March 2014
Reserve money	14.4	5.1	0.9
Select components			
Currency in circulation	9.2	5.7	5.9
Bankers' deposits with RBI	34.0	3.3	-15.7
Select sources of reserve money			
Net foreign exchange assets of RBI	15.7	15.1	10.9
Government's currency liabilities to the public	13.0	15.1	8.1
Net non-monetary liabilities of RBI	21.8	26.6	0.6

Source : RBI

Table 3.3 : Sources of Change in Money Stock (M_3) (in per cent)

	2013-14	31 March 2013 to 27 December 2013	31 March 2014 to 26 December 2014
Broad money (M_3)	13.2	9.9	7.9
Currency with the public	9.4	6.4	6.2
Demand deposits with banks	6.8	2.7	7.7
Time deposits with banks	14.6	11.4	8.2
"Other" deposits with RBI	-39.3	-23.2	314.2
Sources of change in money stock (M_3)			
Net bank credit to government, of which,	12.2	9.3	1.5
Other banks' credit to government	10.5	10.2	10.1
Bank credit to commercial sector, of which,	13.7	9.1	5.7
Other banks' credit to commercial sector	13.6	9.1	5.8
Net foreign exchange assets of banking sector	17.6	16.0	9.5
Government's currency liabilities to the public	13.0	9.9	7.3
Banking sector's net non- monetary liabilities	17.4	12.3	-8.2
Memo items			
Money multiplier	5.5		
Velocity of money	1.2		
Net domestic assets	12.1	8.5	7.5
Net domestic credit	13.2	9.2	4.3

***Source*: RBI.**

cent of NDTL and variable rate fourteen-day term repos; (b) more frequent auction of term repos (four times) during a fortnight, allowing flexibility to banks to alter their liquidity assessment; and (c) higher frequency of access to RBI's overnight liquidity, with the introduction of variable rate overnight repos/reverse repo auctions. Term repo auctions are projected to grow as the main instrument of frictional liquidity management.

Table 3.4 : End-quarter growth rate of NDAs and NFAs (per cent)

	NDAs	NFAs
3/31/2013	9.1	5.8
6/28/2013	19.5	4.0
9/27/2013	24.9	10.6
12/27/2013	13.8	13.1
3/31/2014	18.3	15.7
6/27/2014	-2.1	12.7
9/26/2014	-21.5	13.7
12/26/2014	-19.0	11.5

***Source* : RBI**

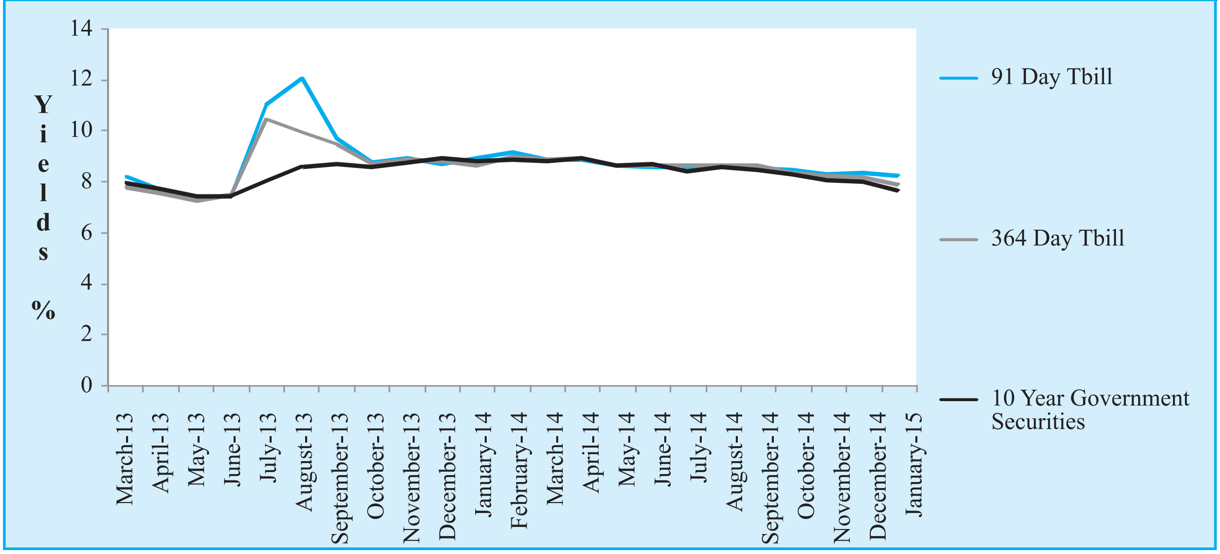
Liquidity conditions

3.6 Liquidity conditions have remained broadly balanced during 2014-15 so far, except temporary tight conditions due to delayed government expenditure. Tight liquidity conditions were witnessed in March 2014 but improved from Q1 2014-15 due to decline in government cash balances. Slower paced growth in credit off-take in comparison to deposit mobilization and draw-down of government cash surplus helped ease liquidity pressures from August. The narrowing gap between credit and deposit growth (which turned negative in August 2014), also helped reduce the pressure on liquidity during this period. The revised liquidity management framework helped the weighted average cut-off rates in fourteen-day term repo auctions as well as in overnight variable rate repo auctions remain close to the repo rate. The volatility of the weighted average call rate went down. Moderation in the weighted average call rates and long-term yields for government and high-quality corporate issuances since end-August 2014 suggest that there has been some easing of monetary conditions.

Developments in Government Securities Market

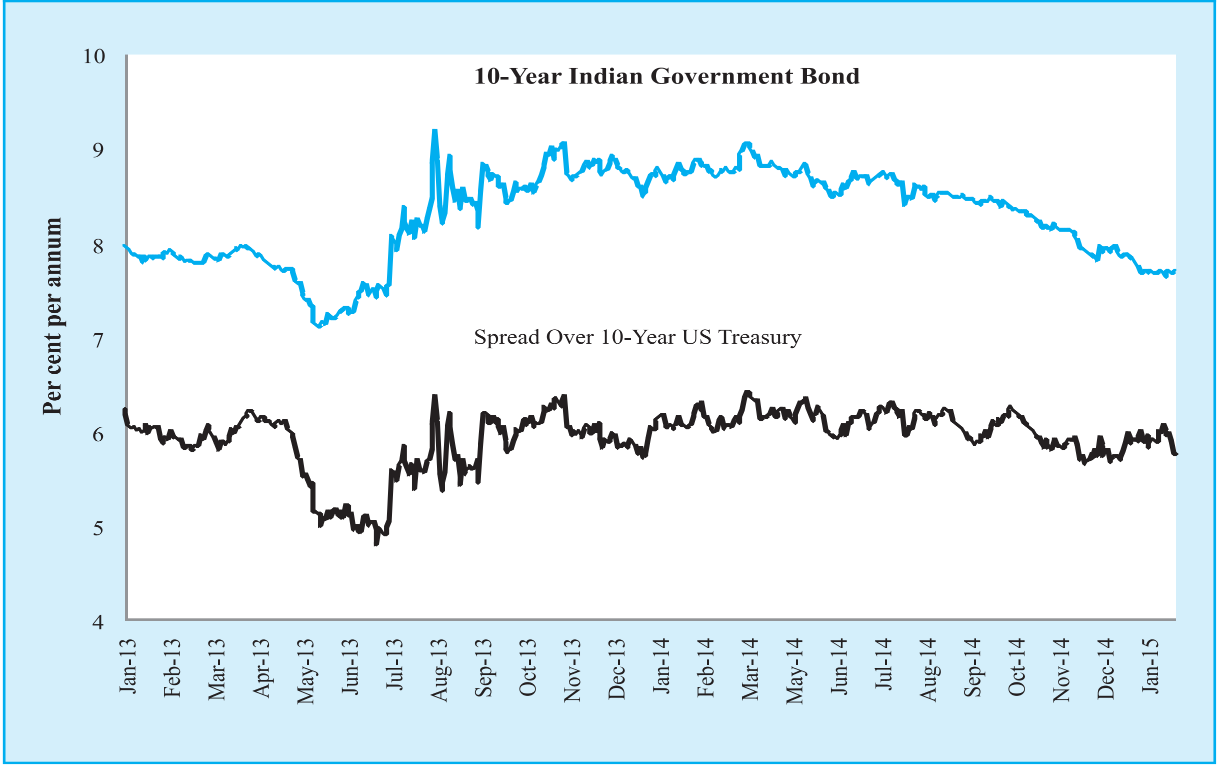
3.7 The ten-year government bond reflects the long end of the yield curve. The ten-year rates are also proxy credit risk of the sovereign. The primary factors responsible for easing in yields (Figures 3.2 and 3.3) include positive

Figure 3.2: Yield Curve



Source : **RBI and Centre for Monitoring Indian Economy (CMIE).**

Figure 3.3: Ten-Year Government Bond Yield (India and USA)



Source: **Bloomberg.**

market sentiment on account of expectations from the new stable government at the centre, three-year low retail inflation readings in December 2014, significant correction in commodity prices and firm commitment shown by the government on the fiscal front, and up gradation of outlook by sovereign credit rating agency S &P.

Table 3.5 : Growth Rates of Select Banking Aggregates

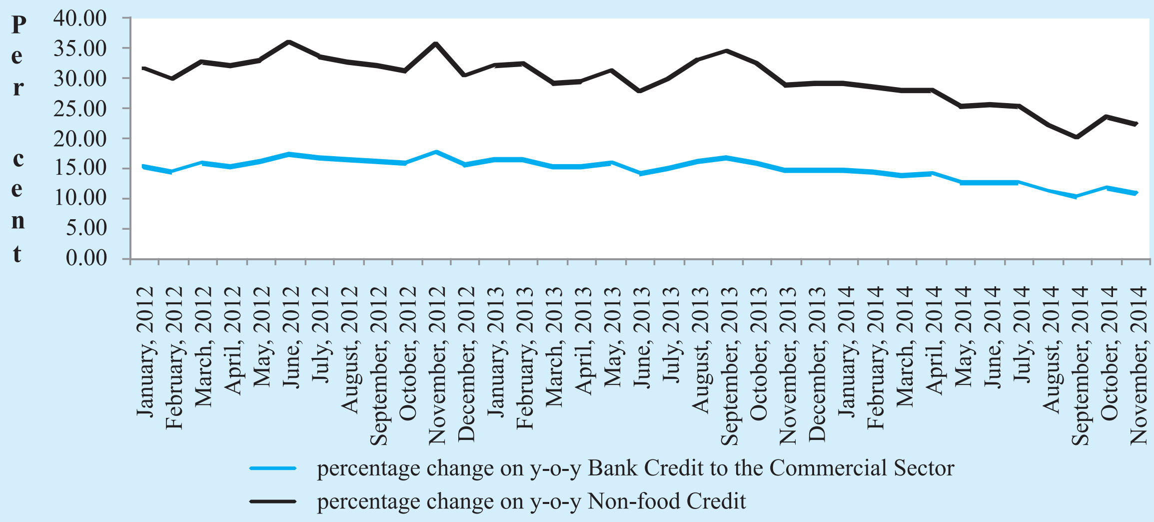
		% change			
		2012-13	2013-14	2013-14 (as on 13 December 2013)	2014-15 (as on 12 December 2014)
1.	**Bank credit**	14.1	13.9	14.6	10.9
	(a) Food credit	18.6	2.1	-1.1	-2.1
	(b) Non food credit	14.0	14.2	14.9	11.1
2.	**Aggregate deposits**	14.2	14.1	16.6	10.6
	(a) Demand Deposits	5.9	7.8	12.3	7.6
	(b) Time Deposits	15.2	14.8	17.0	10.9
3.	**Investment**	15.4	10.3	14.0	10.4
	(a) Govt securities	15.5	10.4	14.0	10.5
	(b) Other approved securities	-11.5	-33.6	-5.8	-8.3

Source **: RBI. Data for 2014-15 is provisional.**

Bank Credit

3.8 The growth of aggregate deposits of scheduled commercial banks (SCB) decelerated during 2014-15 till December (Table 3.5), mainly due to base effect, i.e. high accretion to NRI deposits, last year during September-November and due to lower deposit mobilization during this year. The growth in non-food credit also decelerated (see also Figure 3.4).

Figure 3.4: Year on Year growth of Bank Credit to Commercial Sector and Non-Food credit



Source**: RBI.**

Interest Rates of SCBs (excluding Regional Rural Banks)

3.9 The transmission of changes in policy rate to deposit and lending rates of banks remained muted in 2014-15 so far, reflecting the presence of structural rigidities in the credit market, weak pricing power of banks, and asset quality concerns.During 2014-15 till December, the median-term deposit rates of banks across all maturities declined modestly (Table 3.6), reflecting comfortable liquidity conditions as well as subdued credit demand. The weighted average lending rate (WALR) declined marginally, reflecting weak pricing power of banks, offset partly by asset quality concerns prompting banks to charge higher risk premiums.

3.10 During 2007 to 2013, real policy interest rates were consistently negative (Figure 3.5). This situation had been reversed by the end of 2013, when real interest rates started climbing into positive territory, and they now stand above 2 per cent (on a three-month forward- looking basis).

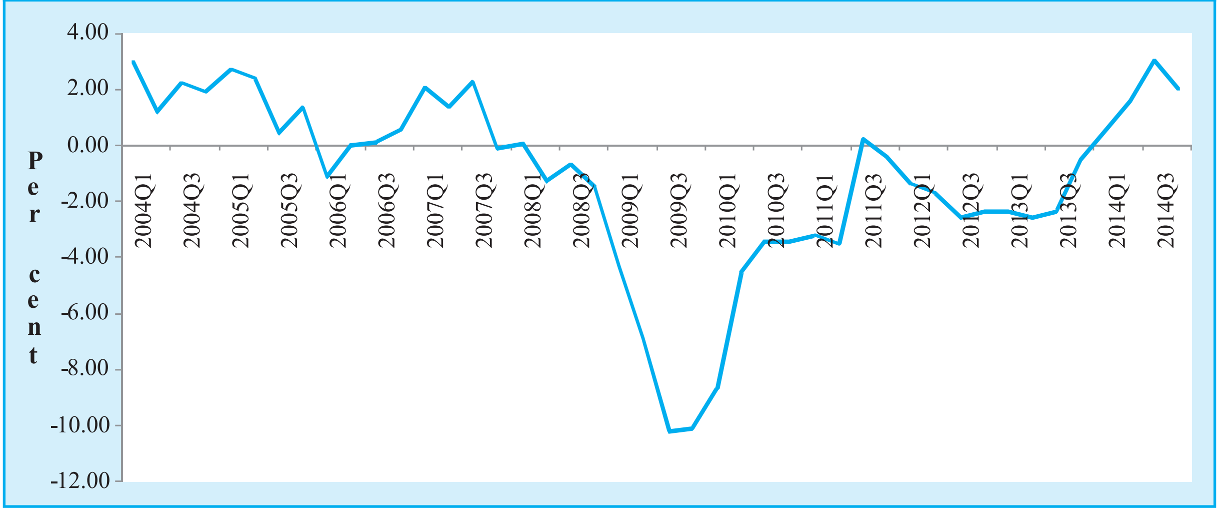
Table 3.6 : Deposit and Lending Rates of SCBs (excluding RRBs)

Items	Average interest rates (%)				Variations (percentage points) (December over March)
	Mar.14	Jun.14	Sep-14	15 Dec. 2014	
Domestic term deposit rates of SCBs- All Maturities	7.69	7.65	7.62	7.54	-0.15
Public-sector banks	7.85	7.81	7.76	7.57	-0.28
Private-sector banks	7.67	7.57	7.56	7.50	-0.17
Foreign Banks	7.56	7.58	7.54	7.53	-0.03
				Nov 2014	Nov over March
WALR (outstanding rupee loans) SCBs	12.19	12.20	12.11	12.14	-0.05
WALR (fresh rupee loans) SCBs	11.64	11.68	11.59	11.60	-0.04

***Source*: RBI.**

Notes: **SCB is scheduled commercial bank. RRB is regional rural bank. WALR is weighted average lending rate. Data on WALR isprovisional.**

Figure 3.5: Real Policy Rate (on a three month forward looking basis)



***Source:* RBI.**

Performance of SCBs

3.11 The capital to risk weighted assets ratio (CRAR) at system level was 13.02 per cent as at end March 2014 (Basel-III). It moved to 12.75 per cent in September 2014. The regulatory requirement for CRAR is 9 per cent for FY 2015. The decline in capital positions at aggregate level, however, was on account of deterioration in capital positions of PSBs. While the CRAR of the scheduled commercial banks (SCB) at 12.75 per cent as of September 2014 is satisfactory, going forward the banking sector, particularly PSBs will require substantial capital to meet regulatory requirements with respect to additional capital buffers.

3.12 Asset quality of PSBs has come under stress in recent times. As per the RBI's Financial Stability Report (December 2014),the gross non-performing advances (GNPA) of scheduled commercial banks as a percentage of the total gross advances increased to 4.5 per cent in September 2014 from 4.1 per cent in March 2014. Stressed advances increased to 10.7 per cent of the total advances from 10.0 per cent between March and September 2014. Five sub-sectors, viz.infrastructure, iron & steel, textiles, mining (including coal), and aviation, hold 54 per cent of total stressed advances of PSBs as on June 2014. Among bank groups, exposure of PSBs to infrastructure stood at 17.5 per cent of their gross advances as of September 2014. This was significantly higher than that of private-sector banks (9.6 per cent) and foreign banks (12.1 per cent). The stress tests suggest that the asset quality of banks may improve in the near future under expected positive developments in the macro-economic environment and banks may be able to meet expected losses with their existing level of provisions. The PSBs continue to be under stress on account of their past lending. Taking GNPA and restructured advances together, the stress on PSBs is 12.57 per cent of total advances as on September 2014.

3.13 The RBI has taken a number of steps to resolve the NPA issue. In January 2014, it came out with guidelines on "Early Recognition of Financial Distress, Prompt steps for Resolution and Fair Recovery for Lenders: Framework for Revitalizing Distressed Assets in the Economy", whereby banks have to start acting as soon as a sign of stress is noticed in a borrower's actions and not wait for it to become an NPA. The RBI has also issued guidelines to bring flexibility in project loans to infrastructure and core industry projects, both existing and new.Towards strengthening recovery from non-cooperative borrowers, the RBI has tightened the norms for asset reconstruction companies (ARC) in August 2014, whereby the minimum investment in security receipts should be 15 per cent, as against the earlier norm of 5 per cent.

Financial Inclusion

3.14 Financial inclusion is an important priority of the government. The objective is to ensure the excluded sections, i.e. weaker sections and low-income groups, access to various financial services such as a basic savings bank account, need-based credit, remittance facility, insurance and pension.

3.15 **Pradhan Mantri Jan-DhanYojana:** To achieve the objective of financial inclusion by extending financial services to the large hitherto unserved population of the country and to unlock its growth potential, the Pradhan Mantri Jan-DhanYojana (PMJDY) was launched on 28 August 2014. The Yojana envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit and insurance. The beneficiaries will receive a RuPay Debit Card having inbuilt accident insurance cover of Rs1 lakh. In addition, there is a life insurance cover of ₹ 30,000 to those who opened their bank accounts for the first time between 15 August 2014 and 26 January 2015 and meet other eligibility conditions of the Yojana. The Yojana has entered the Guinness World Records for opening most bank accounts during the week starting 23August 2014 as part of the financial campaign. As on 28 January 2015, 12.31 crore bank accounts have been opened, of which 7.36 crore are in rural areas and 4.95 crore in urban areas. Under the PMJDY, 67.5 per cent of the accounts as on 28 January 2015 are with zero balance.

The major initiatives taken in the banking sector are given in the box 3.1

Non-Banking Financial Companies

3.16 Non-banking financial companies (NBFCs) have evolved as important financial intermediaries particularly for the small-scale and retail sectors. NBFCs as a whole accounted for 13.1 per cent of bank assets and 0.2 per cent of bank deposits as on 31 March 2014. There are two broad categories of NBFCs based on whether they accept public deposits, viz., deposit-taking NBFCs (NBFC-D) and non-deposit-taking NBFCs (NBFC-ND). With the emergence of large sized NBFCs, the regulatory focus has gradually increased on systemically important NBFCs (NBFCs-ND-SI), i.e. with asset size ₹ 500 crore and above. The total number of NBFCs registered with the RBI declined from 12,158 (as on 30 September 2013) to 11,932 (as on 30 September 2014). The number of NBFCs-D declined from 253 to 226, while the number of NBFC-ND with asset size ₹ 100 crore and above increased from 437 to 465 during the same period. The number of NBFCs-ND-SI stood at 200 as on 30 September 2014. Loans and advances by NBFCs witnessed a growth of 13.1 percent during 2013-14. From the perspective of deployment of funds, loans and advances accounted for more than two-thirds of their total deployment of funds.

3.17 The RBI has issued a revised regulatory framework for NBFCs in November 2014, as they are increasingly exposed to risks arising out of counterparty failures, funding and asset concentration, and interest rate movement and risks pertaining to liquidity and solvency.

Developments in Capital markets

Primary Market

3.18 During April-December 2014, resource mobilization through the primary market exhibited mixed patterns with equity and debt issues declining and private placements of corporate bonds increasing, on year-on-year basis. As private placements of corporate bonds account for the lion's share, total mobilization increased during the period. The number and value of private

Box 3.1 : Major Initiatives in the Banking Sector

a) The RBI issued guidelines for licensing of new banks in the private sector on 22 February 2013, and in April 2014 two applicants have been granted'in principle' approval to setup new banks in the private sector within a period of eighteen months.

b) Pursuant to the Budget 2014-2015 announcement for setting up of differentiated banks serving niche interests such as local area banks and payment banks,the RBI has formulated and released guidelines in November 2014 for licensing of payments banks and small finance banks in the private sector. Subsequently the RBI has invited applications for setting up of small banks and payments banks.

c) Payment and Settlement Systems (Amendment) Bill 2014:The Payment and Settlement Systems Act 2007 (PSS Act) was enacted with a view to providing sound legal basis for the regulation and supervision of payment systems in India by the RBI. For establishing a legal framework for regulation of trade repositories and legal entity identifier issuer, amendments have been considered necessary to make the PSS Act more effective. The proposed amendments will provide finality to the determination of the payment obligations and settlement instructions between a central counter party (the system provider) and system participants in the event of insolvency, dissolution, or winding up of a central counter party. The Bill has been passed by the LokSabha in the winter Session of 2014 and is currently pending in the Rajya Sabha.

d) Capital requirement of PSBs: The Union Cabinet, on 10 December 2014 has approved aproposal allowing PSBs to raise capital from public markets through FPO (follow on public offer) or QIP (qualified institutional placement) by diluting Government of India holding upto 52 per cent in a phased manner based on their capital requirement, stock performance, liquidity, market appetite and subject to certain conditions.

Table 3.7 : Resource Mobilization in the Primary Market (₹ crore)

	2012-13	2013-14	2013-14#	2014-15#
Debt	16982	42383	17436	7348
Equity	15473	13269	8124	4292
of which IPOs	6528	1236	1166	1480
Pvt. Placement of corporate bonds	361462	276054	201838	269245
Total	**393917**	**331706**	**227398**	**280885**

Source: SEBI.

Notes: The equity issues considered are only equity public issues;
: # indicates as on 31 December of respective year.

placements increased both in the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) during the period (Table 3.7).

Secondary Market

3.19 The benchmark indices, BSE Sensex and Nifty showed a general upward trend in the current year so far, closing at 27,499 and 8283 respectively as on 31 December 2014 with corresponding growth rates of 29.9 and 31.4 per cent, year on year (Figure 3.6). The Indian indices are among the better performing in the world (Table 3.8).

Figure 3.6: Movement of Indices of Nifty and Sensex

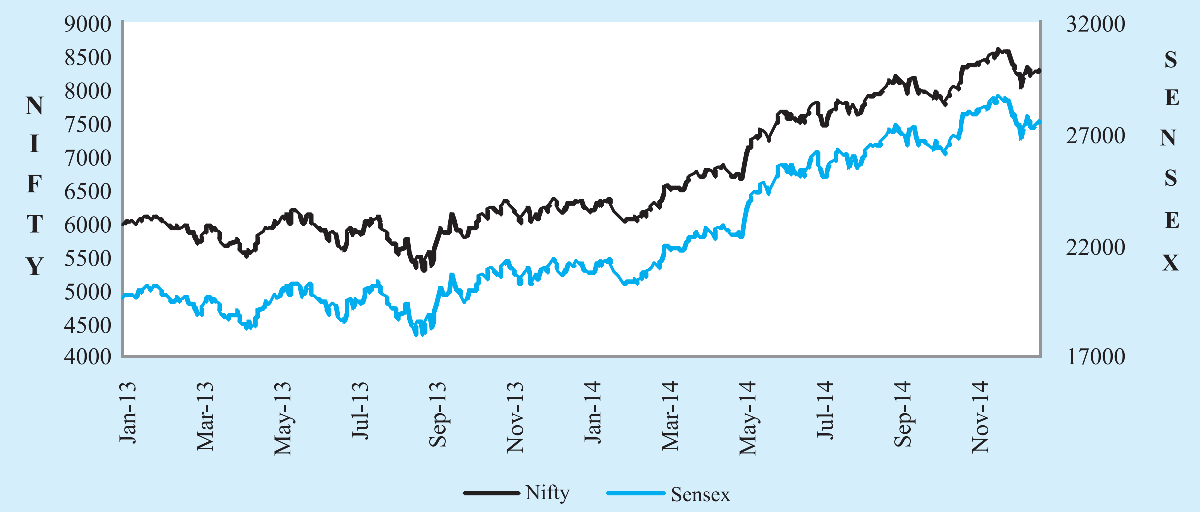


Table 3.8 : Performance of Major Stock Markets in the World

Index	Country	Index value 2014#	Percentage change in 2014 over 2013 (based on local currency)	Percentage change in 2014 over 2013 (based US$)
Sensex	India	27499	29.9	27.1
Nifty	India	8283	31.4	28.5
SPX	USA	2059	11.4	11.4
DAX	Germany	9806	2.7	-9.6
UKX	England	6566	-2.7	-8.5
NKY	Japan	17451	7.1	-5.8
HSI	Hong Kong	23605	1.3	1.3
IBOV	Brazil	50007	-2.9	-13.4
KOSPI	Korea	1916	-4.8	-8.4
FSSTI	Singapore	3365	6.2	1.2
SHCOMP	China	3235	52.9	49.1
CAC	France	4273	-0.5	-12.7

Source : Bloomberg

Note : # indicates as on 31 December of respective year.

Table 3.9 : Currency and Interest Rate Derivatives (₹ crore)

Exchange	Trading value in currency derivatives		Trading value in interest rate derivatives	
	2013-14#	2014-15#	2013-14#	2014-15#
NSE	3454979	2101567	30173	266607
MCX-SX	2166528	534329	7191	20346
USE	185385	52185		
BSE	17552	1073916	2580	1440

Source **: NSE, MCX-SX, BSE and USE.**

Note**: # indicates as on December 31 of respective year.**

3.20 **Currency and Interest Rate Derivatives :** Most exchanges saw a decline in trading volumes in the currency derivatives segment (**Table 3.9**). Trading in cash-settled interest rate futures contracts on ten-year Government of India securities commenced in January 2014.

3.21 **Foreign Portfolio Investment:** With the commencement of the foreign portfolio investment (FPI) regime from 1 June 2014, the erstwhile foreign institutional investors (FIIs), Sub Accounts and qualified foreign investors (QFIs) have been merged into a new investor class termed foreign portfolio investors. The total net FPI inflows during April-December 2014 stood at US $ 32,943 million compared to an outflow of US $ 539 million in the corresponding period of 2013-14.

SEBI has undertaken a number of policy initiatives for the development of both primary and secondary markets during the year. The major policy developments are given in Box 3.2

Insurance Sector

3.22 In India, insurance penetration has grown from 2.3 per cent (life 1.8 per cent and non-life 0.7 per cent) in 2000 to 3.9 per cent (life 3.1 per cent and non-life 0.8 per cent) in 2013. The life insurance penetration level compares well with the emerging market economies. During 2013-14, the life insurance industry recorded a premium income of ₹ 3,14,283 crore as against ₹ 2,87,202 crore in the previous financial year, registering a growth of 9.4 per cent. While private-sector insurers posted 1.4 per cent decline in their premium income, Life Insurance Corporation of India (LIC) recorded 13.5 per cent growth during the period. On the basis of total premium income, the market share of LIC increased from 72.7 per cent in 2012-13 to 75.4 per cent in 2013-14.

3.23 With a view to removing archaic and redundant provisions in the insurance laws, empowering the Insurance Regulatory and Development Authority (IRDA) to enable more effective regulation, and enhancing the foreign equity investment cap in an Indian insurance company from 26 to 49 per cent with the safeguard of Indian ownership and control, the government has promulgated the Insurance Laws (Amendment) Ordinance 2014 on 26 December 2014. The ordinance amends the Insurance Act 1938, the General Insurance Business (Nationalization) Act 1972, and the IRDA Act 1999.

Pension Sector

3.24 The National Pension System (NPS) which was initially introduced for the new recruits who had joined central government service (except armed forces at first stage) with effect from 1 January 2004, has been subsequently extended to autonomous bodies, state governments, and the unorganized sector. Barring two States, all the States have since come under the ambit of the NPS. From 1 May 2009, the NPS was opened up for all citizens in India to join on a voluntary basis. Till 31 December 2014, a total of 79.71 lakh members have been enrolled under the NPS with a corpus of ₹ 73, 097 crore. Assets under management

Box 3.2 : Policy Developments (April-December 2014)

Securities Laws (Amendment) Act 2014: Vide the Act passed in August 2014, enhanced powers were conferred upon SEBI, including explicit power to disgorge ill-gotten gains, power to conduct search and seizure, explicit powers for settlement, attachment and recovery, increase in penalties, and constitution of special courts.

Primary Market

- In order to strengthen the corporate governance norms, SEBI amended Clause 49 of the equity listing agreement with provisions such as exclusion of nominee director from the definition of independent director and compulsory whistle blower mechanism.
- The Securities Contracts (Regulation) Rules 1957 were amended to require a minimum public shareholding of 25 per cent of the total number of issued shares of public-sector units within three years.

Secondary Market

- The framework for stock exchanges to launch cash-settled interest-rate futures on ten-year government securities was prescribed.
- FPIs were allowed to trade in currency derivatives subject to terms and conditions.
- SEBI enabled a single consolidated view of all the investments of an investor in mutual funds and securities held in demat form with the depositories.
- SEBI permitted single registration for stock brokers/clearing members. The policy of granting single registration for operating with both the depositories was approved.
- SEBI amended SEBI {KYC Registration Agency} (KRA) Regulations 2011 to provide for sharing of KYC (know your customer) information with other regulators.

Foreign Portfolio Investors

- The SEBI (Foreign Portfolio Investors) Regulations 2014 came into effect from 1 June 2014. Operational Guidelines for Designated Depository Participants (DDPs) were issued.
- From April 2014, investment conditions for FII/QFI investments in government debt securities were changed whereby their investments in T-Bills were allowed to taper off on maturity/sale.
- FPIs were permitted to invest on repatriation basis, in non-convertible/redeemable preference shares or debentures issued by an Indian company and listed on recognized Indian stock exchanges.

Mutual Funds, Corporate bonds, AIFs

- SEBI (Real Estate Investment Trusts) Regulations 2014 were notified in September 26, 2014.
- SEBI notified the Infrastructure Investment Trust Regulations in September 2014 which provide a framework for registration and regulation of InvITs in India.
- SEBI (Research Analysis) Regulations, 2014 were notified on September 01, 2014.

under the NPS have witnessed an increase from ₹ 48,136 crore as on 31 March 2014 to ₹ 72,000 crore as on 31 December 2014, registering an increase of 49.6 per cent. The Swavalamban Scheme, a co-contributory pension scheme launched in 2010 for persons in the unorganized sector, is now open to those citizens of India who are not part of any pension/provident fund scheme. A total of 6.29 lakh subscribers have already been enrolled under the scheme till 31 December 2014 during FY 2014-15.

3.25 The Pension Fund Regulatory and Development Authority (PFRDA) Act 2013 has been made effective from 1 February 2014, after it was passed by Parliament in September 2013. The PFRDA Act seeks to vest the PFRDA with statutory status in order to allow it to perform its regulatory and developmental roles effectively.

External Sector

04

CHAPTER

The robust external-sector outcome in the current year of moderate trade and current account deficits, abundant financial flows, a build-up of foreign exchange reserves and broadly stable exchange rate movement points to a return to the path of strength and resilience that was in evidence before the global financial crisis of 2008. This follows the improvement last year that was achieved in the face of an initial phase of severe stress and on the strength of policy responses. The correction in the international prices of crude petroleum in the second half of the current fiscal has helped in the decontrol of diesel prices. The overall trade performance signaled an opportune time for withdrawal of restrictions on gold imports. The resilience also owed in part to the trade diversification process. While trade and current account deficits are on even keel, the copious financial inflows in excess of the financing requirement has helped shore up foreign exchange reserves (US$ 328.7 billion at end-January 2015). These have helped allay the vulnerability concerns that led to severe stress last year. These concerns, however, remain a potent downside risk, should the global environment deteriorate for some reason. The global economic outlook remains somewhat uncertain but stable and likely to gain strength if lower global crude petroleum prices drive the demand recovery process in key emerging market economies.

Global Economic Environment

4.2 The global economic environment appears poised for a change for the better with the recent sharp fall in the international prices of crude petroleum, which is expected to boost global aggregate demand, and the sharp recovery in the US economy in the face of gradual withdrawal from monetary accommodation. Following the global crisis of 2008, the global economy came under a cloud of uncertainty and the prolonged weakness in the euro area, particularly since 2011, led to the International Monetary Fund (IMF) often revising global growth downwards in its World Economic Outlook (WEO). In its Update, published on 20 January 2015, the IMF projected the global economy to grow from 3.3 per cent in 2014 to 3.5 per cent in 2015 and further to 3.7 per cent in 2016. This downward revision from its October 2014 projections owed to the weaker economic prospects in China, Russia, the euro area, Japan, and some major oil exporters because of the sharp drop in oil prices. The United States is the only major economy for which growth projections have been raised by 0.5 percentage point to 3.6 per cent for 2015.

4.3 In the case of emerging market and developing economies (EMDEs), which continue to struggle with tepid domestic demand and headwinds from structural impediments, the IMF Update projects growth to moderate to

4.3 per cent in 2015 and 4.7 per cent in 2016. The IMF's projections only partially reflect the net impact of the fall in global crude oil prices and for the near term outlook. Going forward, the lower oil price is likely to be more positive for the EMDEs that account for more than half of the global output (purchasing power parity terms) given their higher contribution to global growth with inflation remaining anchored. This might lead to a better outcome than projected. A sudden correction in financial markets and downside risks to growth with a possible further slowdown in the euro area along with the likely duration of the oil price supply shock effect, are some of the concerns that linger on.

4.4 The WEO Update projects India's GDP growth at market prices to be 6.3 per cent (downward revision of 0.1 percentage point compared to the WEO of October 2014) in 2015 and for the year 2016, projected growth is 6.5 per cent surpassing the projection of 6.3 per cent for China. The recent upward revisions to India's GDP growth made by the Central Statistics Office (CSO) on 30 January 2015 may get reflected in the subsequent projections of the WEO. The level of global economic activity has a significant direct bearing on the growth prospects of the emerging economies through trade channels. As per the IMF WEO Update, January 2015, world trade volume growth projections have been placed at 3.8 per cent and 5.3 per cent, respectively for 2015 and 2016—lower by 1.1 percentage points and 0.2 percentage point respectively.

India's Merchandise Trade

4.5 Over the last ten years, India's merchandise trade (on customs basis) increased manifold from US$ 195.1 billion in 2004-05 to US$ 764.6 billion in 2013-14. As per the World Trade Organization (WTO), India's share in global exports and imports increased from 0.8 per cent and 1.0 per cent respectively in 2004 to 1.7 per cent and 2.5 per cent in 2013. Its ranking in terms of leading exporters and importers improved from 30 and 23 in 2004, to 19 and 12 respectively in 2013. While India's total merchandise trade as a proportion of gross domestic product (GDP) increased from 29.0 per cent in 2004-05 to 41.8 per cent in 2013-14, India's merchandise exports as a proportion of GDP increased from 12.1 per cent to 17.0 per cent during the same two time periods. There were considerable differences in the growth rates within the two time periods which owed largely to the global uncertainty, prolonged weakness in some areas, and volatility in global commodity prices since 2008. In particular, global crude oil prices were a major factor in the process of elevated levels of merchandise trade deficit (Box 4.1).

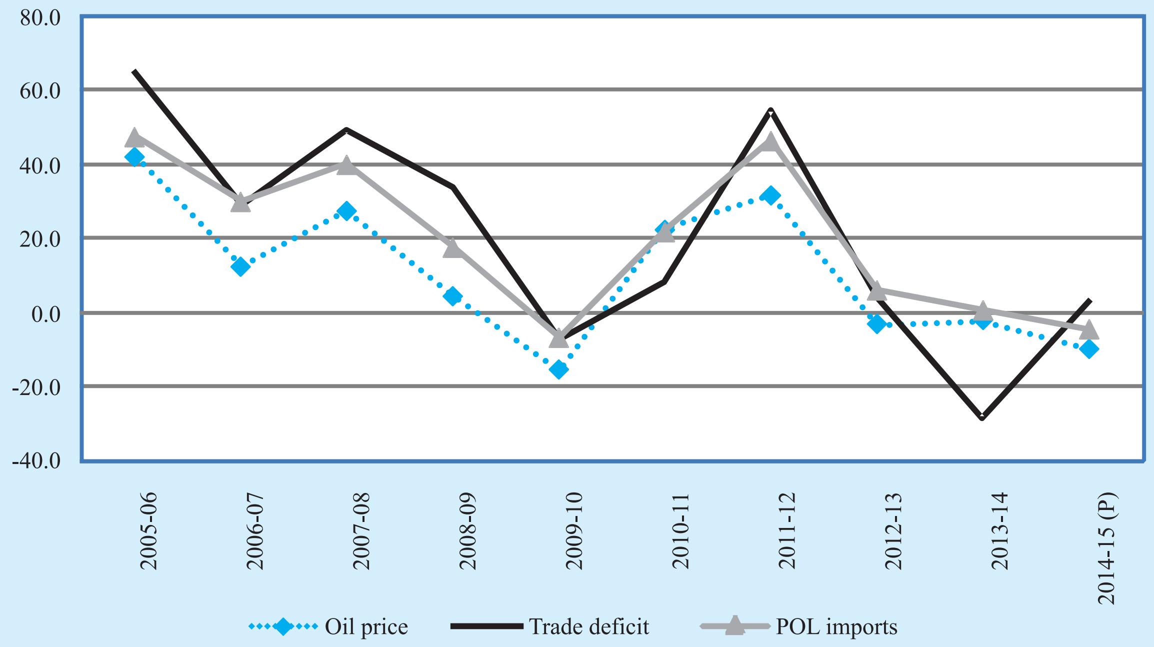
4.6 After registering very high growth of 40.5 per cent in 2010-11, growth of merchandise exports moderated to 21.8 per cent in 2011-12. The high growth in two years led to overall exports crossing the US$ 300 billion mark. In 2012-13, though exports were still above the US$ 300 billion mark, growth in exports could not be sustained and marginally declined by 1.8 per cent [Appendix Table 7.1(B)]. During 2013-14, however, exports recovered to post a growth of 4.7 per cent (US$ 314.4 billion). In 2014-15 (April-January), growth of exports moderated to 2.4 per cent (US$ 265.0 billion vis-à-vis US$ 258.7 billion in the corresponding period of the previous year).

4.7 India's merchandise imports grew by 28.2 per cent in 2010-11and the high growth continued through 2011-12 driven by broad-based expansion in imports of gold and silver, POL group and non-POL and non-gold and silver group. In 2012-13, there was only modest decline in the growth rates of gold and silver as well as non-POL imports, leading to continuance of elevated level of total imports of around US $ 490 billion. In 2013-14, in view of the sharp depreciation of the rupee owing to domestic and external factors, the government placed restrictions on gold imports which led to a sharp decline therein of 46.4 per cent. With domestic activity remaining weak, non-POL and non-gold and silver imports also declined by around 7 per cent, which along with the fall in gold imports led to overall decline in imports to US$ 450 billion. In 2014-15 (April-January), imports grew by 2.2 per cent to US$ 383.4 billion

Box 4.1 : Implications of Global Crude Oil Price Movements

Any major change in global commodity prices, particularly crude oil prices, has implication for the external sector as India is increasingly integrated with the rest of the world. It is evident that India's rising two-way external-sector transactions have more than doubled as a proportion of GDP over the last ten years. Trade openness provides opportunities for higher growth through higher exports and makes available better quality products domestically at globally competitive prices. Typically in the literature, current account deficit (CAD) is viewed as foreign savings that promote growth through higher investment given the level of domestic savings in EMDEs; but in the context of India's large oil import dependence and the sharp rise in global crude oil prices, the widening of the CAD in 2011-12 and 2012-13 may be an atypical outcome. Changes in crude oil prices have direct bearing on India's CAD. Historically, crude oil imports accounted for a substantial portion of the country's total imports. Petroleum, oil, and lubricants (POL) imports accounted for more than one-third of India's total imports in recent years. In 2013-14, POL imports accounted for 36.6 per cent of total imports. The share of POL imports in total imports is estimated at over 33 per cent in the current fiscal year so far (up to December 2014). The changes in trade deficit and by implication CAD in recent years are largely explained by the changes in crude oil prices (Figure 1).

Figure 1: Changes in Oil price (Indian Basket), POL imports and Trade deficit (per cent)



Note **: For the year 2014-15 data relates to April-December.**

Global crude oil prices (Indian basket) which were as high as US$ 107.2 per barrel in the first quarter of 2014-15 declined to US$ 101.7 per barrel in the second and further to US$ 75.2 per barrel in the third quarter of 2014-15. Subsequently, they remained below US$ 50 per barrel. As on 30 January 2015, the crude oil prices of the Indian basket stood at US$ 46.7 per barrel. Under some simplifying assumptions, a fall in international crude oil prices by US$ 1 per barrel is likely to reduce the net import bill by US$ 0.9 billion per annum. Average prices of oil in the period from April 2014 to January 2015 were around US$ 90 per barrel, which is likely to result in lower overall net oil imports by US$ 9.5 billion for 2014-15, assuming 6 per cent growth in import quantity. India's current account balance should strengthen in view of substantial fall of about 56 per cent in crude oil prices of the Indian basket in January 2015 over the level of March 2014. Besides, a reduction in international gold prices by US $ 10 per troy oz is estimated to lead to a US$ 130 million fall in net gems and jewellery imports for 2014-15 assuming no change in quantum of imports.

as compared to US$ 375.3 billion in 2013-14 (April-January). While the value of POL imports declined by 7.9 per cent in 2014-15 (April-January), gold and silver imports grew by 8.0 per cent in 2014-15 (April-January). Non-POL and non-gold and silver imports which largely reflect the imports needed for industrial activity grew by 7.8 per cent in 2014-15 (April-January), after registering a decline of 0.7 per cent and 6.9 per cent respectively in 2012-13 and 2013-14.

4.8 While the above developments in nominal terms broadly reflect the trends, it is useful to decompose the growth rates in terms of changes in quantity and price, which are best indicated by the quantum and unit value indices that reflect terms of trade (Table 4.1). The change in quantum index for exports broadly corresponds directionally with nominal growth in US dollar and rupee terms, albeit at much lower rates, 2012-13 being an exception when in US dollar terms there was negative growth as against a high positive growth rate in the quantum index. In the case of the quantum index of imports, there was greater directional divergence with the nominal growth rates expressed in US dollar and rupee terms.

4.9 The changes in unit value indices of exports and imports were broadly in positive territory with the exception of 2009-10. The outcome in terms of trade was reflected in the deterioration evidenced in 2011-12. This deterioration owes to the oil price shock which could be reversing in the second half of 2014-15.

4.10 The oil price shock was amplified given the large import dependence that had kept imports at elevated levels since 2011-12 and the relative sluggish global demand constraining overall export growth. India's subsequent resilience owed to the diversification processes that encompass both commodity composition and direction of trade.

Composition of Trade

4.11 The commodity composition of India's trade has undergone many changes since liberalization and has been driven by trade policy, movements in international prices, and the changing pattern of domestic demand. Manufactured goods constitute the bulk of exports — over 63 per cent in recent years, followed by crude and petroleum products

Table 4.1 : Trade Performance: Quantum and Unit Value Indices

(per cent change)

	Exports				Imports				Terms of trade	
	US$ terms	Rupee terms	Quantum index	Unit value index	US$ terms	Rupee terms	Quantum index	Unit value index	Net	Income
2001-02	-0.6	2.7	0.8	1.0	2.9	6.2	4.0	2.8	-1.7	-0.9
2002-03	20.3	22.1	19.0	2.9	19.4	21.2	5.8	14.3	-10.0	7.2
2003-04	21.1	15.0	7.3	7.5	27.3	20.8	17.4	3.1	4.3	11.9
2004-05	30.8	27.9	11.2	14.9	42.7	39.5	17.2	18.9	-3.4	7.4
2005-06	23.4	21.6	15.1	6.1	33.8	31.8	16.0	14.0	-6.9	7.1
2006-07	22.6	25.3	10.2	13.7	24.5	27.3	9.8	15.1	-1.2	8.8
2007-08	29.0	14.7	7.9	5.1	35.5	20.4	14.1	1.9	3.1	11.2
2008-09	13.6	28.2	9.0	16.9	20.7	35.8	20.2	13.8	2.7	11.9
2009-10	-3.5	0.6	-1.1	1.0	-5.0	-0.8	9.9	-10.0	12.3	11.0
2010-11	40.5	35.2	15.2	13.8	28.2	23.4	8.0	13.0	0.7	15.9
2011-12	21.8	28.3	8.9	20.2	32.3	39.3	-20.9	74.9	-31.3	-25.2
2012-13	-1.8	11.5	7.9	6.0	0.3	13.8	6.1	8.0	-1.9	5.8
2013-14	4.7	16.6	5.9	9.9	-8.3	1.7	-10.7	12.9	-2.7	3.1
2014-15(P)	3.4	5.0	4.8	3.6	1.5	3.9	0.8	3.3	0.2	5.0

Source **: Computed based on data of the Directorate General of Commercial Intelligence and Statistics (DGCI&S).**
Note **: For the year 2014-15 growth rate relates to April to September. P : Provisional.**

(including coal) with a 20 per cent share, and agriculture and allied products with a share of 13.7 per cent share [Appendix Table 7.3(B)]. The top seven product groups accounting for nearly 80.9 per cent of India's total exports in 2014-15 (April-December) were: petroleum products (19.4 per cent share); gems and jewellery (13.0 per cent share); agriculture and allied products (12.0 per cent share); textiles and allied products (11.6 per cent share); chemicals and related products (10.1 per cent share); transport equipment (8.5 per cent share) and machinery (6.3 per cent share).

4.12 Growth in exports of petroleum and agriculture and allied products which had been in positive territory for the last four years, turned negative in 2014-15 (April-January). Gems and jewellery exports which exhibited a declining trend in 2012-13 and 2013-14, continued to register a declining trend in 2014-15 (April-January). In the case of electronic goods, there has been continuous decline in exports since 2012-13. During 2014-15 (April-January), some sectors like transport equipment; machinery, chemicals and related products, textile and allied products and base metals registered positive growth in exports.

4.13 Marine products and leather and leather manufactures recorded relatively high growth in 2012-13, 2013-14, and 2014-15 (April-January). While the shares in terms of nominal value of exports (conversely imports) may be high in some sectors, the import (export) component may also be high and therefore it would be instructive to look at value added (Box 4.2).

4.14 One of the major items in India's import basket is the POL group, which accounted for 36.6 per cent of India's total imports in 2013-14. POL imports surged with a growth of 46.2 per cent in 2011-12, mainly on account of significant increase in global crude oil prices vis-à-vis 2010-11. The growth in imports of POL moderated to 5.9 per cent and 0.4 per cent respectively in 2012-13 and 2013-14. There was moderation in international crude oil prices (Brent) from US$109.8 per barrel in the first quarter of 2014-15 to US$ 76.0 per barrel in the third quarter which resulted in the value of POL imports declining by 7.9 per cent in 2014-15 (April-January). Capital goods imports are another major group which declined continuously from 2011-12 onwards. Within capital goods, imports of machinery registered positive growth in 2014-15 (April-January). Gold and silver imports accounted for 11.4 per cent of India's total imports in 2012-13 and 7.4 per cent in 2013-14. These imports declined by 9.0 per cent and 40.4 per cent respectively in 2012-13 and 2013-14 but registered a positive growth of 8.0 per cent in 2014-15 (April-January). Imports of pearls and precious and semi-precious stones grew by 5.4 per cent in 2013-14 and declined by 3.9 per cent in 2014-15 (April-January).

Direction of Trade

4.15 There has been significant market diversification in India's trade in recent years –a process that has helped in coping with the sluggish global demand, which owes to a great extent to the weakness in the euro zone. Region-wise, India's export shares to Europe and America have declined over the years—from 23.6 per cent and 20.1 per cent respectively in 2004-05 to 18.6 per cent and 17.2 per cent respectively in 2013-14. Conversely, the shares of India's exports to Asia and Africa have increased from 47.9 per cent and 6.7 per cent respectively in 2004-05 to 49.4 per cent and 9.9 per cent respectively in 2013-14. The change in direction immediately prior to the global financial crisis and since 2010-11 indicates the process of diversification underway. A comparison of India's trade in the pre-crisis (2004-05 to 2007-08) and post-crisis period (2010-11 to 2013-14) shows that India's exports and imports from Europe, the USA, and Singapore have declined, while its trade with Asia and Africa has increased (Table 4.2).

4.16 In 2014-15 (April-December), India's exports to the European region grew by only 0.2 per cent. India's exports to Africa and America grew by 12.9 and 14.5 per cent respectively and

Box 4.2 : Estimates of Labour and Non-labour Components of Domestic Value Added in India's Exports

The changing contours of trade and the emergence of global production chains have important implications for developing countries. Increasing use of imported inputs has generally caused a decline in the domestic value added share of total exports. The decomposition of value added by capital and different types of labour is an important aspect of global fragmentation of the production process. It is often argued that increasing trade and thereby integration with the world market will lead to new opportunities for developing nations to employ their abundant medium and low skilled workers. The aforementioned decomposition of domestic value added allows examination of how the benefits of globalization are being distributed between capital and different types of labour.

In the Indian context, the share of domestic value added exports in total exports has witnessed a decline from 86.9 per cent in 1998-99 to 84.1 per cent in 2003-04 and further to 78.5 per cent in 2007-08. The foreign value added share in exports, however increased, indicating deepening of the process of international production fragmentation. The domestic labour component is relatively higher in India's service exports than in merchandise exports. Further, the domestic value of exports based on four components (unskilled, semi-skilled, skilled labour, and non-labour) shows that the combined share of the skilled labour and non-labour components is significantly high, which shows a pervasive process of technological change that is biased towards the use of skilled labour and capital. An analysis of the domestic value of India's exports by factor inputs reveals that the labour component in domestic value added for merchandise exports was 28 per cent in 2007 whereas it was 39 per cent for total exports (including services) for the same year. For services exports, the corresponding figure is about 51 percent, which indicates that the domestic labour component is relatively higher in services exports than in merchandise exports. The contribution of labour to domestic value addition (Table 1) has decreased for merchandise exports (by more than 6 percentage points) and increased for service exports (by 2 percentage points) over the period 1998-99 to 2007-08. At a disaggregated level, the labour component in domestic value added of India has increased mainly for agriculture, food processing, and services sectors; whereas capital contribution has increased for machinery, metal products, and many of the other manufacturing sectors.

Table 1: Decomposition of Domestic Value Added of Exports into Factor Components 1998-99 to 2007-08

(per cent per annum)

Sectors	Labour component			Non-labour component			Domestic value added		
	1998-99	2003-04	2007-08	1998-99	2003-04	2007-08	1998-99	2003-04	2007-08
Merchandise exports	34.2	32.1	27.9	50.7	47.3	42.9	85.0	79.4	70.8
Services exports	48.8	51.4	50.9	42.0	41.4	35.8	90.8	92.8	86.7
Total exports	39.2	38.9	39.1	47.8	45.2	39.5	86.9	84.1	78.5

Source **: Computation based on input output tables published by the CSO, Annual Survey of Industries (ASI), National Sample Survey (NSS) rounds, and Social Accounting Matrices.**

Note **: The labour and non-labour components of DVA do not add up to 100 because the remaining part is the foreign value added component.**

Distribution of factor content according to skill levels of workers is shown in Table 2. Estimates at the aggregate level, show that for manufactured exports, the share of unskilled labour and capital is high whereas for services exports and total exports the share of capital and high skilled labour is significantly higher than those of medium skilled and unskilled labour.

Table 2 : Distribution of Domestic Value of India's Exports according to Factor Input and Skill Level of Labour 2007

(in per cent)

Sectors	Unskilled labour component	Semi-skilled labour component	Skilled labour component	Non-labour component	Foreign value added share
Merchandise Exports	**10.9**	**8.8**	**8.0**	**43.1**	**29.2**
Top export items					
1) Petroleum products	2.0	2.2	2.4	27.6	65.8
2) Readymade garments	17.3	13.7	9.8	42.7	16.4
3) Gems & jewellery	10.0	10.3	7.8	35.2	36.6
4) Drugs and medicines	8.7	8.0	9.6	47.6	26.1
Services exports	**10.3**	**14.5**	**26.1**	**35.9**	**13.3**
Total Exports	**10.6**	**11.6**	**16.8**	**39.6**	**21.5**

Source **: Computation based on input output tables published by the CSO, ASI, NSS survey rounds, and Social Accounting Matrix tables.**

A similar pattern in factor shares has been observed for several other emerging nations where the shares of capital and high skilled labour have increased implying that the global value chains are becoming increasingly capital and skill intensive over time.

Source: **Based on a study by Deb Kusum Das, Sreerupa Sengupta, and Pilu Chandra Das, ICRIER, 'Estimating Domestic Value Added and Foreign Content of India's Exports', sponsored by the Department of Economic Affairs, Ministry of Finance, Government of India (GoI).**

Table 4.2 : Export and Import Shares of Regions/Countries in India's Trade

Region/ countries	Exports			Imports			Exports to imports Ratio		
	2004-05 to 2007-08	2010-11 to 2013-14	Change in share	2004-05 to 2007-08	2010-11 to 2013-14	Change in share	2004-05 to 2007-08	2010-11 to 2013-14	Change
Europe	**23.3**	**19.0**	**-4.3**	**21.6**	**18.0**	**-3.6**	**73.6**	**68.6**	**-5.0**
Germany	3.3	2.5	-0.7	3.9	3.0	-0.9	56.5	53.9	-2.5
Belgium	2.7	2.1	-0.6	2.6	2.2	-0.3	73.4	62.4	-10.9
Switzerland	0.4	0.4	0.0	4.5	6.2	1.7	6.7	4.2	-2.5
Africa	**7.8**	**8.9**	**1.2**	**6.3**	**8.5**	**2.2**	**84.0**	**68.1**	**-15.9**
Nigeria	0.7	0.9	0.1	2.1	2.9	0.8	23.8	19.7	-4.1
America	**18.9**	**16.6**	**-2.3**	**10.3**	**11.0**	**0.7**	**124.9**	**98.3**	**-26.6**
U S A	14.9	11.6	-3.3	7.1	5.1	-2.0	**143.5**	**148.5**	5.0
Asia	**48.5**	**50.2**	**1.7**	**48.9**	**60.2**	**11.3**	**67.7**	**54.4**	**-13.4**
Singapore	4.8	4.5	-0.3	2.8	1.7	-1.2	116.6	177.7	61.1
Indonesia	1.5	1.9	0.5	2.1	3.0	0.9	47.2	41.5	-5.8
United Arab Emirates	9.2	11.7	2.5	4.5	7.6	3.2	140.0	99.2	-40.8
Saudi Arabia	2.0	2.8	0.8	5.1	6.8	1.7	26.6	26.3	-0.3
Kuwait	0.5	0.4	0.0	2.1	3.4	1.3	15.4	8.5	-6.9
Qatar	0.3	0.2	0.0	0.9	2.8	2.0	22.0	5.6	-16.4
Iraq	0.2	0.3	0.2	1.8	3.6	1.9	6.2	5.5	-0.6
China	6.6	5.3	-1.3	9.0	11.2	2.2	50.4	30.8	-19.6
Hong Kong	4.0	4.1	0.1	1.3	1.9	0.6	210.1	137.7	-72.5
Korea	1.7	1.4	-0.3	2.7	2.7	0.0	43.6	33.8	-9.8
Total	**100.0**	**100.0**	—	**100.0**	**100.0**	—	**68.2**	**65.1**	**-3.1**

***Source* : Computed based on data of the DGCI&S.**

to Asia, a major destination accounting for nearly 50 per cent of India's exports, by 2.2 per cent in 2014-15 (April-December). Within Asia, India's exports to South Asia grew by 23.8 per cent (mainly due to high export growth to Sri Lanka, Nepal, and Bangladesh) and 8.8 per cent in the case of West Asia-Gulf Cooperation Council (GCC) (UAE, Saudi Arabia, and others). India's exports to other regions of Asia witnessed a contraction—declining by 4.4 per cent to North East Asia (consisting of China, Hong Kong, Japan), 7.2 per cent to the Association of South East Asian Nations (ASEAN) (consisting of Singapore, Indonesia, Thailand, Malaysia), and 8.5 per cent to Other West Asia (Iran, Israel, and others)—in 2014-15 (April-December). Country-wise, India's exports to the USA and UAE—major destinations with a share in India's total exports of 12.5 per cent and 9.7 per cent respectively in 2013-14—grew by 11.2 per cent and 11.9 per cent in 2014-15 (April-December). However, India's exports to China (4.7 per cent share) and Belgium (2.0 per cent share) declined by 14.7 per cent and 10.7 per cent during the same period. Since 2012-13, there has been a contraction in India's exports to Singapore and Indonesia.

4.17 The share of Europe in India's imports also declined from 23.0 per cent in 2004-05 to 15.8 per cent in 2013-14 while the shares of Asia and Africa increased substantially from 35.6 per cent and 3.6 per cent in 2004-05 to 60.7 per cent and 8.1 per cent respectively in 2013-14. The share of America in India's imports has also increased from 8.8 per cent to 12.8 per cent during the same period. China is the major source of India's imports, accounting for 11.3 per cent of India's total imports, followed by Saudi Arabia (8.1 per cent share), the UAE (6.5 per cent share), and the USA (5.0 per cent share) in 2013-14. In 2014-15 (April-December), India's imports from China grew by 18.7 per cent. However, there was contraction in India's imports from Saudi Arabia, the UAE, and USA by 14.2 per cent, 7.9 per cent, and 7.9 per cent, respectively during the same period. Imports from Switzerland and Singapore also declined in 2012-13 and 2013-14 but picked up with a positive growth in 2014-15 (April-December).

Trade Deficit

4.18 In 2013-14, India's trade deficit (on customs basis) declined to US$ 135.8 billion from a high level of US$ 190.3 billion in 2012-13, mainly on account of a decline in the growth of imports (8.3 per cent), even though growth in exports was sluggish at 4.7 per cent. The decline in imports owed to lower growth in oil imports (0.4 per cent) and negative growth in gold and silver imports. However, in 2014-15 (April-January) trade deficit increased marginally by 1.6 per cent to US$ 118.4 billion as against US$ 116.5 billion in 2013-14 (April-January). Low export growth (2.4 per cent) and import growth (2.2 per cent), resulted in a modest increase in trade deficit by US$ 1.8 billion. Nevertheless in terms of levels, trade deficit being close to last year reflects on external-sector polices including trade policies.

Trade Policy

Trade policy measures

4.19 The elevated levels of trade deficit arising from the global and domestic factors since 2011-12 that continued through the first quarter of 2013-14 led to severe stress in the external sector outcome with larger macroeconomic implications. The government took various measures including those aimed at boosting the performance of the export sectors which supplemented the announcements made in the Budgets and in the Foreign Trade Policy (FTP) 2009 and its Annual Supplements. Various schemes were strengthened, viz. Focus Product Schemes (FPS), Focus Market Scheme (FMS), Market Linked Focus Product Scheme (MLFPS), and Vishesh Krishi and Gram Udyog Yojana (VKGUY). In addition, industry and trade bodies are given support for participation in buyer seller meets (BSM), trade fairs, and exhibitions in various countries under the Market Access Initiative (MAI) scheme and Market Development Assistance (MDA) scheme.

4.20 Some of the recent measures taken by the government are given in Box 4.3

Anti-dumping Measures

4.21 With a view to providing a level playing field to the country's domestic industry so that it is able to compete effectively in the domestic market with foreign exporters some of whom could be resorting to dumping, recourse to anti-dumping action is being taken by major markets.The Directorate General of Anti-dumping and Allied Duties (DGAD) conducts anti-dumping investigations on the basis of applications filed by the domestic industry with prima facie evidence of dumping of goods in the country, injury to domestic industry, and causal link between the dumping and injury to domestic industry. Such petitions submitted by the domestic industry are processed as per the procedure and within the time limits specified under the Customs Tariff Act 1975 and the rules made thereunder. The DGAD conducts investigations and recommends imposition of duty, wherever appropriate, to the Department of Revenue by issuing its preliminary/final findings. Acting upon such recommendations of the DGAD, the Department of Revenue may impose provisional or definitive duties.

4.22 Anti-dumping investigations are initiated by other countries as well and in 2013 about 287 were initiated in all (Table 4.3). In 2012, Brazil overtook India with more than double the investigations initiated by India. In 2013 also Brazil's investigations were high at 54, followed by the USA and India. In 2014, till June end both India and the USA have initiated equal number of investigations. Of the 690 cases initiated by India (as on 30 June 2014), duty has been imposed in 535; imports from China faced the maximum number of initiations and out of 166 cases, duty was imposed in 134.

Box 4.3 : Some of the Trade Policy Measures Taken

- To promote domestic manufacturing capabilities, scrips issued under different schemes, namely FPS, FMS, VKGUY, MLFPS, Served From India Scheme (SFIS), Agri Infrastructure Incentive Scheme (AIIS), for import of goods can be utilized for payment of excise duty for domestic procurement. This is an important measure for import substitution and will help save foreign exchange as well as create additional employment.
- Similarly, scrips issued under the FPS, FMS, Vishesh Krishi and Gram UdyogYojana (VKGUY) schemes can be utilized for payment of service tax.
- To support export of products from the North Eastern Region (NER), exporters are entitled to additional incentives of 1 per cent of FOB value of exports in addition to other benefits under the FTP if exports are made from land customs station located in the NER.
- To diversify India's exports, 7 new markets (Algeria, Aruba, Austria, Cambodia, Myanmar, Netherlands Antilles, and Ukraine) have been added to the FMS, 7 new markets (Belize, Chile, EI Salvador, Guatemala, Honduras, Morocco, and Uruguay) to the Special FMS, 46 new items to the MLFPS, and 12 new markets for the first time and 100 new items to the FPS list.
- To boost export of services, the government has organized two editions of a Services Conclave in identified service sectors which are crucial to India. In the Conclave, barriers, if any, in the specific service sectors are identified and issues relating to the reforms needed, India's potential for enhancing exports in those sectors, and new markets for exporting services are discussed. A Global Services Exhibition will be organized in April 2015 in New Delhi, which is a platform for enhancing strategic cooperation and developing synergies between competitive players of the services sector and their global counterparts.
- Indian trade portal (www.indiantradeportal.in) was launched on 8 December 2014. This portal provides vital information to Indian industry on forty-two export markets and also a mechanism to take advantage of the increased market access provided through various regional and bilateral free trade agreements (FTA) and comprehensive economic cooperation/partnership agreements (CECA/CEPA). The information is provided in a user-friendly manner in four easy steps for exporters and importers to access the portal, which will contribute to ease of doing business for trade and industry. This portal makes available important data like (i) most favoured nation (MFN) tariff, (ii) preferential tariff, (iii) Rules of Origin (RoO), and (iv) non-tariff measures (SPS/TBT) for use of exporters and importers at one place, in respect of countries with which we have FTAs. Consequently it facilitates India's exports and will also help exporters to utilize the FTAs and access the preferential tariffs available to them in various countries to capture export opportunities.
- In order to mainstream the states so that they focus expressly on boosting exports, the key elements/ steps required to be initiated by them have been distilled and listed. A fifteen-point matrix has been developed and sent to all states / union territories (UTs) to incorporate the following: (a) development of export strategy by the state government, (b) appointment of an Export Commissioner for coordination of all export-related activities by the state government, and (c) instituting export awards to motivate the leading exporters from the state and encourage them to bring in greater export revenues.

WTO Negotiations And India

4.23 While the above measures were broadly domestic policy adjustment to the emerging external-sector environment, India continued to be engaged in WTO negotiations that have an impact on the external sector as well as overall economy. The Ninth Ministerial Conference of the WTO took place in Bali during 3-7 December 2013. Ministers issued a Declaration and ten Decisions were adopted on various issues including trade facilitation and issues relating to agricultural trade rules, development, and least developed countries (LDCs). Amongst these Decisions, two are of particular significance for India, viz. the Ministerial Decision for an Agreement on Trade Facilitation and the Ministerial Decision on Public Stockholding for Food Security Purposes.

4.24 The Trade Facilitation Agreement (TFA), which was also endorsed by India at the Ninth Ministerial Conference, is basically aimed at greater transparency and simplification of customs procedures, use of electronic payments and risk

Table 4.3 : Investigations initiated by Top Ten Users of Anti-Dumping Measures

Country	2001	2011	2012	2013	Jan.-June 2013	Jan.-June 2014
India	79	19	21	29	17	13
United States	77	15	11	39	7	13
European Union	28	17	13	4	3	3
Brazil	17	16	47	54	17	29
Argentina	28	7	12	19	12	4
Australia	24	18	12	20	5	11
South Africa	6	4	1	10	5	1
China	14	5	9	11	8	4
Canada	25	2	11	17	10	3
Turkey	15	2	14	6	4	2
All countries	372	165	208	287	122	106

Source **: WTO.**

management techniques, and faster clearances at ports. Trade facilitation was put on the agenda mainly by the developed countries while the issue of rules relating to public stockholding for food security purposes was put on the agenda by G-33 group of 46 developing countries including India.

4.25 The agricultural trade rules in the WTO's Agreement on Agriculture do not bar public procurement and stockholding for food security. However, if food for such programmes is acquired at administered prices and not market prices, then this is deemed a support to farmers. As per WTO rules negotiated in the Uruguay Round, all such support has to be kept within a limit of 10 per cent of the value of production of the product in question. This cap can constrain procurement and food aid programmes in developing countries. The WTO rules, made keeping the interests of the developed countries uppermost, have overlooked the interests of the developing countries. The draft agriculture negotiating text of December 2008 seeks to change this. It contains a proposal to revise the rules, however, as the negotiations have not concluded, this remains an unfinished agenda. India, as part of a coalition of developing countries known as the G-33, proposed an amendment to the WTO's Agreement on Agriculture to change these rules.

4.26 The G-33 proposals, as well as various alternatives suggested by the Group, met with resistance. Negotiations continued during the Bali Ministerial Conference. The finally agreed text of the Ministerial Decision provides for Members to put in place an interim mechanism and to negotiate on an agreement for a permanent solution for adoption by the Eleventh Ministerial Conference of the WTO. In the interim, until a permanent solution is found and subject to certain conditions, Members were to be protected against challenge in the WTO under the Agreement on Agriculture in respect of public stockholding programmes for food security purposes. Post Bali, the focus of the developed countries was only on the implementation of the TFA. Concerned at this uneven progress India took the stand in July 2014 that without a firm commitment to implement the other Bali Decisions, it would be difficult to join the consensus on the Protocol of Amendment to incorporate the TFA into the umbrella WTO Agreement.

4.27 Despite the general campaign of misinformation that followed about missing the deadline for the TFA and the effect of the impasse on the future of the WTO, India stood firm. Concerted efforts were made to explain the concerns underlying the stand taken and India worked with other WTO members to find a way forward. On 27 November 2014, the General Council of the WTO adopted a Decision on Public Stockholding for Food Security Purposes, a Decision on the TFA and a Decision on Post Bali Work. The General Council Decision on Public Stockholding for Food Security Purposes makes it clear that a mechanism under which WTO members will not challenge the public stockholding programmes of developing country members for food security purposes, in relation to certain obligations under the WTO Agreement on Agriculture, will remain in place in perpetuity until a permanent solution regarding this issue has been agreed upon and adopted. The decision also includes a commitment to find a permanent solution on public stockholding for food security purposes by 31 December 2015 on a best endeavour basis and has a firm commitment to engage in negotiations for a permanent solution through an intensified programme of work. The decision addresses India's concerns on the issue of public stockholding for food security purposes. The Tenth Ministerial Conference of the WTO (MC10) will be held in Nairobi, Kenya, from 15 to 18 December 2015. WTO members are engaged in discussion to finalise the work programme to conclude the remaining issues of the Doha Development Agenda.

Balance of Payments Developments

Overview of Balance of Payments

4.28 Post the 2008 global financial crisis, EMDEs had to face periodic shocks or stresses emanating from policies in advanced economies as well as through financial channels notwithstanding the efforts of the G-20 at coordination of policy responses to the crisis. The Indian economy had to weather the shocks which got amplified on account of confluence of weak external demand and relatively strong domestic demand with large dependence on crude oil imports whose price levels remained elevated until the second half of the current fiscal. These shocks led to widening of the CAD in 2011-12 which continued through the first quarter of 2013-14. With external financing sources remaining volatile, the less than adequate quantity and deteriorating quality of financing resulted in a sharp depreciation of the rupee. The policy responses that were put in place in 2013-14 helped overcome the stress through reduction in the levels of CAD and this, along with ample financing, led to reserve accretion that helped build resilience—a process that continues through the current fiscal.

4.29 In the first half of 2014-15, India's external-sector position was benign and comfortable (Table 4.4). Two important developments were that: (i) lower trade deficit along with moderate growth in invisibles resulted in lower CAD and (ii) there was a surge in capital inflows, enabled by higher portfolio investment, foreign direct investment (FDI), and external commercial borrowings (ECB). Higher capital inflows were in excess of the financing requirement or CAD and resulted in accretion in foreign exchange reserves. Data on merchandise trade available beyond the first half discussed in an earlier section indicates that trade deficit continues to remain broadly at comparably moderate levels and the monthly data on financial inflows and foreign exchange reserves available unmistakably points to reserve accretion and the copious nature of external financing. A part of the moderate trade outcome owe to the recent fall in international prices of crude petroleum. Given the above developments and considering the current conjuncture opportune, the Government decontrolled the prices of high speed diesel on 19 October 2014 and lifted the restrictions placed on gold imports on 29 November 2014.

Current account developments in 2014-15 (April-September)

4.30 Data on balance of payments (BoP), which is available with a lag of approximately one quarter, indicates that in the first half of 2014-15, there was a year-on-year improvement in trade account (on BoP basis) as a result of low growth in imports overcoming the moderation in merchandise export growth. Merchandise exports grew by 7.6 per cent in 2014-15 (April-September) to US$ 167.0 billion. However, in the second quarter there was

Table 4.4 : Balance of Payments : Summary (US$ million)

			2009-10	2010-11	2011-12	2012-13 (PR)	2013-14 (P)	2013-14 H1 (Apr.-Sept. 2013) (P)	2014-15 H1 (Apr.-Sept. 2014) (P)
I	Current account								
	i.	Exports	182442	256159	309774	306581	318607	155152	166974
	ii.	Imports	300644	383481	499533	502237	466216	238941	240188
	iii.	Trade balance	-118202	-127322	-189759	-195656	-147609	-83789	-73214
	iv.	Invisibles (Net)	80022	79269	111604	107493	115212	56830	55272
		A. Services	36016	44081	64098	64915	72965	35239	36069
		B. Transfer	52045	53140	63494	64034	65276	32744	32757
		C. Income	-8038	-17952	-15988	-21455	-23028	-11153	-13554
	Current account balance		-38181	-48053	-78155	-88163	-32397	-26959	-17942
II	Capital account								
	i.	External assistance	2890	4941	2296	982	1032	130	606
	ii.	ECBs	2000	12160	10344	8485	11777	2455	3429
	iii.	Short-term debt	7558	12034	6668	21657	-5044	589	69
	iv.	Banking capital	2083	4962	16226	16570	25449	11487	-542
		of which							
		Non-resident deposits	2922	3238	11918	14842	38892	13700	6473
	v.	Foreign investment	50362	42127	39231	46710	26386	7762	38385
		A. FDI	17966	11834	22061	19819	21564	14589	16183
		B. Portfolio investment	32396	30293	17170	26891	4822	-6827	22202
	vi.	Other flows	-13259	-12484	-7008	-5105	-10813	-6619	-3407
		Capital account balance	51634	63740	67755	89300	48787	15806	38539
III		Errors & omissions	-12	-2636	-2432	2689	-882	453	-2522
		Capital account balance (including errors & omissions)	51622	61104	65323	91989	47905	16259	36017
IV		Overall balance	13441	13050	-12831	3826	15508	-10701	18076
V		Reserve change	-13441	-13050	12831	-3826	-15508	10701	-18076
		(-)indicates increase, + indicates decrease							

Source : **RBI**
Notes : **PR: Partially Revised; P: Provisional**

some deceleration in export growth owing to moderation in oil prices from an average of US$ 105.1 per barrel in 2013-14 (second quarter) to US$ 98.9 per barrel in 2014-15 (second quarter).The outcome in terms of imports was again somewhat mixed in the two quarters of the first half of the current fiscal relative to last year. This was largely due to the base effect of high gold imports in the first quarter of 2013-14 and a sharp correction in such imports in the second quarter of 2013-14 as against a steady pick-up in the first quarter of 2014-15 followed by a surge in imports in the second quarter reflecting seasonal demand spike and the easing of restrictions on gold imports. The mixed outcome also owed to the pick-up in non-gold non-POL imports in 2014-15 relative to the compression in 2013-14. Invisible account covers (a) services, (b) transfers, and

(c) income. The surplus therein has been a major factor that moderated the large trade deficits from spilling over to the CAD. Services (net) continued to be dominated by software exports and witnessed a growth of 2.4 per cent to US$ 36.1 billion in 2014-15 (April-September) as against US$ 35.2 billion in the corresponding period of the previous year (For services trade please refer to Chapter 7). Transfers (net)—mostly remittances—were around US$ 32.7 billion in the first half of both 2013-14 and 2014-15. While software services and remittances provide surpluses, net income is an outgo that reflects interest/dividends payable and has a large bearing on the level of net international investment position. Income (net) is dominated by investment income and was US$ 13.8 billion in 2014-15 (April-September) as against US$ 13.4 billion in 2013-14 (April-September). As a result of the above developments, CAD was placed at US $ 17.9 billion in 2014-15 (April-September) as against US$ 26.9 billion in the same period of 2013-14. As a proportion of GDP, the CAD declined from 3.1 per cent in the first half of 2013-14 to 1.9 per cent in the first half of 2014-15.

Capital / finance account developments in 2014-15 (April-September)

4.31 There was marked improvement in the net capital/financial flows both in terms of quantum and quality in the first half of 2014-15. Net financial flows were at US$ 36.0 billion in the first half of 2014-15 compared to US$ 16.3 billion in the first half of 2013-14. Net foreign investment, an important financial flow, surged from US$ 7.8 billion in 2013-14 (April-September) to US$ 38.4 billion in 2014-15 (April-September). Net ECB was the other important item of the capital / finance account of the BoP which also improved from US$ 2.5 billion in 2013-14 (April-September) to US$ 3.4 billion in 2014-15 (April-September). Net banking capital witnessed a decline from US$ 11.5 billion to (-) US$ 0.5 billion during the same period.

4.32 The financial account was dominated by direct and portfolio investments which are non-debt creating in nature. The net flows in the form of FDI and portfolio investment were more than sufficient to finance the CAD during this period. While higher net FDI flows reflect a positive outlook about the growth potential of the domestic economy, robust portfolio inflows in 2014-15 were underpinned by reduced external-sector vulnerabilities of the domestic economy and benign global financial conditions aided by the prospect of additional European Central Bank easing. Given the net capital flows and the CAD levels, accretion in foreign exchange reserves was US$ 18.1 billion (BoP basis) in the first half of 2014-15 as against drawdown of US$ 10.7 billion in 2013-14 (April-September). In 2014-15 (up to December 2014), there has been a net inflow of US$ 28.5 billion in foreign institutional investors (FII) investment as compared to an outflow of US$ 4.5 billion in the corresponding period of 2013-14. The latest data on FDI inflows (net) available is for the period April-December 2014 and places these inflows at US $ 24.2 billion as against a level of US $ 20.7 billion in the same period in 2013-14. In so far as non-resident Indian (NRI) deposits are concerned, the lower levels of US $ 10.0 billion in April-December 2014 relative to April-December 2013 (US$ 35.1billion) become broadly similar when adjusted for the one-off swap scheme. The above developments in the current and capital accounts indicate further accretion to reserves on BoP basis beyond the first half of the current fiscal.

Foreign Exchange Reserves

4.33 Even though 2013-14 witnessed a sharp depreciation of the rupee in the initial part of the year with significant reserve drawdown, steps taken by the government and the Reserve Bank of India (RBI) resulted in a rise in the stock of foreign exchange reserves which was placed at US$ 304.2 billion at end-March 2014 as against US$ 292.0 billion at end-March 2013. In the first half of 2014-15, India's foreign exchange reserves increased by US$ 18.1 billion on BoP basis (i.e. excluding valuation effect). However, in nominal terms (i.e. including valuation effect) the increase

Table 4.5 : Summary of Changes in Foreign Exchange Reserves (US$ billion)

Sl. No.	Year	Foreign exchange reserves at the end of financial year (end-March)	Total increase (+) / decrease (-) in reserves	Increase /decrease in reserves on BoP basis	Increase/decrease in reserves due to valuation effect
1	2007-08	309.7	110.5	92.2	18.3
2	2008-09	252.0	-57.7	-20.1	-37.6
3	2009-10	279.1	27.1	13.4	13.7
4	2010-11	304.8	25.7	13.1	12.6
5	2011-12	294.4	-10.4	-12.8	2.4
6	2012-13	292.0	-2.4	3.8	-6.2
7	2013-14	304.2	12.2	15.5	-3.3
8	End-Sep. 2014	313.8	9.6	18.1	-8.5

***Source*: RBI.**

Table 4.6 : Foreign Exchange Reserves of Some Major Countries

Sl. No.	Country	Foreign exchange reserves at end-Dec. 2014 (US$ billion)
1	China	3840.0#
2	Japan	1312.1
3	Switzerland*	526.6
4	Russian Federation	388.5
5	Brazil	363.6
6	Korea, Republic of*	363.2
7	China, P.R. Hong Kong*	344.6
8	India	320.6
9	Germany	192.7
10	Thailand*	163.7
11	France*	161.6
12	Italy*	143.3

***Source*: IMF except India and China.**
***Note*: * Latest data available for the month of November 2014 only. # www.pbc.gov.cn**

was only by US$ 9.6 billion with end-September, 2014 levels at US$ 313.8 billion (Table 4.5).

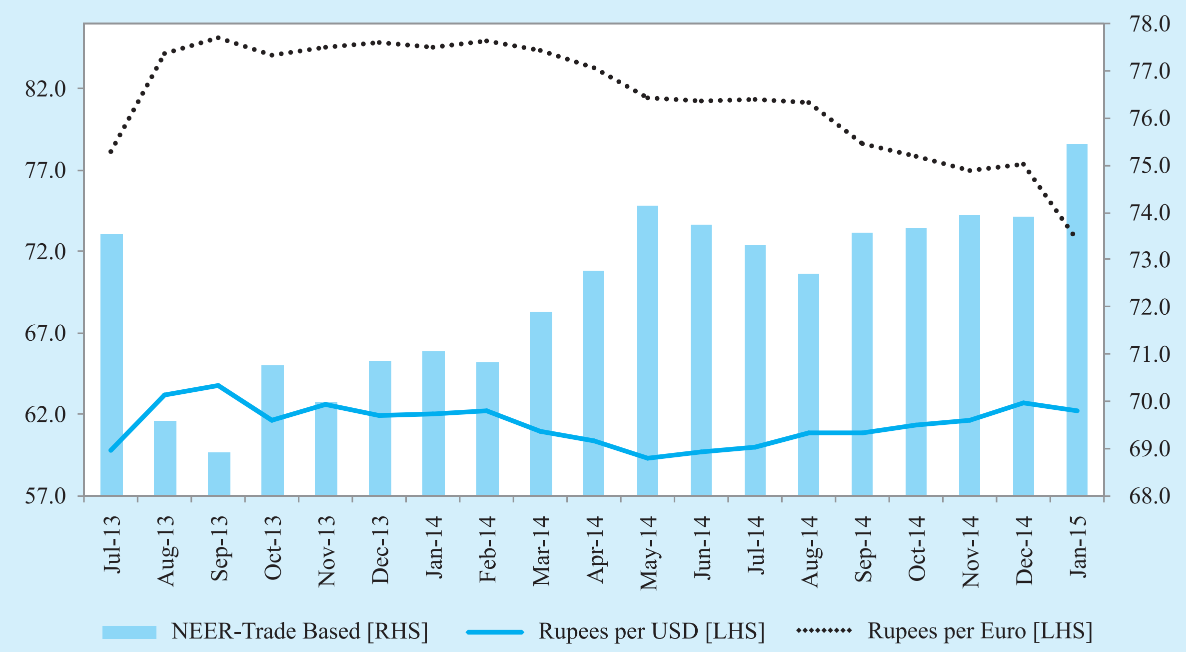
4.34 Among the major economies with current account deficit, India is the second largest foreign exchange reserve holder after Brazil (Table 4.6). India's foreign exchange reserves at US$ 328.7 billion at end-January mainly comprised foreign currency assets amounting to US$ 303.3 billion, accounting for 92.3 per cent of the total. With increase in reserves in the first half of 2014-15, all reserve-based traditional external-sector vulnerability indicators have improved. For instance, the ratio of short-term external debt to reserves has declined from 29.3 per cent at end-March 2014 to 27.5 per cent as at-end September 2014, the reserves cover for imports has also increased from 7.8 months at end-March 2014 to 8.1 months as at-end September 2014.

Exchange Rate

4.35 In 2013-14, global uncertainty following the May 2013 announcement by the US Fed about its intent to withdraw the quantitative easing led to a bout of depreciation in the currencies of emerging markets with varying intensities depending upon the external financing requirement as indicated by the levels of CAD. As India had elevated levels of CAD in 2011-13, which continued through the first quarter of 2013-14, the monthly exchange rate of the rupee against the US dollar depreciated by 14.7 per cent from ₹ 54.38 per US dollar in April 2013 to ₹ 63.75 per US dollar in September 2013. After stabilizing subsequently to reach ₹ 60.10 at end-March 2014, it was ₹ 60.36 per US dollar in April 2014.

4.36 The rupee-US dollar exchange rate has broadly remained stable during the year due to the huge inflow of FDI and FII in the equity and bond markets. Due to the weak economic outlook

Figure 4.1: Movements of Rupee against USD, Euro and NEER



***Source*: RBI.**

in Europe and Japan, the rupee has appreciated against the euro and yen since September 2014 in tandem with cross-currency movements of the euro and yen vis-à-vis the US dollar. On point-to-point basis the rupee has depreciated by 3.3 per cent from ₹ 60.10 per US dollar on 28 March 2014 to ₹ 62.14 per US dollar on 13 February 2015. The rupee reached a low of ₹ 63.75 per US dollar on 30 December 2014 and a peak of ₹ 58.43 per US dollar on 19 May 2014. On month-to-month basis, the rupee depreciated by 2.0 per cent from ₹ 61.01 per US dollar in March 2014 to ₹ 62.23 per US dollar in January 2015 (Figure 4.1). However, the rupee has appreciated by 7.3 per cent, 16.1 per cent, and 13.6 per cent against the pound sterling, euro, and Japanese yen respectively between March 2014 and January 2015.The month-wise exchange rate of the rupee against major international currencies and the RBI's sale/ purchase of foreign currency in the foreign exchange market since April 2014 are given in Table 4.7.

4.37 On the whole, the rupee has exhibited resilience to global events in view of the aforesaid strong external-sector outcome. While in May 2013, it depreciated sharply on the concerns of impact of US FED taper talk, it stabilized when the taper actually happened. As on 8 January 2015, the Indian rupee against the US dollar has depreciated modestly by 4.6 per cent over end-March 2014 as compared with the Russian rouble (40.4 per cent), Brazilian real (14.2 per cent), Mexican peso (10.7 per cent), Indonesian rupiah (10.4 per cent), and South African rand (8.5 per cent) **(**Appendix Table 6.4**)**.

4.38 Effective exchange rates are summary indicators of movement in the exchange rate of home currency against a basket of currencies of trade partner countries and are considered to be an indicator of international competitiveness. The real effective exchange rate (REER) indices are used as indicator of external competitiveness of the country over a period of time. The nominal effective exchange rate (NEER) is the weighted geometric average of the bilateral nominal exchange rates of the home currency in terms of foreign currencies. REER is defined as a weighted geometric average of nominal exchange rates of the home currency in terms of the foreign currencies adjusted for relative price differential. Although the rupee has depreciated against the US dollar, in

Table 4.7 : Exchange Rates of Rupee per Foreign Currency and RBI's Sale/Purchase of US Dollar during 2014-15

Month	Average exchange rates (₹ per foreign currency)[a]				RBI net sale (-)/ purchase (+) (US$ million)
	US dollar	Pound sterling	Euro	Japanese yen[b]	
1	2	3	4	5	6
2013-14 (annual average)	60.50 (-10.1)	96.31 (-10.7)	81.17 (-13.7)	60.40 (9.0)	8992
2014-15 (monthly average)					
April 2014	60.36 (1.1)	101.08 (0.3)	83.35 (1.2)	58.86 (1.3)	5870
May 2014	59.31 (1.8)	99.94 (1.1)	81.49 (2.3)	58.28 (1.0)	1786
June 2014	59.73 (-0.7)	100.98 (-1.0)	81.24 (0.3)	58.53 (-0.4)	2642
July 2014	60.06 (-0.5)	102.62 (-1.6)	81.39 (-0.2)	59.07 (-0.9)	5453
August 2014	60.90 (-1.4)	101.81 (0.8)	81.14 (0.3)	59.17 (-0.2)	-511
September 2014	60.86 (0.05)	99.31 (2.5)	78.60 (3.2)	56.77 (4.2)	1437
October 2014	61.34 (-0.8)	98.72 (0.6)	77.91 (0.9)	56.87 (-0.2)	2703
November 2014	61.70 (-0.6)	97.28 (1.5)	76.99 (1.2)	53.05 (7.2)	3081
December 2014	62.75 (-1.7)	98.11 (-0.8)	77.36 (-0.5)	52.60 (0.9)	6739
January 2015	62.23 (0.8)	94.54 (3.8)	72.77 (6.3)	52.54 (0.1)	—

Source **: RBI.**

Notes **: - : Not Available**

[a] RBI reference rates.

[b] Per 100 Yen.

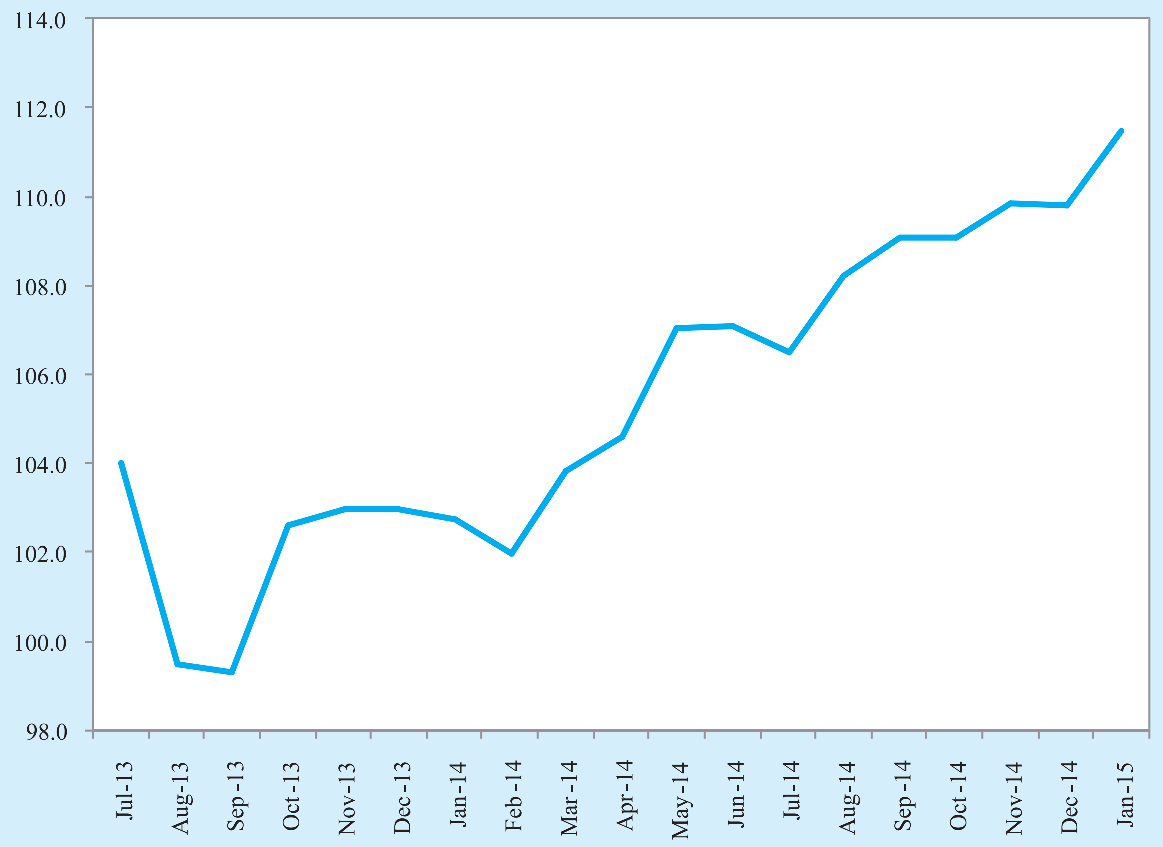
Figures in parentheses indicate appreciation (+) and depreciation (-) over the previous month/year in per cent. Figures may not tally due to rounding off.

terms of NEER (36 currencies) it appreciated by 2.8 per cent in December 2014 over March 2014. Similarly, REER also appreciated by 5.8 per cent during the same period (Figure 4.2).

External Debt

4.39 Post 1991 BoP crisis, India's prudent external debt policies and management with a focus on sustainability, solvency, and liquidity have helped contain the increase in size of external debt to a moderate level and it is compositionally better with a longer term maturity profile. India's total external debt stock at end-March 2014 stood at US$ 442.3 billion, recording an increase of US$ 32.8 billion (8.0 per cent) over the end-March 2013 level. The rise in total external debt during the period was due to long-term debt, particularly NRI deposits. A sharp increase in NRI deposits

Figure 4.2: REER-Trade Based (36 currencies) Base 2004-05 =100



Note: An Increase in REER indicates loss of competiveness and vice versa.

Source: **RBI.**

owed to fresh foreign currency non-resident account (banks) [FCNR(B)] deposits mobilized under the swap scheme during September to November 2013 to tide over the external financing needs. Long-term external debt at US$ 353.0 billion at end-March 2014 recorded an increase of 12.9 per cent over the end-March 2013 level, while short-term debt showed a decline of 7.7 per cent. Appendices 8.4(A) and 8.4(B) present the disaggregated data on India's external debt outstanding in Indian rupee and US dollar terms respectively.

4.40 As per the latest data, India's external debt stock increased by US$ 13.7 billion (3.1 per cent) to US$ 455.9 billion at end-September 2014 over the end-March 2014 level. The rise in external debt was on account of higher long-term debt, particularly commercial borrowings and NRI deposits. The maturity profile of India's external debt indicates the dominance of long-term borrowings. At end-September 2014, long-term debt accounted for 81.1 per cent of the total external debt vis-à-vis 79.8 per cent at end-March 2014. The share of short-term debt in total external debt declined from 20.2 per cent at end-March 2014 to 18.9 per cent at end-September 2014. Details of the composition of India's external debt are presented in Table 4.8.

4.41 The currency composition of India's total external debt shows that the share of US dollar-denominated debt in external debt stock continued to be the highest at 60.1 per cent at end-September 2014, followed by Indian rupee (24.2 per cent), special drawing rights (SDR) (6.5 per cent), Japanese yen (4.5 per cent), and euro (3.0 per cent) denominated. The currency composition of government (sovereign) debt indicates predominance of SDR-denominated debt

Table 4.8: Composition of External Debt (Per cent to total external debt)

Sl. No.	Component	March 2012	March 2013 PR	March 2014 PR	September 2014 QE
1	2	3	4	5	6
1	Multilateral	14.0	12.6	12.1	11.7
2	Bilateral	7.4	6.1	5.6	5.1
3	IMF	1.7	1.5	1.4	1.3
4	Export credit	5.3	4.3	3.5	3.4
5	Commercial borrowings	33.3	34.2	33.5	35.4
6	NRI deposits	16.2	17.3	23.5	23.8
7	Rupee debt	0.4	0.3	0.3	0.3
8	**Long-term debt (1 to 7)**	78.3	76.4	79.8	81.1
9	**Short-term debt**	21.7	23.6	20.2	18.9
10	**Total external debt (8+9)**	100.0	100.0	100.0	100.0

Source **: Ministry of Finance and RBI.**

Notes **: PR : Partially Revised; QE : Quick Estimates.**

(33.5 per cent), which is attributable to borrowing from the International Development Association (IDA), i.e. the soft loan window of the World Bank under the multilateral agencies, and SDR allocations by the International Monetary Fund (IMF). At end-September 2014, government (sovereign) external debt was US$ 88.4 billion. It accounted for 19.4 per cent of India's total external debt. Non-government external debt amounted to US$ 367.5 billion which was 80.6 per cent of total external debt at end-September 2014.

4.42 Over the years, India's external debt stock has witnessed structural change in terms of composition. The proportion of concessional in total debt declined from 42.9 per cent (average) during the period 1991-2000 to 28.1 per cent in 2001-10 and further to 9.8 per cent at end-September 2014. The dominance of non-government debt in total external debt is evident from the fact that such debt accounted for 65.6 per cent of total debt during the 2000s decade, vis-à-vis 45.3 per cent in the 1990s. Non-government debt accounted for over 70 per cent of total debt in the last five years and stood at 80.6 per cent at end-September 2014.The key external debt indicators are presented in Table 4.9. India's foreign exchange reserves provided a cover of 68.9 per cent to the total external debt stock at end-September 2014 vis-à-vis 68.8 per cent at end-March 2014. The ratio of short-term external debt to foreign exchange reserves was 27.5 per cent at end-September 2014 as against 29.3 per cent at end-March 2014. The ratio of concessional debt to total external debt declined steadily and stood at 9.8 per cent at end-September 2014 vis-à-vis 10.5 per cent at end-March 2014.

4.43 India's external debt has remained within manageable limits as indicated by the external debt to GDP ratio of 23.5 per cent and debt service ratio of 5.9 per cent in 2013-14. The prudent external debt management policy of the Government of India has helped in containing rise in external debt and maintaining a comfortable external debt position. The policy continues to focus on monitoring long- and short-term debt, raising sovereign loans on concessional terms with longer maturities, regulating ECBs through end-use, all-in-cost, and maturity restrictions; and rationalizing interest rates on NRI deposits.

International Comparison

4.44 Cross-country comparison of external debt based on the World Bank's International Debt Statistics 2015, which contains the external debt data for the year 2013, indicates that India continues to be among the less vulnerable

Table 4.9 : India's Key External Debt Indicators

(Per cent)

Year	External debt (US$ billion)	Total external debt to GDP	Debt service ratio	Foreign exchange reserves to total external debt	Concessional debt to total external debt	Short-term external debt* to foreign exchange reserves	Short-term external term Debt* to total debt
1	2	3	4	5	6	7	8
2010-11	317.9	18.2	4.4	95.9	14.9	21.3	20.4
2011-12	360.8	20.9	6.0	81.6	13.3	26.6	21.7
2012-13 PR	409.5	22.3	5.9	71.3	11.1	33.1	23.6
2013-14 PR	442.3	23.5	5.9	68.8	10.5	29.3	20.2
End-Sept.2014 QE	455.9	-	-	68.9	9.8	27.5	18.9

Source: Ministry of Finance and RBI.

Notes: PR: Partially Revised; QE: Quick Estimates - : Not worked out for part of the year

*: Short-term debt is based on original maturity.

Debt-service ratio is the proportion of gross debt service payments to external current receipts (net of official transfers).

countries. India's key debt indicators compare well with other indebted developing countries. The ratio of India's external debt stock to gross national income at 23.0 per cent was the sixth lowest. In terms of the cover provided by foreign exchange reserves to external debt, India's position was sixth highest at 64.7 per cent **(For further details please see http://www.finmin.nic.in/reports/ind_Ext_debt.asp)**

Prices, Agriculture and Food Management

05

CHAPTER

After remaining high for a prolonged period, inflation is finally trending down. Average Wholesale Price Index inflation declined to 3.4 per cent in 2014-15 (April-December) as compared to an average of 6 per cent during 2013-14. The WPI inflation even breached the psychological level of 0 per cent in November 2014 and January 2015. Consumer price inflation released by the Central Statistics Office (base 2012=100) reached 5.1 per cent in January 2015. This is lower than the targets of 8 per cent set for January 2015 and 6 per cent for January 2016 given by the Reserve Bank of India in its report on the new monetary policy framework. Prices of the major commodity groups contributing to high inflation, namely 'eggs, meat, and fish', fruits and vegetables, and fuel, have all softened. The major developments driving the stubborn inflation down were falling global commodity prices, especially of crude oil, decline in the growth rate of rural wages, moderation in the increase in minimum support prices as also slack in economic activity. In so far as high food inflation contributed to elevated headline inflation, for sustainability of low inflation the policy focus should be on enhancing the resilience of the agriculture sector and eliminating leakages, inclusion and exclusion errors, and various distortions created by the present food policy. Growth in agriculture has now to increasingly come from non-price factors. Markets for agricultural commodities have to be made more competitive in the interests of both producers and consumers. The High Level Committee headed by Shri Shanta Kumar has given useful recommendations on proposed changes in the food policy. The upside risk to inflation outlook also emanates from uncertainties surrounding the monsoon, international crude oil prices, and the stability in the value of the rupee, particularly in the event of monetary tightening by the US Fed.

Trends in WPI and CPI Inflation

Wholesale Price Index

5.2 Headline inflation measured in terms of the Wholesale Price Index (WPI) (base year 2004-05=100) which remained persistently high at 6-9 per cent during 2011-13 moderated to a low of 3.4 per cent in 2014-15(April-December) on the back of lower food and fuel prices. During the first quarter of 2014-15, WPI headline inflation was at 5.8 per cent as mainly food and fuel prices were high. In second and third quarters of 2014-15, WPI inflation declined to 3.9 per cent and 0.5 per cent respectively (Table 5.1). WPI food inflation (weight: 24.3 per cent), which remained high at 9.4 per cent during 2013-14 moderated to 4.8 per cent during April-December 2014 following sharp correction in vegetables prices since

Table 5.1 : Quarter-wise Inflation in WPI broad groups (in per cent)

	Weights	2013-14				2014-15		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3(P)
All Commodities	**100.0**	**4.8**	**6.6**	**7.1**	**5.4**	**5.8**	**3.9**	**0.5**
I. Primary Articles	20.1	6.5	12.4	13.6	6.8	7.5	4.1	0.4
II. Fuel and Power	14.9	7.7	11.9	10.8	10.1	9.6	4.4	-4.0
III. Manufactured products	65.0	3.3	2.4	2.9	3.3	3.8	3.6	2.0
All Food	24.3	7.7	11.8	11.9	6.2	6.9	5.0	2.5
Core Inflation	55.0	2.6	2.4	3.1	3.7	4.0	3.6	2.0

Source: **Office of Eco. Adviser, Deptt. of Industrial Policy and Promotion (DIPP) P: Provisional**

December 2013 (except March 2014) and moderation in prices of cereals and eggs, meat, and fish. As fuel has larger weight in the WPI, the decline in fuel prices led to a sharper fall in the WPI as compared to the Consumer Price Index (CPI) (base year 2010=100). Inflation in manufactured products has remained within a narrow range since 2013-14. The WPI headline inflation (provisional) in January 2015 stood at -0.4 per cent. The build up inflation rate in the financial year till January 2015 was -1.1 percent compared to a build up rate of 5.2 percent in the corresponding period of the previous year.

Consumer Price Index

5.3 The Central Statistics Office (CSO) has started releasing state-wise and all-India rural, urban, and combined CPIs since January 2011. Retail inflation as measured by the CPI (combined) (base year 2010=100) remained stubbornly sticky around 9-10 per cent for the last two years. Like WPI inflation, CPI inflation has also moderated significantly since the second quarter of 2014-15. It declined to an all-time low of 5 per cent in Q3 of 2014-15 (Table 5.2). The Reserve Bank of India (RBI) had announced its intent to anchor its monetary policy stance to headline CPI (combined) inflation from April 2014.Taking note of the sustained moderation in retail prices, it has signalled easing of the monetary stance by reducing policy repo rates by 25 basis points from 8 per cent to 7.75 per cent on 15 January 2015. The CSO has revised the base year from 2010 to 2012 (Box 5.1) and released the revised series on 12th February, 2015 along with inflation data for January, 2015. CPI inflation in terms of the revised series stood at 5.1 percent in January, 2015.

5.4 Persistence of food inflation in recent years has been the major contributing factor in high headline inflation. There have been wide variations in inflation in commodities within food sub-groups across states, across commodities, and across seasons indicating supply constraints. Demand pressures exerted by high rates of growth of rural

Table 5.2 : Quarter-wise Inflation in CPI (base 2010=100) broad groups (in per cent)

	Weights	2013-14				2014-15		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3(P)
General	**100.0**	**9.5**	**9.7**	**10.4**	**8.4**	**8.1**	**7.4**	**5.0**
I. Food, beverages & tobacco	49.7	11.0	11.1	12.9	9.2	8.9	8.6	4.8
II. Fuel and Light	9.5	8.4	7.9	7.0	6.3	5.2	4.0	3.4
III. Others	40.8	7.9	8.2	8.0	7.9	7.6	6.7	5.5
Food (CFPI)	42.7	11.1	11.4	13.6	9.3	9.1	8.8	4.5
Core inflation (Non-food non-fuel)	42.9	8.0	8.2	8.1	8.0	7.7	6.8	5.7

Source **: CSO. P : Provisional.**

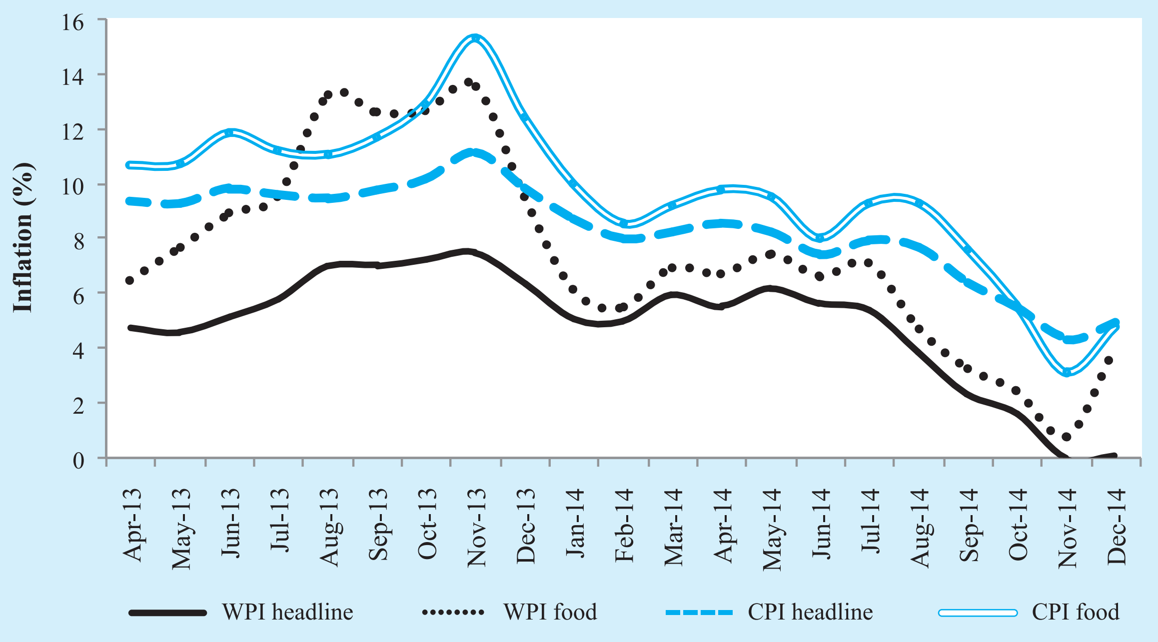
Box 5.1 : Changes in CPI New Series

The CSO, Ministry of Statistics and Programme Implementation (MOSPI) has been, since January 2011, releasing separate rural, urban, and combined CPIs on monthly basis with base year (2010=100) for all-India and states/UTs. In addition to this, separate rural, urban, and combined Consumer Food Price Indices (CFPI) for all India were released from May 2014. The weighting diagram for the new CPI series was derived on the basis of average monthly consumer expenditure of an urban/rural household obtained from the Consumer Expenditure Survey data (2004-05) of 61st Round of the National Sample Survey (NSS). The CSO has revised the base year of the Consumer Price Index from 2010=100 to 2012=100 and the revised index numbers were released on 12 February 2015. The basket of items and weighting diagrams for the revised series have been prepared by using the Modified Mixed Reference period (MMRP) data of the Consumption Expenditure Survey, 2011-12 of the 68th Round of NSS.

wages were mostly reflected in high prices of protein items like, milk, eggs, meat, and fish and also fruits and vegetables.

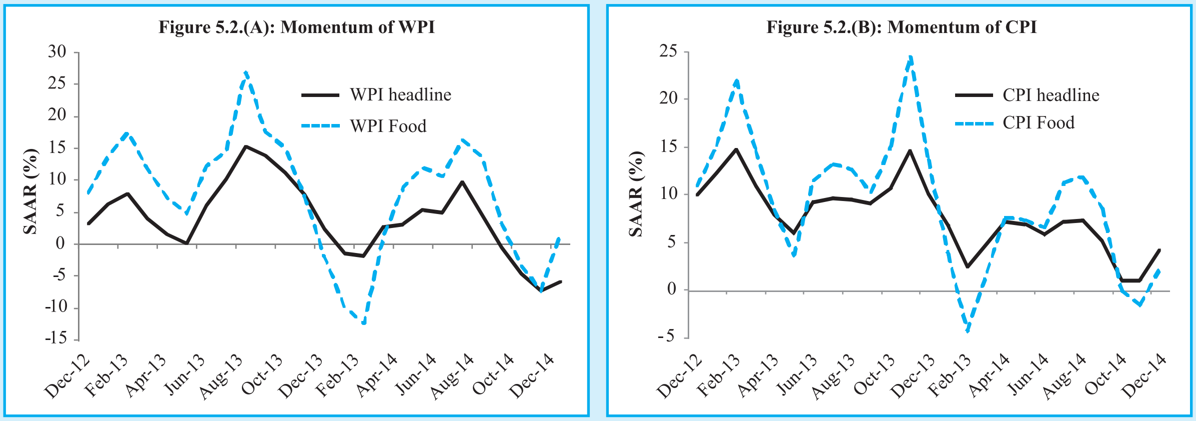
5.5 During 2014-15, particularly in the third quarter, CPI food inflation declined considerably as compared to the previous year, partly on account of base effect, but also due to the seasonal softening of fruit and vegetable prices. Late arrival of the monsoon exerted some pressure on vegetable prices during June-August 2014, but the prices came down subsequently which helped significantly in the moderation of overall CPI inflation. CPI inflation in the fuel and light group registered consistent decline during 2014-15, touching 3.4 per cent in the third quarter following the sharp decline in international crude oil prices. Core inflation (non-food non-fuel) declined to 5.7 per cent in the third quarter of 2014-15 as against 8.1 per cent in the corresponding quarter of the previous year largely on account of the slack in economic activity. Housing and transport contributed to the significant decline in core inflation. Inflation in housing declined to 8 per cent in the third quarter of 2014-15, after remaining in double digits during 2012 and 2013. Inflation in the transport and communication sub-group under the miscellaneous category registered a significant decline of 1.8 per cent during the third quarter of 2014-15, in line with the continued easing of global crude oil prices. In the sub-category others, which largely includes services, inflation dropped to 8.5 per cent during the same period after experiencing double-digit inflation through 2012 and 2013. The overall trends in WPI and CPI inflation are shown in Figure 5.1.

Figure 5.1: Inflation in WPI and CPI



***Source*: DIPP, CSO**

Figure 5.2: Momentum based on SAAR



5.6 Inflation momentum based on the seasonally adjusted annualized rate (SAAR), three month-on-three month (3m-o-3m) inched up in December 2014 after a sharp decline over the previous few months (Figure 5.2).

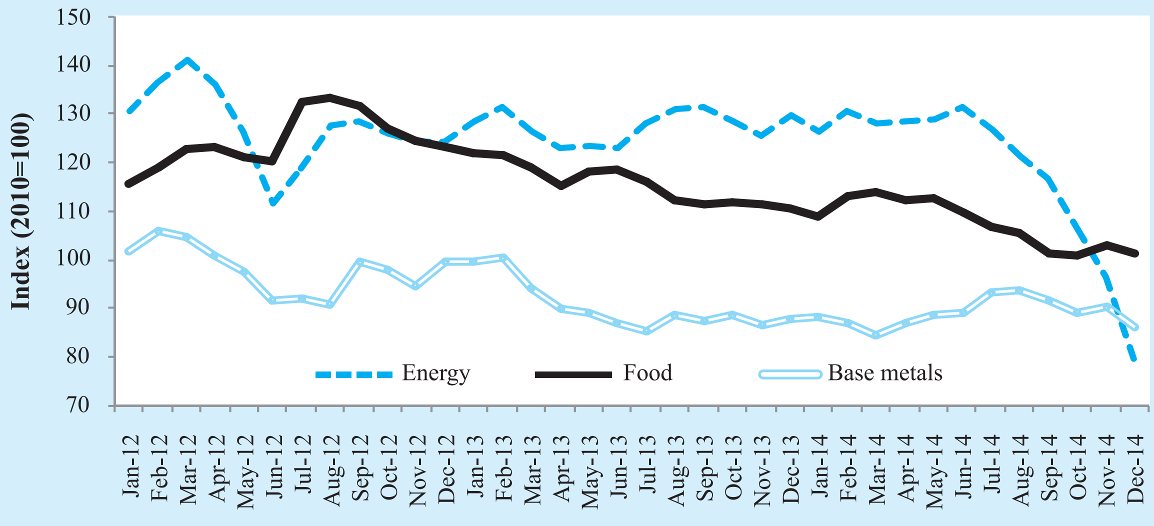
Factors causing moderation in inflation

5.7 The decline in inflation during the year turned out to be much faster than was anticipated in the initial months of the year. Global factors, namely persistent decline in crude prices and softness in the global prices of tradables, particularly edible oils and even coal, helped moderate headline inflation. The tight monetary policy helped contain demand pressures, creating a buffer against any external shock and keeping volatility in the value of the rupee under check. During the last one year, the rupee remained relatively stable vis-à-vis the currency of peer emerging countries, which too had sobering influence on inflation. Moderation in wage rate growth reduced demand pressures on protein-based items. Base effect also contributed to the decline in headline inflation.

Global inflation

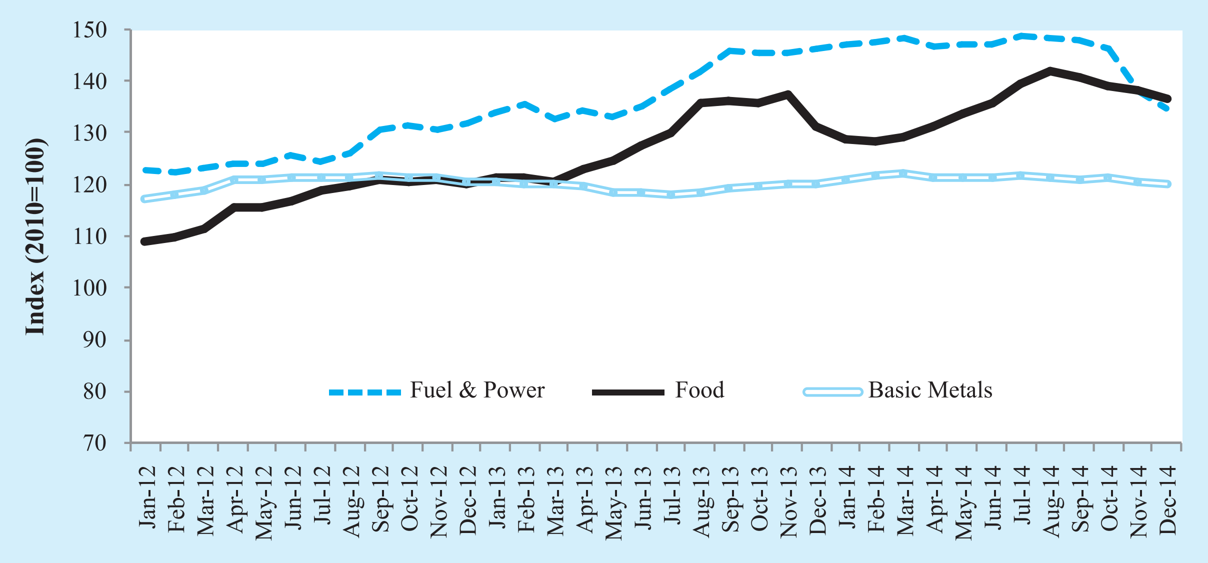
5.8 As per the World Bank Commodities Price Data (Pink Sheet), global commodity prices have shown a declining trend during 2014. The energy price index fell by 40 per cent from June 2014 to December 2014. The food index and base metal

Figure 5.3: Movement of World Bank Price Indices



Source: World Bank Pink Sheet

Figure 5.4: Movement of WPI (converted 2010=100)



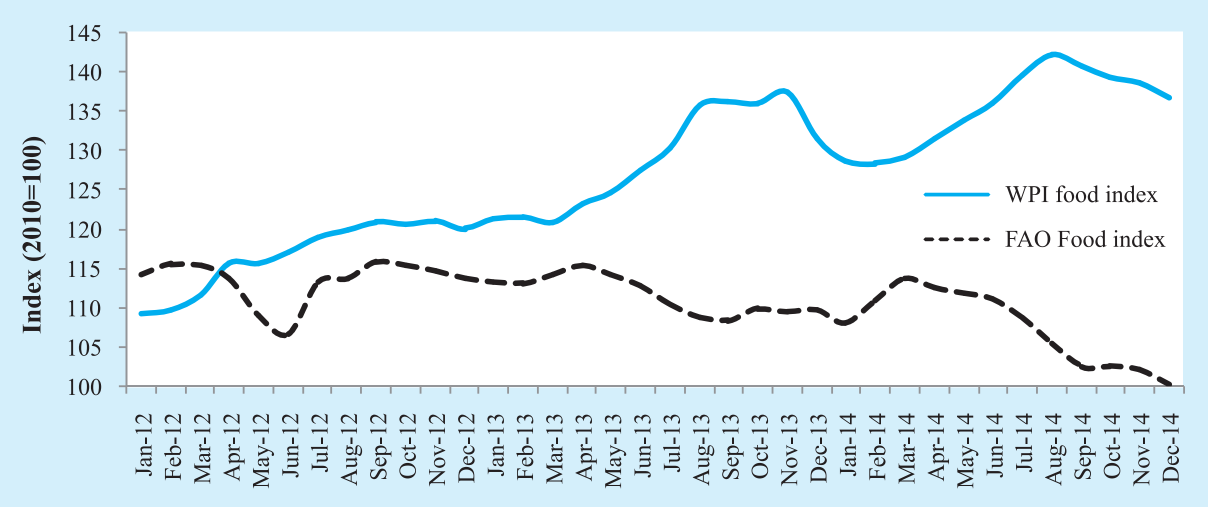
Source: DIPP

index declined by 8 per cent and 3 per cent respectively during the same period. The trend in world commodity prices is indicated in Figure 5.3.

5.9 As against the 40 per cent decline in global energy prices, the Indian energy price index measured in terms of WPI fuel and power declined by only 10 per cent during the period June – December 2014. Figure 5.4 charts the movement of the WPI price indices. Though international oil prices started declining from July 2014, there has been greater alignment of international and domestic prices after the deregulation of diesel in October 2014.

5.10 The Food and Agricultural Organization (FAO) food index shows that there has been a continuous decline in the food index since March 2014, mainly on account of abundant production as well as weakening demand. While the FAO food index declined by about 13 per cent during March-December 2014 following significant decline in dairy, cereal, oil and sugar prices, the Indian food index (WPI) increased by about 6 per cent during the same period. Figure 5.5 compares the domestic and FAO food indices. The difference between the domestic food and FAO food indices indicates that the domestic food

Figure 5.5: FAO vs WPI Food (converted 2010=100)



Source: FAO & DIPP

market is not integrated with the international market. The divergence in the domestic and international food prices stems from the various restrictions in domestic food and trade policy imposed to protect either farmers or consumers.

Moderating growth rate of wages

5.11 High growth rates in rural income/wages (Figure 5.6) triggered by substantial increases in minimum support prices (MSP) and the launch of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) created demand pressures on protein items and eggs, meat, and fish. The high wages also acted through increasing cost of production for agricultural commodities, thereby triggering a rise in MSPs. Since fruits and vegetables and allied agricultural activities draw from a common pool of labour, the higher wages-induced cost-push inflation was observed in the entire basket of food commodities. Prices of edible oils and pulses which are freely allowed to be imported remained subdued.

Measures taken by the Government to control inflation

5.12 The swift decisive steps taken by the government also helped control the stubbornly persistent inflation—particularly food inflation. The decline in inflation is found to be substantial in commodities where the government had taken effective measures. The government took a series of measures to improve availability of food-grains and de-clog the distribution channel. Some of the major steps taken recently in this regard include:

a) Allocation of additional 5 million tonnes of rice to below and above poverty line (BPL and APL) families in the states, pending implementation of the National Food Security Act (NFSA), and allocation of 10 million tonnes of wheat under open market sales for domestic market in 2014-15;

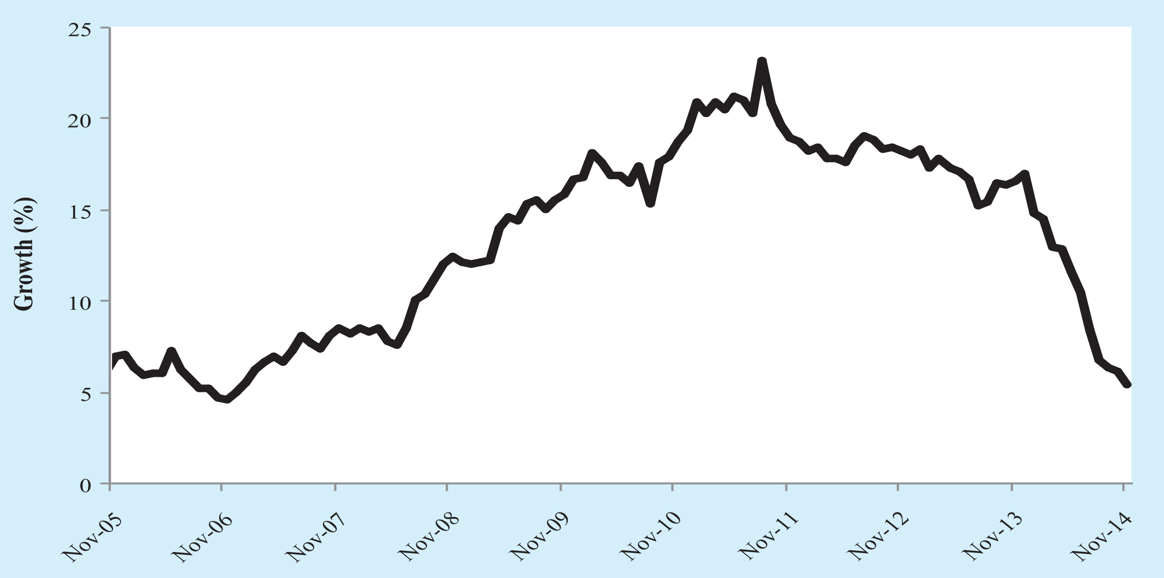
b) Moderation in increases in the MSPs during the last and current season;

c) Advisory to the states to allow free movement of fruits and vegetables by delisting them from the Agricultural Produce Marketing Committee (APMC) Act;

d) Bringing onions and potatoes under the purview of the Essential Commodities Act 1955, thereby allowing state governments to impose stock limits to deal with cartelization and hoarding, and making violation of stock limits a non-bailable offence;

e) Imposing a minimum export price (MEP) of US$ 450 per MT for potatoes with effect from 26 June 2014 and US$ 300 per MT for onions with effect from 21August 2014.

Figure 5.6: Rural Wage Growth



***Source*: Labour Bureau**

5.13 For keeping food inflation low in a sustainable manner, more radical measures will have to be taken to revamp agriculture- and food-sector production, storage, marketing, and distribution – including the public distribution system (PDS) and NFSA.

Household Inflation Expectations

5.14 Since September 2005, the RBI has been conducting quarterly inflation expectation surveys of households. The results of the latest survey covering 5000 urban households across 16 cities were released in December 2014. The survey captures the inflation expectations for the next three-month and one-year period. The current inflation perceptions and inflation expectations have moderated in the latest round (Figure 5.7).

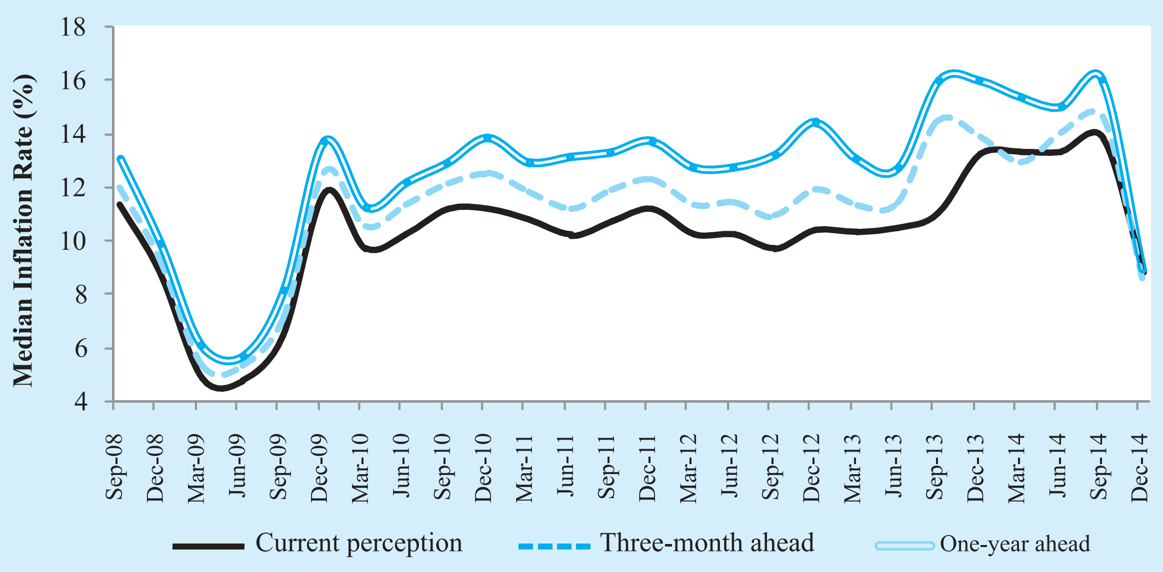
5.15 As can be seen from Figure 5.7, median inflation expectations over the next three months and one year have corrected sharply during the latest survey (December 2014) to 8.3 per cent from 14.6 per cent and to 8.9 per cent from 16 per cent in the previous quarter respectively. The sharp correction in expectations in the latest round (38th round) and the general deviation from actual inflation figures indicate excessive pessimism reflected in the household inflation expectation surveys.

5.16 The upside risk to this outlook emanates from the fact that crude oil prices will have to bottom out from these levels, though it is unlikely that they will flare up in a short space of time. Also, the lower acreage in oilseeds and pulses during the current rabi harvesting season could create supply pressures. Given the capacity constraints in warehousing and cold-storage, seasonal commodities may also add to the inflation risk.

AGRICULTURE AND FOOD MANAGEMENT

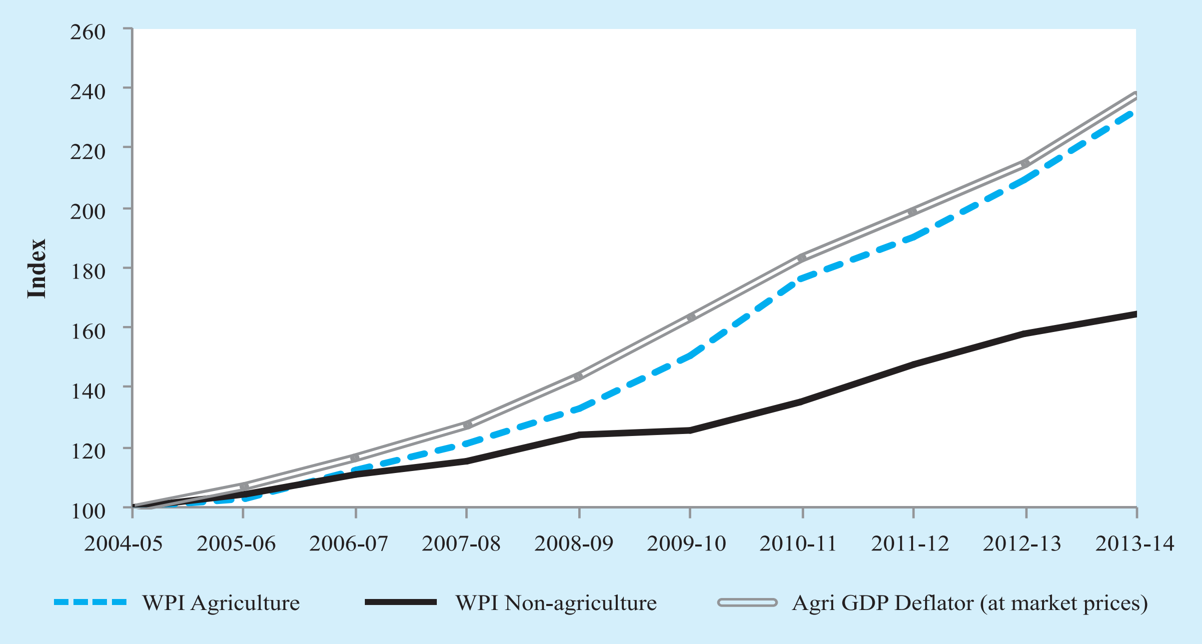
5.17 The agriculture sector registered an annual growth of 3.8 per cent in value added in the decade since 2004-05 on the back of increase in real prices (31 per cent during 2004-05 to 2011-12). The committee set up by the Ministry of Agriculture under the chairmanship of S. Mahendra Dev to come up with updated methodology to compute terms of trade between agriculture and non-agriculture has observed that, during 2004-05 and 2013-14, terms of trade have become favourable for agriculture. The ratio of WPI agriculture to WPI non-agriculture has also risen steeply after 2005-06 (Figure 5.8).

Figure 5.7: Household Inflation Expectations



***Source*: RBI.**

Figure 5.8: Movement of WPI Agriculture, Non-Agriculture & Agri GDP Deflator



***Source*: DIPP, CSO.**

5.18 A rising concern in recent times has been the high level of food inflation, seasonal and short-term price spikes in some commodities like onions, tomatoes, and potatoes which have become more frequent, more severe, and more lasting, hurting consumers and causing economic instability. A strategy of price-led growth in agriculture is, therefore, not sustainable; also the room for increasing production through raising cropped area is virtually non-existent. Hence the strategy for growth in agriculture has to rely more on non-price factors, viz., yield and productivity.

Overview of the Agricultural Sector

5.19 According to the new series of national income released by the CSO, at 2011-12 prices the share of agriculture in total GDP is 18 per cent

Table 5.3 : Agriculture Sector – Key indicators (per cent at 2011-12 prices)

Sl. No.	Item	2011-12	2012-13	2013-14	2014-15
1	Growth in GDP in agriculture & allied sectors	-	1.2	3.7	1.1
	Share of agriculture & allied sectors in total GDP	18.4	18.0	18.0	
	Crops	12.0	11.7	11.8	
	Livestock	4.0	4.0	3.9	
	Forestry and logging	1.6	1.5	1.4	
	Fishing	0.8	0.8	0.9	
2	Share of agriculture & allied Sectors in total GCF	8.6	7.7	7.9	N.A.
	Crops	7.4	6.5	6.6	
	Livestock	0.8	0.7	0.7	
	Forestry and logging	0.1	0.1	0.1	
	Fishing	0.4	0.4	0.5	
3	GCF in agriculture & allied Sectors as per cent to GDP of the sector (at current 2011-12 prices)	18.3	15.5	14.8	

***Source* : CSO.**
***Note* : GCF is Gross Capital Formation.**

in 2013-14. As against a growth target of 4 per cent for agriculture and allied sectors in the Twelfth Plan, the growth registered in the first year at 2011-12 prices was 1.2 per cent, 3.7 per cent in 2013-14, and 1.1 per cent in 2014-15 (Table 5.3).

Area, Production, and Yield

5.20 Table 5.4 gives area, production, and yield figures for different crops in 2013-14. In 2013-14, total foodgrain production has been estimated at 265.6 million tonnes as per the second Advance Estimates (AE), which is higher by 8.5 million tonnes than the 2012-13 production and 22.1 million tonnes than average foodgrain production during the last five years.

5.21 As per the 2nd Advance Estimates for 2014-15, total foodgrains production in the country is estimated at 257.07 million tonnes which is the fourth highest quantity of annual foodgrains production in the country. It may be noted that despite deficiency of 12% in the monsoon rainfall during the year, the loss in production has been restricted to just around 3% over the previous year and has exceeded the average production during the last five years by 8.15 million tonnes.

5.22 As compared to last year's production of 265.57 million tonnes, current year's production of foodgrains is lower by 8.5 million tonnes. This decline has occurred on account of lower production of rice, coarse, cereals and pulses due to erratic rainfall conditions during the monsoon season-2014.

5.23 To improve resilience of the agricultural sector and bolster food security—including availability and affordable access—our strategy for agriculture has to focus on improving yield and productivity. Though yield/productivity in foodgrains and pulses has increased post-2000, the yield gaps vis-à-vis other countries are wide and even within different states yields vary widely, showing that there are possibilities of raising production by increasing yield of most of the crops without necessarily increasing prices (Table 5.5).

Table 5.4 : Area, Production, and Yield (2013-14*)

(Area: million ha; Prod.: million tonnes; Yield: kg/ha)

Group/ commodity	Area	Per cent change in area	Production	Per cent change in production	Yield	per cent change in yield
Foodgrains[a]	126.0	4.3	264.8	3.0	2101	-1.3
Rice	43.9	2.7	106.5	1.3	2424	-1.5
Wheat	31.2	4.0	95.9	2.6	3075	-1.3
Jowar	5.8	-6.1	5.4	1.7	850	-8.2
Maize	9.4	8.3	24.4	9.2	2566	-0.7
Bajra	7.9	8.0	9.2	5.5	1198	2.9
Pulses	25.2	8.3	19.3	5.3	764	-3.2
Gram	10.2	20.3	9.9	12.3	967	-6.7
Tur	3.9	0.0	3.3	9.7	848	9.2
Oilseeds	28.5	7.6	32.9	6.4	1153	-1.3
Groundnut	5.5	17.6	9.7	105.8	1750	75.9
Rapeseed and mustard	6.7	4.7	8.0	-0.5	1188	-5.9
Cotton[b]	11.7	-2.3	36.7	7.2	532	9.4
Sugarcane	5.0	0.0	350.0	2.6	70	0.0

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation.

Notes : *Fourth AE.

[a] Includes cereals, coarse cereals, and pulses.

[b] Bales of 170 kg.

Table 5.5 : Average, Maximum, and Minimum Yield of Major Crops 2013-14

Yield (kg/ha)

Crops	All-India average	Maximum	Minimum
Rice	2416	Punjab (3952)	Madhya Pradesh (1474)
Wheat	3145	Punjab (5017)	Andhra Pradesh (500)
Maize	2676	Tamil Nadu (5372)	Assam (898)
Jowar	957	Andhra Pradesh (1661)	West Bengal (280)
Gram	960	Andhra Pradesh (1439)	Tamil Nadu (653)
Tur	813	Bihar (1667)	Andhra Pradesh (542)
Groundnut	1764	Gujarat (2668)	Himachal Pradesh (600)
Rapeseed & Mustard	1185	Gujarat (1723)	Tamil Nadu (241)
Soyabean	1012	Andhra Pradesh (1612)	Uttar Pradesh (577)
Sugarcane	70522	West Bengal (114273)	Jammu & Kashmir (1000)
Cotton#	510	Punjab (750)	Maharashtra (358)

Source **: Directorate of Economics & Statistics, Department of Agriculture & Cooperation**

Note **: # Thousand bales of 170 kg each.**

5.24 An inverse relationship is noticed between increase in yield over time and the average cost of production of various crops in real terms. For example, for rabi crops a 10 per cent increase in yield resulted in a 2.1 per cent to 8.1 per cent decline in the average cost of production of various crops in real terms. (Price Policy for Kharif Crops, February 2014, pp. 67—69, CACP). This clearly points towards the fact that productivity increases, especially in low productivity states/regions, can significantly contribute towards reducing cost-push food inflation.

5.25. Yield is contingent upon several factors like variety and quality of seeds, soil quality, irrigation – including quality of water—fertilizers—including their proportion—pesticides, labour, and extension services. Prices received by farmers and the certainty or assurance of getting a particular price also incentivize farmers to take to a particular crop and use quality inputs in its cultivation. The status of some of these factors in India is described in the following paragraphs.

Drivers of Growth

Agricultural Research and Education

5.26 The Indian Council of Agricultural Research (ICAR) is engaged in developing new crop varieties with specific traits that improve yield and nutritional quality along with tolerance / resistance to various biotic and abiotic stresses. Besides, it matches crop production and protection technologies to target agro-ecologies. A total of 104 varieties of different crops were released for different agro-ecological niches. To ensure effective seed chain for making quality seed available to farmers, 11,835 tonnes of breeder seeds of recommended varieties of different field crops were developed. The adoption of improved varieties and crop management technologies has resulted in enhancement of production and productivity of cereals, pulses, and other field crops.

5.27 While greater outlay on applied research, education, and extension will result in more assured outcome in terms of reduction in average cost and increase in average yield/productivity, and growth, the paradigm shift in yield/productivity required for the second green revolution can be achieved, with greater outlay on basic research by creating research institutions on the pattern of Indian Institutes of Technology (IIT) and Indian Institutes of Sciences (IIS). It is imperative to make Indian agricultural growth science-led by shedding ‘technology fatigue’. Budget 2014-15 provided for the establishment of two institutes of excellence in Assam and Jharkhand with an initial sum of ₹ 100 crore.

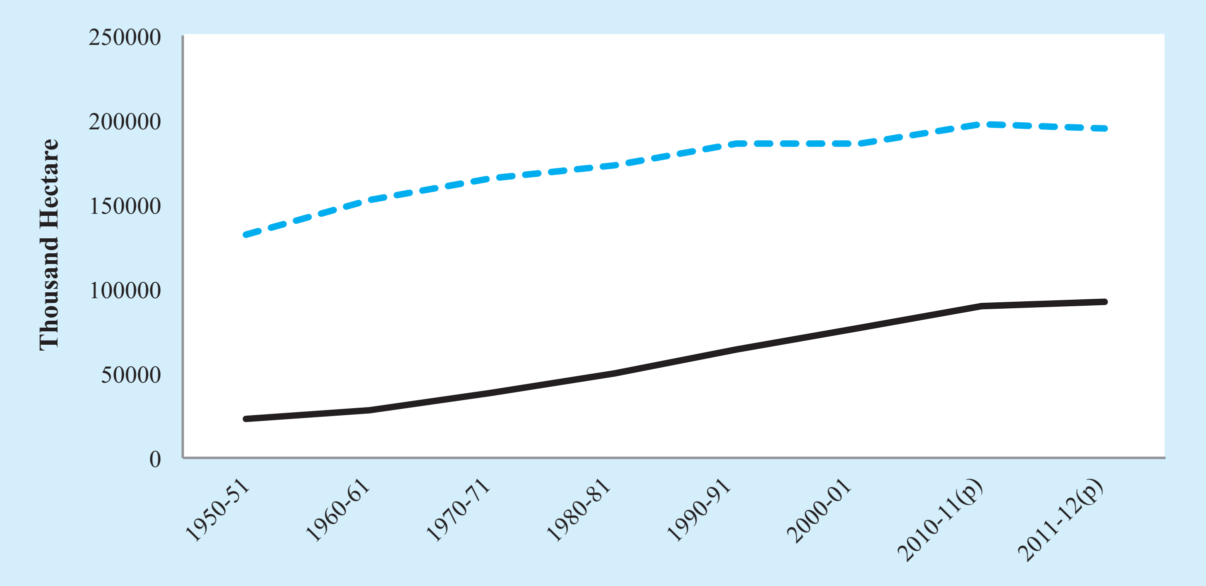
Agricultural Extension

5.28 The NSSO 70th round survey indicates that about 59 per cent of farmers do not get much technical assistance and know-how from government-funded farm research institutes or extension services. So they have to rely on progressive farmers, media, and private commercial agents such as dealers of farm inputs like seeds, fertilizers, and pesticides for technical information. To ensure last-mile connectivity, extension services need to be geared up to address emerging technological and information needs. Effectiveness of the lab-to-farm programme can be improved by leveraging information technology and e- and mobile (m-) applications, participation of professional NGOs, etc. The Budget 2014-15 allocation of Rs100 crore to Kisan TV for disseminating real-time information to farmers regarding new farming techniques, water conservation, organic farming, etc. will partly make up for the existing adverse ratio of one extension worker for every 800 to 1000 farmers and provide farmers a direct interface with agricultural experts.

Irrigation

5.29 The central government initiated the Accelerated Irrigation Benefit Programme (AIBP) in 1996-97 for the completion of incomplete irrigation schemes. Under the AIBP, ₹ 67,195.47 crore of central loan assistance (CLA)/grant has been released up to 31 December 2014. An irrigation potential of 85.03 lakh ha is reported to have been created under the AIBP by states from major / medium /minor irrigation projects till March 2013. The Command Area Development Programme has also been amalgamated with the AIBP to reduce the gap between irrigation potential that has been created and that is utilized. Suggestions for a National Water Grid for transferring water from water surplus to water deficit areas have been made from time to time. In spite of these schemes, Indian agriculture is still heavily rainfall dependent with just 35 per cent of total arable area being irrigated, and distribution of irrigation across states is highly skewed. Focus on micro-irrigation systems like drips and sprinklers would significantly increase water-use efficiency and productivity. The wide gap between gross cropped area and gross irrigated area which has not improved much since the First Five Year Plan period needs to be bridged for increasing productivity, production, and resilience (Figure 5. 9).

Figure 5.9: Gross Irrigated Area vis-a-vis Gross Cropped Area



Source: **Department of Agriculture & Cooperation (DAC).**

Seeds

5.30 Seed is the basic input for enhancing agricultural production and productivity. Efficacy of all other agricultural inputs such as fertilizers, pesticides, and irrigation as well as impact of agro-climatic conditions is largely determined by the quality of the seed used. It is estimated that the quality of seed accounts for 20-25 per cent of agricultural productivity. An overall requirement of 343.55 lakh quintals of certified/quality seeds for 2014-15 (kharif and rabi) is estimated by the states. Against this, 351.76 lakh quintals of certified/quality seed is available. An overall surplus of 8.21 lakh quintals seed is thus available for 2014-15. During 2014-15, there has been shortfall in the availability of certified/quality gram, lentil, pea, soyabean, and potato seeds. Given our import dependence on oils and pulses and susceptibility of potato to inflation, steps are necessary to avoid shortages of certified seeds of these commodities. Given the lack of evidence on negative consequences from Bt and other genetically modified (GM) crops, and the significant potential productivity, food security, and sustainability benefits, the corresponding regulatory frameworks and their implementation deserve rethinking.

Fertilizers

5.31 The following major initiatives were taken in the fertilizer policy of the government in 2014-15: (i) Notification of the Modified New Pricing Scheme (NPS-III) for existing urea units on 2 April 2014 in order to address the issue of under-recoveries of the existing urea units on account of freezing of fixed cost at the 2002-03 level. The modified policy has been implemented for a period of one year from the date of notification. (ii) Further, the government had notified the New Investment Policy 2012 on 2 January 2013 to facilitate fresh investment in the urea sector to make India self-sufficient. The amendment to New Investment Policy – 2012 has been notified by the Department of Fertilizers on 7 October 2014. As against the targets for domestic production of 89.68 lakh tonnes and 33.51 lakh tonnes for nitrogen and phosphate for April-November 2014, actual production was 82.86 lakh tonnes and 25.05 lakh tonnes respectively.

Credit

5.32 The following measures have been taken for improving agricultural credit flow and bringing down the rate of interest on farm loans: (i) Agricultural credit flow target for 2013-14 was fixed at ₹ 7,00,000 crore and achievement was ₹ 7,30,765 crore (Provisional), as against ₹ 6,07,375 crore in 2012-13. Agricultural credit flow target for 2014-15 has been fixed at ₹ 8,00,000 crore against which achievement has been ₹ 3,70,828.60 crore (Provisional) up to 30 September, 2014. (ii) Farmers have been availing of crop loans up to a principal amount of ₹ 3,00,000 at 7 per cent rate of interest. The effective rate of interest for farmers who promptly repay their loans is 4 per cent per annum during 2014-15. (iii) In order to discourage distress sale of crops by farmers, the benefit of interest subvention has been made available to small and marginal farmers having Kisan Credit Cards for a further period of up to six months (post- harvest) against negotiable warehouse receipts (NWRs) at the same rate as available to crop loan. Other farmers have been granted post-harvest loans against NWRs at the commercial rates. (iv) From 2014-15, in order to provide relief to farmers on occurrence of natural calamities, interest subvention of 2 per cent will continued to be available to banks for the first year on the restructured loan amount on account of natural calamities and such restructured loans will attract normal rate of interest from the second year onwards as per the policy laid down by RBI.

5.33 The Interest Subvention Scheme for short-term production credit (crop loans) which was started by the Government of India in 2006-07 was extended to private-sector banks from 2013-14. Presently the total number of loan accounts stands at 5.72 crore. Studies conducted by the RBI and National Bank for Agriculture and Rural Development (NABARD) indicate that the crop loans are not reaching intended beneficiaries and there are no systems and procedures in place at several bank branches to monitor the end-use of funds. Also, although overall credit flow to the agriculture sector has increased over the years, the share of long-term credit in agriculture or investment credit declined from 55 per cent in 2006-07 to 39 per cent in 2011-12. According to NSSO 70th round data, as much as 40 per cent of the finances of farmers still comes from informal sources, despite an increase in the flow of institutional credit to agriculture in recent years. Usurious moneylenders account for a 26 per cent share of total agricultural credit.

5.34 Inadequate targeting of beneficiaries and monitoring/supervision of the end-use of short-term crop loans for which interest subvention scheme is applicable and decline in long-term/investment credit to agriculture are issues that need to be addressed on priority basis.

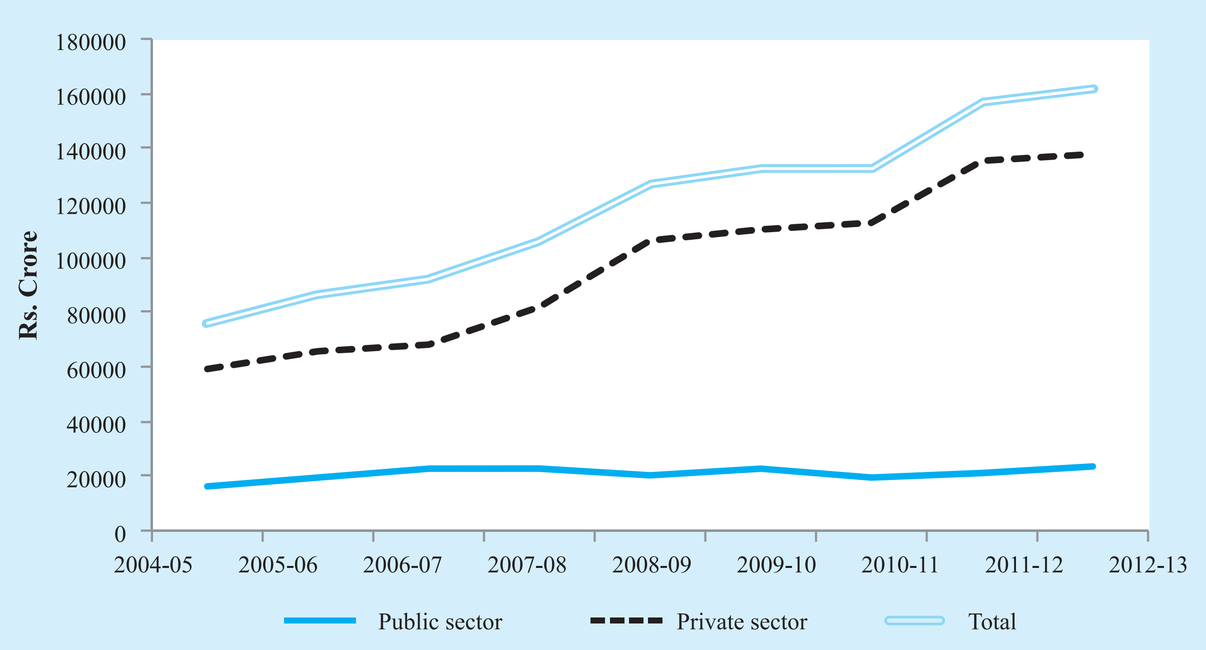
Mechanization

5.35 Agricultural mechanization increases productivity of land and labour by meeting timeliness of farm operations and increases work output per unit time. Besides its paramount contribution to the multiple cropping and diversification of agriculture, mechanization also enables efficient utilization of inputs such as seeds, fertilizers, and irrigation water. Although India is one of the top countries in agricultural production, the current level of farm mechanization, which varies across states, averages around 40 per cent as against more than 90 per cent in developed countries. Farm mechanization in India has been growing at a rate of less than 5 per cent in the last two decades. The main challenges to farm mechanization are, first, a highly diverse agriculture with different soil and climatic zones, requiring customized farm machinery and equipment and, second, largely small landholdings with limited resources. Credit flow for farm mechanization is less than 3 per cent of the total credit flow to the agriculture sector.A dedicated Sub-Mission on Agricultural Mechanization has been initiated in the Twelfth Plan, with focus on spreading farm mechanization to small and marginal farmers and regions that have low farm power availability.

GCF in Agriculture and Allied Sectors

5.36 The GCF in agriculture and allied sectors relative to agri-GDP in this sector has shown an improvement from 13.5 per cent in 2004-05 to 21.2 per cent in 2012-13 at 2004-05 prices (Figure 5.10). Given the vast investment needs of the sector, greater public investment would only help increase private investment.

Figure 5.10: Gross Capital Formation in agriculture & allied sector (at 2004-05 prices)



Source: DAC.

Major Schemes of the Government

Rahtriya Krishi Vikas Yojana (RKVY)

5.37 The government has approved continuation of the RKVY scheme during the Twelfth Plan whereby RKVY funding will be routed into three components, viz. production growth, infrastructure & assets, & sub-schemes and flexi-fund. The proposed allocation for implementation of this scheme during 2015-16 is ₹ 18,000 crore. In view of the need to increase capital formation and get higher returns on investments, states are at liberty to spend up to 100 per cent of total outlay in the infrastructure and asset creation component.

The National Food Security Mission

5.38 The National Food Security Mission (NFSM) is being implemented with the new target of additional production of 25 million tonnes of foodgrains comprising 10 million tonnes rice, 8 million tonnes wheat, 4 million tonnes pulses, and 3 million tonnes coarse cereals by the end of the Twelfth Five Year Plan (2016-17). The revamped NFSM is being implemented from 2014-15 in 619 districts of 28 states. In addition to rice, wheat and pulses, crops like coarse cereals and commercial crops (sugarcane, cotton, and jute) have been included since 2014-15. Promotion of farmer producer organizations (FPOs), value addition, dal mill, and assistance for custom hiring charges have also been undertaken under the Mission. The pulses component has been allocated fifty per cent of total funds under the NFSM in order to increase their production. To promote the use of bio-fertilizers, subsidy on bio-fertilizer has also been enhanced from ₹ 100 per ha to ₹ 300 per ha.

Mission for Integrated Development of Horticulture (MIDH)

5.39 With effect from 2014-15, the Mission for Integrated Development of Horticulture (MIDH) has been operationalized by bringing all ongoing schemes on horticulture under a single umbrella. Production and distribution of quality planting material, productivity improvement measures through protected cultivation, use of micro-irrigation, adoption of integrated pest management and integrated nutrient management along with creation of infrastructure for post-harvest management and marketing are focus areas of the MIDH.

Sustainability and Adaptability

5.40 Concerns have been raised for quite some time about non-sustainability of the present cropping pattern and use of water resources. The following initiatives announced in Budget 2014-15 have brought the issue of sustainability and climate adaptation to the forefront:

- **The Pradhan Mantri Krishi Sinchayee Yojana** with allocation of ₹ 1000 crore.
- **Neeranchal,** a new programme with an initial outlay of ₹ 2142 crore in 2014 to give additional impetus to watershed development in the country,
- **The National Adaptation Fund for Climate Change**, with an initial sum of ₹ 100 crore, and
- A scheme to provide, in mission mode, **a soil health card to every farmer**, with an allocation of ₹ 100 crore. An additional amount of ₹ 56 crore has been allocated to set up 100 mobile soil-testing laboratories across the country.

Allied sectors: Animal Husbandry, Dairying, and Fisheries

5.41 Indian agricultural system is predominantly a mixed crop-livestock farming system, with the livestock segment supplementing farm incomes by providing employment, draught animals, and manure. India ranks first in milk production, accounting for 17 per cent of world production. During 2013-14, milk production peaked at 137.69 MT, thus becoming an important secondary source of income for 70 million rural households engaged in dairying. The average year-on-year growth rate of milk, at 4.18 per cent vis-à-vis the world average of 2.2 per cent, shows sustained growth in availability of milk and milk products for the growing population.

5.42 In the poultry segment, the government's focus, besides framing suitable policies for enhancing commercial poultry production, is on strengthening the family poultry system, which addresses livelihood issues. Egg production was around 73.89 billion in 2013-14, while poultry meat production was estimated at 2.68 MT.

5.43 Fisheries constitute about 1 per cent of the GDP of the country and 4.75 per cent of agriculture GDP. The total fish production during 2013-14 was 9.58 MT, an increase of 5.96 per cent over 2012-13. Fish production during the first two quarters of 2014-15 has also shown an increasing trend and is estimated at 4.37 MT (Provisional).

5.44 For sustainable and continuous growth of the livestock sector by emulating the success achieved in the dairy and poultry sectors, across species and regions, the National Livestock Mission has been launched in 2014-15 with an approved outlay of ₹ 2,800 crore during the Twelfth Plan. This Mission is formulated with the objective of sustainable development of the livestock sector, focusing on improving availability of quality feed and fodder, risk coverage, effective extension, improved flow of credit, and organization of livestock farmers / rearers. Given the high contribution of protein items in inflation, the growth rate of this sector has to match the rising demand reflected in increasing share of these items in consumption expenditure.

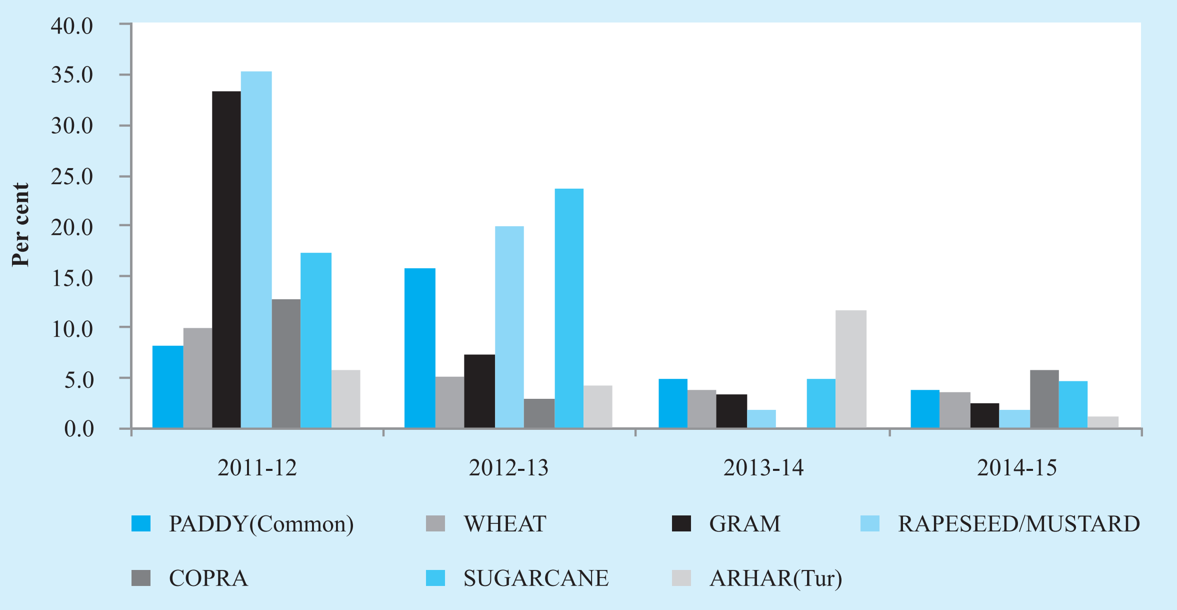
Food Management

5.45 The principal policy objective of food management is to ensure food security, particularly for the vulnerable, through timely and efficient procurement and distribution of foodgrains. This involves procurement of foodgrains from farmers at remunerative prices, building up and maintenance of buffer stocks, storage, movement, and distribution of foodgrains to consumers at affordable prices and stability of foodgrain prices. The price instruments used are MSP and central issue price (CIP).

Price Policy for Agricultural Produce

5.46 As mandated, the Commission for Agricultural Costs and Prices (CACP) recommends MSPs at national level for twenty-three crops, but effectively price support operates primarily in wheat and rice and that too in selected states. This creates incentive structures highly skewed in favour of wheat and rice. While the country is dependent on imports for pulses and oilseeds (edible oils), their prices often fall below the MSP as there is no effective price support.

Figure 5.11: Change in MSPs growth rate



***Source*: Commission for Agricultural Costs & Prices (CACP).**

Since 2012-13, the growth of MSPs of various crops has been the moderate (Figure 5.11).

Procurement

5.47 To enhance efficiency of procurement and public distribution and to extend the benefits of MSP to local farmers, the Decentralized Procurement (DCP) scheme has been adopted by some state governments. The central government is urging all state governments to adopt the DCP scheme so that costs of distribution can be saved and outreach of price support mechanism to the farmers in hitherto weaker areas can be improved. To overcome the problem of gaps in the flow of information about procurement operations on day-to-day basis, an Online Procurement Monitoring System (OPMS) has been evolved for reporting and monitoring on a daily basis, procurement operations for wheat, paddy, and coarse grains in the country.

5.48 Two decisions that will impact procurement and stocks of rice and wheat from kharif marketing season (KMS) 2014-15 and rabi marketing season (RMS) 2015-16 are: (a) To limit procurement from states that are declaring bonus over and above the MSP to the extent of targeted PDS (TPDS)/other welfare schemes (OWS) requirements (In the case of non-DCP states declaring bonus, the FCI will not take part in MSP operations in those states.) and (b) To cap the percentage of levy on rice at 25 per cent.

5.49 This decision has successfully led to dropping of the practice of giving bonus over and above MSP for paddy in states like Chhattisgarh and Madhya Pradesh in KMS 2014-15 and it is expected that the state governments of Madhya Pradesh and Rajasthan will avoid giving bonus for wheat also in RMS 2015-16 in view of this policy. The procurement levels in KMS 2014-15 are lower in both Chhattisgarh and Madhya Pradesh as compared to the previous year and there is re-emergence of competition in the market. Table 5.6 gives procurement, off-stake and stock figures from 2003.

Buffer Stocks

5.50 The buffer norms for foodgrains in the central pool which were in existence since April 2005 have been revised in the backdrop of increased off-take of foodgrains under the TPDS in the last few years and with the coming into force

Table 5.6 : Public Distribution System: Procurement, Off-Take, and Stocks

(million tonnes)

Year	Procurement			Off-take			Stocks		
	Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat	Total
2003-04	22.9	15.8	38.7	25.0	24.3	49.3	13.1	6.9	20.7
2004-05	24.7	16.8	41.5	23.2	18.3	41.5	13.3	4.1	18.0
2005-06	27.6	14.8	42.4	25.1	17.2	42.3	13.7	2.0	16.6
2006-07	25.1	9.2	34.3	25.1	11.7	36.8	13.2	4.7	17.9
2007-08	28.7	11.1	39.9	25.2	12.2	37.4	13.8	5.8	19.8
2008-09	34.1	22.7	56.8	24.6	14.9	39.5	21.6	13.4	35.6
2009-10	32.0	25.4	57.4	27.4	22.4	49.7	26.7	16.1	43.3
2010-11	34.2	22.5	56.7	29.9	23.1	53.0	28.8	15.4	44.3
2011-12	35.0	28.3	63.4	32.1	24.2	56.3	33.4	20.0	53.4
2012-13	34.0	38.2	72.2	32.6	30.1	62.8	35.5	24.2	59.8
2013-14	31.3	25.1	56.4	29.2	28.2	57.4	30.6	17.8	49.5
2014-15*	16.2	28.0	44.2	4.5	3.8	8.3	23.5	37.3	61.6

***Source*: Ministry of Food, Consumer Affairs and Public Distribution, Government of India. *Note*: * as on 9.1.2015.**

Table 5.7: Revision in Buffer Stock Norms (in million tonnes)

As on	Existing since April 2005	Revised
1 April	21.2	21.04
1July	31.9	41.12
1 Oct.	21.2	30.77
1Jan.	25.0	21.41

of the NFSA with effect from 5 July 2013.The revised buffer norms are shown in Table 5.7.

5.51 As against the buffer stock norm of 21.41 million tonnes of rice and wheat (as on 1January of each year), total central pool stocks were 61.6 million tonnes as on 1 January 2015. Considering that the economic cost to the FCI for acquiring, storing, and distributing foodgrains is about 40-50 per cent more than the procurement price, the locked in extra stocks, particularly for the last five years in a row, reflect flaws in the food policy. This has also resulted in high cereal inflation despite bumper produce and overflowing stocks.

Economic Cost of Foodgrains to the FCI

5.52 The economic cost of foodgrains consists of three components, namely the MSP including central bonus, if applicable, as the price paid to farmers, procurement incidentals, and the cost of distribution. The economic cost for both wheat and rice witnessed significant increase during the last few years due to increase in MSPs and proportionate increase in incidentals as well as other costs as depicted in Table 5.8.

5.53 High economic cost necessitated a detailed review of the open-ended procurement policy, especially in states that offer high bonus on top of MSP and those that impose high taxes and statutory levies, as well as stocking and distribution policies. In this regard, the government set up a High Level Committee (HLC) in August 2014 under the chairmanship of Shri Shanta Kumar to suggest inter-alia restructuring or unbundling of the FCI with a view to improving its operational efficiency and financial management. The gist of its main recommendations is given in Box 5.2.

Open Market Sale Scheme (Domestic)

5.54 The FCI on behalf of the government has been undertaking sale of wheat at predetermined prices/reserve prices in the open market from time to time to enhance market supply of foodgrains; to exercise a moderating influence on open market prices and to offload surplus stocks. Under the Open Market Sale Scheme (Domestic), during the year 2014-15, 100 lakh tonnes of wheat has been allocated for sale in the domestic market. Deviating from the earlier practice, this year the government has adopted a policy of differential prices to encourage sale of older stock first. The government is consciously keeping the reserve price above MSP, but reasonably below the acquisition cost or economic cost of wheat, so that the buyers remain attracted to purchase of wheat from the mandis during the harvest season and the market remains competitive. At the same time the market price in the lean season does not increase much and inflation remains under check.

Table 5.8 : Economic Cost of Rice and Wheat (₹/quintals)

Year	2010-11	2011-12	2012-13	2013-14(Prov.)	2014-15 (RE)
Rice					
Pooled cost of food grains	1446.53	1512.20	1633.83	1788.96	1925.52
Procurement incidentals	313.09	350.00	383.76	435.13	462.13
Distribution cost	223.49	260.74	287.28	374.26	430.26
Economic cost	1983.11	2122.94	2304.87	2598.35	2817.91
Wheat					
Pooled cost of food grains	1064.32	1119.18	1219.41	1273.57	1346.64
Procurement incidentals	212.38	235.68	263.35	331.81	339.00
Distribution cost	217.65	240.39	269.81	326.87	361.92
Economic cost	1494.35	1595.25	1752.57	1932.25	2047.56

Box 5.2 : Recommendations of High Level Committee on restructuring FCI

On procurement related issues:

- The FCI should hand over all procurement operations of wheat, paddy, and rice to states that have gained sufficient experience in this regard and have created reasonable infrastructure for procurement. The FCI will accept only the surplus (after deducting the needs of the states under the NFSA) from these state governments (not millers) to be moved to deficit states. The FCI should move on helping those states where farmers suffer from distress sales at prices much below MSP, and which are dominated by small holdings.
- Centre should make it clear to states that in case of any bonus being given by them on top of MSP, it will not accept grains under the central pool beyond the quantity needed by the state for its own PDS and OWS.
- The statutory levies including commissions need to be brought down uniformly to 3 per cent, or at most 4 per cent of MSP, and this should be included in the MSP itself (states losing revenue due to this rationalization of levies can be compensated through a diversification package for the next three-five years);
- The Government of India must provide better price support operations for pulses and oilseeds and dovetail their MSP policy with trade policy so that their landed costs are not below their MSP.
- Cash transfers in PDS should be gradually introduced, starting with large cities with more than 1 million population; extending it to grain surplus states; and then giving deficit states for the option of cash or physical grain distribution.

On PDS- and NFSA-related issues:

- Given that leakages in the PDS range from 40 to 50 per cent, the GoI should defer implementation of the NFSA in states that have not done end to end computerization; have not put the list of beneficiaries online for anyone to verify; and have not set up vigilance committees to check pilferage from PDS.
- Coverage of population should be brought down to around 40 percent.
- BPL families and some even above that they be given 7kg/person.
- On central issue prices, while Antyodya households can be given grains at ₹ 3/2/1/kg for the time being, but pricing for priority households must be linked to MSP.

On stocking and movement related issues:

- FCI should outsource its stocking operations to various agencies.
- Covered and plinth (CAP) storage should be gradually phased out with no grain stocks remaining in CAP for more than 3 months.
- Silo bag technology and conventional storages wherever possible should replace CAP.

On Buffer Stocking Operations and Liquidation Policy:

- DFPD/FCI have to work in tandem to liquidate stocks in OMSS or in export markets, whenever stocks go beyond the buffer stock norms. A transparent liquidation policy is the need of hour, which should automatically kick-in when FCI is faced with surplus stocks than buffer norms.
- Greater flexibility to FCI with business orientation to operate in OMSS and export markets is needed.

On direct subsidy to farmers:Farmers be given direct cash subsidy (of about Rs 7000/ha) and fertilizer sector can then be deregulated.

On end to end computerization:

- The HLC recommends total end-to-end computerization of the entire food management system, starting from procurement from farmers, to stocking, movement, and finally distribution through the TPDS.

On the new face of the FCI:

- The new face of the FCI will be akin to an agency for innovations in the food management system with the primary focus of creating competition in every segment of the foodgrain supply chain, from procurement to stocking to movement and finally distribution under the TPDS, so that overall costs of the system are substantially reduced and leakages plugged and it serves a larger number of farmers and consumers.

Higher procurements have lead to stocks exceeding the buffer norms, which FCI is forced to carry over to the next year.

Food Subsidy

5.55 Provision of minimum nutritional support to the poor through subsidized foodgrains and ensuring price stability in different states are the twin objectives of the food security system. In fulfilling its obligation towards distributive justice, the government incurs food subsidy. The programme covers over 65 million BPL households serviced through 4, 50,000 fair price shops. While the economic cost of wheat and rice has continuously gone up, the issue price has been kept unchanged since 1 July 2002. On account of implementation of the NFSA, the CIP has further gone down for the APL and BPL categories. The government, therefore, continues to provide large and growing amounts of subsidy on foodgrains for distribution under the TPDS/NFSA and other nutrition-based welfare schemes and open market operations. The food subsidy bill has increased substantially in the past few years putting severe strain on the public exchequer (**Table 5.9**).

Storage

5.56 The total capacity available for storage of foodgrains as on 30 November 2014 was 727 lakh MT, comprising covered godowns of 567 lakh MT capacity and cover and plinth (CAP) facilities of 160 lakh MT capacity. The existing warehousing facility is limited not only in terms of capacity but also to certain crops. The stockholding capacity has not kept pace with the increase in production and demand for a long time. Considering that 160 lakh MT capacity is only CAP, which cannot be treated as scientific storage, public agencies do not have warehouses for proper storage of even half of the wheat and rice procured by them. In the wake of persistent seasonal inflation in perishables like fruits and vegetables, there was no effective strategy to control the inflation on a sustainable basis. Cold storage capacity for all type of food items is just 29 MT (Planning Commission 2012). The production of potato alone is about 35 MT. Cold storage facility is available for only 10 per cent of fruits and vegetables produced in India (Planning Commission 2011). The allocation of ₹ 5000 crore for developing scientific warehousing in Budget 2014 can create additional storage capacity of 16 MT. Policies to promote private investment in scientific storage are important to bridge the gap between the requirement and availability of scientific storage capacity.

Table 5.9 : Quantum of Food Subsidies Released

Year	Food subsidy (₹ in crore)	Annual growth (%age)
2005-06	23071.00	-10.39
2006-07	23827.59	3.28
2007-08	31259.68	31.19
2008-09	43668.08	39.69
2009-10	58242.45	33.37
2010-11	62929.56	8.05
2011-12	72370.90	15.00
2012-13	84554.00	16.83
2013-14	89740.02	6.13
2014-15	107823.75*	20.15

Source **: Department of Food and Public Distribution.**
Note **: * Figures up to 9 January 2015.**

Agri-Marketing Reforms

5.57 Box 5.3 gives recent initiatives in agri-marketing. Recognizing the need for setting up a national market the 2014-15 Budget stated that the central government would work closely with state governments to reorient their respective APMC Acts to provide for establishment of private market yards/private markets. The Budget also announced that the state governments would also be encouraged to develop farmers markets in town areas to enable them to sell their produce directly.

Commodity Futures Market

5.58 Currently 43 of the 113 commodities that are notified for futures trading are actively traded in 4 national exchanges and 6 commodity-specific exchanges. Share of agricultural commodities in the total turnover was 18.37 per cent in 2014-15

Box 5.3 : Recent Initiatives in Agricultural Marketing

(i) The Department of Agriculture (DAC) has issued a comprehensive advisory to states to go beyond the provisions of the Model Act and declare the entire state a single market with one licence valid across the entire state and removing all restrictions on movement of agricultural produce within the state.

(ii) In order to promote development of a common national market for agricultural commodities through e-platforms, the department has approved ₹ 200 crore for a central-sector scheme for Promotion of National Agricultural Market through Agri-Tech Infrastructure Fund (ATIF) to be implemented during 2014-15 to 2016-17. Under the scheme, it is proposed to utilize the ATIF for migrating towards a national market through implementation of a common e- platform for agri-marketing across all states.

(iii) On the request of the central government, a number of state governments have exempted the marketing of fruits and vegetables from the purview of the APMC Act. The NCT of Delhi has taken the initiative in this direction by issuing a notification on 2 September2014 , ending the regulation of fruits and vegetables outside redefined market yard/ sub-yard area of the APMC, MNI, Azadpur, APMC, Keshopur, and APMC Shahdara. The Small Farmers Agribusiness Consortium (SFAC) has taken the initiative for developing a kisan mandi in Delhi with a view to providing a platform to FPOs for direct sale of their produce to prospective buyers totally obviating or reducing unnecessary layers of intermediation in the process .They plan to scale their activities in other states based on the outcome of the experience of the Delhi kisan mandi.

Source : **DAC.**

(up to December 2014), with food items (refined soya oil, soyabean, chana, coriander and rapeseed/ mustard seed) contributing 50.01 per cent of it. The remaining (81.63 per cent) turnover was contributed by bullion, metals, and energy contracts. A committee set up by the Ministry of Finance, which submitted its report in April 2014 has observed that hedging efficiency of the commodity futures markets is low. In order to ensure that forward markets in commodities are well regulated and the Indian commodity futures market is compliant with international regulatory requirements, the regulatory framework for the commodity futures market needs to be strengthened at the earliest.

Trade Policy

5.59 Trade Policy in respect of agricultural commodities is changed from time to time in response to domestic availability and price situation. The basic customs duty (BCD) in some agri-products was reduced / removed to encourage domestic manufacture of value added products, generate employment, and make exports competitive. To combat undervaluation and protect the interests of domestic farmers and industry, the BCD of some agri-products like sugar and edible oils was raised. The duty on sugar was increased from 15 per cent to 25 per cent vide Customs Notification dated 21 August 2014 and duty on import of crude and refined edible oils raised from 2.5 per cent to 7.5 per cent and 10 per cent to 15 per cent respectively, vide custom notification dated 24 December 2014.

5.60 There is an increasing demand for opening up of the export of pulses which would incentivize farmers to invest in pulse cultivation and for a reasonable duty structure to be devised to contain excessive import. Further, a pre-announced import duty structure will bring stability in domestic edible oil prices leading to increase in production of oil seed/palm. This will also result in reduced incidence of prices falling below MSPs of oilseeds requiring procurements by government agencies.

5.61 The following policy changes were made in recent years to benefit farmers and to incentivize the development of the agro-processing sector and enhance farm productivity:

- export of edible oils in branded consumer packs of up to 5 kg was permitted with an MEP of US$ 1100 per MT vide Director General of Foreign Trade's notification dated 30 April 2014.
- export of kabuli chana and 10,000 MT of organic pulses per annum has been allowed.

- since 2011, exports of rice and wheat have been permitted.
- since February 2013 processed and/or value-added agricultural products have been exempted from export restrictions /bans even if their base produce is subject to an export ban.
- free export of cotton is permitted.

5.62 The import policy for agriculture is often considered as a price support and price stabilization tool. Increase in tariffs is recommended for agricultural products in response to decline in prices on an ad hoc basis. Reform is required in the import policy of agricultural products. The applied tariffs for imports should be linked in a countercyclical manner with international prices so that the landed prices of imported commodities fall within a known range. This would protect farmers from adverse impact of steep fall in commodity prices and facilitate long-term investment in agriculture. While the trade policy regime should be stable, it should also be nimble to quickly respond to the changed export duty structure of the exporting countries aimed at pushing value-added products by neutralizing our duty differential between raw material and finished product.

Agriculture Trade

5.63 India has emerged as a significant agri-exporter in a few crops, viz. cotton, rice, meat, oil meals, pepper, and sugar. As per the World Trade Organization's Trade Statistics, the shares of India's agricultural exports and imports in world trade in 2013-14 were 2.69 per cent and 1.31 per cent respectively. Agricultural exports as a percentage of agricultural GDP have increased from 9.10 per cent in 2008-09 to 14.05 per cent in 2013-14. During the same period, agricultural imports as a percentage of agricultural GDP also increased from 3.94 per cent to 5.50 per cent.

Outlook and Challenges ahead

5.64 The inflation is not expected to rise significantly from the current levels, since:

a) The oil prices are expected to remain benign in the coming months on account of weak global demand and increased supplies.

b) Global commodity prices, both spot and futures have generally been declining. Global commodity prices are expected to remain weak in 2015 due to low international demand and comfortable supply.

c) Factors like high rural wages, higher level of MSP, and rise in input cost have been instrumental for elevated inflation in the last few years. At present, growth of all these drivers have been slowed down considerably and this could result in keeping food inflation within limits.

5.65 Agriculture and Food sector needs huge investment in research, education, extension, irrigation, fertilizers, and laboratories to test soil, water and commodities, warehousing, cold-storage. Rationalisation of subsidies and better targeting of beneficiaries would generate part of the resources for public investment. There are wide differences in the yields within states. Even the best of the states have much lower yield in different crops when compared to the best in the world. This provides ample opportunity to increase production by bridging the yield-gap to the extent feasible within the climatic zone.

5.66 The focus of public expenditure for agriculture so far has been on provision of subsidies (public expenditure in agriculture is only one-fourth of expenditure towards food and fertilizer subsidies, CACP Kharif report 2014-15) and it is time it shifted towards investments to boost productivity. Recommendations of Shanta Kumar Committee provide useful suggestions for the future road-map of food-policy. Every effort should be made to bring states on board for creating national common market for agricultural commodities.

Industrial, Corporate, and Infrastructure Performance

06
CHAPTER

The earlier perception about slow industrial growth during the last three years is at variance with the latest gross domestic product estimates, based on a new methodology and with 2011-12 as base year. The latter indicates an industrial recovery lead by mining and manufacturing However, in the current year, credit growth, corporate performance, and the Index of Industrial Production continue to point towards slow industrial growth. Infrastructure growth in terms of eight core industries has been higher than industrial growth since 2011-12 and this trend is expected to continue. A number of macro level and sectoral initiatives undertaken to improve industrial growth are expected to yield results over time.

6.2 As per recently released data on national accounts, with 2011-12 as base year, industrial growth in 2012-13 and 2013-14 at 2.4 per cent and 4.5 per cent is much better than the growth rates taking 2004-05 as the base year. Further, the 1.4 per cent growth in gross capital formation (GCF) in industry in 2013-14 implies that recovery in industrial growth commenced last year. In contrast, the Index of Industrial Production (IIP) suggests that the industrial sector is recovering slowly with a 2.1 per cent growth in April-December 2014-15 over the 0.1 per cent increase in the same period last year. The recovery is led by the infrastructure sectors, viz. electricity, coal, and cement. Mining sector growth has turned positive while manufacturing growth continues to remain tepid. In terms of use based classification, basic and capital goods appear to be on the path of recovery, intermediate goods are yet to emerge out of difficulties, and consumer goods led by consumer durables continues to experience negative growth.

6.3 Corporate sector performance of listed manufacturing companies in the private sector in terms of growth of sales and net profit appeared to turn around in Q1 of 2014-15. However, performance in Q2 of 2014-15 has dampened the expectations of sustained improvement. There is no discernible improvement in capacity utilization in the first two quarters of 2014-15, as per the twenty-seventh round of the Reserve Bank of India's (RBI's) Order Books, Inventories and Capacity Utilisation Survey.

6.4 A new regime with a fresh mind-set has been in repair damage mode for instilling confidence among the business community and boosting industrial growth. Box 6.1 lists some of the initiatives of the new government in the industrial sector. The emphasis has been on rapidly improving ease of doing business and launching fresh initiatives like Make in India and Digital India, creating a National Industrial Corridors Authority, streamlining environment and forest clearances and labour reforms. To overcome critical constraints holding up use of land and natural resources, action has been taken to remove regulatory uncertainty by passing ordinances to streamline land acquisition, e-auction of coal blocks for private

Box 6.1 : Recent initiatives to boost industrial growth

1. **Ease of Doing Business:** To improve India`s low Ease of Doing Business Index ranking, reforms are being undertaken in areas such as starting a business, dealing with construction permits, registration of property, power supply, paying taxes, enforcing contracts, and resolving insolvency. The important measures that have been undertaken are liberalization of licensing and deregulation of a large number of defence products, extending the validity of licencses to provide enough time to licencees to procure land and obtain the necessary clearances/ approvals from authorities, adoption of a checklist with specific time-lines for processing all applications filed by foreign investors in cases relating to retail/non-resident Indian (NRI)/export-oriented unit (EoU) foreign investments, automation of processes for registration with the Employees Provident Fund Organization and Employees State Insurance Corporation, processing of environment and forest clearances online, reducing the number of documents for exports, adoption of best practices by states in granting clearances and ensuring compliance through peer evaluation, self-certification, etc.
2. **Make in India:** The Make in India programme is aimed to facilitate investment, foster innovation, enhance skill development, protect intellectual property, and build best-in-class manufacturing infrastructure. Information on twenty-five sectors has been provided on a web portal along with details of FDI policy, National Manufacturing Policy, intellectual property rights, and the Delhi-Mumbai Industrial Corridor and other National Industrial Corridors. An Investor Facilitation Cell has been created in 'Invest India' to guide, assist, and handhold investors
3. **E-Biz Project:** Under the project a Government to Business (G2B) portal is being set up to serve as a one-stop shop for delivery of services to the investors and address the needs of the business and industry from inception through the entire life cycle of the business. The process of applying for industrial licence (IL) and industrial entrepreneur memorandum (IEM) has been made online and this service is now available to entrepreneur on 24x7 basis at the E-Biz website. Other services of the central government are being integrated on top priority.
4. **Skill development:** After the setting up of a new Ministry of Skill Development and Entrepreneurship to promote skill and entrepreneurial activities, work is being undertaken on setting up common norms for skill training across central ministries/ departments. Thirty- one industry/employer-led Sector Skill Councils (SSCs) are now operational and these have been aligned with the twenty-five sectors of 'Make in India'. To create a common standard for skills training and certification in the country efforts are on to align the National Council for Vocational Training (NCVT), school boards, and the University Grants Commission (UGC).
5. **Streamlining environment and forest clearances:** A process for online submission of applications for environment, coastal regulation zone (CRZ), and forest clearances has been started. The decision- making process has been decentralized by strengthening federalism. To ensure industrial and education growth, the requirement of environment clearance has been done away with for projects for construction of industrial sheds which house plant and machinery, educational institutions and hostels.
6. **Labour- sector reforms :** A Shram Suvidha portal has been launched for online registration of units, filing of self-certified, simplified, single online return by units, introduction of a transparent labour inspection scheme via computerized system as per risk-based criteria, uploading of inspection reports within seventy-two hours and timely redressal of grievances. A Universal Account Number has been launched facilitating portable, hassle-free, and universally accessible Provident Fund accounts for employees. The Apprentices Act, 1961 has been amended so as to make it flexible and attractive to youth and industry and an Apprentice Protsahan Yojana to support micro small and medium enterprises (MSME) in the manufacturing sector in engaging apprentices has been launched.

companies, and auction of iron ore and other new coal mines.

6.5 In infrastructure, the focus has been on resolving long-pending issues like pricing of gas, establishing processes and procedures for transparent auction of coal and minerals, and improving power generation and distribution. In railways, there have been several policy announcements such as 100 per cent foreign direct investment (FDI) to build a variety of rail infrastructure and new initiatives like bullet/semi-high speed trains and modernization of stations and timely completion of major projects like Dedicated Freight Corridors being monitored closely. In the road sector efforts have been undertaken to resolve problems associated with projects which are yet to be completed and the National Highways and Infrastructure Development Corporation Ltd. has been set up for speedy implementation of highway projects in the north-east.

IIP-based Industrial Performance

6.6 The IIP provides quick estimates on the performance of key industrial sectors ignoring seasonal adjustment. As per the IIP, industrial production which had slowed down to 2.5 per cent in 2008-09, improved in the next two years to reach 8.2 per cent in 2010-11, declined for the next three years successively, to reverse the trend in 2014-15. The main reasons for the declining industrial growth are high interest rates to tackle persistent inflation, slowdown in investment, and loss of business confidence.

6.7 During April-December 2014-15, industrial production attained a growth of 2.1 per cent owing mainly to recovery in the mining sector and impressive growth in the electricity sector (Table 6.1). The manufacturing sector continues to remain tepid, registering growth of 1.2 per cent in April-December 2014-15.The low growth in manufacturing is mainly due to high rate of interest, infrastructure bottlenecks, and low domestic and external demand.

6.8 In terms of use based classification, basic goods and capital goods have witnessed marked improvement in performance registering growth rates of 6.9 per cent and 4.8 per cent , intermediate goods have grown by 1.7 per cent, while consumer goods have declined by 4.9 per cent during April-December 2014-15 as compared to the same period in 2013-14. The decline in growth of consumer goods is accentuated by the (-)15.2 per cent growth in consumer durables.

Industrial-sector performance based on revised GDP estimates

6.9 The recently released new series of national accounts, revising the base year from 2004-05 to 2011-12 and applying changed methodology, whose details are not yet available, gives considerably improved estimates of growth in the industrial sector in 2012-13 and 2013-14 as compared to those based on the 2004-05 series (Table 6.2). This is mainly due to much better performance in the mining and manufacturing sectors as per the new series. In 2013-14, manufacturing sector growth is estimated at 5.3 per cent as compared to the (-) 0.7 per cent estimated under the 2004-05 series. The Advance Estimates (AE) for the year 2014-15 show industrial growth of 5.9 per cent as per 2011-12 base year. The manufacturing, electricity, and construction sectors have grown

Table 6.1 : Index of Industrial Production-Growth rates (per cent)

	Weight	2012-13	2013-14	2013-14 Q1	2013-14 Q2	2013-14 Q3	2013-14 Apr.-Dec.	2014-15 Q1	2014-15 Q2	2014-15 Q3	2014-15 Apr.-Dec.
General	100.00	1.1	-0.1	-1.0	1.9	-0.8	0.1	4.5	1.3	0.5	2.1
Sectoral											
Mining	14.16	-2.3	-0.6	-4.7	-0.2	0.5	-1.5	3.0	0.5	1.7	1.7
Manufacturing	75.53	1.3	-0.8	-1.1	1.4	-1.6	-0.4	3.9	0.4	-0.8	1.2
Electricity	10.32	4.0	6.1	3.5	8.4	5.0	5.6	11.3	9.4	9.3	10.0
Use based											
Basic goods	45.68	2.5	2.1	-0.2	2.8	1.8	1.5	8.7	7.0	5.1	6.9
Capital goods	8.83	-6.0	-3.6	-3.7	2.2	0.0	-0.4	13.6	-0.5	2.5	4.8
Intermediate goods	15.69	1.6	3.1	1.6	3.8	3.9	3.1	3.1	1.6	0.3	1.7
Consumer goods	29.81	2.4	-2.8	-2.1	-0.2	-6.1	-2.9	-3.2	-5.4	-6.4	-4.9
Consumer durables	8.46	2.0	2.8	-12.7	-9.5	-16.5	-12.9	-9.5	-15.5	-20.9	-15.2
Consumer non-durables	21.35	-12.2	4.8	7.1	8.2	2.3	5.8	1.4	2.3	3.1	2.2

Source **: Central Statistics Office (CSO).**

Table 6.2 : Changes in Growth in Industry at constant prices (per cent)

	Item	2012-13		2013-14		2014-15 (AE)	
		2004-05 Series	2011-12 Series	2004-05 Series	2011-12 Series	2004-05 Series	2011-12 Series
i	Mining and quarrying	-2.2	-0.2	-1.4	5.4	NA	2.3
ii	Manufacturing	1.1	6.2	-0.7	5.3	NA	6.8
iii	Electricity, gas etc.	2.3	4.0	5.9	4.8	NA	9.6
iv	Construction	1.1	-4.3	1.6	2.5	NA	4.5
	Industry	**1.0**	**2.4**	**0.4**	**4.5**	**NA**	**5.9**

Source **: CSO.**

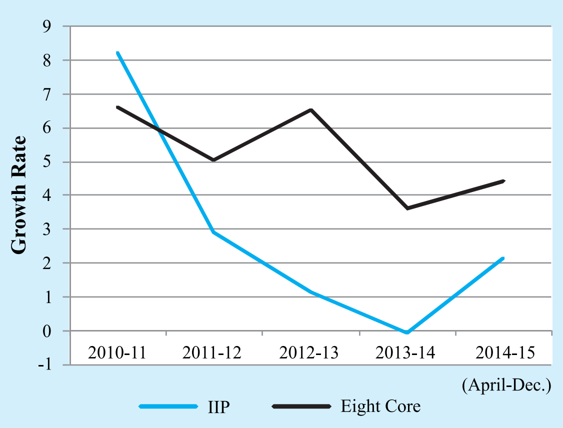
Note **: NA : Not Available**

remarkably while growth in the mining sector has declined as compared to 2013-14. The improved performance in manufacturing is attributed to the change in methodology and use of new data sources. The growth in electricity, gas, and water supply and construction shows marked improvement in 2014-15 as compared to the previous two years.

Performance of Eight Core Industries

6.10 A monthly index of eight core industries, viz. coal, fertilizer, electricity, crude oil, natural gas, refinery product, steel, and cement, comprising 38 per cent of the weight of items in the IIP, is released to gauge the impact on overall economic activity. A comparison between the annual average growth rate in the eight core industries and the IIP (Figure 6.1) shows that since 2011-12 the higher annual growth of the eight core industries than of the IIP, implies slowdown in the growth of consumer goods.

Figure 6.1: Growth of IIP & Eight Core Industries



Source**: CSO and Economic Adviser, Department of Industrial Policy and Promotion (DIPP).**

6.11 The overall growth in eight core industries during April-December 2014-15 has improved marginally to 4.4 per cent compared to 4.1 per cent in the same period last year. Electricity (9.7 per cent), coal (9.1 per cent), and cement (7.9 per cent) boosted the performance, while natural gas (-5.1 per cent), fertilizers (-1.4 per cent), crude oil (-0.9 per cent), refinery products (0.2 per cent), and steel (1.6 per cent) accounted for moderation in growth. The improved performance in electricity is due to high growth in thermal generation; in coal mining to higher production by Coal India Ltd. and captive mining; and in cement to capacity addition. Natural gas and crude oil production have declined because of no major discoveries and problems with old oilfields. Domestic steel production is affected by slowdown in domestic demand and cheaper imports. Fertilizer production has contracted mainly because of non-availability of gas and no significant capacity addition in the past few years.

Comparative position of India and World Manufacturing

6.12 India accounts for 1.8 per cent of the world's manufacturing output. World manufacturing growth was 3.4 per cent in the first quarter and 3.0 per cent in the second quarter of 2014-15, according to the United Nations Industrial Development Organization's (UNIDO) Quarterly Report on World Manufacturing Production. Growth rates in manufacturing are uniformly low worldwide because industrialized economies are experiencing slow growth and emerging economies are finding it difficult to sustain growth as they are facing low demand in the global market and in their domestic economies. The main items which have boosted world manufacturing output are tobacco products, other transport equipment, basic metals, radio, TV and communication equipment, and machinery and equipment.

6.13 India's manufacturing output has increased by 3.9 per cent in the first quarter and 0.4 per cent in the second quarter. The items which have shown high positive growth in 2014-15 (April-December) are electrical machinery and apparatus and basic metals. These have shown positive growth in world manufacturing sector as well. However, in India items like radio, TV and communication equipment and apparatus, and office, accounting, and computing machinery have registered high negative growth whereas in the rest of the world these items have shown positive growth. India needs to be part of the global manufacturing chain to partake of the benefits of growth in these items and the electronics industry needs to be incentivized to set up domestic production facilities.

Corporate-sector Performance

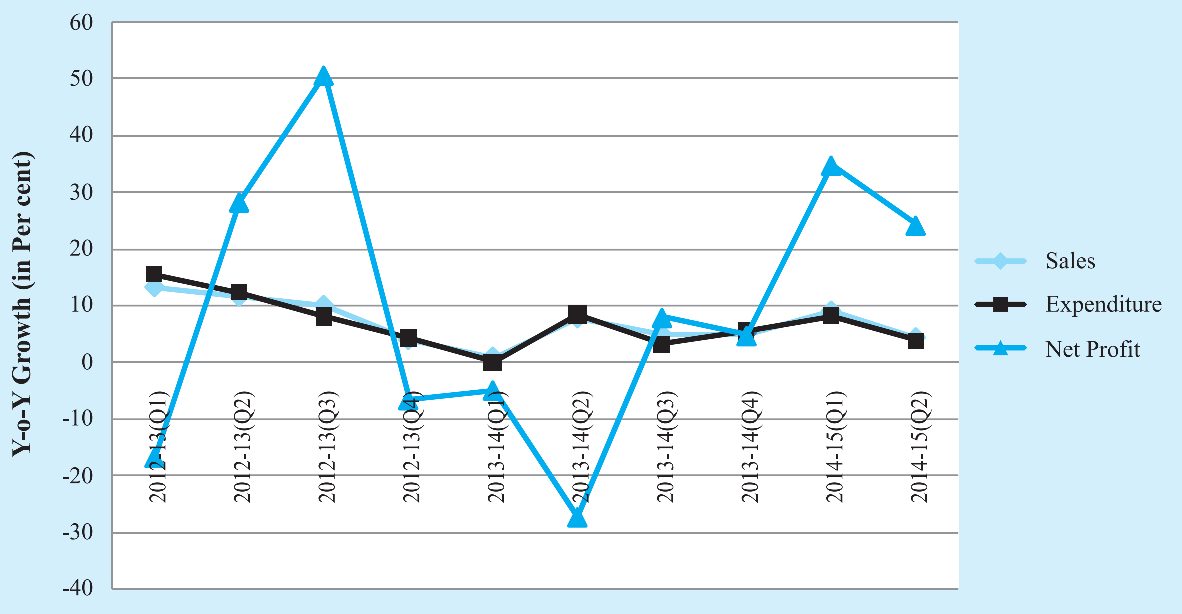
6.14 The corporate sector performance of listed manufacturing companies in the private sector in terms of growth of sales and net profit appeared to turn around in Q1 of 2014-15 (Figure 6.2). However, the performance in Q2 of 2014-15 dampened the expectations of sustained improvement. Year-on-year (Y-o-Y) sales growth declined successively from quarter to quarter from 13.1 per cent in Q1 of 2012-13 to 0.8 per cent in Q1 of 2013-14 and then moderated to around 5.0 per cent in the last two quarters of 2013-14. Sales recorded growth of 8.9 per cent and 4.2 per cent respectively in Q1and Q2 of 2014-15. Similarly, expenditure growth for the manufacturing sector declined successively from Q1 of 2012-13 till Q1 of 2013-14, and then fluctuated till Q2 of 2014-15, when it stood at 3.8 per cent after declining from 8.2 per cent in Q1 of 2014-15. Net profit growth rose sharply from 4.6 per cent in Q4 of 2013-14 to 34.7 per cent in Q1 of 2014-15 and stood at 24.1 per cent in Q2 of 2014-15. For manufacturing companies in the private sector, although growth in sales has been stagnant for the last two years, net profit has started rising from the last quarter of 2013-14, showing improved efficiency of the companies, which is a positive sign for growth of the manufacturing sector in India

6.15 Capacity utilization, as measured by the twenty-seventh round of the Order Books, Inventories and Capacity Utilisation Survey (OBICUS) of the RBI, registered an increase in Q2 of 2014-15 over the previous quarter although it was lower than its level in the previous year. The (Y-o-Y) growth in new orders decelerated from 12.0 per cent in Q1 of 2014-15 to 5.6 per cent in Q2 of 2014-15. The finished goods inventory to sales ratio at 18.0 per cent in Q2 of 2014-15 was similar to the previous quarter but down from its level in the previous year. The raw material inventory to sales ratio declined in Q2 of 2014-15 on both quarter-on-quarter (Q-o-Q) and Y-o-Y basis.

GCF in the Industrial Sector

6.16 As per the latest data available on national income, consumption expenditure, and capital formation at constant 2011-12 prices, the rate of growth of GCF has declined from 37.2 per cent in 2012-13 to 33.4 per cent in 2013-14. The rate

Figure 6.2: Growth in sales, expenditure and net profit of listed Manufacturing Companies in the Private Sector



Source **: RBI**

of growth of GCF in industry has improved from a (-) 0.7 per cent in 2012-13 to 1.4 per cent in 2013-14, implying slight uptick in investment in industry (Table 6.3). The sector-wise share in overall GCF over the period 2011-12 to 2013-14 shows that the shares of mining and electricity have gone up gradually, the share of manufacturing has remained unchanged, and the share of the construction sector has declined.

Table 6.3 : Gross Capital Formation (GCF) by Industry of use at constant prices (2011-12) (in per cent)

	2011-12	2012-13	2013-14
Rate of growth of GCF in industry		-0.7	1.4
Sector-wise share in overall GCF			
i. Mining	2.1	2.4	3.1
ii. Manufacturing	19.7	21.0	19.6
iii. Electricity	9.0	9.8	10.2
iv. Construction	6.5	5.8	5.5

Source **: CSO**

Credit Flow to the Industrial Sector

6.17 Except the mining sector, all other major industrial sectors have experienced slowdown in growth of credit in 2014-15 as compared to 2013-14 (Table 6.4). Growth of credit flow to the manufacturing sector at 13.3 per cent in 2014-15 is lower than the growth of 25.4 per cent in 2013-14, reflecting the tepid growth in the sector. Chemicals, food processing, and textiles have seen a sharp decline in growth of credit in 2014-15. In 2014-15, there is 13.3 credit growth in micro and small industries and 0.7 per cent and 6.1 per cent growth in medium-scale and large-scale industries respectively.

MSME Sector

6.18 The 3.61 crore (MSMEs), contributing 37.5 per cent of the country's GDP, have a critical role in boosting industrial growth and ensuring the success of the Make in India programme. A number of schemes are being implemented for the establishment of new MSMEs and growth and

Table 6.4 : Growth of Credit to Industry by Scheduled Commercial Banks (in per cent)

Sectors	2013-14*	2014-15**
Industries	14.1	6.8
Manufacturing	25.4	13.3
Mining	1.2	3.5
Manufacturing sub-sectors		
Food processing	31.0	12.1
Textiles	14.0	3.1
Petroleum & nuclear fuel	-3.1	-7.4
Cement & cement products	18.6	5.6
Chemicals & chemical products	19.6	-8.9
Basic metal & metal products	15.1	7.3
All engineering	16.3	6.5
Transport equipment	15.6	5.0
Other Industries	-2.5	-3.1

Source: RBI.

Note : * End - December. 2013 over end -December 2012 .
** End-December 2014 over end December 2013.

development of existing ones. These include: (a) the Prime Minister's Employment Generation Programme, (b) Micro and Small Enterprises-Cluster Development Programme , (c) Credit Guarantee Fund Scheme for Micro and Small Enterprises, (d) Performance and Credit Rating Scheme, (e) Assistance to Training Institutions, and (f) Scheme of Fund for Regeneration of Traditional Industries.

Central Public-Sector Enterprises

6.19 Central Public Sector Enterprises (CPSEs), spanning industries and infrastructure, continue to play a key role in the development of the economy. A total of 290 CPSEs existed under the administrative control of various ministries/ departments as on 31 March 2014. Of these, 234 were operational and 56 under construction. Financial investment (paid-up capital + long-term loans) in all the CPSEs stood at ₹ 9,92,971 crore as on 31 March 2014 showing an increase of 17.46 per cent over 2012-13. In 2013-14, net profit of the 163 profit-making CPSEs was ₹ 1,49,164 crore and net loss of the 71 loss-making CPSEs was ₹ 20,055 crore. The Oil and Natural Gas Corporation (ONGC) Ltd, Coal India Ltd, National Thermal Power Corporation (NTPC) Ltd, Indian Oil Corporation Ltd . and National Mineral Development Corporation (NMDC) Ltd. were the top five profit-making CPSEs during 2013-14. Bharat Sanchar Nigam Ltd (BSNL), Air India Ltd, Hindustan Photofilms Manufacturing Co. Ltd., Hindustan Cables Ltd., and State Trading Corporation of India Ltd. were the top five loss-making CPSEs in 2013-14. The contribution of CPSEs to the central exchequer by way of divided payment, interest on government loans, and payment of taxes and duties increased from ₹ 1,63,207 crore in 2012-13 to ₹ 2,20,161 crore in 2013-14. This was primarily due to increase in contribution towards dividend payment, excise duty, customs duty, corporate tax, and dividend tax.

FDI

6.20 An investor-friendly FDI policy has been put in place, whereby FDI up to 100 per cent is permitted under the automatic route in most sectors/activities. In 2014, FDI policy has been further liberalized. FDI up to 49 per cent through the government route has been permitted in the defence industry. Higher FDI has also been allowed on a case-to-case basis. FDI up to 100 per cent through the automatic route has been permitted in construction, operation, and maintenance of identified railway transport infrastructure. Norms related to minimum land area, capitalization, and repatriation of funds for FDI in construction development projects have been further liberalized.

6.21 During April-November 2014-15, total FDI inflows (including equity inflows, reinvested earnings, and other capital) were US$ 27.4 billion, while FDI equity inflows were US$ 18.9 billion. Cumulative FDI inflows from April 2000 to November 2014 were US$ 350.9 billion. Services, construction, telecommunications, computer software and hardware, drugs and pharmaceuticals, the automobile industry, chemicals, and power have attracted a proportionately high share of total inflows.

Infrastructure Performance: Specific Sectors

Power

6.22 To provide 24x7 power across the country by 2019, several decisions have been taken for increasing power generation, strengthening of transmission and distribution, separation of feeder and metering of power to consumers. The Electricity (Amendment) Bill 2014 has been introduced in the Lok Sabha to usher in reforms in the power sector, promote competition and efficiency in operation, and improve the quality of supply of electricity.

Generation

6.23 With a target of 765.39 billion units (BU) and achievement of 793.73 BU, electricity generation by power utilities has exceeded the target for April-December, 2014. Led by double-digit growth in thermal sector, a 9.9 per cent growth was achieved in power generation during April-December 2014-15 (Table 6.5). The negative growth in hydro generation in 2014-15 is mainly due to poor monsoon.

6.24 In April-December, 2014-15, in the thermal category, growth in generation from coal, lignite, and gas-based stations was of the order of 14.41per cent , 9.64 per cent, and (-) 3.89 per cent respectively. The overall plant load factor (PLF), a measure of efficiency of thermal power stations, was 65.09 per cent during April-December 2014 as compared to 64.57 per cent during April-December 2013.

Capacity addition

6.25 The capacity-addition target during the Twelfth Plan period is 88,537 MW comprising 26,182 MW in the central sector, 15,530 MW in the state sector, and 46,825 MW in private sector. As against the capacity-addition target of 17,830.3 MW in 2014-15, 11,610.41 MW (including 1,000MW nuclear capacity commissioned) has been added till 31December 2014. The cumulative capacity addition as on 31 December 2014, is 50,058.22 MW, which constitutes 56.5 per cent of the Twelfth Plan target. The individual targets achieved by the central, state, and private sectors are 39.2 per cent, 64.5 per cent, and 63.6 per cent, respectively.

Distribution

6.26 To reduce aggregate technical and commercial (AT & C) losses, establish IT-enabled energy accounting/auditing, and improve collective efficiency, a new scheme, the 'Integrated Power Development Scheme (IPDS)' which subsumes the Restructured Accelerated Power Development and Reforms Programme (R-APDRP), has been launched. The outlay for the IPDS is ₹ 32,612 crore. Its key features are strengthening of the sub-transmission and distribution network in urban areas, metering of distribution /feeders/ transformers /consumers in urban areas and roof top solar panels.

Table 6.5 : Power Generation by Utilities (billion units)

Category	April-March			April-December		
	2012-13	2013-14	Growth (per cent)	2013-14	2014-15	Growth (per cent)
Power generation	912.06	967.15	6.04	722.11	793.73	9.91
Hydroelectric#	113.72	134.85	18.58	110.76	106.73	-3.64
Thermal	760.68	792.48	4.18	580.81	657.06	13.13
Nuclear	32.87	34.27	4.14	25.11	25.04	-0.28
Bhutan Import	4.80	5.60	16.75	5.44	4.90	-9.91

Source **: Ministry of Power.**

Note **: # includes generation from hydro stations above 25 MW.**

6.27 A new scheme, the 'Deendayal Upadhyaya Gram Jyoti Yojana' (DDUGJY), has been launched with the objectives of: (a) separating agriculture and non-agriculture feeders to facilitate distribution companies (discoms) in the judicious rostering of supply to agricultural and non-agricultural consumers; (b) strengthening and augmentation of sub-transmission and distribution infrastructure in rural areas; and (c) metering in rural areas. The existing 'Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)' is subsumed under the DDUGJY. Under the new scheme all discoms including private sector discoms are eligible for availing of financial support.

Petroleum and Natural Gas

Production

6.28 Domestic annual production of crude oil has been stagnant at around 38 million tonnes in the last four years. During April-December 2014-15, domestic production of crude oil was 28.171 MMT which is close to the 28.423 MMT produced during the same period last year. Production was affected due to operational problems in RJ-ON-90/1, GAIL pipeline fire accident in Andhra Pradesh, and prolonged bandhs and blockages in Assam.

6.29 Gas production during April-December 2014-15 was 25.320 BCM against 26.698 BCM during the corresponding period of 2013-14, showing a decline of 5.1 per cent. The decline in natural gas production is due to lower production in Bassein and satellite fields, under performance of six newly drilled wells in M&S Tapti, seizure of one well in KG-D6, and closure of non-associated gas wells on account of the GAIL pipeline accident.

6.30 Domestic production is supplemented by oil and gas assets acquired by Indian companies abroad. During April -December 2014-15, production of crude oil and natural gas from assets abroad was 4.135 MMT and 2.417 BCM, respectively. Box 6.2 lists some of the initiatives for enhancing crude oil and natural gas production.

Box 6.2 : Recent Policy Initiatives for enhancing Crude Oil and Natural Gas production

- **New Gas Pricing Formula:** The Government approved the New Gas Pricing formula on 18 October, 2014 and released New Gas Pricing Guidelines, 2014. The increase in price of domestically produced natural gas strikes a fine balance between the expectations of investors and interests of consumers.
- **Reforms in Production-Sharing Contracts to push Investment in Exploration:** The government has ironed out a number of rigidities in production- sharing contracts to instil confidence among investors and ensure that work, which was stuck in a number of blocks, takes off in right earnest and without further delay.
- **Reassessment of Hydrocarbon Potential:** An elaborate plan has been rolled out to reassess hydrocarbon resources in India's sedimentary basins which will provide greater clarity to future investors on the prospects of the basins.
- **Project for Survey of Un-appraised Sedimentary Basins of India:** A project has been undertaken to appraise about 1.5 million sq. km area in twenty-four sedimentary basins where scanty geo-scientific data is available. Data generated under the project shall be stored, maintained, validated in a National Data Repository (NDR) which is being set up in the Directorate General of Hydrocarbons (DGH).
- **Data Acquisition through Non Exclusive Multi-Client Model:** A policy for acquisition of geo-scientific data through a non-exclusive multi-client model is being implemented. This model replaces the earlier fiscal term of profit sharing after cost recovery with the payment of a one- time project fee.
- **Level Playing Field for Gas operations in the North East Region:** For incentivizing exploration and production in the North East region, a 40 per cent subsidy on gas operations has been extended to private companies operating in the region.
- **Gas Grid Infrastructure:** In addition to the existing 15,000 km gas pipeline network, another 15,000 km has been planned for completion of the gas grid.

Refining capacity

6.31 India is a major player in global refining. Its refining capacity was 215.066 million metric tonne per annum (MMTPA) as on 1 April 2014. Crude throughput during April-December 2014-15 was 166.685 MMT, marginally higher than 166.362 MMT during April-December 2013-14.

Exploration of unconventional resources

6.32 Coal Bed Methane (CBM): Out of the total available coal-bearing area of 26,000 sq. km for CBM exploration in the country, exploration has been initiated in about 17,000 sq. km. The estimated CBM resources in the country are about 92 trillion cubic feet (TFC), of which only 9.9 TCF has so far been established. Commercial Production of CBM in India has now become a reality with current production of about 0.60 million metric standard cubic metre per day (MMSCMD).

6.33 Shale Oil and Gas: Under the first phase of assessment of shale oil and gas, fifty Petroleum Exploration Lease (PEL) / Petroleum Mining Lease (PML) blocks have been awarded to ONGC and five to OIL. These blocks are located in Assam (6), Arunachal Pradesh (1), Gujarat (28), Rajasthan (1), Andhra Pradesh (10), and Tamil Nadu (9). ONGC has drilled one well and spudded another in Cambay Basin, Gujarat, for assessment of shale gas/shale oil potential of Cambay Basin.

New And Renewable Energy

6.34 To provide a big push to solar energy, two new schemes, viz., 'Scheme for Development of Solar Parks and Ultra Mega Solar Power Projects' and 'Pilot-cum-Demonstration Project for Development of Grid Connected Solar PV Power Plants on Canal Banks and Canal Tops' were rolled out in December, 2014. Supplementary guidelines were issued under the existing 'Solar Pumping Programme for Irrigation and Drinking Water' scheme to solarize the targeted one lakh such pumps throughout the country during the current year.

6.35 Under the 'Pilot-cum-Demonstration Project for Development of Grid Connected Solar PV Power Plants 'in principle' approval has so far been accorded to canal-top projects for generation of 34 MW solar power and canal-bank projects for 35 MW.

Coal

6.36 A quantum jump in production of domestic coal is critical when the country is gearing up to revive economic growth. The focus is therefore on addressing quantity, quality and time-bound transportation issues so that the fuel needs of a growing economy are met.

Production

6.37 The annual target for coal production for 2014-15 is 630.25 MT. Production of raw coal during April-December 2014 at 426.7 MT increased by 9.1 per cent compared to 1.5 per cent growth in the corresponding period of 2013-14 . Though the production of coal has been increasing over the years, total imports including both coking and non-coking coal have also increased due to higher demand mainly from fuel-starved power stations (Table 6.6).

Coal Mines (Special Provisions) Ordinance, 2014

6.38 The government has taken quick decisions to overcome the uncertainty in the coal sector emerging from the Supreme Court judgment dated 20 August, 2014 and its order dated 24 September, 2014 cancelling allocation of certain coal blocks and issuing directions with regard to them. The central government has issued the Coal Mines (Special Provisions) Ordinance, 2014 on 21 October 2014 followed by the Coal Mines (Special Provisions) Second Ordinance, 2014 on 26 December 2014. The main purpose of these ordinances is to provide for allocation of coal mines to steel, cement, and power utilities which are vital for development and, ensure smooth transfer of rights, title, and interests in the mines/blocks along with their land and other associated mining infrastructure to the new allottees to be selected

Table 6.6 : Production, Supply, and Import of Coal

(million tonnes)

Year	All India coal		CIL		Imports		Total imports
	Production	Offtake/ supply	Production	Offtake/ supply	Coking	Non-coking	
2008-09	492.76	489.17	403.73	400.72	21.08	37.92	59.00
2009-10	532.04	513.79	431.26	415.22	24.69	48.57	73.26
2010-11	532.70	523.47	431.32	423.78	19.48	49.43	68.91
2011-12	539.95	535.30	435.84	432.62	31.80	71.05	102.85
2012-13	556.40	567.14	452.21	464.54	35.56	110.22	145.78
2013-14	565.77	571.25	462.41	470.91	37.19	131.25	168.44
2014-15*	485.38	497.12	388.98	398.29	27.6 #	110.0 #	137.6 #

***Source* : Ministry of Coal.**
***Notes* : *Up to January 2015.**
 # Import figures are up to November 2014. CIL is Coal India Limited.

through an auction or allotment (to government companies). The allocation of coal blocks would now be made in line with the provisions of the ordinances and rules made under them and the auction of coal blocks would be through an e-auction process in order to keep the process transparent. The methodology for fixing a floor/ reserve price for auction and allotment of these coal mines/blocks has also been spelt out by the government. The government has assigned high priority to the early completion of critical railway projects for movement of coal.

Minerals

6.39 The share of the mining and quarrying sector as a percentage of gross domestic product (GDP) has declined from 2.8 per cent in 2010-11 to 2.1 per cent in 2013-14 (Provisional Estimates). During this period, following in the wake of various judicial pronouncements, and the Justice Shah Commission Report, several mining leases were either suspended or closed down. To overcome the problems in the sector, an enabling environment based on sound principles of transparency and efficiency is being designed to provide a fair level playing field to both domestic and foreign investors.

Settling the policy paradigm

6.40 To give a fillip to the mining sector, it has been decided to amend the provisions of the Mines and Minerals (Development & Regulation) Act , 1957 (MMDR) with the objectives of: (a) providing greater transparency in allotment by auctioning mining leases; (b) attracting private investment and high technology by promoting easy transferability; and (c) obtaining an increased share for the state governments. To this effect an ordinance has been promulgated on 12 January 2015. The salient features of the Mines & Minerals (Development Regulations) (Amendment Ordinance 2015) include: –

(a) Auction for realization of fair value: For realization of the fair share value of the mineral resources and for improving transparency in allocation of mineral resources, a provision has been made for grant of mineral concessions only through auction by competitive bidding. However, dispensation in respect of public sector entities has to be specified separately.

(b) Dispensing with discretion and addressing possible disruption: To remove discretion in grant of renewals, provisions for renewal of mining leases has been removed. The period of mining lease has been increased to fifty years. After fifty years a lease will be auctioned afresh.

(c) Relief to project-affected people/district: In order to earmark funds for benefit of persons affected by mining, setting up of a District Mineral Foundation in every district affected by mining has been announced. The resources for the Foundation will be raised by way of an additional levy, not exceeding one-third of the royalty, and as decided by the Government of India from time to time. The state governments are required to frame rules for the governance structure of the Foundation and effective utilization of its funds.

(d) Boost to exploration: The establishment of a National Mineral Exploration Trust has been proposed for the purpose of regional and detailed exploration. This will be funded by an additional levy not exceeding 2 per cent of the royalty.

(e) Easy transferability to encourage private sector participation: To attract private agencies and promote the latest technology, a provision has been made for easy transfer of mineral concessions which have been granted through auction route.

(f) Timely disposal of cases: For eliminating delays in administration and facilitating expeditious and optimum development of the mineral resources, a provision has been made to empower the central government to frame rules for fixing time limits for the various stages in processing applications for grant of mining lease or prospecting license-cum-mining lease.

(g) Deterrents against illegal mining: To curb the menace of illegal mining, imposition of stricter penalties like imprisonment up to five years or fine up to ₹ 5 lakh per hectare of area where illegal mining is proved are proposed.

6.41 For a smooth transition to the new mining regime, several steps need to be taken by the government and various other agencies. These include piloting the Amendment Bill in the Parliament, framing of rules for amendment of Mineral Concession Rules, 1960 and Mineral Conservation and Development Rules, 1988 in line with the proposed changes in the MMDR Act, laying down the auction procedure including preparation of standard bidding documents, setting up of District Mineral Foundation and National Mineral Exploration Trust and most importantly hand holding the state governments, and strengthening their capacity to deal with the transition to the auction regime without any disruption in the production of important minerals.

Railways

6.42 Indian Railways (IR) is faced with the challenge of sustaining traffic volume in an environment of moderate growth. The key focus areas for IR include creation of capacity, modernization of network, improvement in asset utilization and productivity, modernization of rolling stock and maintenance practices, and improvement in the quality of services. Investments are being prioritized in important areas like Dedicated Freight Corridors (DFCs) , high speed rail, high capacity rolling stock, last mile rail linkages, and port connectivity. Box 6.3 lists some of the initiatives by IR.

Freight performance

6.43 Freight loading (excluding loading by Konkan Railways) by IR during 2013-14 was 1051.64 million tonnes, as against 1008.09 million tonnes in 2012-13, registering an increase of 4.32 per cent. During April -December 2014-15, IR carried 806.38 million tonnes of revenue-earning freight traffic, as against a budget target of 807.18 million tonnes. The freight carried shows an increase of 39.15 million tonnes over the freight traffic during the same period in 2013-14, translating into an increase of 5.1 per cent.

Box 6.3 : New initiatives by IR during 2014-15

i. **Completion of Udhampur-Katra broad gauge line:** The Udhampur-Katra broad gauge line in Jammu and Kashmir, bringing the state closer to the rest of the nation, is an engineering marvel by IR. Four train services up to Katra have commenced from July 2014.

ii. **Meghalaya gets rail connectivity:** Meghalaya got its first rail connectivity with the completion of the new Dubhnoi-Mendipathar line in August 2014. A new route from Mendipathar in Meghalaya to Guwahati in Assam, got connected by rail in November , 2014.

iii. **High speed Bullet Trains:** Steps are under way for introduction of High Speed Bullet Trains in the country on the Mumbai-Ahmedabad corridor, as part of the Diamond Quadrilateral network of high speed rail, connecting major metros and growth centres of the country.

iv. **Next Generation e-ticketing(NgeT) application:** The newly launched NgeT, developed by the Central Railway Information Centre (CRIS) has enabled sharp increase in online ticket booking capacity, number of enquiries per minute, as well as the capacity to handle concurrent sessions.

v. **Premium special trains:** To make sufficient berths available to passengers, and to earn additional revenue, as compared to trains operating on normal fares, IR has introduced premium special trains under the dynamic fare system.

vi. **Harnessing solar energy:** The Rail Coach Factory, Rae Bareli is presently functioning completely on solar power. A 30 kw solar plant has been commissioned, on the roof top of Rail Bhawan at New Delhi and provision of solar plants at other Railway buildings is being expedited , preferably under the public-private partnership (PPP) model.

vii. **Wi-Fi Broadband service at select railway stations:** Bengaluru and New Delhi Railway Stations have been provided Wi-Fi broadband facilities.

viii. **e-catering service in trains:** Indian Railways Catering and Tourism Corporation, has been entrusted the task of implementation of e-catering service in trains.

ix. **Cooperation with China :** An MoU and an Action Plan have been signed between the Government of India and People's Republic of China, for enhancing technical cooperation in the railway sector. The potential cooperation areas in the MoU include i) training in heavy haul freight transportation, ii) raising speed of trains on existing routes, iii) station re-development, iv) high speed rail, and v) setting up of a Railway University.

x. **Early completion of coal transportation projects:** Three rail connectivity projects for coal movement in Jharkhand, Odisha, and Chhattisgarh have been put on fast track.

Semi-high speed trains

6.44 Nine corridors have been identified for the introduction of semi-high speed trains at 160/200 kilometers per hour (kmph), viz. (i) Delhi-Agra (ii) Delhi-Chandigarh (iii) Delhi-Kanpur (iv) Nagpur-Bilaspur (v) Mysore-Bengaluru-Chennai (vi)Mumbai-Goa (vii) Mumbai-Ahmedabad (viii) Chennai-Hyderabad; and (ix) Nagpur-Secunderabad. All technical inputs required for running of commercial services at 160 kmph, on the New Delhi-Agra corridor, have been provided, and the corridor is ready for introducing the service. A feasibility study for raising the speed on the Chennai-Bengaluru-Mysore corridor is being taken up under a co-operation agreement with China.

ROADS

6.45 India has one of the largest road networks of over 48.65 lakh km, comprising expressways, national highways, state highways, major district roads, other district roads, and village Roads. The national highways (NHs) with a total length of 96,214 km serve as the arterial network of the country. Table 6.7 shows the status of the National Highways Development Project (NHDP) as on 31 December 2014.

Financing of NHDP

6.46 To fund the NHDP, a part of the fuel cess imposed on petrol and diesel is allocated as budgetary support. The National Highways Authority of India (NHAI) leverages this to borrow

Table 6.7 : Status of NHDP as on 31 December 2014

Sl. No.	NHDP component	Total length (km)	Completed 4/6 lane(km)	Under implementation Length (km)	Under implementation No. of contracts	Balance for award of civil works (km)
1.	NHDP Phase I (GQ, port connectivity, others)	7,522*	7,519	3	1	-
2.	NS-EW Corridors	6,647	5,836	441	45	370
3.	NHDP Phase III	12,109	6,352	4,708	125	1,049
4.	NHDP Phase IV	20,000	907	7,759	114	11,334
5.	NHDP Phase V	6,500	1,973	2,107	27	2,420
6.	NHDP Phase VI	1,000	0	0	0	1,000
7.	NHDP Phase VII	700	22	19	1	659
	Total	**54478**	**22609**	**15037**	**313**	**16832**

Note : *** Two projects (24 km) for Chennai – Ennore port connectivity have been re-awarded. These two projects were merged with another project (6 km) under Phase – I whereby total length increased by 24 km.**

additional funds from the debt market. Till date, such borrowings have been limited to funds raised through 54 EC (capital gains tax exemption) bonds and tax-free Bonds.

6.47 The economic down turn seen in the last few years caused reduction in the growth of traffic and consequently lower revenue realization for build operate transfer (BOT) road projects. The reduced revenue realization adversely affected debt servicing by concessionaires. This caused widespread default in debt accounts. Concessionaires unable to service debt had to seek restructuring from lenders. With debt obligations mounting on account of debt repayment deferments, sector exposure increased, reaching the ceiling exposure norms for the road sector. The road sector debt portfolio faced disproportionately high levels of default. Consequently the appetite for BOT PPP projects came down as developers had no equity to contribute and lenders were unwilling to provide debt funds. The government stepped in and took various initiatives to restore market confidence. To ensure that project execution does not suffer owing to cash flow constraints, rescheduling of premium payment in BOT projects has been granted, to be available to concessionaires experiencing subsistence revenue shortfall.

Improvement of road connectivity in left-wing extremism (LWE)-affected areas

6.48 The government has approved a scheme for development of 1,126 km of national highways and 4,351 km of state roads in left -wing extremism (LWE) affected areas as a special project with an estimated cost of about ₹ 7,300 crore. Development in 3,299 km length has been completed up to December 2014 and cumulative expenditure incurred so far is ₹ 4,374 crore.

Creation of a corporation to expedite works in the North-Eastern Region

6.49 The National Highways and Infrastructure Development Corporation Ltd. has been created to expedite development of highways in the North-Eastern region and border areas.

Civil Aviation

6.50 One of the significant achievements of the civil aviation sector is that the PPP model for airports has led to a significant improvement in infrastructure and in collection of revenues.

Passenger and cargo handled

6.51 There has been healthy increase in international passengers and cargo handled at

Indian airports during 2014-15. During April - December 2014-15, 101.34 million domestic passengers and 36.74 million international passengers were handled at Indian airports. Domestic passenger traffic throughput increased by 7.1 per cent and international passengers increased by 10.3 per cent during April-December 2014-15 as compared to the same period in 2013-14. International cargo throughput at Indian airports was 1.17 million metric tons while domestic cargo throughput stood at 0.74 million metric tons. International cargo throughput increased by 8.3 per cent and domestic by 19.3 per cent in April –December 2014-15 as compared to the corresponding period of previous year.

Airport Infrastructure

6.52 The Airports Authority of India (AAI) is managing 125 airports in the country. It has finalized a no frills airport model to build airports in remote areas with the objective of improving air connectivity and boosting the country's economic growth. During 2014-15, the AAI has completed development of airports at Bikaner and Jaisalmer (Rajasthan), Bhatinda (Punjab), and Cuddapah (Andhra Pradesh).

Initiatives

6.53 The major initiatives to augment better airport infrastructure across the country are: (a) implementation of PPP projects at four airports of the AAI, namely Chennai, Kolkata, Ahmedabad, and Jaipur, (b) setting up of greenfield airports, namely, Mopa in Goa; Navi Mumbai, Shirdi and Sindhudurg in Maharashtra; Shimoga, Gulbarga, Hassan, and Bijapur in Karnataka; Kannur and Arnamula in Kerala; Durgapur in West Bengal; Pakyong in Sikkim; Datia/Gwalior (cargo) in Madhya Pradesh; Kushinagar in Uttar Pradesh; and Karaikal in Puducherry, and (c) development of small airports in Tier II and Tier III cities, namely Hubli and Belgaum in Karnataka, Kishangarh in Rajasthan, Jharsuguda in Odisha, and Tezu in Arunachal Pradesh.

Ports

Cargo traffic at Indian Ports

6.54 During April-December, 2014-15, major and non-major ports achieved a total cargo throughput of 775.17 million tonnes, showing an increase of 6.8 per cent over the same period of 2013-14 (Table 6.8). The growth of cargo at non-major ports was 9.1 per cent while that at major ports was 5.0 per cent.

Telecommunications

6.55 The telecom sector continues to grow rapidly. During April-November 2014-15, 31.2 million new telephone connections were added, way ahead of the 12.13 million new connections in the corresponding period of 2013-14. Overall teledensity has increased from 75.23 per cent at the beginning of April 2014 to 77.12 per cent at the end of November 2014, while total broadband connections have touched 82.22 million.

Table 6.8 : Cargo Traffic at Ports

(million tonnes)

Category of ports	2012-13	2013-14	April-December	
			2013-14	2014-15
Major ports	545.83	555.49 (1.8)	413.06	433.86
Non-major ports	387.92	420.24 (8.3)	312.84	341.31
All ports	933.75	975.73 (4.5)	725.90	775.17

Source **: Ministry of Shipping.**

Note **: Figures in parentheses indicate growth over the previous year.**

National Optical Fibre Network Project

6.56 In order to ensure equity in access and to accelerate socio-economic growth in rural areas, the Department of Telecommunications (DoT) has planned to connect all 2,50,000 Gram Panchayats in the country with minimum 100 Mbps bandwidth under the National Optical Fibre Network Project (NOFN). Cable laying has been completed in about 5000 villages and the project is likely to be completed by 31 December 2016.

Spectrum Auction

6.57 The DoT plans to conduct auction of spectrum in 2100 MHz, 1800 MHz, 900 MHz, and 800 MHz bands. A roadmap will also be chalked out for providing more spectrums, as per the National Telecom Policy 2012, keeping in view the objective of affordable and reliable communication services to serve public interest.

Urban Infrastructure

6.58 Urbanization in India has become an irreversible process and an important determinant of national economic growth and poverty reduction. The increased pace of urbanization poses challenges with respect to providing adequate infrastructure, improving connectivity, and mobilizing resources The level of urbanization has increased from 27.78 per cent in 2001 to 31.18 per cent in 2011. According to Census 2011, as many as thirty-five cities in India had a million plus population. At current rates of growth, urban population in India is projected to reach 575 million by 2030.

New schemes

6.59 Three new schemes have been announced for development of urban infrastructure. These are the Swachh Bharat Mission (SBM), Heritage City Development and Augmentation Yojana (HRIDAY), and Smart City Scheme. All statutory towns will be covered under the SBM which will be in force till 2 October 2019. The objectives of the SBM are elimination of open defecation, eradication of manual scavenging, modern and scientific solid waste management, and generating awareness about sanitation and its linkage with public health. The objective of HRIDAY is to preserve the character of a heritage city and facilitate inclusive heritage-linked urban development by exploring various avenues including involvement of the private sector. It is proposed to develop 100 smart cities identified on the basis of stipulated criteria .These cities will have smart (intelligent) physical, social, institutional, and economic infrastructure to improve public services.

Services Sector

07

CHAPTER

India's dynamic services sector has grown rapidly in the last decade with almost 72.4 per cent of the growth in India's GDP in 2014-15 coming from this sector. Unlike other developing economies, the Indian growth story has been led by services-sector growth which is now in double digits.

International Comparison

World Services GDP

7.2 In 2013 in the US$ 75.6 trillion world gross domestic product (GDP)(at current prices) the share of services improved marginally to 66.0 per cent while growth rate (at constant prices) decelerated marginally to 2.1 per cent over 2012. However, in the last twelve years, the share of services in world GDP has declined by 2.8 percentage points (pp). The US ranks first in services GDP as well as in overall GDP, with China and Japan a distant second and third. Among the world's top 15 countries in terms of GDP, India ranked 10th in terms of overall GDP and 11th in terms of services GDP in 2013. However, among these top fifteen nations, in the period 2001-13, maximum increase in services share to GDP was recorded by Spain (8.6 pp) followed by India (5.7 pp) and China (5.6 pp). During this period, with a compound annual growth rate (CAGR) of 8.7 per cent, India had the second fastest growing services sector, just below China's 10.7 per cent. Among these top fifteen countries, only China's share of services in its total GDP is less than 50 per cent (Table 7.1).

World Services Employment

7.3 As per the International Labour Organization's (ILO) Global Employment Trends 2014, services accounted for more than half of total global employment growth of 1.4 per cent in 2013 over 2012. The share of services in world income declined from 68.8 per cent in 2001 to 66 per cent in 2013, while its share in employment increased from 39.1 per cent to 45.1 per cent. For the top fifteen countries, except India and China, the shares of both services GDP and services employment are high and close to each other. India's services sector has a high share in income and relatively low share in employment, while in China, the shares of both services income and services employment are relatively low. But in both these countries, the shares of services in both GDP and employment have increased in the last twelve years.

World Services Trade

7.4 During 2001-13 the CAGR of world commercial services exports was 10 per cent, with India at the top among the top fifteen largest economies at 20.1 per cent followed by China at 16.5 per cent. In 2013, the US$ 4.6 trillion world commercial services exports grew by 5.6 per cent. Services exports of the United States, the largest exporter of commercial services, grew by 5 per cent while they decelerated for China to 7.5 per cent and India to 3.6 per cent due to decline in exports of transport services by 3 per cent in both countries. Services imports of India fell by 2.7 per cent and China's grew by 17.6 per cent.

Table 7.1 : Performance in Services: International Comparison

Country	Rank in GDP		Services growth rate			Share of services						Services export growth		
	Over all	Ser-vices	(per cent) Y-o-Y		CAGR 2001-13	in GDP		in employment		in total exports		(per cent) Y-o-Y		CAGR 2001-13
			2001	2013		2001	2013	2001	2013	2001	2013	2001	2013	
US	1	1	2.1	1.7	1.8	77.6	78.6	75.0	81.2	27.2	29.5	-3.6	5.0	7.7
China	2	2	10.3	8.3	10.7	40.5	46.1	27.7	35.7	11.0	8.5	9.1	7.5	16.5
Japan	3	3	1.3	0.8	0.7	69.0	72.4	63.9	69.7	13.6	16.9	-6.9	2.0	7.1
Germany	4	4	3.1	0.1	0.9	68.8	68.4	64.6	70.2	12.8	16.5	5.6	7.8	10.7
France	5	5	2.0	0.6	1.4	74.7	78.5	69.9	74.9	19.8	29.0	-0.5	9.7	9.5
UK	6	6	3.4	2.0	2.2	73.6	79.2	73.8	78.9	30.1	35.1	-0.8	1.5	7.9
Brazil	7	8	1.8	2.1	3.5	67.1	69.4	59.4	62.7	13.0	13.4	-2.7	-1.7	12.9
Italy	8	7	2.3	-1.3	0.2	70.5	74.4	63.1	68.5	18.9	17.6	2.1	6.1	5.6
Russia	9	10	3.3	2.0	5.1	55.6	59.8	58.6	62.3	9.9	11.0	17.3	11.2	4.0
India	10	11	7.5	6.7	8.7	51.3	57.0	24.0	28.1	27.9	32.5	4.8	3.6	20.1
Canada	11	9	3.5	1.8	2.5	65.9	70.4	74.7	76.5	12.7	14.6	-3.6	0.0	6.2
Australia	12	12	3.7	2.5	3.0	69.9	69.7	74.2	75.5	21.8	17.1	-8.9	-0.1	9.4
Spain	13	13	4.0	-1.1	2.3	65.3	73.9	62.0	74.9	32.2	31.5	6.0	6.1	8.4
South Korea	14	15	5.0	2.9	3.7	59.0	59.1	62.6	76.4	16.3	16.6	-4.9	1.3	15.7
Mexico	15	14	1.1	2.4	3.2	57.7	58.9	56.1	61.9	7.2	4.9	-7.5	21.3	11.8
World			**2.5**	**2.1**	**2.5**	**68.8**	**66.0**	**39.1**	**45.1**	**19.4**	**19.8**	**0.1**	**5.6**	**9.9**

Source : Computed from UN National Accounts Statistics for GDP, World Bank and ILO database for employment and WTO database for Services Trade.

Notes : Rank and share are based on current prices (2013); growth rates are based on constant prices (US$); construction sector is excluded in services GDP; for employment data in 2013, the available data of nearest preceding years is used.

7.5 In Q1, Q2 and Q3 of 2014, world services exports grew by 5.7 per cent, 6.4 per cent, and 4.7 per cent respectively. India's services export growth was at 7.4 per cent in Q1 but decelerated to 2.8 per cent and 2.7 per cent in Q2 and Q3. Its services import growth fell by 3.9 per cent in Q1 but grew by 0.3 per cent and 2.7 per cent in Q2 and Q3 respectively.

Foreign Direct Investment in World Services Sector

7.6 In 2014, global foreign direct investment (FDI) inflows declined by 8 per cent to an estimated US$ 1.3 trillion, due to the fragility of the global economy, policy uncertainty, and geopolitical risks as per the United Nations Conference on Trade and Development (UNCTAD). China became the world's largest recipient of FDI, with an increase of 3 per cent driven by FDI in the services sector while FDI in manufacturing fell. India's FDI rose by around 26 per cent to an estimated US$ 35 billion also due to inflows in the top services sector as corroborated by the Indian data.

India's Services Sector

7.7 Services in India are emerging as a prominent sector in terms of contribution to national and states' incomes, trade flows, FDI inflows, and employment.

Services GDP and Gross Capital Formation

7.8 As per the new method of India's National Accounts Statistics, the services sector accounting for 51.3 per cent of India's gross value added (GVA) at basic prices (current prices) in 2013-14, grew by 9.1 per cent compared to 6.6 per cent total GVA growth and 6.9 per cent GDP growth at market prices. Including construction, a borderline service, the services share is 59.6 per cent and growth is 8.1 per cent (Table 7.2).

7.9 Interestingly, the services sector has the highest share (54.6 per cent) in the gross capital

Table 7.2 : Share and Growth of India's Services Sector (GVA at basic price)

(per cent)

	GVA			GCF	
	2012-13	2013-14	2014-15#	2012-13	2013-14
Total Services	**50.0 (8.0)**	**51.3 (9.1)**	**53.0 (10.6)**	**53.8 (-1.9)**	**54.6 (3.1)**
Trade, repair, hotels, and restaurants	11.3 (10.3)	12.0 (13.3)	18.7 (8.4)*	9.6 (46.9)	11.5 (21.2)
Trade & repair services	10.2 (11.1)	11.0 (14.3)		8.6 (59.9)	10.6 (23.5)
Hotels & restaurants	1.1 (3.3)	1.1 (3.9)		0.9 (-15.6)	0.9 (-0.3)
Transport, storage, communication & services related to broadcasting (of which)	6.6 (8.4)	6.6 (7.3)		6.8 (-4.1)	5.5 (-16.4)
Railways	0.8 (18.0)	0.8 (9.3)		1.1 (11.0)	1.2 (5.6)
Road transport	3.3 (7.5)	3.2 (5.0)		2.5 (-16.6)	1.6 (-35.8)
Air transport	0.1 (-5.9)	0.1 (6.0)		0.2 (-11.4)	0.0 (-72.4)
Financial services	5.9 (6.7)	5.8 (6.4)	20.9 (13.7)^	1.3 (-9.8)	1.1 (-10.6)
Real estate, ownership of dwelling & professional services	13.6 (9.8)	14.0 (8.5)		22.7 (-15.1)	20.1 (-10.2)
Public administration and defence	6.0 (3.2)	6.0 (4.9)	13.4 (9.0)@	8.5 (1.7)	10.6 (26.3)
Other services	6.6 (6.2)	6.9 (10.7)		4.9 (4.2)	5.8 (20.3)
Construction	8.7 (-4.3)	8.3 (2.5)	8.0 (4.5)	5.8 (-11.5)	5.4 (-4.4)
Total Services (+ construction)	**58.7 (6.0)**	**59.6 (8.1)**	**61.0 (7.1)**	**59.6 (-3.0)**	**60.0 (2.4)**
TOTAL GVA / GFC	**100.0 (4.9)**	**100.0 (6.6)**	**100.0 (7.5)**	**100.0 (-0.7)**	**100.0 (1.4)**
GDP (market price constant 2011-12)	**(5.1)**	**(6.9)**	**(7.4)**		

Source : Central Statistics Office (CSO).

Notes : Shares are in current prices and growth in constant 2011-12 prices; Figures in parentheses indicate growth rate; # AE for 2014-15.* Also includes transport, communication and services related to broadcast, ^ Also includes real estate and professional services, @ Also includes other services. This is based on new method followed by the CSO.

formation (GCF) of ₹ 35.4 lakhs in 2013-14. This is owing to the GCF in real estate, ownership of dwelling and professional services at 20.1 per cent, though the share has fallen in the last two years, followed by trade and repair services (10.6 per cent) and public administration and defence (10.6 per cent) where there is improvement in shares. The growth rate of services GCF at 3.1 per cent has also been higher than the total GCF growth of 1.4 per cent. Infact, the positive GCF growth in services led to positive growth in total GCF as GCF growth in agriculture and industry was negative at - 0.3 per cent and - 0.6 per cent respectively. GCF growth in manufacturing was even more negative at - 5.4 per cent.

7.10 As per the old method of estimating GDP at factor cost (GDP at FC), the services sector accounting for 57 per cent of GDP grew by 6.8 per cent in 2013-14, marginally lower than in 2012-13. This is mainly due to a fall in the growth rate of the combined category of trade, hotels, and restaurants and transport, storage, and communications to 3.0 per cent from 5.1 per cent in 2012-13, and in spite of robust growth of financing, insurance, real estate, and business services at 12.9 per cent. The somewhat differing results in services growth under the two methods are due to conceptual changes of GDP at FC to basic price and adoption of latest data sources. There was also drastic decline in services share under the new method. The major change took place in the share of trade, repair, hotels, and restaurants from 17.2 per cent in 2012-13 using the old factor cost method to 11.3 per cent using the new basic price method. This is because trade carried out by manufacturing companies has now been shifted to manufacturing from trade and the data on unorganized trade enterprises has been updated with the 2010-11 survey instead of the 1999-2000 survey. However, this sector's growth was much higher using the new method than under the old method.

7.11 As per the Advance Estimates (AE) in 2014-15, growth of the services sector accelerated further to 10.6 per cent as compared to 9.1 per cent in 2013-14. This is mainly due to growth acceleration in financial, real estate, and professional services to 13.7 per cent from 7.9 per cent and public administration, defence, and other services to 9.0 per cent from 7.9 per cent in the previous year. There was also good growth in trade, hotels, transport, communication, and related services at 8.4 per cent in 2014-15 though it was lower than the 11.1 per cent growth in 2013-14.

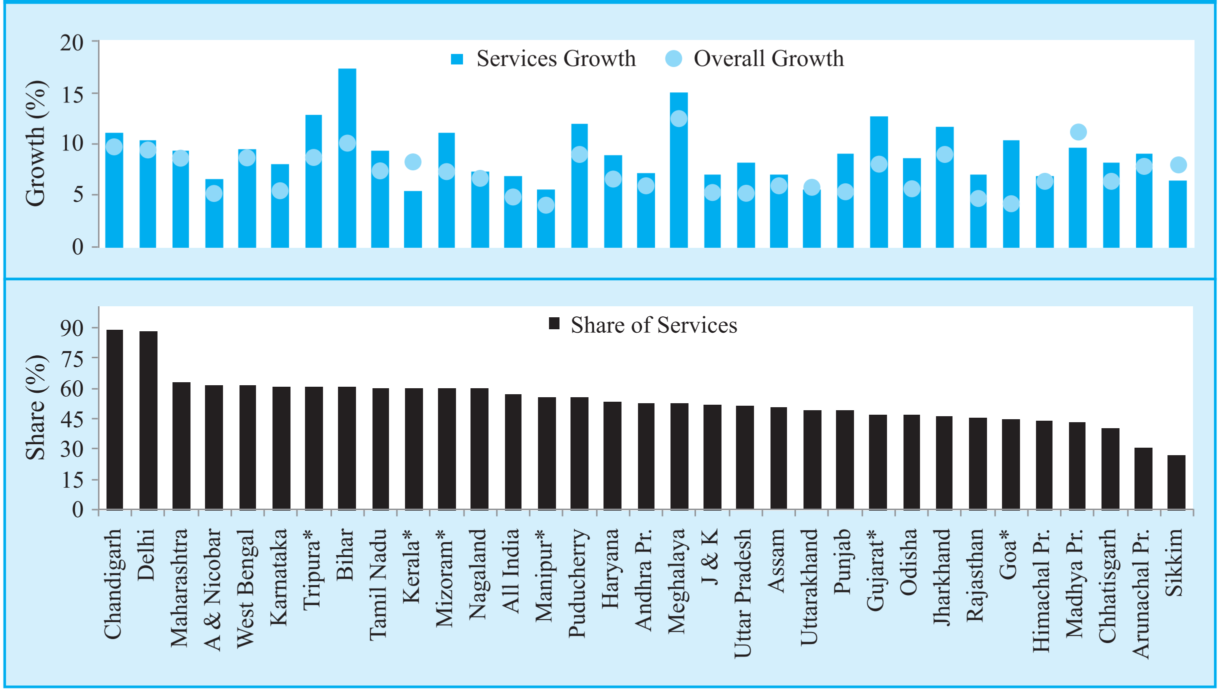
State-wise Comparison of Services

7.12 The services sector is the dominant sector in most states of India with a share of more than 40 per cent in the gross state domestic product (GSDP) in 2013-14 except for Arunachal Pradesh and Sikkim (Figure 7.1). Chandigarh is at the top with a share of 88.4 per cent followed by Delhi with 87.7 per cent. The major services in most of the states with high share are trade, hotels, and restaurants followed by real estate, ownership of dwellings and business services. Banking and insurance has an important share only in a few states/ union territories (UT) like Delhi, Maharashtra, and Chandigarh. In 2013-14, Bihar had the highest services growth of 17.3 per cent and Uttarkhand the lowest of 5.5 per cent. Bihar has been consistently showing double-digit growth in the services sector in the last five years due to high growth in trade, hotels, and restaurants.

FDI in India's Services Sector

7.13 The ambiguity in classifying FDI in different activities under the services sector continues. The combined FDI share of financial and non-financial services under services sector, construction

Figure 7.1: Share and Growth of the Services Sector in 2013-14



***Source* : Computed from CSO data.**

***Note* : Share at current prices, growth rate at constant (2004-05) prices; * indicates 2012-13 data; Andhra Pradesh-undivided.**

Table 7.3 : FDI Equity Inflows in the Services Sector

Ranks	Sector	Value (in US $ million) 2013-14	2014-15 (Apr. Nov.)	Cumulative (Apr. 2000-Nov. 2014)	Percentage to total	Growth rate 2013-14	2014-15 (Apr. Nov.)
1	Services sector (financial & non-financial)	2225	1847	41307	17.5	-54.0	24.9
2	Construction development #	1226	703	24009	10.2	-8.0	-20.9
3	Telecommunications *	1307	2472	16635	7.0	329.9	7390.9
4	Computer software & hardware	1126	862	13679	5.8	131.7	62.9
5	Hotel &tourism	486	544	7662	3.2	-85.1	180.4
	Total top five services	**6370**	**6428**	**103291**	**43.7**	**-37.6**	**105.8**
	Total FDI inflows	**24299**	**18884**	**236465**	**100**	**8.4**	**22.2**

Source **: Based on Department of Industrial Policy and Promotion (DIPP) data.**

Note **: # indicates township, housing, built-up infrastructure; * indicates radio paging, cellular mobile, basic telephone services.**

development, telecommunications, computer hardware and software, and hotels and tourism can be taken as the best estimate of services FDI, though it could include some non-service elements. This share is 43.7 per cent of the cumulative FDI equity inflows during the period April 2000-November 2014. If the shares of some other services or service-related sectors like trading, information and broadcasting, construction (infrastructure) activities, consultancy services, hospital and diagnostic centres, ports, agriculture services, education, air transport including air freight, and retail trading are included, then the total share of cumulative FDI inflows to the services sector would increase to 53.8 per cent. In 2013-14, FDI inflows to the services sector (top five sectors including construction) declined sharply by 37.6 per cent to US$ 6.4 billion, though overall FDI inflows grew by 8.4 per cent. However, during 2014-15 (April to November), the FDI inflows to services grew by 105.8 per cent compared to 22.2 per cent growth in overall FDI inflows. The total FDI inflows to the top five services in the first eight months of this year are higher than for the whole of 2013-14 owing to major inflows in telecommunications (Table 7.3).

India's Services Trade

7.14 India's share in global exports of commercial services increased to 3.2 per cent in 2013 from 1.2 per cent in 2000. Its ranking among the leading exporters in 2013 was sixth. After witnessing high growth during 2002-03 to 2008-09 with a CAGR of 31.2 per cent, and a pick up and good growth in 2010-11 and 2011-12 in the aftermath of the global financial crisis, export growth of services decelerated in 2012-13 to 3.4 per cent. In 2013-14 services exports grew by 4.0 per cent to US$ 151.5 billion and services imports declined by 2.8 per cent to US$ 78.5 billion resulting in net services of US$ 73.0 billion with 12.4 per cent growth. In the first half of 2014-15, services exports grew by 3.7 per cent to US$ 75.9 billion and import of services grew by 5.0 per cent to US$ 39.9 billion, resulting in net services growth of only 2.4 per cent (Table 7.4). Net services has been a major source of financing India's trade deficit in recent years. Surplus on account of services exports financed 49.4 per cent and 49.3 per cent of merchandise trade deficit in 2013-14 and H1 of 2014-15 respectively. Two recent developments in India's exports sector are the rising foreign value added content and services value added content (Box 7.1).

7.15 India's major services exports in 2013-14 are computer services (45.8 per cent share); other business services (18.8 per cent share) including professional and consulting services (10.2 per cent share), technical and trade-related services (7.8 per cent share) and R & D services (0.8 per

Table 7.4 : Export Performance of Major Services

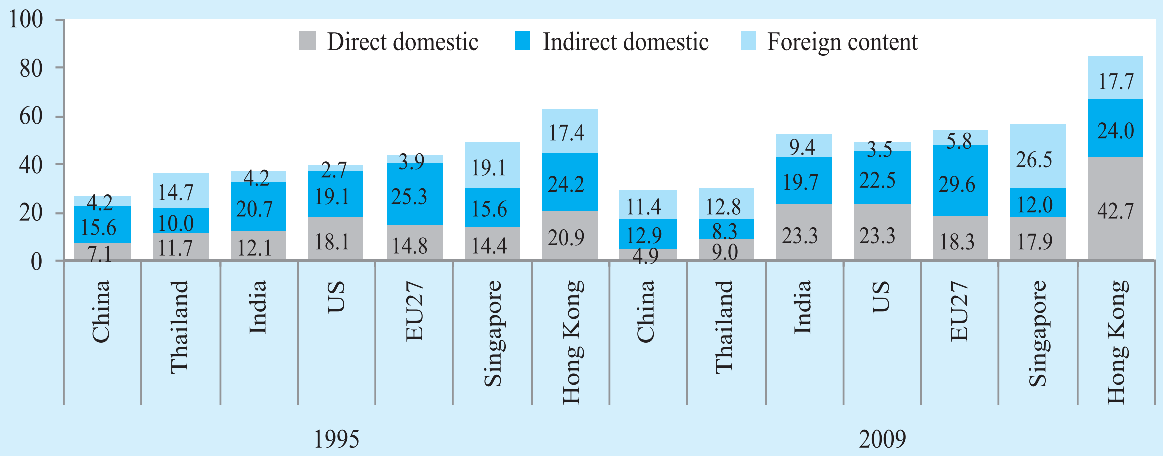
	Value (US$ bn) 2013-14	Share (per cent) 2013-14	Export growth rate (per cent) 2012-13	2013-14	2013-14 H1	2014-15 H1
Total services exports	**151.5**	**100**	**3.4**	**4.0**	**3.4**	**3.7**
Transport	17.4	11.5	-5.1	0.3	-2.1	8.5
Travel	17.9	11.8	-2.5	-0.4	4.8	18.0
Construction	1.3	0.9	24.9	33.3	37.2	36.0
Financial, insurance, & pension services	8.8	5.8	-16.5	22.2	23.3	-11.8
Telecommunications services	2.4	1.6	2.0	43.0	38.4	-22.2
Computer services	69.4	45.8	5.9	5.4	5.6	5.1
Other business services	28.5	18.8	15.8	0.1	-0.1	-3.9
R & D services	1.1	0.8	17.0	24.0	9.7	6.3
Professional& consulting services	15.5	10.2	26.0	10.4	7.1	-6.7
Technical,trade-related,& others	11.8	7.8	6.8	-12.2	-8.6	-1.4
Net services exports	**73.0**	—	**1.4**	**12.4**	**12.6**	**2.4**

Source **: RBI's Balance of Payments (BoP) data (BPM-6).**

Box 7.1 : Services GVA Content in India's Exports

As per the Organisation for Economic Cooperation and Development's (OECD) TiVA (trade in value added) data, domestic value added content in India's gross exports was 78 per cent in 2009, a little above the OECD average (76 per cent), but 12 pp lower than in 1995, reflecting increasing fragmentation of production and integration with global value chains. Interestingly, services value added content of India's exports at 52.4 per cent in 2009, is marginally higher than the OECD average (48 per cent). India is fifth highest in terms of services value added content in its exports after Hong Kong, Iceland, Singapore, and EU-27. There is also a 15.4 pp increase over 1995 (Figure 1). This has been driven by increasing direct exports of services and more than doubling of foreign services content of exports also indicating greater integration with global value chains.

Figure 1: Services Value Added Content of Gross Exports (%)



A study for the Ministry of Finance, Government of India (GoI) by Indian Council for Research on International Economic Relations (ICRIER) also shows rising share of foreign value added in India's exports. The increase was higher in merchandise exports from 11.2 per cent in 1995 to 25.7 per cent in 2011 than in services exports, where it increased from 6.4 per cent to 8.5 per cent.

Source **: Based on OECD and ICRIER reports**

cent share); travel (11.8 per cent share); transport (11.5 per cent share); and financial, insurance and pension services (5.8 per cent share). In 2013-14, there was deceleration in export growth of software services to 5.4 per cent, negative growth of - 0.4 per cent in travel, and marginal growth in transport (0.3 per cent) and other business services (0.1 per cent). However, moving in tandem with global exports of financial services, India's exports of financial services registered a high growth of 34.4 per cent. In the first half of 2014-15, export growth decelerated further for computer services (5.1 per cent) and was negative for other business services (- 3.9 per cent) and financial, insurance, and pension services (-11.8 per cent). But growth was robust for travel (18.0 per cent) with pick up in foreign tourist arrivals (FTAs) and foreign exchange earnings (FEEs) in dollar terms and good for transport (8.5 per cent) due to pick up in India's external trade by 2.5 per cent in H1 of 2014-15 compared to 0.8 per cent in the previous year.

7.16 There are many market access barriers and domestic regulations in India's services sector (see Economic Survey 2012-13 and 2013-14). Given the potential of India's services sector, removal of many of these barriers both domestically and internationally is of vital importance. Services-sector negotiations both at multilateral and bilateral/ regional levels are therefore of special significance to India (See Box 7.2).

Box 7.2 : WTO Services Negotiations and Bilateral Negotiations including Services Trade

WTO Negotiations: India's Stand

- The post Bali work programme has to be within the mandate of the Doha Development Agenda (DDA) and valuable milestones such as the Annex C on 'Services' of the Hong Kong Ministerial Declaration (HKMD) which contains the roadmap for conclusion of the Doha Round.
- India does not support any cherry picking of issues or sectors of interest to certain economies in the name of concluding the Doha Round and the level of ambition across the negotiating pillars including in services would be governed by agriculture.
- Since development is the central theme of the Doha negotiations, commitments in areas of export interest to developing countries and least developed countries (LDCs) is crucial for the success of the round. In the past, India has been dismayed by the negligible progress in Mode 4 offers.
- Preferential treatment for the LDCs in the World Trade Organization (WTO): At the High Level Meeting of the WTO services council on 5 February 2015, discussions were held to operationalize the Bali decision on LDC services waiver. India has been a generous partner for LDCs and offered market access for contractual services suppliers and independent professionals under Mode 4 in sectors like engineering services, integrated engineering services, computer and related services, some important management consulting and project management services, hotel and other lodging services, travel agency, tour operator services and tourist guides conversant in a foreign language, other than English. An exclusive quota of 250, only for tourist guides from LDCs was offered. India has also agreed to waive visa fee for LDC applicants seeking Indian business or employment visas.

Bilateral Agreements: Status

- India has signed Comprehensive Bilateral Agreements with the Governments of Singapore, South Korea, Japan, and Malaysia. A Free Trade Agreement (FTA) in services and investment was signed with the Association of South East Asian Nations (ASEAN) in September 2014.
- India has joined the Regional Comprehensive Economic Partnership (RCEP) plurilateral negotiations and is continuously engaged in the bilateral FTA negotiations including Trade in Services with Canada, Israel, Thailand, the European Free Trade Association (EFTA), Australia, New Zealand, and the EU. Negotiations with Canada and Australia have not progressed much and modalities for the negotiations are still being discussed. Negotiations with Thailand are at an advanced stage and with EFTA are more or less over. India is also engaged in bilateral trade dialogues with the US under the India-US Trade Policy Forum (TPF), with Australia under the India-Australia Joint Ministerial Commission (JMC), with China under the India-China Working-Group on Services, and with Brazil under the India-Brazil Trade Monitoring Mechanism (TMM).

***Source*: Department of Commerce, Government of India.**

Table 7. 5 : Sector-wise Employment Trends (UPS)

	Absolute number(million) (Share in percent given in parentheses)					Employment elasticity			
	1993-94	1999-00	2004-05	2009-10	2011-12	1993-94 to 1999-00	1999-00 to 2004-05	2004-05 to 2009-10	2009-10 to 2011-12
Agriculture	204.3 (61.1)	214.7 (58.5)	226.8 (54.5)	220.5 (51.6)	204.4 (47.1)	0.3	0.7	-0.2	-0.5
Industry	53.5 (16.0)	61.7 (16.8)	81.0 (19.5)	93.1 (21.8)	106.1 (24.4)	0.4	0.9	0.3	0.9
Services	76.6 (22.9)	90.6 (24.7)	108.0 (26.0)	113.7 (26.6)	123.9 (28.5)	0.3	0.5	0.1	0.5
Trade, hotels, and restaurants	26.8 (8.0)	34.1 (9.3)	46.5 (11.2)	48.4 (11.3)	50.5 (11.6)	0.4	0.8	0.1	0.3
Transport, storage, and communication	11.0 (3.3)	15.0 (4.1)	18.7 (4.5)	19.9 (4.6)	22.8 (5.2)	0.5	0.4	0.1	0.6
Financial, insurance, real estate and business services	3.7 (1.1)	4.8 (1.3)	7.5 (1.8)	9.4 (2.2)	10.7 (2.5)	0.5	1.6	0.4	0.6
Community, social, and personal services	35.1 (10.5)	36.7 (10.0)	35.3 (8.5)	36.1 (8.4)	39.9 (9.2)	0.1	-0.2	0.1	1.1
Total	**334.4 (100.0)**	**367.0 (100.0)**	**415.7 (100.0)**	**427.4 (100.0)**	**434.4 (100.0)**	**0.2**	**0.4**	**0.1**	**0.1**

Source : **Based on data from National Sample Survey Office (NSSO) different round reports and CSO.**

Note : **Employment elasticity is calculated by CAGR method, Employment elasticity = (CAGR employment) / (CAGR GDP at FC constant 2004-05 prices) for the respective period. UPS- usual principal status**

India's Services Employment

7.17 The pattern of the sectoral share of employment has changed over the last two decades with the share of agriculture falling and of industry and services rising steadily. Services share in employment at 28.5 per cent in 2011-12 is higher than in industry at 24.4 per cent. Among the different services sectors, from 1993-94 to 2011-12, there was continuous increase in employment share in trade, hotels, and restaurants; transport, storage, and communication; and financial, insurance, real estate and business services. Employment share in community, social, and personal services has fallen continuously except in 2011-12 when there was an increase compared to 2009-10 and 2004-05. Employment elasticity has increased for both services and industry in 2009-10 to 2011-12 compared to 2004-05 to 2009-10, though industry had relatively higher employment elasticity. Among services, employment elasticity was the highest in 'financial, insurance, real estate, and business services' and 'transport, storage, and communication' (Table 7.5).

Major Services: Overall Performance

7.18 Some available indicators of the different services in India for 2014-15 show reasonably good performance of tourism, telecom, aviation, and railways (Table 7.6). Estimates of the Centre for Monitoring Indian Economy (CMIE) derived from limited firm-level data indicates improved performance in retail trading, aviation, telecom, and transport logistics. Other estimates like the HSBC's services PMI (Purchasing Managers Index) data indicate improvement in services sector growth in the current year as the reading was above 50 in all months since May 2014 and it was at 52.6 in November 2014, 51.1 in December 2014 and 52.4 in January 2015.

Table 7.6 : Performance of India's Services Sector: Some Indicators

Sector	Indicators	Unit	Period		
			2009-10	2013-14	2014-15
Aviation	Airline passengers (domestic and international)*	Million	77.4	103.7	(68.0)74.9#
Telecom	Telecom connections (wireline and wireless)[b]	Million	621.3	933.0	(910.1)964.2#
Tourism	Foreign tourist arrivals[a]	Million	5.2	7.0	7.5
	Foreign exchange earnings from tourist arrivals[a]	US $ billion	11.1	18.4	19.7
Shipping	Gross tonnage of Indian shipping[b]	Million GT	9.7	10.5	10.3@
	No. of ships[b]	Numbers	1003	1213	1209@
Ports	Port traffic	Million tonnes	850.0	975.7	(725.9)775.2@
Railways	Freight traffic by railways[c]	Million tonnes	887.8	1051.6	(767.2)806.4@
	Net tonne kilometres of railways[c]	Billion	600.5	665.8	(478.9)506.9@
Storage	Storage capacity	Lakh MT	106.0	105.6	103.1#
	No. of warehouses	Numbers	487	471	470#

***Sources*: Telecom Regulatory Authority of India (TRAI), Ministry of Tourism, Ministry of Shipping, Ministry of Railways, Directorate General of Civil Aviation, Central Warehousing Corporation.**

***Notes* : [a] calendar years, for example 2009-10 for 2009; [b] As on 31 March of ensuing financial year; [c] data from 2009-10 to 2012-13 is on carried basis, while that for 2013-14 and 2014-15 is on originating basis; * foreign airlines included for international passenger; # data is upto November 2014; @ data is upto December 2014; data in parentheses are for same period of 2013-14. GT=gross tonnage; MT=metric tonnes.**

Major Services: Sector-wise Performance and Some Recent Policies

7.19 This section includes some of the important commercial services for India based on their significance in terms of GDP, employment, exports, and future prospects. Some important services covered in other chapters have been excluded to avoid duplication.

Tourism

7.20 According to the World Travel and Tourism Council (WTTC), the US$ 7 trillion travel and tourism sector's contribution to world GDP increased in 2013 to 9.5 per cent, creating 4.7 million new jobs. This resulted in total employment in this sector of nearly 266 million, that is one in eleven jobs in the world. This sector is estimated to grow by 4.3 per cent in 2014 and generate 6.5 million new jobs. The latest World Tourism Barometer of the United Nation's World Tourism Organization (UNWTO) also shows that international tourist arrivals reached 1.1 billion in 2014, a 4.7 per cent increase over the previous year and for 2015 the forecast is a 3 to 4 per cent increase. France has the highest share in International tourist arrivals (ITAs) and the US in International tourism receipts (ITRs) in 2013. India's share in ITAs is a paltry 0.6 per cent compared to 7.8 per cent in France and 6.4 per cent in the US. Even Vietnam and Indonesia have higher shares than India. However, in terms of ITRs, India's share at 1.5 per cent is better than those of Vietnam and Indonesia though it is way below the share of the US at 14.5 per cent. Even in terms of growth, countries like Vietnam, Indonesia, Thailand and Turkey are ahead of India in 2013 (Table 7.7).

7.21 In India's National Accounts Statistics there is no separate heading for tourism. Some tourism activities like travel agent, tour operator, and other reservation activities are a part of the broad category administrative and support service activities and other professional activities. As per the Second Tourism Satellite Account of India (TSA), the contribution of tourism to total GDP

Table 7.7 : Tourism Performance: International Comparison in 2013

Country	International Tourist Arrivals			International Tourism Receipts		
	Numbers (in million)	Share (%)	Growth (%)	Value (US $ billion)	Share (%)	Growth (%)
France	84.7	7.8	2.0	56.7	4.7	5.6
US	69.8	6.4	4.7	173.1	14.5	7.4
Spain	60.7	5.6	5.6	60.4	5.1	7.3
Turkey	37.8	3.5	5.9	28.0	2.3	10.7
Thailand	26.5	2.4	18.8	42.1	3.5	24.6
Malaysia	25.7	2.4	2.7	21.5	1.8	6.4
Singapore	11.9	1.1	7.2	19.1	1.6	1.1
Indonesia	8.8	0.8	9.4	9.1	0.8	9.5
Vietnam	7.6	0.7	10.6	7.5	0.6	10.3
India	6.8	0.6	4.1	18.4	1.5	4.0
World	1087	100.0	4.8	1195	100.0	7.2

Source **: UNWTO.**

during 2012-13 was 6.9 per cent (3.7 per cent direct and 3.1 per cent indirect) and to total employment 12.4 per cent (5.3 per cent direct and 7.0 per cent indirect). After poor foreign exchange earnings (FEE) growth in dollar terms at 4.0 per cent, despite growing foreign tourist arrivals at 5.9 per cent, in 2013, there was an increase in growth of both foreign tourist arrivals (7.1 per cent) and FEEs (6.6 per cent) in 2014.

7.22 In Budget 2014-15, the government announced several measures for boosting tourism like streamlining of some service tax bottlenecks and focused effort for the development of a global-scale Buddhist circuit and cleaning of the Ganga along with creation of world class amenities to enhance the spiritual experience along the holy river. Further, easing of the Indian tourism visa regime through the execution of tourist visa on arrival enabled by electronic travel authorization (ETA) for forty-three countries will provide a major boost to tourism.

Some Transport-related Services

Shipping

7.23 Shipping is an important indicator of both commodity and services trade of any country. Around 95 per cent of India's trade by volume and 68 per cent in terms of value is transported by sea. As on 31 December 2014, India had a fleet strength of 1209 ships with gross tonnage (GT) of 10.3 million, with the public-sector Shipping Corporation of India (SCI) having the largest share of around 31 per cent. Of this, around 358 ships with 9.1 million GT cater to India's overseas trade and the rest to coastal trade. Despite having one of the largest merchant shipping fleets among developing countries, India's share in total world dead weight tonnage (DWT) is only 1.1 per cent as on 1 January 2014. In 2013, as per UNCTAD, India with 10.7 million twenty-foot equivalent units of container (TEUs) and a world share of 1.6 per cent ranked eighth among developing countries in terms of container ship operations.

7.24 India continues to be a leading ship-breaking destination. It topped the list of ship-recycling countries in 2014 (January to October) with a world share of 32 per cent, scrapping 234 ships of 7.98 million DWT as per the ISL Shipping Statistics and Market Review. India is also a major supplier of seafarers to the world. According to BIMCO/ISF Manpower Update 2010-2014, India supplied 60,000 crew (fresh seamen) and 44,500 officers in 2014.

7.25 The shipping sector has been plagued by economic hardships since 2008. In 2014, all segments of shipping saw intermittent spikes but

Table 7.8 : Some Performance Indicators of Ports in India

Indicators	2000-01	2010-11	2012-13	2013-14	(Apr. to Nov) 2014-15
Average turnaround time (days)	4.2	2.7	2.6 (0.0)	2.3 (-0.3)	2.1 (-0.1)
Average pre- berthing time (days)	1.2	0.5	0.5 (0.0)	0.3 (-0.2)	0.2 (-0.1)
Average output per ship berth day (in tonnes)	6961	9140	11786 (-1287)	12509 (723)	14326 (1817)

Source : **Ministry of Shipping.**
Note : **Changes from previous years are given in parentheses.**

there was no secular uptrend in any of them. Further, internationally deliveries of new ships are slated in 2015 which could dampen shipping freight rates even more. The Baltic Dry Index, the barometer of merchandise trade as well as shipping services, which had peaked to 11,793 on 20 May 2008 has been in the lower range since then and is in the red at 530 as on 13 February 2015.

7.26 There has also been a sharp decline in the share of Indian ships in the carriage of India's overseas trade from about 40 per cent in the late 1980s to 9.1 per cent in 2012-13. The existing Indian fleet is also ageing, with the average age increasing from 15 years in 1999 to 17.7 as on 1 October 2014 (43.1 per cent of the fleet is over 20 years old and 10.7 per cent in the 16-19 age group). Thus there is urgent need to increase India's shipping fleet.

7.27 Recognizing the need to encourage the growth of Indian tonnage, several policy initiatives were taken which include allowing Indian shipping companies to acquire ships abroad and flag them in the country of their convenience; allowing access to cheaper finance abroad; exemption from customs and central excise duty leviable on bunker fuels used in Indian flag vessels for transportation of export and import items and on empty containers between two or more ports in India; and elimination of registration requirement of ship repair units (SRUs) with the Director General of Shipping.

Port Services

7.28 The cargo traffic of Indian ports increased by 4.5 per cent to 975.7 million tonnes in 2013-14 and by 6.8 per cent in (April-December) 2014-15 (see Chapter 6). In the Maritime Agenda, a target of 3130 million tonnes (MT) port capacity has been set for the year 2020 with around ₹ 2,96,000 crore investment. More than 50 per cent of this capacity is to be created in the non-major ports. FDI up to 100 per cent under automatic route is permitted for construction and maintenance of ports. In 2013-14, 16 public private partnership (PPP) projects were awarded at an estimated cost of ₹ 18,640.8 crore for capacity addition of 159.7 MT in the major ports comprising construction of berths and terminals and mechanization of existing berths.

7.29 The three ports-related performance indicators showed continued improvement with the average turnaround time and average pre-berthing detention time falling to 2.1 days and 0.2 day respectively and the average output per ship berth day improving to 14,326 tonnes in 2014-15 (April-November) (Table 7.8). The improvement in turnaround time and pre-berthing detention time could partly be due to mechanization and systemic improvements in ports and partly to lower volume handled in some ports on account of global downturn. However, the improvement in average output per ship berth day indicates that the performance parameters of Indian ports are also improving

Some Professional Services

IT and ITeS

7.30 Software development and information technology enabled services (ITeS) including business process management (BPM), software engineering R & D services and product development has emerged as one of the most dynamic and vibrant sectors in India's economy.

It is the single largest contributor to services exports. As per AT Kearney's Global Services Location Index 2014, India ranked first and remains the pre-eminent destination for offshore services, with excellence in IT, BPO, and voice services. The sector continues to be one of the largest employers in the country, directly employing nearly 3.5 million people as per the National Association of Software and Service Companies (NASSCOM).

7.31 As per the Central Statistics Office (CSO), computer and related services with a share of 3.3 per cent in India's GDP grew by 14.4 per cent in 2013-14. As per NASSCOM's estimate the revenue of the IT-BPM industry at US$119 billion grew by 12 per cent in 2014-15, while the export market at US$ 98 billion grew by 12.3 per cent over the previous year. The BPM sector is being driven by greater automation, expanding omni-channel presence, and application of analytics across the entire value chain. The year also witnessed hyper-growth in the technology start-up and software product landscape, India ranking as the fourth largest start-up hub in the world with over 3100 start-ups in the country. The domestic IT-BPM market is estimated at US$ 20.9 billion in 2014-15, with a growth of 10 per cent. Software products and services revenues for 2015-16 is projected to grow at 12-14 per cent to reach US$ 133-136 billion as per NASSCOM. Export revenues are projected to grow by 12 to 14 per cent to reach US$ 110-112 billion and domestic revenues by 10-15 per cent to reach US$ 23-24 billion during 2015-16.

7.32 Recognizing the need for greater penetration of IT services domestically, in Budget 2014-15 Digital India has been envisioned as an ambitious umbrella programme to prepare India for knowledge-based transformation. This would ensure broadband connectivity at village level, improved access to services through IT-enabled platforms, greater transparency in government processes and increased indigenous production of IT hardware and software. One of the important components of this programme is people's empowerment through availability of entitlements on the cloud, coupled with Aadhaar Authentification Platform. A National Rural Internet and Technology Mission for services in villages and schools and E-Kranti for government service delivery are other initiatives. Recognizing the importance of IT, the government's Make in India mission has included IT and BPM among the twenty-five focus sectors.

Research and Development Services

7.33 The Research and Development (R&D) sector has been growing consistently in double digits in the last few years with growth at 20.8 per cent in 2012-13 (old method). Professional, scientific and technical activities including R&D grew by 14.0 per cent in 2013-14 (new method). According to Global R&D Service Providers (GSPR) Rating 2014, a report by Zinnov Management Consulting, India's R&D globalization and services market is set to double by 2020 to US$ 38 billion. The study estimates the overall addressable R&D globalization and services opportunity at US$ 170 billion as of 2014. Currently only US$ 55 billion of this opportunity is addressed globally. India's share of the addressed market is 33 per cent with in-house R&D centers contributing US$ 11.3 billion worth of services to their parent companies.

7.34 According to the Global Competitiveness Report 2014-15, India's capacity for innovation has been lower than that of many countries like the USA, UK, South Korea, and even other BRICS countries (Brazil, Russia, India, China, and South Africa) except Russia (Table 7.9). Even in quality of scientific research institutions, India scores lower than China, Brazil, and South Africa. This is also exhibited through its poor score on university–industry collaboration on R&D as compared to some other BRICS nations like China and South Africa. In terms of patents granted per million population, India fares badly compared to other BRICS countries. In terms of company spending on R & D also India is far below China. Only in terms of availability of scientists and engineers, India scores better or is equal to other BRICS countries.

Table 7.9 : Global Competitiveness Index: R & D Innovation

Country	Capacity for innovation		Quality of scientific research institutions		Company spending on R&D		University – Industry collaboration on R&D		Availability of scientists and engineers		PCT patents granted/ million population	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
USA	5.9	2	6.1	4	5.5	4	5.8	2	5.3	5	149.8	11
UK	5.3	10	6.3	2	4.8	14	5.7	4	4.8	22	89.1	18
South Korea	4.7	24	5.0	27	4.5	20	4.6	26	4.4	42	201.5	8
South Africa	4.3	35	4.7	34	3.4	48	4.5	31	3.5	102	6.5	45
China	4.2	40	4.3	39	4.3	23	4.4	32	4.4	43	11.7	34
Brazil	4.1	44	4.0	50	3.5	43	3.8	54	3.3	114	3.2	50
India	4.0	48	4.0	52	3.8	30	3.9	50	4.4	45	1.5	61
Russia	3.8	66	4.0	56	3.2	62	3.6	67	4.1	70	7.1	41

Source : **Global Competitiveness Report 2014-15, World Economic Forum.**

Note : **PCT- Patent Cooperation Treaty.**

Consultancy Services

7.35 Consultancy services are emerging as one of the fastest growing services in India cutting across different sectors with some overlapping. According to Plunkett Research, global consulting industry revenues (including human resources [HR], IT, strategy, operations, management, and business advisory services) increased to an estimated $431 billion in 2014 compared to US$ 415 billion during the previous year. India's outsourcing and consulting industry is estimated at US$ 86.4 billion in 2014, accounting for almost 20 per cent of global consulting industry revenue, and is projected to reach US$ 99.0 billion in 2015.

7.36 India's emergence as one of the fastest growing consultancy markets worldwide is largely attributable to increased investment activities due to liberalization of FDI, entry of many new players into the Indian market and low cost sourcing. Indian consultants have good expertise particularly in engineering consultancy which could be leveraged to enhance consultancy exports.

Real Estate and Housing

7.37 Real estate and ownership of dwelling constitute 7.8 per cent of India's GDP in 2013-14. Both domestic and global slowdown affected this sector with growth decelerating from 7.6 per cent in 2012-13 to 6.0 per cent in 2013-14 and FDI in the real estate sector falling to US$ 703 million in the period April-November 2014.

7.38 House prices have increased over the years in many cities and towns as per the National Housing Bank's RESIDEX index of residential prices in India. In 2014, out of 26 cities, 17 witnessed increase in prices over 2013 with the maximum increase observed in Chennai (17 per cent) followed by Ahmedabad (15 per cent), while 7 saw decline, with the maximum fall witnessed in Meerut (-16 per cent) followed by Chandigarh (-8 per cent).

7.39 The widening gap between demand and supply of housing units and affordable housing finance solutions is a major policy concern for India. At present urban housing shortage is 18.8 million units of which 95.6 per cent is in economically weaker sections (EWS) / low income group (LIG) segments and requires huge financial investment to overcome. Institutional credit for housing investment is well below that in countries like China, Thailand, and Malaysia though growing at a CAGR of about 19 per cent per annum. Procedural delay is another major constraint in this sector. According to the World Bank's 'Doing Business 2015', India ranked 184th (out of 189 economies) in terms of construction permits, requiring on an average 27 procedures to get permits as compared to an average of 14 in South

Asia and 12 in OECD (Organization for Economic Cooperation and Development) countries.

7.40 Several policy initiatives taken in 2013-14 to help this sector include the amendment of the FDI policy, thereby reducing the minimum floor area to 20,000 sq. m from the earlier 50,000 sq.m and bringing down the minimum capital requirement to US$ 5 million from US$ 10 million. Budget 2014-15 also announced setting up of Real Estate Investment Trusts (REITs) and SEBI has approved the REITs regulation. In order to encourage savings, the deduction limit on housing loan interest for self-occupied property was also increased to ₹ 2 lakh from the earlier ₹ 1.5 lakh in Budget 2014-15. In order to push development of affordable housing and achieve the target of housing for all by 2022, the Reserve Bank of India (RBI) relaxed norms for issue of long-term bonds by banks for financing affordable housing.

Internal Trade

7.41 The ₹ 11,47,274 crore trade and repair services sector with a share of 11.0 per cent in GDP, grew by 14.3 per cent in 2013-14. Trade is the major item in this category as the share of repair services in this category is just 6-7 per cent. As per the AT Kearney's Global Retail Development Index (GRDI), India's retail trade ranking slipped further to twentieth in 2014 from fourteenth in 2013. The retail sector was affected in 2013 by high consumer price inflation, currency fluctuations, and strict FDI policies. However, India remains an attractive long-term retail destination for several reasons, including its large population, 58.3 per cent of which is below 30 years and 31.1 per cent of which lives in urban areas with rising disposable incomes. Migration from traditional stores to modern retail continues, though the latter accounts for only 8 per cent of the total market.

7.42 India's e-commerce market is expected to grow by more than 50 per cent in the next five years. Inventory management, logistics planning, and resource availability are important hurdles for online retail in India. Consumer safeguard being another concern for consumers of e-commerce, the government proposes including sufficient provisions in the ongoing amendment to the Consumer Protection Act 1986.

Media and Entertainment Services

7.43 The Indian media and entertainment industry comprises various segments which include television, print, films, radio, music, animation, gaming and visual effects, and digital advertising. According to a report by FICCI-KPMG, the Indian media and entertainment industry grew by 11.8 per cent to ₹ 918 billion in 2013 and is projected to grow at a CAGR of 14.2 per cent to reach ₹ 1786 billion by 2018. Digital advertising and gaming are projected to drive the growth of this sector in the coming years. With ₹ 18.4 billion inflows, this sector contributed 1.6 per cent of the total FDI inflows in India during April 2000-November 2014.

7.44 With 161 million TV households, India is the world's third largest TV market after China and the USA. There are about 826 satellite television channels, 86 teleports, 243 FM radio channels, and 179 community radio stations operating in India. India's broadcasting distribution network comprises 6000 multi system operators (MSOs), around 60,000 local cable operators (LCOs), and 7 direct to home (DTH) operators. The Government has embarked on an ambitious exercise of digitizing its cable network in four phases leading to complete switch off of analog TV services by 31 December 2016. India also has a liberalized FDI regime for the broadcasting sector where 26 per cent FDI is allowed in content and 74 per cent in various carriage services like DTH, HITS (headend in the sky).

7.45 India is emerging as the new favourite of international studios, with 100 per cent FDI permitted in the film sector. Disney, Fox, Sony, and Warner Brothers have entered into co-production and distribution deals with domestic production houses. India has co-production treaties with ten countries. During the year 2014-15 (till December 2014), the government has accorded permission for film shooting in India to twenty-one foreign production houses.

7.46 To sum up, the performance of the services sector in recent years has been reasonably good, despite the difficult international and domestic situation. However, the performance of different sectors varied.

Climate Change and Sustainable Development

08

CHAPTER

The year 2015 is likely to be momentous with the world set to witness new agreements on climate change and sustainable development. The global agreement on climate change under the UN Framework Convention on Climate Change applicable to all countries must be ambitious, comprehensive, equitable, and balanced, taking into account the huge development needs of developing countries including access to financial resources and low carbon technological options. In India, landmark environmental measures introduced in recent years reflecting actions both at national and sub-national levels are being further supplemented by policies in the light of new scientific findings and current needs.

8.2 The course for international development and environmental policy agenda for the global community for the next fifteen years is being decided in the year 2015. The negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) are expected to result in a global agreement by December 2015, applicable to all countries, to take action on climate change from 2020. Simultaneously, governments are due to agree on a new post 2015 development agenda including a set of Sustainable Development Goals (SDGs), replacing the Millennium Development Goals, which are coming to an end in 2015.

8.3 A major development attracting attention worldwide has been the Joint Announcement on Climate Change by the United States and China—the world's two largest emitters—in November 2014. As per this announcement, the US intends to achieve an economy-wide target of reducing its emissions by 26 -28 per cent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28 per cent. China intends to achieve the peaking of carbon dioxide (CO_2) emissions around 2030 and to make best efforts to peak early and intends to increase the share of non-fossil fuels in primary energy consumption to around 20 per cent by 2030. This has great political significance in the run-up to the post 2015 climate change agreement. The announcement is expected to provide a boost to the renewable energy sector globally.

8.4 Domestically, several measures have been taken to address climate change. Most importantly, India's national solar mission is being scaled up fivefold from 20,000 megawatts (MW) to 100,000 MW and the clean energy cess on coal has been doubled to ₹100/tonne in 2014.

CLIMATE CHANGE

Recent Scientific Findings from IPCC Fifth Assessment Report

8.5 The Intergovernmental Panel on Climate Change (IPCC) reviews and assesses the most recent scientific, technical, and socio-economic information produced worldwide relevant to climate change. The IPCC in its recent report—

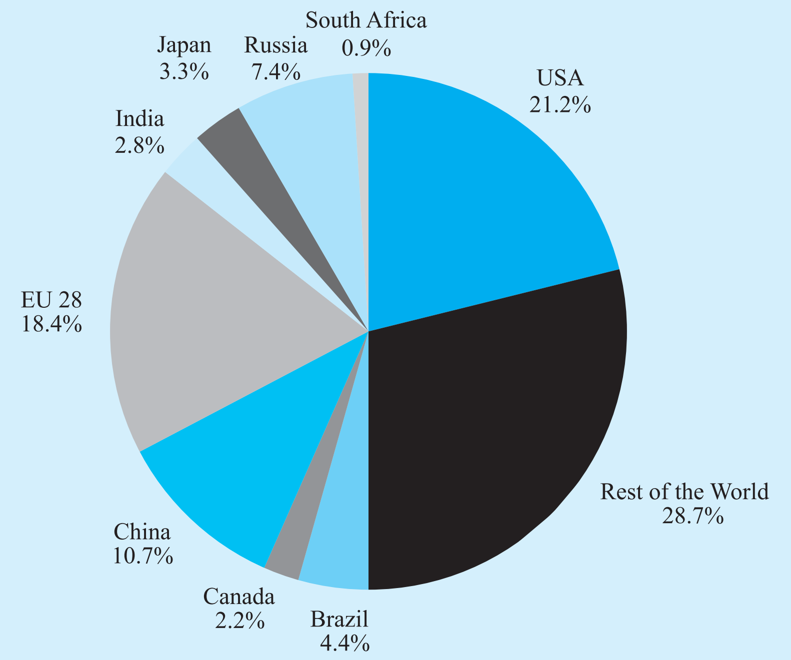
Fifth Assessment Report (AR5)—published in 2014 has observed that there has been an increasing trend in the anthropogenic emissions of greenhouse gases (GHG) since the advent of the industrial revolution, with about half of the anthropogenic CO_2 emissions during this period occurring in the last forty years.The period 1983-2012 is likely to have been the warmest thirty-year period of the last 1400 years. CO_2 emissions from fossil fuel combustion and industrial processes have contributed a major portion of total GHG emissions during the period 1970 - 2010.

8.6 The change in the climate system is likely to have adverse impact on the economy, livelihoods, cropping pattern, and food security. According to the various projections by the IPCC, extreme heat events are likely to be longer and more intense in addition to changes in precipitation patterns.The change in climate could affect the production of wheat, rice, and maize in the tropical and temperate zones; have negative impact on health by exacerbating health problems that already exist especially in developing countries; and adversely impact productive activities like growing food and working outdoors.

8.7 The ecological overshoot problem, i.e. the ecological footprint being larger than the bio-capacity of the population, is an important issue in the global climate discourse. The 'overshoot' can also be understood in terms of the carbon budget. The risk of climate change is largely a function of total cumulative GHGs in the atmosphere. IPCC AR5 has estimated that for temperature increase to remain below 2°C of pre-industrial levels the world can emit only about 2,900 Giga tonnes (Gt) of CO_2 from all sources from the industrial revolution till 2100. Till 2011, the world has emitted 1,900 Gt of CO_2, thus already consuming around two-thirds of this budget. This means that out of the budget of 2,900 Gt, only 1,000 Gt remains to be used between now and 2100. The World Resources Institute estimates that if emissions continue unabated, the remaining budget will last only 30 more years.

8.8 The key issue therefore for designing emission reduction commitment is how we should allocate this remaining sparse carbon budget between countries in a manner which is both fair and achievable. This certainly should involve an assessment of historic responsibility based on how

Figure 8.1: Contribution by Different Countries to Cumulative Global CO_2



Source **: Centre for Science and Environment and IPCC AR5.**

countries have contributed to cumulative emissions so far. India's contribution to cumulative global CO_2 (1850-2011) was a meagre 3 per cent as against 21 per cent by the USA and 18 per cent by the EU (Figure 8.1). The sustainability of the world economic system also needs to be analysed through the lens of social justice and equity. For developing countries, their future commitment will also be determined by what kind and level of financial, capacity-building, and other support is provided by developed countries that have contributed most to cumulative global GHG emissions so far.

8.9 There are multiple mitigation pathways that are likely to limit warming to below 2°C relative to pre-industrial levels. These pathways would require substantial emissions reduction over the next few decades and near zero emissions of CO_2 and other long-lived GHGs by the end of the century. Implementing such reductions poses substantial technological, economic, social, and institutional challenges.

Global GHG Emissions from Major Sectors and Countries

8.10 Since 2000 GHG emissions have been growing in all sectors, except agriculture, forestry, and other land use (AFOLU). Of the 49 (±4.5) $GtCO_2eq$ (CO_2 equivalent) emissions in 2010, 35 per cent were released in the energy supply sector, 24 per cent in AFOLU, 21 per cent in industry, 14 per cent in transport, and 6.4 per cent in buildings (Figure 8.2).

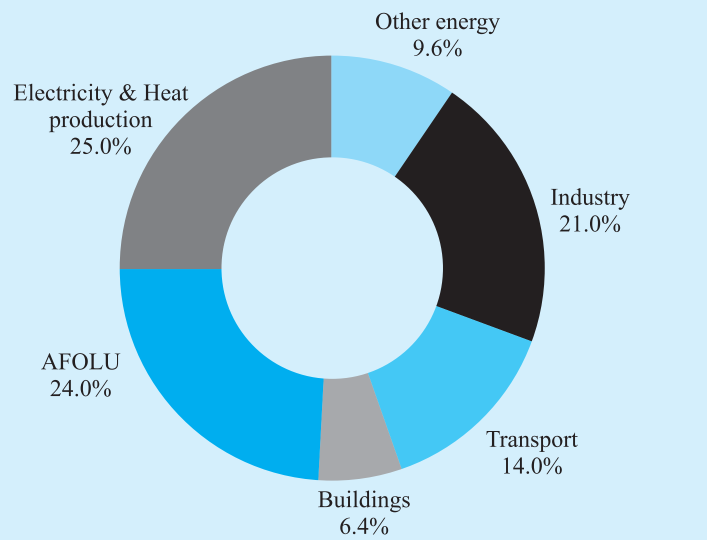
8.11 There are substantial variations in total and per capita emissions of different countries. As per AR5 of IPCC, per capita GHG emissions in 2010 were highly unequal with median per capita emissions for the group of low-income countries (1.4 t CO_2eq/cap) being 9 times lower than median per capita emissions of high income countries (13 t CO_2eq/cap). In terms of absolute CO_2 emissions from fossil fuel use and cement production in 2013, China, the USA, and EU hold the first three positions respectively with India a distant 4^{th} (Figure 8.3). However, in terms of per capita CO_2 emissions from the same sectors in 2013, countries like India, Brazil, and South Africa fall in the bottom 100 among 196 countries (Figure 8.4).

India's Progress on Climate Change

National Action Plan on Climate Change

8.12 India was one of the early adopters of a national climate change plan. Launched way back in 2008, the National Action Plan on Climate Change (NAPCC) outlines policies directed at mitigation and adaptation to combat climate change. India is also working on the voluntary goal

Figure 8.2: Global GHG Emissions from Different Sectors in 2010



***Source* : IPCC, AR5.**

Figure 8.3: Absolute CO_2 Emissions of Some Major Countries

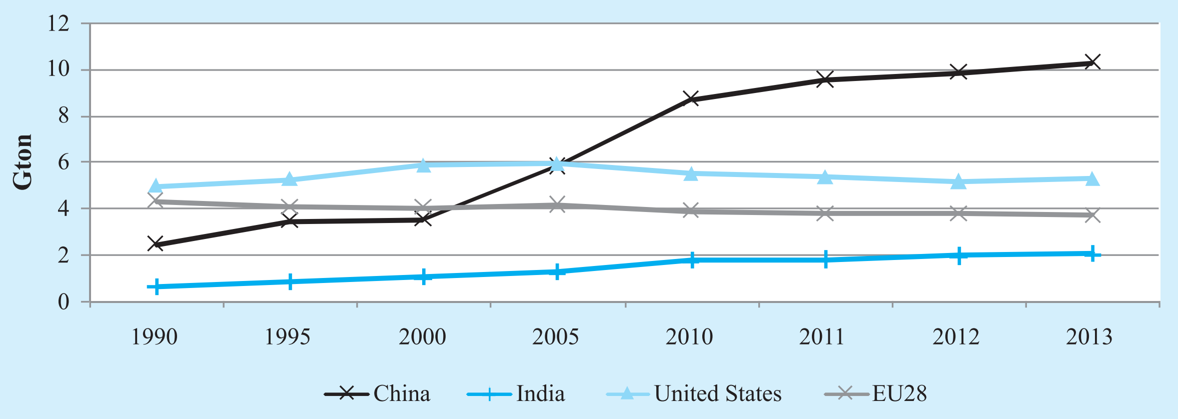
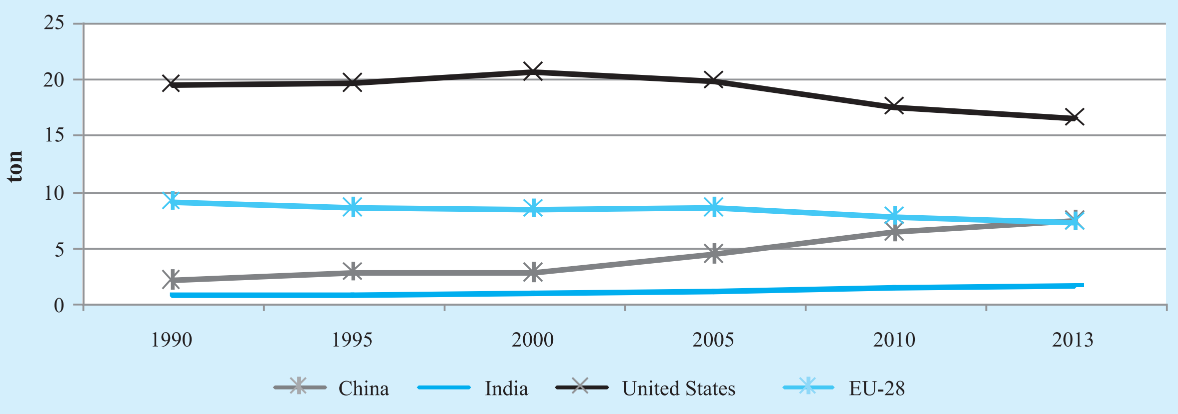


Figure 8.4: Per capita CO_2 Emissions of Some Major Countries



Source **: Trends in Global CO_2 Emissions 2014 Report, European Commission Joint Research Centre**
Note **: CO_2 emissions from fossil fuel use and cement production.**

of reducing the emissions intensity of its GDP (excluding emissions from agriculture) by 20-25 per cent by 2020 as compared to the base year of 2005. The recent United Nations Environment Programme (UNEP) Emission Gap Report (2014) has recognized India as being one of the countries on track to achieve its voluntary pledges. India is also taking proactive steps in enhancing energy efficiency and expanding renewables to combat climate change. At the same time adaptation measures in agriculture, water resources, and urban areas remain its key priorities.

8.13 India is now revisiting National Missions under the NAPCC in the light of new scientific information (IPCC AR5) and technological advances; undertaking additional interventions in areas like GHG mitigation in power generation, other renewable energy technology programmes, disaster management, protection of coastal areas, and the health sector; creating capacity at different levels of the government; exploring possibilities of new missions on wind energy, health, waste to energy, and coastal areas; and redesigning the National Water Mission and National Mission on Sustainable Agriculture.

State Action Plans on Climate Change

8.14 Subsequent to the NAPCC, in 2009 all the state governments were requested to prepare State Action Plans on Climate Change (SAPCC). So far, 31 states have prepared and submitted SAPCC documents. The SAPCCs have both adaptation and mitigation components to address climate change impacts, though adaptation has been identified as the more important element. A combined budgetary requirement of around ₹ 11,33,692 crore has been estimated for implementation of the 31 SAPCCs.

Progress in Expanding the Share of Renewable Energy in India

8.15 India's total renewable power installed capacity as on 31 December 2014 has reached 33.8 GW. Wind energy continues to dominate this share accounting for 66 per cent of installed capacity, followed by biomass, small hydro power, and solar power. As per Census of India 2011, around 1.1 million households are using solar energy to meet their lighting needs and an almost similar number meets cooking energy needs from biogas plants. India's renewable energy sector is driven primarily by the private sector. The government has been promoting private investment in renewable energy through an attractive mix of fiscal and financial incentives, in addition to preferential tariffs being provided at state level. These include capital/interest subsidy, accelerated depreciation, and nil/concessional excise and customs duties. The level of capital subsidy being provided depends on the renewable resources and region, and varies from about 10 per cent to 90 per cent of project costs. The Jawaharlal Nehru National Solar Mission launched in January 2010 seeks to establish India as a global leader in solar energy by creating policy conditions for its diffusion across the country. Installed capacity of Indian solar power in 2013-14 was 2647 MW. As per Bloomberg New Energy Finance/UNEP report, in 2013, there was a total investment of US$ 6 billion in renewable energy in India. Proposals for the next five years are likely to generate business opportunities of the order of US$ 160 billion. It offers very good opportunity for businesses to set and scale up industry, leapfrog technologies, and create volumes. Some of India's major immediate plans on renewable energy include scaling up cumulative installed capacity to 170 GW that includes 100 GW of solar power by 2022 and establishing a National University for Renewable Energy.

Clean Energy Cess on Coal

8.16 One of the important instruments being proposed for dealing with climate change is the introduction of carbon taxes. However, very few countries in the world have introduced carbon taxes so far. India introduced a clean energy cess on coal in 2010. This cess on coal which feeds the National Clean Energy Fund (NCEF) has been increased from ₹ 50 to ₹ 100 per tonne in Budget 2014-15. Total collection so far (till 2014-15) under the Fund is ₹ 17,084.45 crore (Budget Estimates—BE) and 46 clean energy projects worth ₹ 16,511.43 crore have been recommended for funding out of the NCEF till September 2014 (Table 8.1). The scope of the NCEF has now been expanded to include funding in the area of clean environment initiatives.

Table 8.1 : Projects Recommended for NCEF Funding

Year	Number of Projects	Amount (₹ in crore)
2011-12	9	566.50
2012-13	6	2715.11
2013-14	12	1229.65
2014-15	19	12000.17
Total	46	16511.43

Progress in Adaptation Actions

8.17 India has also made progress in adaptation actions. The National Bank for Agriculture and Rural Development (NABARD) is India's National Implementing Entity (NIE) for the Adaptation Fund created under the UNFCCC. At present, NABARD is the only NIE in the Asia Pacific Region. In its capacity as NIE, NABARD has generated several feasible proposals on climate change adaptation, five of which, amounting to US$ 7.3 million, have been submitted to the Adaptation Fund. The Adaptation Fund Board has recently sanctioned the first set of two projects submitted by NABARD with an outlay of US$ 3.2 million for promoting climate resilient agriculture systems in West Bengal and enabling the fisheries sector in Andhra Pradesh.

8.18 Additionally, NABARD is implementing several development projects to promote sustainable development livelihood through Natural Resource Management, such as watershed development and sustainable livelihood for tribal communities. NABARD has sanctioned a pilot project of ₹ 21 crore on climate change adaptation in Maharashtra to develop knowledge, strategies, and approaches that will enable vulnerable communities to adapt to the impending impacts of climate change. Under NABARD Infrastructure Development Assistance, it is financing green investments in solar power generation and improvement of electricity distribution networks which includes India's first 1MW canal-top solar power project in Gujarat.

8.19 Further, as a follow-up of its announcement in Budget 2014-15, a 'National Adaptation Fund' with an initial corpus of ₹ 100 crore has been set up to support adaptation actions to combat the challenges of climate change in sectors like agriculture, water, and forestry.

Domestic Carbon Market Mechanisms

8.20 Simultaneously, there have been a number of actions on the domestic front to create carbon markets. An important one is the Perform, Achieve & Trade (PAT) scheme which is being implemented for the designated industries under the National Mission on Enhanced Energy Efficiency. The activities under the PAT scheme provide opportunities for new markets as it devises cost-effective energy efficient strategies for end-use demand-side management leading to ecological sustainability. The PAT scheme covers 478 plants (designated consumers) in eight energy-intensive industrial sectors accounting for one-third of total energy consumption. The target for reduction in average specific energy consumption under PAT is 4.05 per cent during PAT Cycle 1 (1 April 2012 to 31 March 2015). As a major initiative of the National Solar Mission under the NAPCC, renewable energy certificates (REC) seek to address the mismatch between availability of renewable energy sources and the requirement of the obligated entities to meet their renewable purchase obligations. The value of an REC is equivalent to 1 MW hour of electricity injected into the grid from renewable energy sources. As per the Renewable Energy Certificate Registry of India, a total of 16,58,593 solar RECs were issued till January 2015.

International State of Negotiations: Twentieth Session of the Conference of Parties to the UNFCCC

8.21 The just concluded twentieth session of the Conference of Parties to the UNFCCC (COP 20) in December 2014 in Lima, Peru, was an important milestone as it came out with a 'Lima Call for Climate Action' after long deliberations and intense negotiations (Box 8.1). With less than a year left to conclude the deal in Paris later this year, nations are working hard towards finalizing the agreement by December 2015 at the COP 21 session in Paris.

8.22 India's main concern in the negotiations was to protect its long term interests and emphasize the need for growth and development space to tackle the problem of eradicating poverty, providing energy access to all and address other developmental priorities. India's stand in the negotiations was guided by the principle of Equity and Common but Differentiated Responsibilities (CBDR) (Box 8.2).

International Climate Finance Flows

8.23 The UNFCCC squarely places the responsibility of providing climate finance to the developing countries on the developed countries. For this purpose a financial mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology, has been defined in Article 11 of the Convention.

8.24 The Global Environment Facility (GEF) is one of the two operating entities under the financial mechanism as per Article 11. It funds projects in energy efficiency, renewable energy, sustainable urban transport, and sustainable management of land use, land-use change and forestry and climate-smart agriculture. Recently, thirty donor countries pledged US$ 4.43 billion for the GEF-6 cycle (July 2014 – June 2018). India has received an allocation of US$ 130.58 million under this, of

Box 8.1 : Key Lima Outcomes

The UNFCCC negotiations focused on the finalization of elements of the draft negotiating text for the 2015 Paris agreement, identification of information to be submitted by Parties under the Intended Nationally Determined Contributions (INDCs), and enhancement of pre 2020 actions. Some of the important outcomes of the Lima Conference are the following:

- The Lima Conference has decided that the new agreement will be under the UNFCCC and will reflect the principle of CBDR in the light of different national circumstances. It also addresses all elements, i.e. mitigation, adaptation, finance, technology development and transfer, capacity building, and transparency of action and support in a balanced manner.
- The draft text has to be finalized by May 2015 in order to be placed for consideration and adoption of Parties at COP 21.
- Another key decision was that countries should not backslide from current pledges under the INDCs and their contribution has to be more than their current commitments. The final decision successfully ensured that countries can include adaptation, finance, technology development and transfer, capacity building, and transparency of action and support also in their INDCs, in addition to mitigation. There is also no 'ex-ante assessment' to be undergone.
- Now countries have to submit quantifiable information on the reference point (base year), time frames, scope and planning process, assessments, etc. related to the INDCs. This will be published on the UNFCCC website and a Synthesis Report of the aggregate effect of the INDCs prepared by 1 November 2015.
- It was decided to accelerate action on enhancing the pre-2020 actions like early ratification of the Kyoto Protocol second commitment period, revisiting of targets and conditionalities associated with it, and provision of finance, technology, and capacity building support by developed countries to developing countries.
- On the issue of finance, developed countries have been invited to provide clarity on reaching the US$ 100 billion goal by 2020, by way of enhanced information and greater transparency and predictability for scaling up climate finance. On the Green Climate Fund (GCF), pledges amounting to US$ 10.2 billion for initial capitalization of the Fund have been acknowledged. It was further decided to urge contributors to confirm these pledges in the form of fully executed contribution agreements so that at least 50 per cent of pledges made till November 2014 are reflected as fully executed contribution agreements by 30 April 2015.

which US$ 87.88 million is for climate change mitigation focal area. Till date, India has accessed US$ 477.3 million of GEF grant of which US$ 284.2 million is for climate change mitigation projects and US$ 10 million is for climate change adaptation projects. The GEF also manages two separate adaptation-focused funds under the UNFCCC— the Least Developed Countries Fund and the Special Climate Change Fund— which mobilize funding specifically earmarked for activities related to adaptation.

8.25 The GCF is also an operating entity of the financial mechanism of the Convention set up in 2011. The GCF is expected to become the major channel of mobilizing a significant share of the US$ 100 billion climate finance from developed to developing countries in the coming years, helping the latter in their efforts to combat climate change and adjust their development pathways to a more climate-friendly one. Significant progress has been made towards operationalizing the GCF. Some of the breakthrough decisions adopted include: 50:50 allocation for mitigation and adaptation over time; maximizing engagement with the private sector through a special Private Sector Facility of the Fund; and the intention of defining the Fund's gender action plan soon. As of date, US$ 10.2 billion in grants has been pledged to the GCF. The GCF is currently structured into two themes— mitigation and adaptation and one modality which is the Private Sector Facility. With this, the GCF is now ready for business.

Box 8.2 : Climate Change Issues: India's Stand

India has been following action-oriented policies to bring rapid development to its people while purposefully addressing climate change. India has been one of the foremost advocates of long-term global cooperation in combating climate change in accordance with the principles and provisions of the UNFCCC. Climate change impacts being witnessed today are a result of the total accumulated greenhouse emissions for which the major responsibility lies with the developed nations. Moreover, despite the fast growth registered by some of the developing countries, a large proportion of people in these countries still live in extreme poverty. The Indian stance in the climate change negotiations has been guided by the principle of CBDR. India thus believes that the climate change agreement of 2015 should take into consideration a whole gamut of issues including adaptation, finance, technology development and transfer, capacity building, transparency of action and support in a balanced manner, and loss and damage in addition to mitigation.

Mitigation: Historical responsibilities of developed countries and equity in access to global atmospheric resources should continue to be the basis of defining mitigation commitments. The 2015 agreement must ensure that the developing countries be given their fair share of carbon and development space. The contribution of developing countries to mitigation efforts is far greater than that of developed countries and could be further enhanced if developed countries effectively implement and significantly increase their commitments of providing finance, technology, and capacity building support to developing countries.

Adaptation: Equal weightage has to be given to adaptation as it is essential for reducing vulnerabilities of communities to climate change. This assumes more importance in view of the fact that the developing countries are the most vulnerable to climate change. However, both global action and finance flows have been biased in favour of mitigation. The developing countries are pushing hard to include adaptation in a comprehensive and balanced manner in the 2015 agreement.

Finance: The responsibility of providing financial assistance to the developing countries lies with the developed countries and this has been clearly articulated in the UNFCCC. India together with other developing countries continue to urge the developed countries to honour their obligation to provide new, additional, and predictable financial support to developing countries in a measurable, reportable, and verifiable manner. In this context ambitious capitalization of the GCF assumes significance. Developed countries have been urged to provide clear timelines and pathways to reach the US$ 100 billion annual commitment made by them in 2010.

Technology transfer: Technology forms a major component of any move towards combating climate change. The important issue in this regard is that while the developed countries are the frontrunners in clean technology, the developing countries do not possess either sufficient technical capability or the financial resources to develop clean technologies. Appropriate mechanisms for smooth transfer of technology from the developed to developing countries have to be agreed upon. The intellectual property rights price-tag should not come in the way of such technology transfer.

8.26 The GCF follows a 'country-driven approach', which envisages effective involvement of various stakeholders at all levels and also enables the developing countries to evolve their climate policy keeping in consideration their immediate development priorities like poverty reduction and improving standards of living for a large proportion of their population. The effectiveness with which a country is able to tap the resources from the GCF and use them effectively is dependent on how well the country's government and its various institutions have prepared themselves to access the Fund. The first step is building the institutional capacity of the country. India has moved forward in this regard by selecting the Ministry of Environment, Forests and Climate Change as India's Nationally Designated Authority (NDA) for the GCF, which will recommend to the Board of the GCF funding proposals in the context of national climate strategies. The next step is to select competent NIEs which will be accredited by the GCF Board and will oversee the implementation of the project by the Executing Entities. Given the country-driven approach of the GCF, the onus also lies on the recipient countries to decide how to use the resources accessed from the GCF. This calls for prioritizing the sectors and projects that will yield maximum sustainable development benefits for India. Currently efforts are under way by the government to build India's institutional capacity including the selection of NIEs and an overall framework for effectively accessing resources from the GCF.

International Carbon Markets

8.27 India's participation in the carbon market is a story of success. India has been proactive in its approach to the carbon market and represents a significant component of the global market of the Clean Development Mechanism (CDM) established under the Kyoto Protocol. As on 1 December 2014, 1541 of the total 7589 projects registered by the CDM Executive Board are from India. This so far is the second highest in the world with China leading with 3763 registered projects. The total certified emission reductions (CER) issued so far are 1.52 billion units, and CERs issued to Indian projects are 191 million units (13.27 per cent). Also, as on 31 December 2014, the National CDM Authority in India has accorded approval to 2941 projects facilitating an investment of more than ₹ 5,79,306 crore in the country. These projects are in the sectors of energy efficiency, fuel switching, industrial processes, municipal solid waste, renewable energy, and forestry.

8.28 In the second commitment period of the Kyoto Protocol (2013-2020), the number of CDM projects has come down drastically. In 2012, there were 3227 projects registered with the UNFCCC and in 2013 only 307 projects were registered under the CDM. Interestingly, in 2013 India has registered 115 projects, which is the highest number by any country. In 2014, India registered 56 projects with the UNFCCC.

8.29 Although international dialogue continues to intensify focus on a robust and meaningful international climate change agreement in 2015, the lack of mitigation ambition in the pre-2020 period continued to slow down the momentum in the international market-based mechanisms. In fact, Parties participating in the second commitment period of the Kyoto Protocol represent only 12 per cent of global emissions. Some major players pulled out of the Kyoto Protocol, which has further suppressed the limited demand of Kyoto credits. As per a World Bank Group report, the current demand is estimated to be around 1120-1230 megatons of CO_2 equivalent ($MtCO_2e$), as against a supply of 3500-5400 $MtCO_2e$ for 2014-2020, around three to five times the expected demand.

8.30 Proposals to augment the demand for carbon credits and a price stabilization mechanism are being negotiated. This includes proposals to create new market mechanisms within and beyond the Kyoto Protocol within an appropriate framework. While the CDM will continue to function during the period from 2013 to 2020, the manner in which it will get subsumed within these new mechanisms for an effective carbon market is to be seen (Box 8.3).

SUSTAINABLE DEVELOPMENT

8.31 Planetary boundaries in terms of sustainable development can be understood in terms of ecological footprint which is suggestive of the pressure human activities put on ecosystems, which when compared to bio capacity (a measure of the capacity of ecosystems to produce useful biological materials and to absorb waste materials generated by humans) tells us if we are running in surplus or deficit. Data shows that the world is living in a situation of ecological overshoot. In 2010, the global ecological footprint was 18.1 billion global hectares (gha), or 2.6 gha per capita, and the earth's total bio capacity was 12 billion gha, or 1.7 gha per capita, as per the Living Planet Report 2014. Bio capacity is not spread evenly around the world. Unfortunately the low-income countries have the smallest footprint but suffer the greatest ecosystem losses. Moderate UN scenarios suggest that if current population and consumption trends continue, by the 2030s we will need the equivalent of two earths to support us.

8.32 As per a McKinsey report, India is at the threshold of an urban flare-up. The population of Indian cities will increase from 340 million in 2008 to 590 million by 2030. In the 2030s India's largest cities will be bigger than many major countries. As population increases, demand for every key service will increase five to sevenfold. These trends,

Box 8.3 : CDM and the Future of Carbon Markets

The CDM, a type of carbon market created multilaterally under the UNFCCC, has proved to be one of the most effective mitigation instruments. Though lack of mitigation ambition in the pre-2020 period has slowed down its momentum, efforts to harness the full potential of the CDM, the world's largest global carbon market, are picking up. Many developing countries including India have greatly benefited from and contributed to the emission reduction initiative through the CDM. While countries look for a new market mechanism, there are strong reasons to build on the powerful CDM tool for the reasons given in Table 1. The CDM Board has also agreed to a budget that will allow CDM operations to continue upto 2020.

Table 1 : CDM-related facts

Emissions reduced or avoided	-	1.5 Gt of CO_2eq
7700 + projects and programme of activities registered in less than 10 years	-	Average of over 2 projects per day
1 US$ of public money invested in the CDM on average leverages	-	10 US$ in private-sector investment
US$ 130 billion investment in GHG-reducing activities	>	Total annual ODA flow in 2011
Money saved by EU Emissions Trading Scheme installations from 2008 to 2012 through CER purchased	=	US$ 6 - 28 billion
155 countries involved in the CDM	=	Over three-fourths of the countries in the world

***Source*: UNFCCC; State and Trends on Carbon Pricing, World Bank 2014.**

Apart from the CDM, the reach of carbon pricing across the globe is steadily increasing. As per a World Bank Group report, a total of eight new carbon markets opened their doors in 2013 alone. With these new instruments, the world's emissions trading schemes are worth about US$30 billion.With a global climate deal set to be finalized in 2015 and substantial incremental finance required to tackle the climate problem, carbon markets and pricing are expected to play a key role in controlling emissions. New approaches to market-based mechanisms are being developed to help fast-track their deployment and maximize investment in low carbon technologies. These are being termed as reformed CDM, or New Market Mechanisms.

These developments are likely to help India, as till now limited options were available to Indian CDM project developers who had to sell at prevailing prices. With Indian-registered projects expected to generate substantial CERs by 2020, Indian CER holders are now looking forward to selling their CERs once the carbon markets pick up.

combined with the current challenges of poverty eradication, food and energy security, urban waste management, and water scarcity, will put further pressure on our limited resources which will add to greater energy needs and lead to increase in emissions if further decoupling doesn't take place. At the same time, hidden in this challenge are great opportunities. Unlike many countries, India has a young population and therefore can reap the fruits of its demographic dividend. With more than half of the India of 2030 yet to be built, we have an opportunity to avoid excessive dependence on fossil fuel-based energy systems and carbon lock-ins that many industrialized countries face today. A conscious policy framework which takes into account both development needs and environmental considerations could help in turning the challenges into opportunities.

8.33 There has been a growing political drive towards the post 2015 development agenda due for agreement in September 2015. In this direction, the thirty-member Open Working Group mandated by the Outcome Document—"The Future We Want"—of the UN Conference on Sustainable Development (Rio+20) held in June 2012 at Rio came out with a set of 17 SDGs in July 2014 (Box 8.4). The SDGs cover a broad range of sustainable development issues and also focus on means of implementation as one of the overarching goals to achieve the SDGs. These are expected to be integrated into the UN's post-2015 Development Agenda. At present, the post-2015 agenda and SDG processes are moving rapidly towards their conclusion this year.

Box 8.4 : SDGs

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable, and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient, and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

8.34 On the domestic front, India has been working towards environmental safety without compromising on the goal of rapid economic growth. Accordingly, India's development plans lay a balanced emphasis on economic development and the environment. The country has witnessed the introduction of landmark environmental measures for conservation of rivers, improvement of urban air quality, enhanced forestation, significant increase in installed capacity of renewable energy technologies, shift towards public transport, and enhancing rural and urban infrastructure. Recent key initiatives include: the Swachh Bharat Mission, Clean Ganga Plan, scaling up of the National Solar Mission fivefold from 20,000 MW to 1,00,000 MWwith an additional investment requirement of US$ 100 billion, development of 100 smart cities with integrated policies for sustainable development, and preparations for developing a National Air Quality Index and a National Air Quality Scheme.

8.35 To sum up, political awareness on the issue of climate change and sustainable development both in the international arena and on the domestic front has risen considerably. Many developing countries including India have made considerable progress in tackling climate change issues. The year 2015 is likely to witness a series of events in the run up to the Paris agreement. As we put our acts together towards a post-2015 agreement on climate change, it is absolutely critical to ensure that the new agreement is comprehensive, balanced, equitable, and pragmatic. It should address the genuine requirements of developing countries like India by providing them equitable carbon and development space to achieve sustainable development and eradicate poverty. To achieve this, adherence to the principles and provisions of the UNFCCC is critical. Importantly, global climate action rests heavily on the means of implementation, especially finance and technology, and the agreement should adequately address this. As India's Prime Minister Shri NarendraModi said in the UN General Assembly in September 2014, "We should be honest in shouldering our responsibilities in meeting the challenges. The world community has agreed on a beautiful balance of collective action—common but differentiated responsibilities. That should form the basis of continued action."

Social Infrastructure, Employment, and Human Development

09

CHAPTER

Growth with equity has been the focus of Indian economic policy since the 1960s. By 2020, India is projected to be the youngest nation in the world in terms of size. While this 'youth bulge' provides India great opportunities, it also poses challenges. These young people need to be healthy, suitably educated, and appropriately skilled to contribute optimally to the economy. Despite global shocks, India has not compromised on expenditures on welfare activities, especially for the vulnerable population. The success of programmes and policies of the government lies in the strength of institutional structures with strong public delivery systems as well as in the attitudes and mindset of the people. To ensure conversion of outlays into outcomes the role of Panchayati Raj institutions is crucial. Though significant outcomes have been achieved in the areas of poverty reduction, health, and education, more remains to be done. Government, along with civil society, media, and other stakeholders, must work towards changing the patriarchal mindset of society and empowering women to realize their untapped potential and fulfil their aspirations.

9.2 As per provisional results of Census 2011, 2001-11 is the first decade in independent India where in the population momentum coupled with declining fertility has dampened the pace of net additions to population. Thus, the net addition (between 2001-2011) is less than that of the pervious decade by 0.86 million. At present a little more than one out of every six persons in the world is an Indian. As per Sample Registration System (SRS) (2013) data, there has been a gradual decline in the share of population in the age group 0-14 from 41.2 to 38.1 per cent during 1971 to 1981 and from 36.3 to 28.4 per cent during 1991 to 2013. On the other hand, the proportion of economically active population (15-59 years) or, India's 'demographic dividend', has increased from 53.4 to 56.3 per cent during 1971 to 1981 and from 57.7 to 63.3 per cent during 1991 to 2013. On account of better education, health facilities, and increase in life expectancy, the percentage of elderly (60+) has gone up from 5.3 to 5.7 per cent and 6.0 to 8.3 per cent respectively in the same two periods.

9.3 The growth rate of the labour force will continue to be higher than that of the population until 2021. According to an Indian Labour Report (Time Lease, 2007), 300 million youth will enter the labour force by 2025, and 25 per cent of the world's workers in the next three years will be Indians. Population projections indicate that in 2020 the average age of India's population will be the lowest in the world—around 29 years compared to 37 years in China and the United States of America, 45 years in West Europe, and 48 years in Japan. Consequently, while the global economy is expected to witness a shortage of young population of around 56 million by 2020, India will be the only country with a youth surplus of 47 million (Report on Education, Skill Development and Labour Force (2013-14) Volume III, Labour Bureau, 2014).

9.4 The main issue to address then is not just providing employment but increasing the employability of the labour force in India. Employability is contingent upon knowledge and skills developed through quality education and training. Thus any solution to the problem lies in a well-designed education and training regime that sets out to meet these objectives. The problem of low employability levels owing to poor quality of education is accentuated by the fact that fewer students opt for higher education.

Educational Challenges

9.5 While only 73 per cent literacy has been achieved as per Census 2011, there has been marked improvement in female literacy. Male literacy at 80.9 per cent is still higher than female literacy at 64.6 per cent but the latter has increased by 10.9 percentage points compared to 5.6 percentage points for the former. The Right of Children to Free and Compulsory Education (RTE) Act 2009 was enacted by the centre to increase the quality as well as accessibility of elementary education in India in April 2010. Sarva Shiksha Abhiyan (SSA) is the designated scheme for implementation of the RTE Act. The framework of the SSA has been revised to include reimbursement for expenditure incurred for at least 25 per cent admissions of children belonging to disadvantaged and weaker sections in private unaided schools from the academic year 2014-15. Between 2007-08 and 2013-14, according to the DISE (District Information System for Education), total enrolment in primary schools increased from 134 million to 137 million in 2011-12 and then declined to 132 million in 2013-14 while upper primary enrolment grew from 51 million to about 67 million. This is in line with the changing demographic age structure. India has achieved near universal enrolment and enhanced hard and soft infrastructure (schools, teachers, and academic support staff).

9.6 However, the overall standard of education is well below global standards: that PISA (Programme for International Student Assessment) 2009+ results ranked Tamil Nadu and Himachal Pradesh 72 and 73 out of 74 participants, higher only than Kyrgyzstan, exposes the gaps in our education system. PISA, which measures the knowledge and skills of 15-year-olds with questions designed to assess their problem-solving capabilities, rates these two states at the bottom, with the scores in mathematics and science falling way behind the OECD (Organisation for Economic Cooperation and Development) average. Shanghai-China tops the rankings followed by Singapore, while the Russian Federation is ranked at thirty-eighth position. “Countries where students near the end of compulsory schooling perform at high levels tend to maintain their lead after these students transition from school into young adulthood…There is considerable scope for post-secondary education and training systems, as well as workplaces, to intervene to improve the proficiency of young people who leave school with poor literacy and numeracy skills.” Clearly, the policy prescription lies in shifting attention away from inputs to outcomes and focusing on building quality education and skill development infrastructure (Box: 9.1). India did not participate in PISA 2012.

9.7 ASER (Annual Status of Education Report) findings have been reporting low levels of learning amongst the 5 to 16 age group in rural India since 2005. The worrying fact is that these are floor-level tests (basic 2-digit carry-forward subtraction and division skills), without which one cannot progress in the school system.

9.8 With the changing demography and declining child population, the inadequacy of human capital at the base of the pyramid leading to a huge backlog in basic skills could become a big impediment in India’s growth. The Padhe Bharat Badhe Bharat initiative to create a base for reading, writing, and math fluency is a good step. However,

Box 9.1 : School Education Outcomes : Critical Inputs for tapping the Demographic Dividend

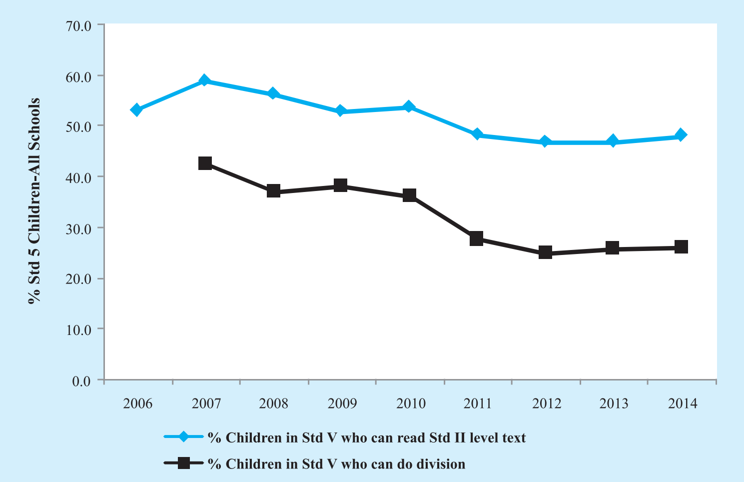
i. The single most significant ASER finding is that learning levels across the country, whether in public or private school, have not improved (Figure 9.1).

ii. Another important finding is regarding school enrolment—from only 16 per cent children enrolled in private schools in 2005, enrolment has gone up to nearly 30 per cent. Present trends indicate that this number will increase to 50 per cent by the end of the current decade. During 2007-08 and 2013-14, enrolment in government schools (both primary and upper primary) declined by about 11.7 million, from 133.7 million to 121 million, while enrolment in private schools increased by 27 million, from 51 million to 78 million. It is a moot point whether the poor learning levels in government schools have contributed to this. Paradoxically this trend is observed in rural areas, which receive funding under the SSA and other programmes.

iii. Some highlights of the survey of rural children conducted in 16,497 villages in 557 districts (569,229 children surveyed), are listed below:

- **Marginal improvement in basic reading levels:** The percentage of children in Standard V who are able to read a Standard II-level text increased from 47.0 per cent in 2013 to 48.1 per cent in 2014.
- **Decline in arithmetic levels:** The percentage of Standard III children able to solve simple two-digit subtraction problems fell from 26.1 per cent in 2013 to 25.3 per cent in 2014. The percentage of children in Standard II who cannot recognize numbers up to 9 has increased over time, from 11.3 per cent in 2009 to 19.5 per cent in 2014.
- **Better provision of girls toilets:** The proportion of schools without toilets (girls + boys) declined from 7.2 per cent in 2013 to 6.3 per cent in 2014. The proportion of separate girls toilets (unlocked and useable) in schools has improved from 32.9 per cent in 2010 to 53.3 per cent in 2013 and further to 55.7 per cent in 2014.
- **Increase in libraries in schools:** The proportion of schools without libraries has declined only one percentage point from 22.9 per cent during 2013 to 21.9 per cent during 2014.
- **Compliance on pupil-teacher ratio:** There has been a consistent rise in the proportion of schools complying with RTE norms on pupil-teacher ratio, from 45.3 per cent in 2013 to 49.3 per cent in 2014.
- **Improvement in drinking water facility:** The proportion of schools with no provision for drinking water declined from 17.0 per cent in 2010 to 15.2 per cent in 2013 and further to 13.9 per cent in 2014 but the proportion of schools with useable drinking water facility improved only marginally from 73.8 per cent in 2013 to 75.6 per cent in 2014.
- **Stagnant enrolment in rural India:** Over one year the enrolment of 6-14-year old children in rural India remained dormant at 96.8 per cent, with the proportion not enrolled also unchanged at 3.3 per cent.
- **Rising private school enrolment:** Private school enrolment of 6-14-year olds has risen marginally from 29.0 per cent in 2013 to 30.8 per cent in 2014. Among the major States which have higher private enrolment are Kerala followed by Haryana, UP, Punjab, and Rajasthan.
- **Decline in classroom-teacher ratio (CTR):** The steady decline in the percentage of schools meeting the RTE norm for CTR continued; from 73.8 per cent in 2013 the ratio further declined to 72.8 per cent in 2014.
- **Decline in attendance:** Children's attendance in both primary and upper primary schools shows a steady downward trend. In 2009, attendance was at 74.3 per cent in primary schools and 77 per cent in upper primary schools as compared to 71.4 per cent and 71.1 per cent respectively in 2014.
- **Same classroom for different classes:** In 2014, Standard II students in about 63 per cent of schools and Standard IV students in about 57 per cent of schools were reported to be sitting with one or more other classes; the percentages have been increasing over the years.

Figure 9.1: Reading and Arithmetic Abilities of Children in Standard V ASER 2007-2014: All India Rural



Source: **Annual Status of Education Report (Rural) 2014 – Provisional Results** for it to be fruitful, it is critical that the local administration is fully involved and sensitized.

9.9 While the RTE Act and the Juvenile Justice Act 2000 were promulgated to bring children into education rather than employment, they have allowed youth in the 15-18 age-group to slip through the cracks. India has about 100 million young people who fall in this category. Since there are educational and age requirements for entry into most vocational skilling programmes, and job placements are not possible before age 18, the vast majority of this population could land up in the unorganized sector. There is need for research into the type of knowledge or skills required to address the opportunity gaps and to improve productive capacity in the unorganized sector.

9.10 Concurrently, to build capacity in secondary schools on par with expanded primary enrolments, several schemes like the Mid-Day Meal (MDM) scheme, Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Model School Scheme (MSS), and Saakshar Bharat (SB)/ Adult Education have also been implemented. The focus of SB is female literacy. Inter alia, the lack of trained teachers compounds the problem. To strengthen the cadre of teacher educators by providing early career choice to prospective teachers and to fill the vacancies in teacher education institutions, a new four-year integrated programme, i.e. BA/BEd. and BSc./BEd. has been introduced.

9.11 The Indian higher education system is one of the largest in the world in terms of the number of colleges and universities. From 350 universities and 16,982 colleges in 2005-06, the numbers have gone up to 713 universities, 36,739 colleges, and 11,343 diploma-level institutions in 2013-14. There is need to match the supply with demand and to dovetail education policy to employment opportunities. Therefore, higher education needs to be futuristic and envision areas that will generate future employment opportunities and accordingly offer suitable courses for students. The gross enrolment ratio (GER) in higher education has nearly doubled from around 11.6 per cent in 2005-06 to 21.1 per cent in 2012-13 (Provisional), with 29.6 million students enrolled in 2012-13 as compared to 14.3 million in 2005-06. However, the lower penetration into higher levels of education leads to higher dropouts, especially among the secondary and upper primary students, consequently to accumulation of less educated and less skilled job seekers at the bottom of the pyramid. The percentage educated also falls progressively with higher levels of education.

EMPLOYMENT MATTERS

Skilling the Youth

9.12 There is a dual challenge here of developing skills on the one hand and using skills on the other since skills that are not used are lost. As per the Labour Bureau Report 2014, the current size of India's formally skilled workforce is small, approximately 2 per cent. This number contrasts poorly with smaller countries like South Korea and Japan that report figures of 96 and 80 per cent respectively. At all-India level around 6.8 per cent persons aged 15 years and above are reported to have received/ be receiving vocational training.

9.13 As per studies conducted by National Skill Development Corporation (NSDC) for the period between 2013 and 2022, there is an incremental requirement of 120 million skilled people in the non-farm sector. The current capacity for skilling is grossly inadequate and needs to be speedily scaled up to meet immediate skill needs of the country. The poor skill levels among India's workforce are attributed to dearth of a formal vocational education framework, with wide variation in quality, high school dropout rates, inadequate skills training capacity, negative perception towards skilling, and lack of 'industry-ready' skills even in professional courses (Labour Bureau Report 2014). Some recent initiatives that aim to enhance access, equality, quality, innovation, etc. in the area of higher and vocational education are the Rashtriya Uchchatar Shiksha Abhiyan (RUSA), Technical Education Quality Improvement Programme (TEQIP), and National Skill Qualification Framework (NSQF).

9.14 A dedicated Department of Skill Development and Entrepreneurship has been created under the Ministry of Skill Development, Entrepreneurship, Youth Affairs and Sports to accord focused attention in this area. In addition, the skilling programme for rural youth has been refocused and reprioritized to build the capacity of poor rural youth to address domestic and global skill requirements. The Deen Dayal Upadhyaya Grameen Koushalya Yojana (DDU-GKY) is a placement-linked skill development scheme for poor rural youth. A total of 51,956 candidates have been skilled under the DDU-GKY, of which 28,995 have been placed till November during 2014-15.

9.15 Other new programmes that aim at bringing minorities into mainstream development include Nai Manzil for education and skill development of dropouts; USTTAD (Upgrading Skills and Training in Traditional Arts/Crafts for Development) to conserve traditional arts/crafts and build capacity of traditional artisans and craftsmen belonging to minority communities; Nai Roshni, a leadership training programme for women; and MANAS for upgrading entrepreneurial skills of minority youths.

Sluggish employment growth

9.16 A cause for concern is the deceleration in the compound annual growth rate (CAGR) of employment during 2004-05 to 2011-12 to 0.5 per cent from 2.8 per cent during 1999-2000 to 2004-05 as against CAGRs of 2.9 per cent and 0.4 per cent respectively in the labour force for the same periods. As per the National Sample Survey Office (NSSO) data during 1999-2000 to 2004-05, employment on usual status (US) basis increased by 59.9 million persons from 398.0 million to 457.9 million as against the increase in labour force by 62.0 million persons from 407.0 million to 469.0 million. After a period of slow progress during 2004-05 to 2009-10, employment generation picked up during 2009-10 to 2011-12, adding 13.9 million persons to the workforce, but not keeping pace with the increase in labour force (14.9 million persons) (Table 9.1). Based on current daily status (CDS), CAGR in

Table 9.1 : Employment and Unemployment Scenario in India

Method	1999-2000	2004-05	2009-10	2011-12
Persons in the labour force (in millions)				
US	407.0	469.0	468.8	483.7
CDS	363.3	417.2	428.9	440.4
Persons and person days employed (in millions)				
US	398.0	457.9	459.0	472.9
CDS	336.9	382.8	400.8	415.7
Unemployment rate (in per cent)				
US	2.2	2.3	2.0	2.2
CDS	7.3	8.2	6.6	5.6

Source : Various survey rounds of the NSSO on employment and unemployment in India.

Note : US (principal + subsidiary) measures employment in persons, CDS measures employment in person days.

employment was 1.2 per cent and 2.6 per cent against 2.8 per cent and 0.8 per cent in the labour force respectively for the same periods.

9.17 There have also been structural changes: for the first time, the share of the primary sector in total employment has dipped below the halfway mark (declined from 58.5 per cent in 2004-05 to 48.9 per cent in 2011-12), while employment in the secondary and tertiary sectors increased to 24.3 per cent and 26.8 per cent respectively in 2011-12 from 18.1 per cent and 23.4 per cent respectively in 2004-05. Self-employment continues to dominate, with a 52.2 per cent share in total employment. What is critical is the significant share of workers engaged in low-income-generating activities.

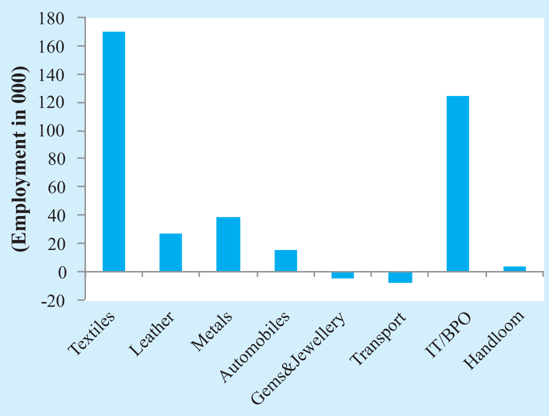
9.18 There are other issues of concern like poor employment growth in rural areas, particularly among females. Though employment of rural males is slightly better than that of females, long-term trends indicate a low and stagnant growth. Such trends call for diversification of livelihood in rural areas from agriculture to non-agriculture activities. In order to improve generation of productive employment under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), the Intensive and Participatory Planning Exercise (IPPE) has been initiated to prepare the labour budget for financial year 2015-16 in selected 2500 backward blocks using participatory rural appraisal technique. Emphasis has been laid on agriculture and allied activities to ensure that at least 60 per cent of the works in a district in terms of cost is for creation of productive assets linked to agriculture and allied activities through development of land, water, and trees.

9.19 A major impediment to the pace of quality employment generation in India is the small share of manufacturing in total employment. However data from the sixty-eighth NSSO round (2011-12) indicates a revival in employment growth in manufacturing from 11 per cent in 2009-10 to 12.6 per cent in 2011-12. This is significant given that the National Manufacturing Policy 2011 has set a target of creating 100 million jobs by 2022. Promoting growth of micro, small, and medium enterprises (MSME) is critical from the perspective of job creation which has been recognized as a prime mover of the development agenda in India. Although total informal employment increased by 9.5 million to 435.7 million between 2004-05 and 2011-12, it is significant that informal unorganized-sector employment declined by 5.8 million to 390.9 million, leading to an increase in informal organized-sector employment by 15.2 million. Consequently the share of unorganized labour has declined from 87 per cent to 82.7 per cent (Table 9.2).

Box 9.2 : Quarterly Survey Report on Employment in India

The twenty-second Quarterly Quick Employment Survey for the period April-June 2014 was conducted in the month of July 2014. A total of 2200 sample units were covered for the quarter ending June 2014. Comparing the result of last four surveys over the period June 2013 to June 2014 in the eight selected sectors, employment has increased by about 0.4 million (Figure 9.2). At overall level, employment increased by 182,000 (close to 0.2 million) during the quarter ended June 2014 over the quarter ended March 2014. At industry level, the highest jump in employment is observed in the textile including apparel sector, where employment has increased by 69,000 during June 2014 over March 2014, followed by 51,000 in IT/BPOs, 47,000 in metals, 7000 each in leather and gems & jewellery and 1000 in the automobiles sector.

Figure 9.2: Employment Generation (in 000) in Eight Selected Sectors (June 2013- June 2014)



Source **: Labour Bureau.**

Table 9.2 : Share of Formal-Informal Employment across Organized–Unorganized Sectors in 2011-12 and 2004-05 (in per cent)

	Organized	Unorganized	Total
Formal	45.4 (52)	0.4 (0.3)	8.1 (7.3)
Informal	54.6 (48)	99.6 (99.7)	91.9 (92.7)
Total	**17.3 (13)**	**82.7 (87)**	**100**

Source **: Niti Aayog.**

Note **: Population projected for year 2004-05 and 2011-12 using decadal population growth rate between Census 2001 and 2011. Figures in brackets pertain to 2004-05**

9.20 NSSO rounds are quinquennial and therefore information on the employment/ unemployment situation in the country is available only after a gap of five years. To make available data in the interregnum, the Labour Bureau conducts household employment-unemployment surveys on annual basis and has also been bringing out quarterly survey reports on the effects of the economic slowdown on employment in select sectors in India since 2009. The results of the latest quarterly summary on employment, July 2014 (Box 9.2), indicate an increase in employment by 3.5 million since the first survey.

9.21 The US unemployment rate is generally regarded as the measure of chronic open unemployment during the reference year; while the CDS is considered a comprehensive measure of unemployment, including both chronic and invisible unemployment. Thus, while chronic open unemployment rate in India hovers around a low of 2 per cent, it is significant in absolute terms. The number of unemployed people (under US) declined from 11.3 million during 2004-05 to 9.8 million in 2009-10 but again increased to 10.8 million in 2011-12. However, based on the CDS the number of unemployed person days declined from 34.3 million in 2004-05 to 28.0 million in 2009-10 and further to 24.7 million in 2011-12. Thus there has been a significant reduction in chronic and invisible unemployment from 8.2 per cent in 2004-05 to 5.6 per cent in 2011-12 (Table 9.1). Despite only a marginal growth in employment between 2009-10 and 2011-12, the reason for the decline in unemployment levels could be that an increasing proportion of the young population opts for education rather than participating in the labour market. This is reflected in the rise in enrolment growth in higher education from 4.9 million in 1990-91 to 29.6 million in 2012-13 (Provisional).

Box 9.3 : Labour reform measures

(1) The Apprentice Act 1961 was amended on 18.12.2014 to make it more responsive to industry and youth. The Apprentice Protsahan Yojana was also launched to support MSMEs in the manufacturing sector in engaging apprentices. Government is also working affirmatively to bring a single uniform law for the MSME sector to ensure operational efficiency and improve productivity while ensuring job creation on a large scale.

(2) A unified labour portal scheme called ShramSuvidha Portal has been launched for timely redressal of grievances and for creating a conducive environment for industrial development. Its main features are: (i) Unique Labour Identification Number (LIN) allotted to around 0.7 million units facilitating online registration; (ii) filing of self-certified, simplified single online return instead of 16 separate returns by industry; (iii) transparent labour inspection scheme via computerized system as per risk-based criteria and uploading of inspection reports within 72 hours by labour inspectors.

(3) **Under Employees' State Insurance Corporation (ESIC) Project Panchdeep**: Digitization of internal and external processes to ensure efficiency in operations, especially services to employers and insured persons. The portal enables employers to file monthly contributions, generate temporary identity cards and create monthly contribution challans online, issue of pehchan card for insured persons for fast and convenient delivery of services. Through the IP Portal, insured persons can check contributions paid/payable by employers, family details, entitlement to various benefits, and status of claims. Integration of its services will promote ease of business and curb transaction costs.

(4) **Under Employees Provident Fund (EPF)**: Digitization of complete database of 42.3 million EPF subscribers and allotment of universal account number (UAN) to each member, which facilitates portability of member accounts. UAN is being seeded with bank account, Aadhar Card and other KYC details to promote financial inclusion. Direct access to EPF accounts will enable members to access and consolidate previous accounts. Online pensioners can view their account and disbursement details online. The statutory wage ceiling under the Employees Provident Fund and Miscellaneous Provisions (EPF&MP) Act was enhanced to Rs. 15000 per month from 01.09.2014. A minimum pension of Rs.1000 has been introduced for pensioners under the Employees' Pension Scheme 1995 w.e.f 01.09.2014.

(5) **For Unorganized Workers:** The Rashtriya Swasthya Bima Yojana (RSBY) is a scheme under the Unorganized Workers' Social Security Act 2008. It is a smart card-based cashless health insurance scheme, including maternity benefit, which provides a cover of Rs 30,000 per family per annum on a family floater basis to below poverty line (BPL) families in the unorganized sector. It is proposed to extend the RSBY to all unorganized workers in a phased manner.

(6) A **National Council for Vocational Training-Management Information System (NCVT-MIS)** portal has been developed for streamlining the functioning of Industrial Training Institutes (ITI), Apprenticeship Scheme, and assessment/certification of all NCVT training courses.

(7) **The National Career Service(NCS)** is being implemented as a mission mode project to transform the National Employment Service and provide various job-related services such as online registration of job seekers and job vacancies, career counselling, vocational guidance, and information on skills development courses, internships, and apprenticeship.

Source **: Ministry of Labour and Employment.**

Labour Reforms

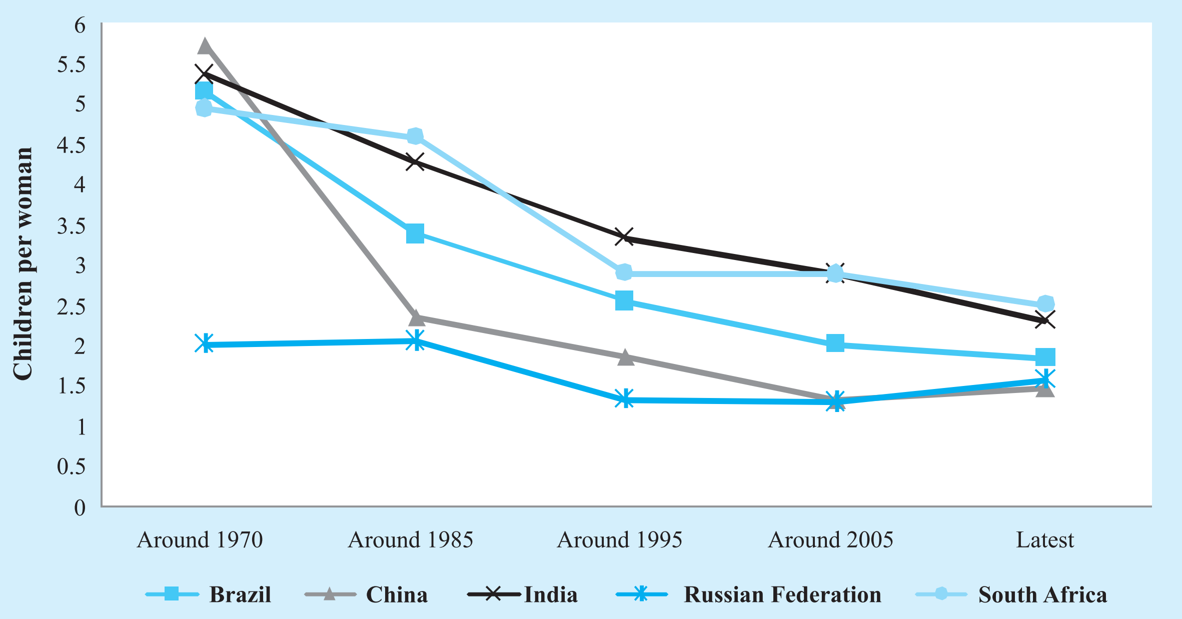
9.22 Significant improvement in industrial harmony in India is evident from the fact that mandays lost on account of strikes and lockout have been steadily declining: from 17.6 million in 2009 to 14.46 million in 2011, and further to 3.65 million (Provisional) during 2013 and 1.79 million (Provisional) from January 2014 to 9 December 2014.

9.23 The multiplicity of labour laws and difficulty in complying with them has always been cited as an impediment to industrial development in India. In a major initiative for ensuring compliance and promoting ease of doing business, the government has initiated a number of labour reform measures (Box 9.3). Thus amendments have been proposed to labour laws to align them with the demands of a changing labour market. Individually, states like Rajasthan have also introduced major reforms in three labour legislations: the Industrial Disputes Act, Factories Act, and Contract Labour Act.

Towards a Healthy India

9.24 It is noteworthy that India's total fertility rate (TFR) has been steadily declining and is now at 2.3; while state-wise disparities exist, a declining trend is recorded across states, explaining the declining growth rate of population. Figure 9.3 gives the comparative trends in TFR across BRICS nations (Brazil, Russia, India, China and South Africa). India is set to reach the UN Millennium Development Goals (MDG) with respect to maternal and child survival. The MDG for maternal mortality ratio (MMR) is 140 per 100,000 live births, while India had achieved 178 by 2010-12 and is estimated to reach 141 by 2015. The under-5 mortality rate (U5MR) MDG is 42, while India has an U5MR of 52 and is expected to reach 42 by 2015. This is particularly creditable as in 1990 India's MMR and U5MR were 47 per cent and 40 per cent above the international average respectively. However, significant effort is required to improve the rate of decline of still-births and neonatal mortality, which have been lower/ stagnant in some states. While overall death rates have been

Figure 9.3: TFR among BRICS Nations



Source **: World Fertility Data 2012, United Nations, Department of Economic and Social Affairs Population Division, Fertility and Family Planning Section; Census of India 2011.**

Note **: The reference year for the latest data varies – it is 2006 for South Africa, 2008 for Brazil and China, 2010 for the Russian Federation, and 2011 for India taken from Census data.**

declining, owing to improvement in health accessibility and facilities, SRS (2013) reports that a significant 30 per cent of all deaths occur in the age group 0-4 years; the percentages are higher for girl children in both rural and urban areas.

9.25 A direct relationship exists between water, sanitation, health, nutrition, and human well- being. Consumption of contaminated drinking water, improper disposal of human excreta, lack of personal and food hygiene, and improper disposal of solid and liquid waste are major causes of diseases in developing countries like India. The Swachh Bharat Mission (Gramin) launched on 2 October 2014 aims at attaining an open defecation free (ODF) India by 2 October 2019, by providing access to toilet facilities to all rural households and initiating Solid and Liquid Waste Management activities in all gram panchayats to promote cleanliness. **Box 9.4** provides examples of good practices that have replication potential. Together with capacity building efforts by multiple agencies including Panchayati Raj institutions (PRIs), field-level implementers, organizations of high repute identified as key resource centres (KRCs), self-help groups, women's groups, convergence with other state departments like Health, Women & Child Development, and Panchayati Raj, provision has been made for incentivizing accredited social health activists (ASHAs) and anganwadi workers to promote sanitation. Guidelines are also in place to involve corporates in the sanitation sector through corporate social responsibility.

9.26 In order to improve the availability of drinking water in rural areas, 20,000 solar power based water supply schemes have been approved under the National Rural Drinking Water Programme (NRDWP) across all the states for their habitations located in far-flung / hilly areas or where availability of electricity is a constraint.

9.27 Mission Indradhanush was launched on 25 December 2014 with the aim of covering all those children who are either unvaccinated or are partially vaccinated against seven vaccine-preventable diseases which include diphtheria, whooping cough, tetanus, polio, tuberculosis, measles, and

Box 9.4 : Examples of Good Practices

Mundla Village of Icchawar Block in Sehore district – 100 per cent sanitized village

Before the launch of the Global Water, Sanitation and Hygiene for All (WASH) campaign in Mundla village on in February 2014, there were four functional toilets in the village. As of 2 October 2014, the village has been declared an ODF village. The efforts of villagers have converted it into a hygienic and 100 per cent sanitized village.

Asia's Cleanest Village

Mawlynnong in Meghalaya is a model that showcases how collective effort can help a village find a place on the tourism map. The village has 80 households, of which 29 are below poverty line (BPL). Being awarded the Asia's Cleanest Village award has resulted in an increase in the number of tourists to this village. The villagers have also constructed two tree houses with eco-friendly materials such as bamboo, which provide a magnificent bird's-eye view of the beautiful and clean village and a panoramic view of Bangladesh villages, a few miles away.

***Source* : Ministry of Drinking Water and Sanitation.**

hepatitis B by 2020. The intensification of immunization activities will be carried out in 201 high focus districts in the first phase and 297 districts will be targeted for the second phase in 2015.

9.28 With the goal of providing holistic health solutions, the erstwhile Department of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy) has been elevated to a full-fledged ministry from 9 November 2014. The basic objective of the National AYUSH Mission (NAM) is to promote AYUSH medical systems through cost-effective AYUSH services and strengthening of educational systems. Steps are also underway for including yoga in the regular education curriculum. Paying heed to the Prime Minister's exhortation during his address to the UN General Assembly in September 2014, the UN has declared 21 June International Yoga Day.

9.29 Given the multiple determinants of health, it is clear that a prevention agenda that addresses the social and economic environment requires cross-sectoral, multi-level interventions that involve

Table 9.3 : Number and Percentage of Poor*

Year	Poverty line (in ₹)		Number of poor (million)			Poverty ratio (per cent)		
	Rural	Urban	Rural	Urban	Total	Rural	Urban	Total
2004-05	446.68	578.80	326.3	80.8	407.1	41.8	25.7	37.2
2011-12	816.00	1000.00	216.5	52.8	269.3	25.7	13.7	21.9

***Source*: Neeti Aayog, * Estimated by Tendulkar Method.**

sectors such as food and nutrition, education, drinking water and sanitation, housing, employment, industrial and occupational safety, welfare including social protection, family and community services, tribal affairs, and communications.

Poverty

9.30 The latest estimates of poverty are available for the year 2011-12. These estimates have been made following Tendulkar Committee methodology using household consumption expenditure survey data collected by the NSSO in its sixty-eighth round (2011-12). Over a span of seven years the incidence of poverty declined from 37.2 per cent to 21.9 per cent in 2011-12 for the country as a whole, with a sharper decline in the number of rural poor (Table 9.3).

Human Development: International Comparison

9.31 The 2014 Human Development Report (HDR) presents the Human Development Index (HDI) values and ranks for 187 countries in terms of three basic parameters: to live a long and healthy life, to be educated and knowledgeable, and to enjoy a decent standard of living. India's HDI value for 2013 is 0.586, positioning the country at 135 out of 187 countries and territories—the lowest among the BRICS countries, with Russia at 57, Brazil at 79, China at 91, and South Africa at118, and slightly ahead of Bangladesh and Pakistan. Significantly, while China improved its ranking by ten places between 2008 and 2013, India's position improved by just one rank (Table 9.4). Thus a lot remains to be done to bridge the gap.

Table 9.4 : Trends and India's Position in Global HDI 2013

Country	HDI 2013		Change in rank		GNI per capita 2013($)	LEB (years) 2013	Mean year of schooling (years) 2012 a	Expected year of schooling (years) 2012 a	Income Inequality		GII 2013	
	Value	Rank	over 2012-13	Between 2008 & 2013					Quintile income ratio 2003-12	Gini-co-efficient 2003-12	Value	Rank
Norway	0.944	1	0	0	63,909	81.5	12.6	17.6	...	25.8	0.068	9
US	0.914	5	0	-2	52,308	78.9	12.9	16.5	...	40.8	0.262	47
Germany	0.911	6	0	-1	43,049	80.7	12.9	16.3	...	28.3	0.046	3
UK	0.892	14	0	-2	35,002	80.5	12.3	16.2	7.2	36.0	0.193	35
Russian Fed.	0.778	57	0	0	22,617	68.0	11.7	14.0	7.3	40.1	0.314	52
Sri Lanka	0.750	73	2	5	9,250	74.3	10.8	13.6	5.8	36.4	0.383	75
Brazil	0.744	79	1	-4	14,275	73.9	7.2	15.2	20.6	54.7	0.441	85
China	0.719	91	2	10	11,477	75.3	7.5	12.9	10.1	42.1	0.202	37
South Africa	0.658	118	1	2	11,788	56.9	9.9	13.1	25.3	63.1	0.461	94
India	**0.586**	**135**	**0**	**1**	**5,150**	**66.4**	**4.4**	**11.7**	**5.0**	**33.9**	**0.563**	**127**
Bangladesh	0.558	142	1	2	2,713	70.7	5.1	10.0	4.7	32.1	0.529	115
Pakistan	0.537	146	0	-1	4,652	66.6	4.7	7.7	4.2	30.0	0.563	127
World	**0.702**	-	-		**13,723**	**70.8**	**7.7**	**12.2**			0.451	-

***Source* : HDR 2014.**

***Notes* : $: GNI (gross national income) is based on 2011 dollar purchasing power parity (PPP).**
GII is Gender Inequality Index. LEB is life expectancy at birth : Data refers to 2012 or the most recent year available.

9.32 India's HDI is also below the average of countries in both the medium human development group (0.614) and in South Asia (0.588). Between 1980 and 2013, India's life expectancy at birth (LEB) increased by 11.0 years, mean years of schooling increased by 2.5 years, and expected years of schooling increased by 5.3 years while gross national income (GNI) per capita increased by about 306.2 per cent. As compared to BRICS nations and some neighbouring countries, India reports the least mean years of schooling and an LEB that is just above that of South Africa. Bangladesh, with less GNI per capita than India, has a much higher LEB and mean years of schooling. China, which recorded a slightly higher HDI than India in 1980, has widened the margin in 2013 (Table 9.5). The existing gap in health and education indicators between India and developed countries and also many developing countries highlights the need for much faster and wider spread of basic health and education, as reflected by China and Sri Lanka.

9.33 In terms of gender equality, the HDR ranks India 127 out of 152 countries with a Gender Inequality Index (GII) of 0.563. The GII for 149 countries reveals the extent to which gender inequality erodes national achievements in reproductive health, empowerment and labour market participation . A comparison with India's developing country peers in the G20 grouping also shows India in poor light on gender equality issues. Unlike the HDI, a higher GII value indicates poor performance (Table 9.6).

9.34 The Gender Development Index (GDI), defined as a ratio of the female to male HDI measures gender inequality according to three basic parameters of human development: health (LEB),

Table 9.5 : HDI Component Indices of Select Countries 2013 and 1980

Country	HDI 2013					HDI 1980				
	LEB (years)	Expected years of schooling (years)	Mean years of schooling (years)	GNI per capita ($)	HDI Value	LEB (years)	Expected years of schooling (years)	Mean years of schooling (years)	GNI per capita ($)	HDI Value
Russian Fed.	68.0	14.0	11.7	22,617	0.778	67.4	12.2	7.1		
Sri Lanka	74.3	13.6	10.8	9,250	0.750	68.2	10.0	7.1	2,475	0.569
Brazil	73.9	15.2	7.2	14,275	0.744	62.7	9.9	2.6	9,154	0.545
China	75.3	12.9	7.5	11,477	0.719	67.0	8.4	3.7	690	0.423
South Africa	56.9	13.1	9.9	11,788	0.658	56.9	11.1	4.8	9,756	0.569
India	**66.4**	**11.7**	**4.4**	**5,150**	**0.586**	**55.4**	**6.4**	**1.9**	**1,268**	**0.369**
Bangladesh	70.7	10.0	5.1	2,713	0.558	54.9	4.9	2.0	1,021	0.336
Pakistan	66.6	7.7	4.7	4,652	0.537	58.0	3.7	1.8	2,376	0.356

Source **: HDR 2014.**

Notes **:$: GNI (gross national income) is based on 2011 dollar purchasing power parity (PPP).**
LEB is life expectancy at birth : Data refers to 2012 or the most recent year available.

Table 9.6 : GII Component Indices of Select Countries 2013

Country	Gender Inequality Index value 2013	Gender Inequality Index rank 2013	MMR 2010 (death per 1 lakh life birth)	Adolescent birth rate 2010-2015 (per 1000 women ages 15-19)	Share of women seats in parlia-ment 2013 (%)	25+, female population with at least some secondary education 2005-2012 (%)	25+, male population with at least some secondary education 2005-2012 (%)	15+,female labour force participation rate 2012 (%)	15+, male labour force participation rate 2012 (%)
Argentina	0.381	74	77	54.4	37.7	57.0	54.9	47.3	75.0
Russian Federation	0.314	52	34	25.7	12.1	89.6	92.5	57.0	71.4
Brazil	0.441	85	56	70.8	9.6	51.9	49.0	59.5	80.9
China	0.202	37	37	8.6	23.4	58.7	71.9	63.8	78.1
Indonesia	0.500	103	220	48.3	18.6	39.9	49.2	51.3	84.4
South Africa	0.461	94	300	50.9	41.1	72.7	75.9	44.2	60.0
India	**0.563**	**127**	**200**	**32.8**	**10.9**	**26.6**	**50.4**	**28.8**	**80.9**

Source **: HDR 2014.**

education (expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (estimated GNI per capita). Country rankings are based on absolute deviation from gender parity in HDI. The GDI is calculated for 148 countries. The female HDI value for India is 0.52 as compared to 0.63 for males, resulting in a GDI value of 0.828. In comparison, Bangladesh and China are ranked higher with values of 0.908 and 0.939 respectively (Table 9.7).

9.35 Thus, while India is in the bottom 25 per cent of all countries on the HDI, it ranks in the bottom 20 per cent on the GII. These statistics reflect the high levels of gender inequality in India and the poor status of women and girls in Indian society. India is a signatory to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which is often described as an international bill of rights for women. It defines discrimination against women and sets the agenda for national action to end violations of women's rights. An important element of CEDAW is its affirmation of women's reproductive rights, including the right to determine the number and spacing of children and equal access to family planning. Unfortunately in India there is an increasingly disproportionate emphasis on women's sterilization; thus tubectomies account for a whooping 97.5 per cent of all sterilization operations in 2013-14 (a massive jump from 78.6 per cent in the 1980s). This runs counter to our goals of achieving gender equality and women's empowerment. Sterilization constitutes 75 per cent of India's contraceptive use. It is unparalleled in any country in the world today. The closest is Latin America where it forms 40 per cent of all contraceptive methods.

9.36 Another concern is the secular decline in the child sex ratio (CSR– girls per 1000 boys aged 0-4 or 0-6) in India from 976 in 1961 to 918 in 2011; the SRS (2013) reports a figure of 909 for 2011-13. Globally CSR is calculated as boys per 100 girls. Comparatively, in Asia and the Pacific, the CSR (boys per 100 girls aged 0-14) was 110 in 2012, much higher than the sex ratio under natural conditions (105). While China's CSR declied from 121 in 2010 to 117 in 2012, India's CSR increased from 109 to 111 over the same period. Figure 9.4 gives the trends in CSR in select countries in Asia between 1990 and 2012.

9.37 The UN General Assembly in 1993 defined violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women." Consequently, apart from violence against married/adult women, excess female child mortality, female infanticide, and child marriage are also considered violence against the female gender. The implementation of the Protection of Women from Domestic Violence Act 2005 (PWDVA) is weak, as nineteen states have no planned schemes.

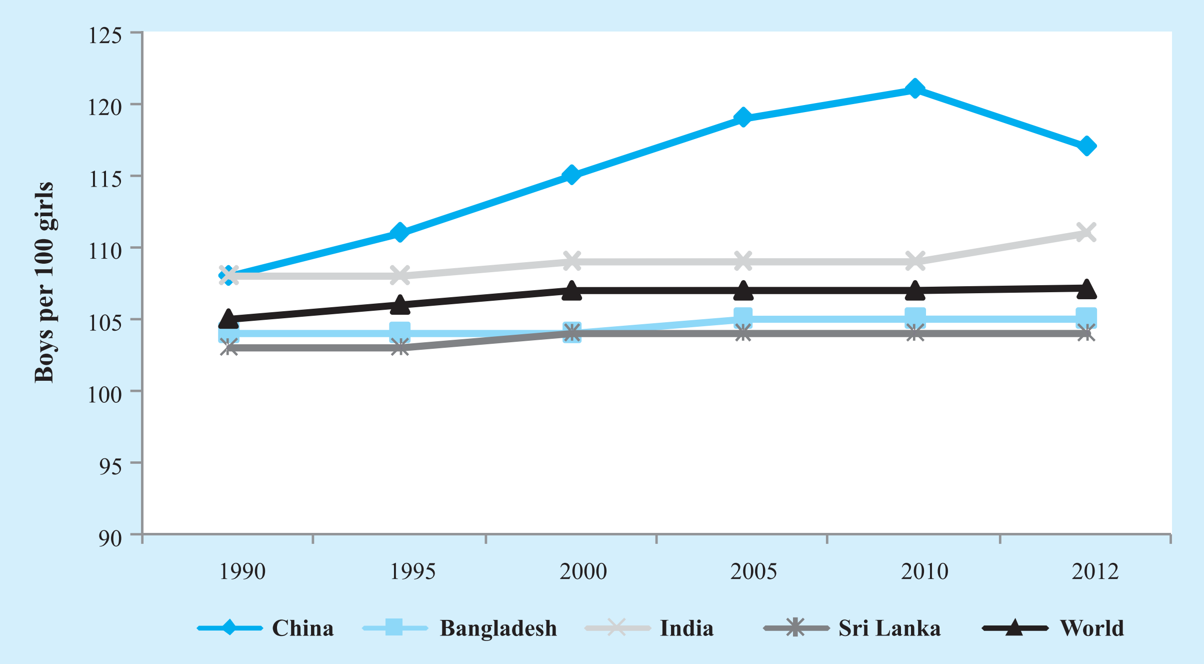
Table 9.7 : GDI Component Indices of Select Ccountries 2013

Country	GDI 2013		HDI value 2013		LEB (years) 2013		Mean years of schooling 2002-2012		Expected years of schooling 2000-2012		Estimated GNI per captia ($) 2013	
	Ratio of Female to male HDI 2013	Rank	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Sri Lanka	0.961	66	0.72	0.75	77.4	71.2	10.7	9.4	13.9	13.4	5078	13616
China	0.939	88	0.70	0.74	76.7	74.1	6.9	8.2	13.0	12.8	9288	13512
India	**0.828**	**132**	**0.52**	**0.63**	**68.3**	**64.7**	**3.2**	**5.6**	**11.3**	**11.8**	**2277**	**7833**
Bangladesh	0.908	107	0.53	0.58	71.5	69.9	4.6	5.6	10.3	9.7	1928	3480
Pakistan	0.750	145	0.45	0.60	67.5	65.7	3.3	6.1	6.9	8.4	1707	7439

Source **: HDR 2014.**

Notes : **$: GNI (gross national income) is based on 2011 dollar purchasing power parity (PPP).**
GDI is Gender Deveopment Index. LEB is life expectancy at birth : Data refers to 2012 or the most recent year available.

Figure 9.4: Trends in Child Sex Ratio in Select Asian Countries



Source **: Statistical Yearbook for Asia and the Pacific 2013.**

9.38 Appropriately a new scheme, Beti Bachao Beti Padhao (BBBP) Programme, for promoting survival, protection, and education of the girl child was launched on 22 January 2015 at Panipat, Haryana, a state that is noted for the lowest CSR – 835 (SRS 2013). It aims to address declining CSR through a mass campaign targeted at changing social mind set and creating awareness about the criticality of the issue. The overall goal of the BBBP programme is to celebrate the girl child and facilitate her education with the objectives of preventing gender-biased sex-selective elimination, ensuring survival and protection, and education of the girl child.

9.39 Comparison of select socio-economic development indicators of states is given in Appendix Table 9.8.

Fostering Inclusive Growth

9.40 Indian development planning has focused on formulation of programmes and policies aimed at bringing the marginalized and poor sections of society into the main stream. The government has been implementing many such programmes for social and financial inclusion. The disbursement of benefits needs a systematic channel which will provide for financial empowerment and make monitoring easier and the local bodies more accountable. The Pradhan Mantri Jan Dhan Yojna (PMJDY) launched on 28 August 2014 and the RuPay Card, which is a payment solution, are important schemes in this regard. These two schemes are complementary and will enable achievement of multiple objectives such as financial inclusion, insurance penetration, and digitalization.

9.41 Government has restructured and fine-tuned a number of ongoing programmes based on the field experience to make them need based. These are listed in Appendix Page A141-A145. To facilitate coordinated functioning of various social infrastructure and human development programmes, the government has launched the Sansad Adarsh Gram Yojna (SAGY) which will be implemented through the convergence and implementation of existing government programmes. In addition, the Vanbandhu Kalyan Yojna will be implemented in one block each of ten states that have Fifth Schedule areas.

9.42 Given the multiple schemes implemented to foster inclusive growth, the role of Panchayati

Box 9.5 : Need to Strengthen Village Panchayats and ULGs

The 73rd and 74th Constitutional Amendments marked a watershed in the history of decentralized governance, planning, and development in India as these made panchayats and ULGs the third tier of government with reasonable power and authority in addition to creating space for women and marginalized groups in the federal set-up. Decentralized democracy was also extended to Fifth Schedule areas through the provisions of another Panchayat (Extension to the Scheduled Areas) Act 1996 known as the Extension Act which not only made the gram sabha a strong body, but also put '*jal, jungle, and jamin*' (water, forest, and land) under its control. These central acts, however, instead of clearly specifying the powers and functions of panchayats and municipalities, have left it to the discretion of state governments. Articles 243 G and 243 W of these acts decree that the legislature of a state may, by law, endow the panchayats/municipalities with such powers and authority as may be necessary to enable them to function as institutions of self-government. Such law may also contain provisions for devolution of powers and responsibilities upon panchayats/ municipalities, subject to such conditions as may be specified therein, with respect to the preparation of plans and implementation of such schemes for economic development and social justice as may be entrusted to them. These may include inter alia schemes and plans in relation to socio-economic development and providing basic services as listed in the Eleventh and Twelfth Schedules of the constitution.

Article 243 ZD of the 74th Amendment Act providing for constitution of district planning committees (DPC) by the state government in every district is a milestone in decentralized planning with people's participation. These committees are expected to consolidate the plans prepared by the panchayats and municipalities in the district and prepare a draft development plan for the district as a whole. DPCs have been set up in most of the states. Much of implementation of these panchayat acts, i.e. power-sharing with panchayats / ULGs, is left to the states. Over the years panchayats and ULGs have not been strengthened in terms of functions, finances and functionaries (triple Fs) with regard to preparation of plans and the listed subjects.

These amendment acts have the potential of becoming true vehicles for carrying out the government's slogan of less government–more governance if an atmosphere of general consensus to adopt it is created among all the states. In order to convert outlays of the panchayat /municipality-centric programmes into outcomes, these institutions need greater awareness, responsibility, and accountability, which will also enable better connect of these programmes with the common man. There needs to be greater devolution of powers to the panchayats and municipalities in respect of the triple Fs in a phased manner. The majority of panchayat/municipality-centric programmes do have earmarked funds for awareness generation and capacity building. These funds across ministries need to be pooled together under the Panchayati Raj Ministry and Ministry of Urban Development to make infrastructure and capacity building of panchayats and municipalities a continuous and regular process. This will enable panchayats and municipalities to understand not only their role and rights but also their responsibilities and will make them accountable, bringing about qualitative improvement in governance at decentralized level. Such facilitation by the government will transform panchayats and municipalities into vibrant institutions and enable them to perform their envisaged role in participatory planning, implementation, execution, monitoring, and supervision and also carry out social audit of all panchayat/ municipality-centric programmes including the Swachh Bharat Mission.

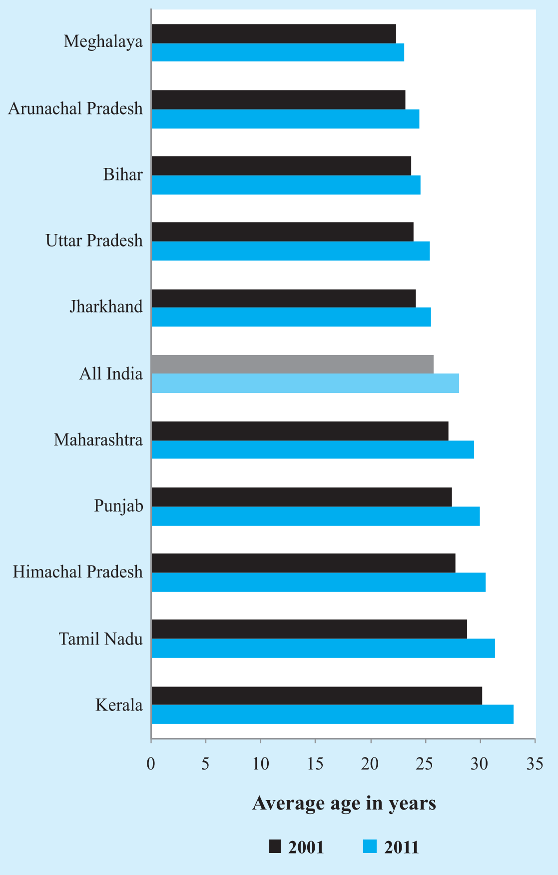
Raj institutions and urban local governments (ULG) is critical (**Box 9.5**).

Demographic Dividend and Related Policy Interventions

9.43 A declining 0-14 population will impact both elementary (5-14 age group) and higher education (15-29 age group). Elementary education can be further subdivided into primary (5-9 age group) and middle/upper primary (10-14 age group). The first stage of impact will be felt in declining enrolment in primary schools. As stated earlier, total enrolment in primary schools has fallen in 2013-14 while upper primary enrolment has grown. The dependency ratio for India is expected to fall from 54 per cent in 2010 to 49 per cent in 2020. In this scenario, given interstate disparities, states that are already facing this situation need to adopt specific policy measures in the field of education, wherein, instead of expanding the number of primary schools, focus should be on (i) improving access to education considering the high dropout rates among senior students; (ii) removing gender disparity especially in the higher age group and in rural areas; and (iii) improving quality of education, including pupil-teacher ratios and provision of amenities in schools, especially in view of the declining learning levels.

9.44 The lag in demographic transition between different states that necessitates state-specific policies to optimally garner the benefits of the demographic dividend. Owing to substantial fertility decline in the south during the last two decades, the south is ahead in the demographic transition compared to the north, thereby the window is already wide open in the south compared to the north. For instance, the projected average age of 29 years in 2020 has already been surpassed in some states like Kerala (33 years), Goa (32.3), Tamil Nadu (31.3), Himachal Pradesh (30.4), Punjab (29.9), Andhra Pradesh (29.3), and West Bengal (29.1). Comparative picture of five states each with lowest and highest average age is shown in Figure 9.5.

Figure 9.5: Comparison of Average Ages across top 5 Youngest and Oldest States in India 2001 and 2011



Source **: Based on census 2001 and 2011.**

9.45 This lag in demographic transition among states in India could turn out to be a great blessing from the point of view of coping with the problem of declining population. India is better placed in this respect than most other countries. Thus states already well into the demographic window should actively pursue policies for employment generation to the already bulging labour force, while states just entering the window period have some time to plan and must pursue policies simultaneously in several areas like education, health (including reproductive health), gender issues, and employment generation from now on so that they can fully utilize the opportunity.

Trends in India's social-sector expenditure

9.46 Reserve Bank of India (RBI) data on expenditure on social services by the general government (centre and states) as a proportion of total expenditure has also been showing a mixed trend. It had declined to 22.9 per cent in 2012-13 from 24.7 per cent in 2010-11 but increased to 24.1 per cent in 2013-14 (RE) and declined again to 22.3 per cent in 2014-15 (BE). As a percentage of the GDP, expenditure on social services has declined from 6.9 per cent in 2009-10 to 6.7 per cent in 2014-15 (BE), with expenditure on education increasing from 3.0 per cent to 3.1 per cent and on health declining from 1.4 per cent to 1.2 per cent. There was a consistent rise in absolute social-sector expenditure by the general government (centre+state) even during the global crisis of 2008-09 and Euro area crisis of 2011-12, from ₹ 3,80,628 crore during 2008-09 to ₹ 5,80,868 crore in 2011-12 and further to ₹ 8,68,476 crore (BE) during 2014-15 (Appendix Table 9.9).

9.47 Government spending on healthcare in India is only 1.2 per cent of GDP which is about 4 per cent of total government expenditure, less than

30 per cent of total health spending. The failure to reach minimum levels of public health expenditure remains the single most important constraint to attaining desired health outcomes. While it is important to recognize the growth and potential of a rapidly expanding private sector, international experience shows that health outcomes and financial protection are closely related to absolute and relative levels of public health expenditure.

Conclusion

9.48 With women accounting for nearly 48 per cent of India's population (Census 2011), there is need to ensure and safeguard their place in the socio-economic milieu. Since this requires a change in the patriarchal mindset of the larger population, government has to continue to be a proactive facilitator of this change through consistent policies. India aims to be in the top 50 countries of the Doing Business ranking; it must at the same time endeavour to be in the top 50 countries in HDI and GII rankings. Low levels of education and skill deficit are responsible for low income levels of a large majority of the labour force, thereby perpetuating inequality. Consequently, the government's thrust on skill development as well as 'Make in India' aims at improving employability and generating employment avenues. Since demographic predictions warn that the promise of the demographic dividend will not last long, in any case not beyond 2050, India needs to take advantage of this demographic window in the next couple of decades. The challenge for the country now is in planning and acting towards converting its demographic 'burden' into enhanced opportunities for growth by dovetailing the quality of manpower to the requirements of employers (off-farm, industry, and services sectors), both domestic and international. For this intention to translate into reality, a 'bottom-up' approach using Panchayati Raj institutions and ULBs as agents of change is the need of the hour.