



# INDIA

March 2016

## 2016 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR INDIA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2016 Article IV consultation with India, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its February 12, 2016 consideration of the staff report that concluded the Article IV consultation with India.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on February 12, 2016, following discussions that ended on December 15, 2015, with the officials of India on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 27, 2016.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for India.

The documents listed below have been or will be separately released.

Selected Issues Paper

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## **IMF Executive Board Concludes 2016 Article IV Consultation with India**

On February 12, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with India.

The Indian economy is on a recovery path, helped by a large terms of trade gain (about 2.5 percent of GDP), positive policy actions, and reduced external vulnerabilities. Since late 2014, a collapse of global oil prices has boosted economic activity in India and underpinned a further improvement in the current account and fiscal positions, and engendered a sharp decline in inflation. A range of supply-side measures (including release of surplus grain buffer stocks) and an appropriate monetary stance have also contributed to the decline in inflation, from an average of about 9.5 percent during 2011–13 to 5.6 percent in December 2015. Due to its further-reduced vulnerabilities and improved growth prospects, India has experienced large foreign direct investment inflows in 2015. As a result, and in conjunction with the continued much-smaller current account deficit (largely due to continued low global commodity prices), international reserves have increased by \$46.7 billion since end-March 2014, standing at US\$350.4 billion at end-December 2015 (around 8 months of import cover). Nonetheless, persistently high household inflation expectations and large fiscal deficits remain key macroeconomic challenges, resulting in limited policy space to support growth through demand management measures. Furthermore, anemic exports as well as headwinds from weaknesses in India's corporate financial positions and public bank balance sheets weigh on the economy.

Growth is projected at 7.3 percent for fiscal year FY2015/16, picking up to 7.5 percent in FY2016/17 (at market prices), supported by stronger domestic demand. With the revival of sentiment and picking up of industrial activity, an incipient upturn in private investment is expected to help broaden the recovery. Higher public infrastructure investment and government initiatives to tackle supply-side bottlenecks and repair corporate and public bank balance sheets

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

should also help crowd-in private investment. The Reserve Bank has achieved its inflation target to bring inflation below 6 percent by January 2016. Going forward, near-term headline consumer price inflation dynamics will continue to be underpinned by supply-side factors which, despite the subpar crop outlook, should help achieve the Reserve Bank of India's inflation goal of around 5 percent for March 2017. Notwithstanding the 125 basis points nominal policy rate cut in 2015, monetary conditions remain consistent with achieving the inflation target of 5 percent by March 2017. Despite the recent export slowdown, continued low global oil prices should help contain the current account deficit at around 1.5 percent of GDP in FY2016/17. The FY2015/16 Union budget deficit target of 3.9 percent of GDP (equivalent to about 4.25 percent of GDP in IMF terms) will likely be achieved.

While the balance of risks has improved, economic risks remain tilted to the downside. On the external side, despite the reduction in imbalances and strengthening of buffers, the impact from intensified global financial market volatility could be disruptive, including from unexpected developments in the course of U.S. monetary policy normalization or China's growth slowdown. Absent disruptive global financial market volatility, slower growth in China would have only modest adverse spillovers to India, given weak trade linkages. Domestic risks include continued weaknesses in corporate financial positions and public bank asset quality, as well as setbacks in the reform process, which could weigh on growth, accelerate inflation and undermine sentiment. On the upside, further structural reforms could lead to stronger growth, as would a sustained period of low global energy prices.

### **Executive Board Assessment<sup>2</sup>**

Executive Directors commended the authorities for their appropriate policy actions that—along with favorable terms of trade—have underpinned India's improved economic performance and reduced external vulnerabilities. They welcomed in particular recent measures aimed at increasing public infrastructure spending, rationalizing subsidies, creating more flexible labor and product markets, and enhancing financial inclusion. Looking forward, Directors noted that global financial market volatility, a potential further deterioration in exports, and strains in bank and corporate balance sheets could weigh on India's growth prospects. Meanwhile, high fiscal deficits and upside risks to inflation constrain the scope for countercyclical policies.

Against this backdrop, Directors underscored the need for continued vigilance, growth-friendly fiscal consolidation, and sustained reforms to enhance the resilience of the economy and bolster potential growth. Addressing supply constraints and further improving the business environment remain important priorities. Progress in these areas would have a positive impact on poverty reduction.

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

Directors stressed the importance of preserving external stability. They noted that India's international reserves are assessed to be adequate. Directors agreed that, in the event of a surge in global financial market volatility, exchange rate flexibility remains a key shock absorber, complemented by judicious foreign exchange intervention. They encouraged the authorities to sustain the reform momentum to further enhance investor confidence and attract foreign direct investment, while cautiously liberalizing external commercial borrowings by the private sector.

Directors welcomed the adoption of flexible inflation targeting and progress in enhancing monetary policy transmission. Given upside risks to inflation and still high household inflation expectations, Directors agreed that the monetary policy stance should remain appropriately targeted at ensuring durable reduction in inflation toward the medium-term target, supported by clear policy communication, continued fiscal consolidation, and measures to boost food supply. They encouraged the monetary authorities to stand ready to tighten the stance if warranted.

Directors welcomed the recent improvements in the quality and efficiency of public expenditure, as well as revenue-enhancing measures. They called on the authorities to articulate and implement credible measures that would underpin the achievement of the medium-term fiscal deficit targets and increase fiscal space for priority capital spending and social expenditures. Crucial in this regard are further reforms of fertilizer and food subsidies, a well-designed goods and services tax, and improved tax administration.

Directors saw as priorities for the authorities to accelerate reforms to remove supply-side bottlenecks, especially in the agricultural and power sectors; and to facilitate land acquisition. Further reforms are also essential to boost employment in the formal sector, encourage female labor force participation, and enhance labor market flexibility more broadly.

While acknowledging that India's financial system is generally sound, Directors noted potential risks from weak corporate and bank balance sheets. They supported ongoing efforts to further enhance bank supervision, and encouraged the authorities to continue to strengthen prudential regulation for bank asset quality recognition, augment capital buffers and improve corporate governance at public sector banks, as well as enhance the bankruptcy and insolvency framework. A further deepening of capital markets would also facilitate financial intermediation.

## India: Selected Economic Indicators, 2012/13–2016/17 1/

### I. Social Indicators

<b>GDP (2014/15)</b>		<b>Poverty (percent of population)</b>	
Nominal GDP (in billions of U.S. dollars):	2,051	Headcount ratio at \$1.90 a day (2011):	21.3
GDP per capita (U.S. dollars):	1,584	Undernourished (2011):	15.4
<b>Population characteristics (2014/15)</b>		<b>Income distribution (2011, WDI)</b>	
Total (in billions):	1.30	Richest 10 percent of households:	30.0
Urban population (percent of total):	32	Poorest 20 percent of households:	8.2
Life expectancy at birth (years):	66.0	Gini index (2011):	33.6

### II. Economic Indicators

	2011/12	2012/13	2013/14	2014/15	2015/16 Proj.	2016/17 Proj.
<b>Growth (in percent)</b>						
Real GDP (at market prices)	6.6	5.1	6.9	7.3	7.3	7.5
Industrial production	2.9	1.1	-0.1	2.8	...	...
<b>Prices (percent change, period average)</b>						
Consumer prices - Combined	9.5	9.9	9.4	5.9	5.0	5.3
<b>Saving and investment (percent of GDP)</b>						
Gross saving 2/	34.7	31.5	30.8	30.2	29.8	29.6
Gross investment 2/	38.9	36.3	32.5	31.6	31.1	31.1
<b>Fiscal position (percent of GDP) 3/</b>						
Central government deficit	-6.1	-5.1	-4.6	-4.2	-4.2	-4.0
General government deficit	-8.1	-7.4	-7.6	-7.0	-7.0	-7.0
General government debt 4/	68.1	67.5	65.8	66.1	66.3	65.7
Structural balance (% of potential GDP)	-8.4	-7.3	-7.5	-6.9	-6.9	-6.9
Structural primary balance (% of potential GDP)	-3.9	-2.8	-2.8	-2.2	-2.3	-2.1
<b>Money and credit (y/y percent change, end-period)</b>						
Broad money	13.5	13.6	13.4	10.8	11.1	13.6
Credit to private sector	17.8	13.5	13.7	9.2	11.1	13.7
<b>Financial indicators (percent, end-period)</b>						
91-day treasury bill yield (end-period) 5/	9.0	8.2	8.9	8.3	7.2	...
10-year government bond yield (end-period) 5/	8.6	8.0	8.9	7.8	7.7	...
Stock market (y/y percent change, end-period) 6/	-10.5	8.4	18.7	24.9	-9.1	...
<b>External trade 7/</b>						
Merchandise exports (in billions of U.S. dollars)	309.8	306.6	318.6	316.5	277.9	280.1
(Annual percent change)	20.9	-1.0	3.9	-0.6	-12.2	0.8
Merchandise imports (in billions of U.S. dollars)	499.5	502.2	466.2	461.5	429.8	449.3
(Annual percent change)	30.3	0.5	-7.2	-1.0	-6.9	4.5
Terms of trade (G&S, annual percent change)	-6.1	-0.3	2.3	3.5	7.0	1.8
<b>Balance of payments (in billions of U.S. dollars)</b>						
Current account balance	-78.2	-88.2	-32.4	-26.7	-27.7	-34.8
(In percent of GDP)	-4.2	-4.8	-1.7	-1.3	-1.3	-1.5
Foreign direct investment, net	22.1	19.8	21.6	31.3	34.2	37.4
Portfolio investment, net (equity and debt)	17.2	26.9	4.8	42.2	-6.8	12.4
Overall balance	-12.8	3.8	15.5	61.4	22.7	40.8
<b>External indicators</b>						
Gross reserves (in billions of U.S. dollars, end-period)	294.4	292.0	304.2	341.6	364.3	405.1
(In months of imports) 8/	6.1	6.4	6.7	7.9	8.0	7.9
External debt (in billions of U.S. dollars, end-period)	360.8	409.4	446.3	475.2	513.3	550.4
External debt (percent of GDP, end-period)	19.6	22.3	23.8	23.2	24.0	23.6
Of which: Short-term debt 9/	7.5	9.0	9.8	9.0	9.6	9.7
Ratio of gross reserves to short-term debt (end-period) 8/	2.1	1.8	1.7	1.9	1.8	1.8
Debt service ratio 10/	6.0	5.9	5.9	7.5	7.1	7.8
Real effective exchange rate (percent change) 11/						
(based on annual average level)	-3.4	-2.3	-2.4	7.3	6.0	...
Exchange rate (rupee/U.S. dollar, end-period) 5/	50.3	54.4	61.0	62.6	66.8	...
<b>Memorandum item (in percent of GDP)</b>						
Fiscal balance under authorities' definition	-5.8	-4.9	-4.3	-4.0	-3.9	-3.8

Sources: Data provided by the Indian authorities; CEIC Data Company Ltd; Bloomberg L.P.; World Bank, *World Development Indicators*; and IMF staff estimates and projections.

1/ Data are for April–March fiscal years.

2/ Differs from official data, calculated with gross investment and current account. Gross investment includes errors and omissions.

3/ Divestment and license auction proceeds treated as below-the-line financing.

4/ Includes combined domestic liabilities of the center and the states, and external debt at year-end exchange rates.

5/ For 2015/16, as of 6 January 2016.

6/ For 2015/16, year-to-date as of 6 January 2016.

7/ On balance of payments basis.

8/ Imports of goods and services projected over the following 12 months.

9/ Short-term debt on residual maturity basis, including estimated short-term NRI deposits on residual maturity basis.

10/ In percent of current account receipts, excluding grants.

11/ For 2015/16, year-to-date as of November 2015.



# INDIA

## STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

January 27, 2016

### KEY ISSUES

**Outlook and Risks:** The Indian economy is on a recovery path, helped by a large terms of trade gain, positive policy actions, improved confidence, and reduced external vulnerabilities. A faster-than-expected decline in inflation created space for nominal policy rate cuts. Persistently high inflation expectations and large fiscal deficits remain key macroeconomic challenges, resulting in limited policy space to support growth through demand management measures. In addition, supply bottlenecks and structural challenges constrain medium-term growth and hinder job creation. Risks are weighted to the downside, with external risks mainly from intensified global financial market volatility and slower global growth. On the domestic side, a further weakening of bank and corporate balance sheets could pose risks to economic recovery and weigh on financial stability, while setbacks in the pace of structural reforms could dampen growth and undermine sentiment. In contrast, lower-for-longer global energy prices constitute an upside risk for India.

#### Key Policy Recommendations:

- To achieve the Reserve Bank of India's (RBI) "glide path" towards its medium-term inflation target of 4 percent, the monetary stance should remain tight to ensure a durable reduction in inflation and still-high household inflation expectations, supported by measures to boost food supply and continued fiscal consolidation.
- The Union budget deficit target of 3.9 percent of GDP for FY2015/16 will likely be achieved. Looking ahead, while accommodating an appropriate increase in public capital spending, medium-term fiscal consolidation should continue, underpinned by revenue-raising reforms (including by introducing the GST and improvements in revenue administration) and further reductions in subsidies.
- To safeguard financial stability in the presence of elevated corporate and banking sector strains, NPAs on public banks' balance sheets should be fully recognized; banking sector structural reforms continued; banks' loss-absorbing buffers increased; monitoring of corporate vulnerabilities strengthened; and banks' debt recovery mechanisms further enhanced.
- Several important economic and structural reforms have been initiated. Additional steps in relaxing long-standing supply bottlenecks, especially in the mining and power sectors, as well as further labor market reforms, are crucial to achieving faster and more inclusive growth.

Approved By  
**Markus Rodlauer**  
**(APD) and Seán Nolan**  
**(SPR)**

Discussions took place in New Delhi and Mumbai during November 30–December 15, 2015. The team comprised Mr. Cashin (head), Mr. Tulin, Mr. Raissi, Ms. Das, Ms. Khera (all APD), Ms. Iorgova (MCM), Ms. Bi (SPR), Mr. Richardson (Senior Resident Representative), and Mr. Mohapatra (Resident Representative Office). Messrs. Gokarn and Govil (OED) also participated in the discussions. The mission met with Finance Secretary Watal, Department of Economic Affairs Secretary Das, Chief Economic Advisor Subramanian, Reserve Bank of India (RBI) Deputy Governor Patel, Securities and Exchange Board of India (SEBI) Whole Time Member Saran, and other senior officials and representatives of the business community. May Inoue and Michael Dalesio assisted in the preparation of this report.

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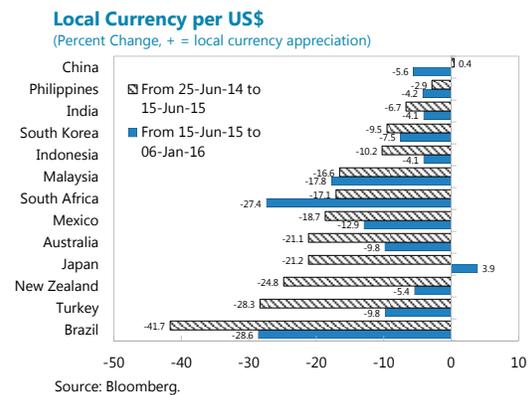
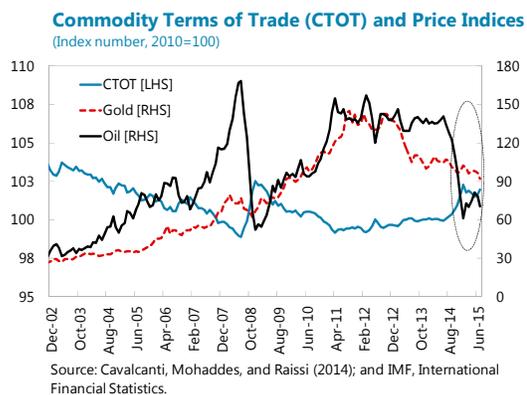
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## CONTEXT

### 1. The Indian economy is on a recovery path, supported by a large terms of trade gain (about 2½ percent of GDP) and reduced external vulnerabilities, though downside risks remain.

After bottoming at 5.1 percent in FY2012/13, the economy has been on a gradual cyclical recovery, reaching 7.3 percent growth in FY2014/15 with a revival of sentiment.<sup>1,2</sup> Since late 2014, a halving of global oil prices has boosted economic activity in India and underpinned a further improvement in its current account and fiscal positions, and engendered a sharp decline in inflation (Boxes 1 and 2).<sup>3</sup> As a result of further-reduced external vulnerabilities, improved growth prospects, and continued monetary accommodation in advanced economies, India has experienced large FDI and portfolio capital inflows, a real appreciation of the rupee, and a robust rebound in foreign exchange reserves in FY2014/15. Nonetheless, despite better growth prospects, India faces the risk of capital flow reversals and should guard against the buildup of domestic vulnerabilities.



**2. Important economic and structural reforms have been initiated, but further reforms are needed to boost India's growth potential.** Following its election victory in May 2014, the Bharatiya Janata Party (BJP)-led government of Prime Minister Narendra Modi has gradually introduced numerous economic reforms (see Annex I and Box 3), including subsidy reforms, steps to create more flexible labor and product markets, agricultural reforms (including the new crop insurance scheme), enhancing financial inclusion, relaxing FDI limits in several key sectors and improving the ease of doing business, raising Foreign Portfolio Investment limits in public debt securities, and increasing public infrastructure spending. Flexible inflation targeting was also adopted by the Reserve Bank of India (RBI) in February 2015. Nonetheless, in the last two sessions of Parliament the passage of key legislation, including the long-planned goods and services tax, was not secured given the lack of BJP control of the upper house of Parliament.

<sup>1</sup>In January 2015, India's Ministry of Statistics released the new series of national accounts. Upward revisions of the GDP growth rate for 2012/13 and 2013/14 in part reflected methodological changes. Lack of back-casted historical GDP data based on the new methodology constrains a comparison of current growth with past growth.

<sup>2</sup>The output gap is currently estimated at about -0.5 percent.

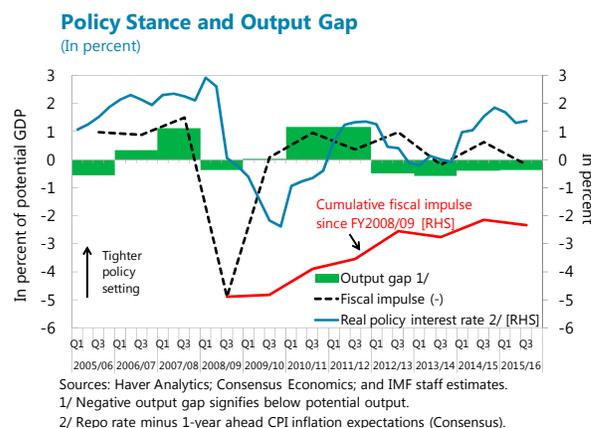
<sup>3</sup>As the global commodity price boom unwinds, India's terms of trade has improved significantly (jumping by 4 percent in 2014/15 and a further 7 percent in 2015/16), supporting output growth and raising real incomes.

**3. Notwithstanding the cyclical pickup, medium-term growth continues to be constrained by supply-side bottlenecks and weaknesses in the corporate and banking sectors.** Past weak economic growth and delays in implementing infrastructure projects have placed pressure on banks' asset quality (particularly at state-owned banks that lent heavily to infrastructure companies). Corporate vulnerability indicators remain elevated. Long-standing supply-side bottlenecks, especially in the energy, mining and power sectors, continue to weigh on India's growth potential.

**4. Past Fund advice and the authorities' macroeconomic policies have been broadly aligned, but progress on structural reforms has been partial.** There has been substantial fiscal consolidation in recent years (although it has paused in FY2015/16), and staff supports the improvement in quality of fiscal adjustment this year with its welcome emphasis on public investment. Excise duties on petrol and diesel have been raised, important kerosene and LPG subsidy allocation and distribution reforms have been pursued, and some progress has been made on reducing and rationalizing fertilizer subsidies, broadly in line with previous IMF advice. The stance of monetary policy was appropriately tight in 2014/15 to reduce inflation along the RBI's "glide path", consistent with Fund advice. The RBI has adopted a flexible inflation targeting regime, with headline CPI inflation the principal nominal anchor for monetary policy. Progress on land and labor market reforms has been limited, though some market reforms have been initiated by the center and a few states.

## OUTLOOK AND RISKS

**5. India's growth outlook has improved, despite new headwinds.** In the near term, economic recovery is expected to continue to be underpinned by private consumption (which has benefited from lower energy prices and higher real wages). Policy credibility has also strengthened, with continued fiscal consolidation and a tight monetary stance. With the revival of sentiment and picking up of industrial activity, an incipient recovery of private investment is expected to help broaden the recovery. Higher public infrastructure investment and government initiatives to unclog stalled investment projects and support the lending capacity of state-owned banks should also help crowd-in private investment (Box 4).<sup>4</sup> Real GDP growth is forecast at 7.3 percent in FY2015/16, further accelerating to 7.5 percent in FY2016/17, supported



<sup>4</sup> See also G. Bahal, M. Raissi, and V. Tulin (2015), "Crowding Out or Crowding In? Public and Private Investment in India," IMF WP 15/264.

<sup>5</sup> To improve the public private partnership (PPP) model of infrastructure investment, the November 2015 Kelkar Committee report made detailed recommendations on resolving legacy issues, and going forward, proper identification and allocation of risks among stakeholders, strengthening PPP-related policy and governance and institutional capacity, revitalizing contractual processes, and scaling up finance.

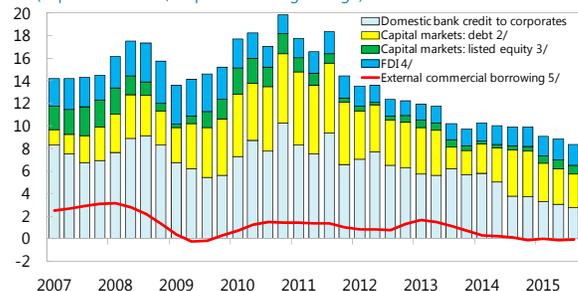
by recovery in domestic demand. Nonetheless, anemic exports as well as headwinds from weaknesses in India's corporate financial positions and public bank balance sheets will weigh on the economy. In the presence of continued supply-side bottlenecks, and assuming no substantial legislative initiatives, medium-term growth is projected to remain at around 7¾ percent.

**6. Despite a sharp reduction in inflation over the past year, medium-term inflationary pressures and upside risks to inflation remain.** Headline CPI inflation declined to 5.6 percent in December 2015, down from an average of 10 percent during 2009-13, reflecting economic slack, the RBI's tight monetary policy stance, lower global commodity prices and government efforts to contain food inflation (through release of surplus grain buffer stocks and low minimum support price increases in agriculture) (see Box 5). Although the 6 percent inflation target for January 2016 is expected to be met, upside risks to inflation for FY2016/17 stem from an unfavorable monsoon and implementation of the pay review of government employees.<sup>6 7</sup> Given food supply constraints and the ingrained nature of household inflation expectations (which remain near double-digits), inflation is expected to remain close to the upper limit of the RBI's medium-term inflation target band (4 percent CPI inflation ± 2 percent).

**7. The current account deficit (CAD) has narrowed further, helped by sharply lower commodity import prices.** From a high of 4.8 percent of GDP in FY2012/13, the CAD has compressed sharply to an average of 1.5 percent of GDP in the past two years. This narrowing was helped by a policy-induced fall in the volume of gold imports and, more recently, by lower commodity prices (see Box 6).<sup>8</sup> Notwithstanding the recent export slowdown, continued low global oil prices should help contain the CAD.<sup>9</sup> The CAD is expected to widen to 2½ percent of GDP over the medium term as domestic demand strengthens further and commodity prices gradually rebound. However, the sluggish global economic growth outlook and recent rupee appreciation in real effective terms pose headwinds to an export growth recovery for India (see Box 7).

**8. Bank credit growth remains anemic, reflecting demand and supply factors, including high corporate leverage and weak bank asset quality.** Although private banks (one-quarter of banking system assets) are well capitalized,

**India's Corporate Sector Financing Sources, Net 1/**  
(In percent of GDP, 4-quarter moving average)



Sources: CEIC; Haver Analytics; Dealogic; World Federation of Exchanges (WEF); and IMF staff estimates.

1/ Non-internal sources of finance. Excludes credit by non-bank financial companies.

2/ Includes corporate bonds, commercial paper, syndicated loans.

3/ Money raised on the primary market (BSE and NSE) with offer of shares (WEF data).

4/ Equity investment by direct investor in direct investment enterprise, right scale.

5/ Net flow on the balance of payments basis.

<sup>6</sup> The decennial pay scale review of central government employees (Seventh Central Pay Commission) will increase the civil service wage bill from January 1, 2016.

<sup>7</sup> For additional details, see P. Cashin, K. Mohaddes and M. Raissi (2015), "Fair Weather or Foul? The Macroeconomic Effects of El Niño," IMF Working Paper 15/89.

<sup>8</sup> Staff projects gold imports at 920 metric tonnes (mt) in FY2015/16, up from 890 mt in FY2014/15. This compares with a decadal average of 940 mt for gold imports (2005/06 to 2014/15); see also Box 6 on gold macro-financial linkages.

<sup>9</sup> All macroeconomic projections in this report are based on oil-price assumptions contained in the January 2016 *World Economic Outlook Update*.

profitable, and have low NPAs and limited exposure to troubled sectors, low profitability and further asset quality deterioration in public sector banks (PSBs) constrain the banking system's capacity to expand credit. In addition, a thin investment pipeline, reflecting still low capacity utilization in core sectors and areas of high corporate leverage (and recourse of higher-quality borrowers to capital markets), have reduced the demand for bank credit. Further deterioration in asset quality could lower capital levels and thereby weigh on credit supply and the investment recovery. In addition, although capital markets have partly substituted for bank credit, their ability to provide adequate, stable financing for the growth recovery will hinge on investor sentiment, and on further policy measures to deepen capital market liquidity.<sup>10</sup>

**9. While the balance of risks has clearly improved, economic risks remain tilted to the downside.** On the external side, despite the reduction in imbalances and strengthening of buffers, the impact from intensified global financial market volatility could be disruptive, including from unexpected developments in the course of U.S. monetary policy normalization or China's growth slowdown, particularly against the backdrop of recent large capital inflows.<sup>11</sup> Absent disruptive global financial market volatility, slower growth in China would have only modest adverse spillovers to India, given weak trade linkages (see Box 8). Domestic risks include continued weaknesses in corporate financial positions and public bank asset quality, as well as setbacks in the reform process, which could weigh on growth, accelerate inflation and undermine sentiment. On the upside, further structural reforms could lead to stronger growth, as would a sustained period of low global energy prices (see Annex II: Risk Assessment Matrix).

### ***Authorities' Views***

**10. The authorities broadly agreed with the staff's view on the outlook.** They agreed that the Indian economy is in the early stage of recovery with some areas of weakness, and—in view of the recovering investment pipeline—project real growth for the current fiscal year at about 7½ percent, rising slightly in FY2016/17. They acknowledged that some indicators, such as the growth of indirect tax receipts, are consistent with economic growth in the 7½ percent range, but they also noted that other high-frequency data, including corporate profitability and capacity utilization, do not corroborate this rate. The RBI estimates the output gap at about -½ of one percent.

**11. Nevertheless, the authorities feel they are well prepared to weather any surge in global financial market volatility.** The RBI has adequate reserves, including after adjustment for forward contracts, and there remains scope for monetary policy action. There was agreement with staff that exchange rate flexibility has served India well, and the authorities noted that corporate hedging ratios have risen over the past year. Finally, a part of the oil price decline windfall was

<sup>10</sup> See also P. Lindner and S. Jung (2014), "Corporate Vulnerabilities in India and Banks' Loan Performance," IMF Working Paper 14/232.

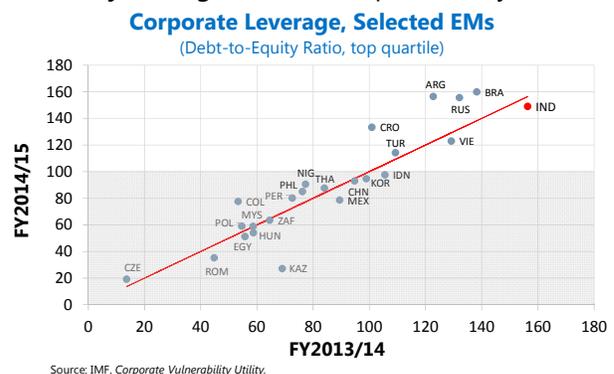
<sup>11</sup> During early January 2016 episode of China-induced global financial market volatility, India largely resisted the spillover pressures. Stock markets only declined by about 3 percent, the rupee depreciated by about 1 percent against the U.S. dollar, and FII outflows were limited (about \$100 million). See also Selected Issues Chapter IV for an analysis of the summer 2015 episode of global financial market volatility.

saved by the government in the form of higher petroleum product excise taxes, and this represents a potential buffer against a spike in global commodity prices.

## KEY POLICY ISSUES

### A. Bolstering Robustness of the Financial Sector

**12. Elevated corporate sector risks and weakened bank balance sheets, especially for PSBs, pose headwinds for economic growth.** With the corporate sector (non-household lending) accounting for over 80 percent of banks' credit portfolios, banking sector soundness and its ability to finance investment and growth rest on the financial health of the domestic corporate sector.<sup>12</sup> Corporate vulnerabilities remain elevated, reflecting implementation delays and cost overruns in infrastructure projects, and challenges to effective debt restructuring. The share of debt held by firms with weak debt repayment capacity (interest coverage ratio below one) remains close to a decade-long high, at about 11 percent as of end-March 2015 (see Selected Issues Chapter I). Corporate leverage—particularly among large firms and in a few key sectors—is one of the highest across EMs, reflecting increased reliance on bank funding to meet high capital investment requirements in the late 2000s. Industries subject to greater stress, particularly those with weakened debt servicing capacity—including infrastructure, textiles, iron and steel, and mining—account for nearly one third of banks' total loans and more than half of banks' stressed assets. The vulnerability of corporate balance sheets to a sharp rupee depreciation remains elevated (see Box 9), but it is partly mitigated by increased hedging against FX movements.<sup>13</sup>



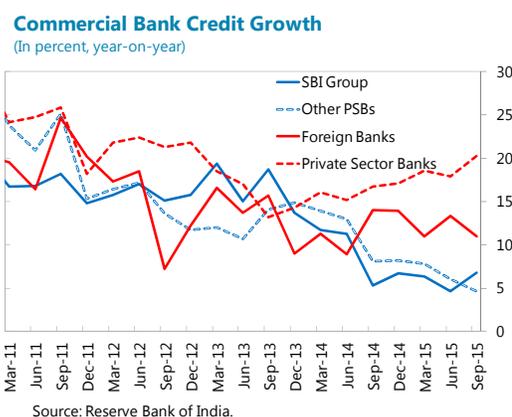
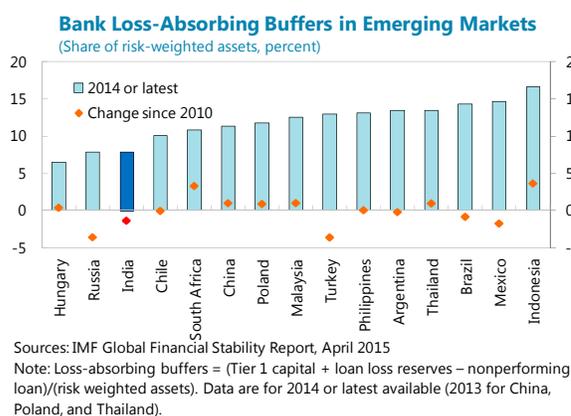
**13. Public sector banks continue to face asset quality difficulties, contributing to a slowdown in credit expansion.** The share of PSBs' stressed assets—including gross non-performing assets (NPAs) and restructured assets—in total advances continued to increase to 14.1 percent at end-September 2015 (of which NPAs stand at 6.2 percent), from 12.9 percent a year earlier.<sup>14</sup> Weaker credit quality, due in part to poor governance and lack of commercial incentives, has kept PSBs' profitability depressed, with ROA of around 0.4 percent in the past two fiscal years, below the 0.8 percent average in the preceding three years, and well below the 1.7

<sup>12</sup> India's stocks of household debt (10 percent of GDP) and corporate debt (50 percent of GDP) are relatively small compared to other major emerging market economies.

<sup>13</sup> Indian corporates' FX funding has continued to account for up to a fifth of total funding, as of end-March 2015. RBI data show that the hedge ratio for external commercial borrowings (ECB) and foreign currency convertible bonds (excluding natural hedges) increased to about 39 percent in FY2014/15 and about 41 percent in the first quarter of FY2015/16, from about 15 percent of borrowings in FY2013/14. However, a sharp increase in hedging costs could adversely affect corporates' hedging ability.

<sup>14</sup> Based on data from RBI's *Financial Stability Report*, December 2015 (Issue No.12). Past countercyclical measures were not fully effective in averting a deterioration in banks' asset quality (see Selected Issues Chapter II).

percent ROA of private sector banks. While provisioning for stressed assets has increased gradually over time, there are still concerns about possible underprovisioning, with average NPA provisioning of about 40 percent. In addition, the need for capital preservation, given eroding asset quality, has accounted for a marked slowdown in credit growth at PSBs to 6.1 percent year-on-year as of end-June 2015 (alternatively 7.4 percent as of end-FY2014/15), down from 14.0 percent at end-FY2013/14. While PSBs' credit growth is expected to remain muted, its impact on growth is lessened by the relatively low credit intensity of the Indian economy and the pick-up in nonbank financing.<sup>15</sup>



**14. PSBs' capital augmentation needs are expected to be manageable, but may require further fiscal outlays.** Under a stress scenario assuming a transition of 15 percent of restructured loans to NPAs and an extra capital cushion of 2 percentage points, PSBs' capital needs are estimated to account for 2.9 percent of FY2018/19 GDP (cumulatively over the next four years), with a government share of 1.9 percent of FY2018/19 GDP (see Box 9, Annex III, and Selected Issues Chapter I).<sup>16</sup>

**15. Full recognition of risks on PSBs' balance sheets, adequate capitalization, and further governance reforms are critical for strengthening the banking sector going forward.**

In this regard, staff recommends the following policy measures:

- *Phasing out remaining forbearance.* New regulations (as of April 1, 2015) curb considerably banks' ability to resort to forbearance by requiring banks to classify new restructured loans as NPAs, and hence provision appropriately. However, there are still certain exemptions,

<sup>15</sup> Non-bank funding has seen a considerable uptick, with the stock of outstanding commercial paper (CP) up by about 80 percent in FY2014/15 (reflecting lower funding costs), and lending by non-bank financial corporations (NBFCs) up by 20 percent over the same period.

<sup>16</sup> This estimate includes a cumulative capital injection of 0.8 percent of FY2018/19 GDP over four years, related to the ongoing implementation of Basel III in India, expected to be finalized by March 2019. The estimate for the government's share assumes no dilution of government ownership in PSBs, currently at about 61 percent. Implementation of the Basel III capital framework is progressing and is expected to be completed by end-March 2019. All banks currently meet the minimum 8 percent Tier-1 capital requirement under Basel III and its Indian equivalent of 9 percent. However, further Basel III capital requirements and potential risk weight changes would necessitate additional capital infusions (see Selected Issues Chapter I).

including on postponing reclassifications of restructured loans on projects with delayed implementation schedules (projects deemed to be viable but with temporary problems), and on extending amortization schedules of classes of loans (provided there is no change in present value terms).

- *Bank recapitalization.* To support PSBs' current lending capacity, the authorities should consider larger government capital injections in PSBs and some divestments of banks' non-core assets. The government's capital injections in PSBs per the *Indradhanush* plan (August 2015) are quite modest in scale (0.3 percent of FY2018/19 GDP cumulatively over the next four years), and largely leave recapitalizations up to the ability of affected PSBs to raise capital in the markets.
- *Corporate debt restructuring.* To boost corporate loan recovery, banks are now allowed (under the Strategic Debt Restructuring (SDR) scheme) to convert corporate loans into equity if debtors cannot meet debt restructuring plans. Debt-to-equity conversions are only a partial solution, given high corporate leverage ratios and hence limits on debt recovery. The authorities should continue to place priority on improving corporate debt restructuring mechanisms, including the formal insolvency framework (passage of the new Insolvency and Bankruptcy Bill and the Company Law Tribunals) and out-of-court debt restructuring (introduction of robust mechanisms for both operational and financial restructuring). These initiatives would build upon the LEG-provided capacity building assistance in these areas.
- *PSB governance reforms.* The authorities should follow through on the *Indradhanush* plan's commitment to structural reforms, including on enhancing PSBs' corporate governance, risk management practices and accountability.

**16. The Indian government remains fully committed to enhancing financial inclusion.** Its financial inclusion agenda has broadened over the past year (see Box 10). The government's proposed introduction of gold monetization schemes is also, in part, meant to boost financial intermediation by channeling domestic gold holdings to gold savings accounts (see Selected Issues Chapter III). Continued emphasis on increasing transactional volumes on *Pradhan Mantri Jan-Dhan Yojana* (PMJDY) accounts by expanding the range of provided financial services (including *Aadhaar*-supported<sup>17</sup> direct benefit transfers), and linking these<sup>17</sup> to new technologies (e.g., via use of mobile solutions), and potentially provided by the newly-formed payments banks, would support financial inclusion.

**17. Additional measures would help maintain financial stability and enhance the contribution of the financial sector to growth.** Staff supports the following measures:

- Facilitating further deepening of the domestic corporate bond market, including, among others, by developing robust bondholder protection mechanisms, improving liquidity in the secondary market, and rationalizing stamp duties on bond issuances. Easing investment restrictions on domestic institutional investor classes would be important to support the development of a broader investor base.

<sup>17</sup> India's Unique Identification Authority began to issue biometric identification numbers to residents in September 2010. Identities are authenticated based on the holder's fingerprints or iris scan. As of January 2016, the program had enrolled over 966 million people (<https://portal.uidai.gov.in/uidwebportal/dashboard.do>).

- Enacting a further gradual reduction of banks' statutory liquidity requirement (SLR), as the government's fiscal deficit declines, to facilitate more private sector lending. The Indian government has been gradually reducing the SLR rate (currently at 21.5 percent, down from 25 percent of deposit liabilities in mid-2008), and plans to reduce the ratio to 20.5 percent by January 2017.<sup>18</sup>

### **Authorities' Views**

**18. The authorities recognized the challenges of addressing corporate balance sheet stress.** They emphasized their efforts to strike a balance between creating room on bank balance sheets and instilling payment discipline. Several schemes have been introduced to promote debt restructuring, including the recent *Ujwal Discom Assurance Yojana* (UDAY) power sector scheme<sup>19</sup> for electricity distribution companies (November 2015), while forbearance has been phased out, with any debt restructured under the Corporate Debt Restructuring (CDR) window now requiring provisioning at the same level as NPAs. The emphasis on labeling loan nonpayers as "willful defaulters" has had some effect, and mergers and acquisitions activity is beginning to pick up. Finally, they were very optimistic that the new Bankruptcy Bill (introduced in parliament in December 2015) will close a loophole in the corporate finance architecture, and took note of staff views that the formal bankruptcy set-up needs to be complemented by an appropriate out-of-court settlement framework.

**19. There was, however, a general view that the cause of anemic credit growth is mainly inadequate demand.** To some extent the commercial paper market and non-bank financial intermediaries have taken up some of the slack, but anemic investment and the slow recovery of private sector borrowing suggest that the investment cycle has yet to definitively turn. The authorities also agreed with staff's view that the fiscal cost of recapitalizing PSBs will be modest. They noted that strong steps are being taken to improve corporate governance in PSBs, which should help to reduce the flow of new bad assets going forward. Finally, the authorities are looking forward to the upcoming 2016/17 FSAP for inputs on how to continue building a financial system that is efficient and inclusive. They also urged staff to carefully review the upcoming Financial Stability Board (FSB) Peer Review of India (due by September 2016), to avoid duplication of effort in the FSAP.

**20. The authorities also noted that, in the presence of elevated corporate and banking sector strains, they have taken extensive measures to safeguard financial stability.** These include: the withdrawal of forbearance by requiring banks to classify and provision restructured

<sup>18</sup> Under India's system of parallel bank liquidity requirements—including India's own SLR and the Basel III liquidity coverage ratio (LCR)—banks face conservative liquidity requirements. Further reductions of the SLR are, thus, important in order to lessen the burden on domestic banks.

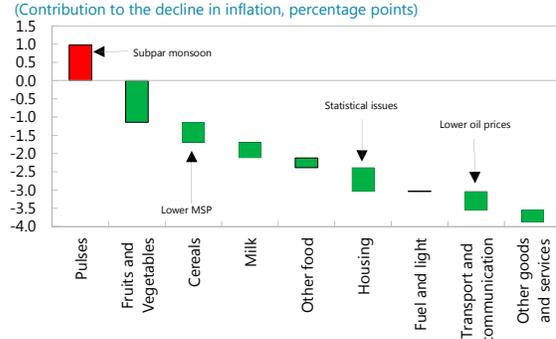
<sup>19</sup> Under UDAY, state electricity distribution companies will enter a tripartite agreement with the Ministry of Power and relevant State Governments, and 75 percent of their outstanding debt (as of September 2015) will be taken up by states in a staggered manner over the next two years. The scheme aims to enforce financial discipline, improve operational efficiency, and reduce power and interest costs.

loans as NPAs; monitoring closely likely NPAs via the Central Repository of Information on Large Credits (CRILC); and encouraging corporate debt restructuring and strategic debt restructuring. They underscored that extensions of loan amortization schedules under current regulations should not be construed as forbearance, given that these pertain to the refinancing of projects (in infrastructure and core industries) that do face any credit weakness. Overall, the authorities emphasized that the recent policy measures seek to induce a structural change in project financing, including a shift to long-term structured financing and a change in banks' mindset to ensure that project financing is carried out per international best practices.

## B. Complement the New Monetary Policy Framework with Structural Policies to Durably Reduce Inflation

**21. The collapse in global commodity prices, a range of supply-side measures, and a relatively tight monetary stance have resulted in a faster-than-expected decline in inflation.** Although core inflation declined from an average of 9½ percent during 2011–13 to around 5 percent by mid-2014, it has remained relatively sticky since. Near-term headline CPI inflation dynamics will continue to be underpinned by supply-side factors which, despite the subpar crop outlook, should help achieve the RBI's 6 percent inflation target for early 2016. Notwithstanding the 125 basis points nominal policy rate cut in 2015, monetary conditions remain consistent with achieving the inflation target of 5 percent by March 2017.<sup>20</sup> However, in light of upside risks to inflation, the authorities should stand ready to raise the policy rate if inflationary pressures gather pace.

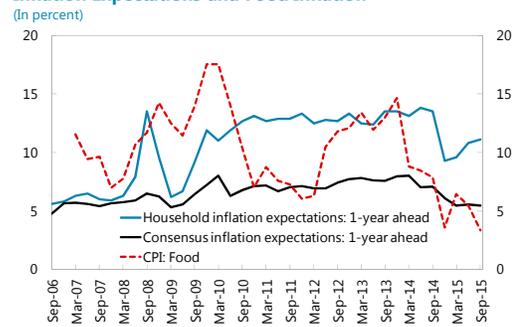
**What drove down CPI inflation from 8 percent in mid-2014 to about 5½ percent in December 2015**  
(Contribution to the decline in inflation, percentage points)



Source: Haver Analytics and IMF staff calculations.

**22. Adoption of a flexible inflation targeting regime by the RBI provides a robust institutional foundation for maintaining price stability in an increasingly complex economy.** With the formal adoption of flexible inflation targeting in February 2015, the presence of a well-defined nominal anchor and a clear policy objective has strengthened policy formulation. The RBI also took further steps to improve communication, and to enhance monetary

**Inflation Expectations and Food Inflation**



Sources: CEIC; Haver Analytics; and IMF staff calculations.

<sup>20</sup> India's neutral real interest rate is estimated to be in the range of 1.25–1.75 percent, which is in line with RBI staff's assessment (see RBI Working Paper 05/215). The current level of the real policy interest rate falls in the range of 1.5–2.0 percent.

transmission<sup>21</sup> and structural liquidity management. Nonetheless, bringing down inflation expectations of the general public and anchoring them at a lower level has proven challenging, as food inflation propagates rapidly into non-food inflation, and household inflation expectations remain near double digits.<sup>22</sup> Breaking away from the adaptive nature of Indian inflation expectations will likely require a prolonged period of low inflation, underpinned by a continued anti-inflationary monetary policy stance.<sup>23</sup>

**23. Introducing durable supply side measures, continued fiscal consolidation, relieving impediments to monetary transmission, and finalizing a robust Monetary Policy Committee (MPC) are prerequisites for low inflation in the medium term.** Staff views the medium-term 4 percent inflation target adopted by the RBI as broadly appropriate. However, in view of India's large weight on food in its CPI basket and structurally-high food inflation, achieving this target on a sustained basis will require ramping up food supply commensurate with strong consumption demand. Further structural reforms to increase food production are needed, particularly to accommodate dietary shifts towards more nutritious and protein-based foods associated with growing incomes.<sup>24</sup> Staff sees scope for improving food grain buffer stock management, and for increasing investment in storage and distribution infrastructure for perishable produce. A strong institutional design of the RBI's MPC, supporting credible monetary policy making, remains paramount for the success of the new monetary framework, as does further reducing impediments to monetary transmission (including administered interest rates on small savings schemes) and continued fiscal consolidation.<sup>25</sup>

### ***Authorities' Views***

**24. The authorities acknowledged that achieving their medium-term inflation target of 4 percent would be a challenge in the absence of structural reforms, particularly in agriculture.** They agreed with staff that the January 2016 target will be met, and were optimistic that inflation will fall to 5 percent by early 2017. In addition the authorities viewed household inflation expectations as on a declining trend. In their view, by reducing the policy rate by 125 basis points in 2015 they had implemented an accommodative monetary stance, but emphasized that these rate cuts had been front loaded and further cuts would be contingent on inflation developments and ongoing fiscal consolidation. The authorities also recognized that the recent

<sup>21</sup> In order to improve the efficiency of monetary policy transmission, new RBI guidelines will require banks to move to marginal-cost-of-funds-based determination of their lending rates from April 1, 2016. Prior to this, banks were following different methodologies in computing their lending rates, including those based on average costs of funds.

<sup>22</sup> See R. Anand, D. Ding and V. Tulin (2014), "Food Inflation in India: Role for Monetary Policy," IMF WP 14/148.

<sup>23</sup> Low and stable inflation is the best way for monetary policy to support Indian growth over the medium term. Staff analysis concludes that CPI inflation exceeding 5½ percent is particularly detrimental to long-term economic growth—see K. Mohaddes and M. Raissi (2014), "Does Inflation Slow Long-run Growth in India?," IMF WP 14/222.

<sup>24</sup> See R. Anand, N. Kumar and V. Tulin (2016), "Understanding India's Food Inflation: The Role of Demand and Supply Factors," IMF WP 16/2.

<sup>25</sup> On asymmetric monetary transmission, see S. Das (2015), "Monetary Policy in India: Transmission to Bank Interest Rates," IMF WP 15/129. Transmission would benefit from reducing the SLR over time to a level in line with the liquidity coverage ratio (LCR), continued focus on increasing competition in the banking sector, and progress on financial inclusion which will decrease the presence of informal finance.

windfall of lower world oil prices will not be repeated. They pointed out that some portion of food inflation during the past year stemmed from the subpar monsoon, and that it would be unlikely for three monsoons in a row to be so poor. They pointed out that a range of supply side reforms are being undertaken in the agricultural sector that should raise productivity and facilitate price stability.

### C. Consolidating the Fiscal Position

**25. Although near-term fiscal consolidation has paused, the spending mix has improved.** While FY2014/15 Union Budget execution outperformed the target, this was largely achieved as a result of cuts in capital spending to make up for overly optimistic revenue assumptions in the budget. The FY2015/16 Budget targets a fiscal deficit of 3.9 percent of GDP (equivalent to about 4¼ percent of GDP in IMF terms), and will likely be achieved. This deficit is 0.3 percentage points of GDP higher than envisaged in the previous roadmap for fiscal consolidation. While staff would have preferred a deficit path in line with the roadmap, the FY2015/16 Budget contains a welcome emphasis on public investment (0.25 percent of GDP increase over FY2014/15) and a further reduction in fuel subsidies (see Annex V: Subsidy Reform Progress). Nonetheless, given a possible shortfall in disinvestment proceeds, expenditure may again come under pressure. As the expenditure side gains from declining global oil prices have been largely exhausted, the authorities should take the opportunity to continue to raise petroleum-related revenues. Staff recommends that any increased expenditure arising from the Seventh Pay Commission be phased over time.

**26. Medium-term fiscal targets have been delayed and appear to be challenging.** The achievement of the medium-term Union deficit target of 3 percent of GDP has been deferred to FY2017/18, one year later than previously planned.<sup>26</sup> India's overall fiscal position remains vulnerable, given that at the general government level the deficit is expected to remain around 6-7 percent of GDP, which is high by global standards, and could pose challenges to durably reducing inflation. Moreover, with the increase in net transfers to states and no offsetting consolidation expected from the states, measures at the center need to be further articulated. Given the absence of clear medium-term fiscal plans, staff's projections (which are on the basis of current policies and assume no major legislative changes) suggest that the central government will underperform against its fiscal adjustment targets. Also, the lack of a binding medium-term fiscal framework raises questions about the credibility of medium-term consolidation plans. Nonetheless, India's public debt (with a favorable maturity structure and currency composition, as well as a captive domestic investor base) remains on a downward path and is sustainable (see Annex III: Debt Sustainability Analysis). As in the 2015 Article IV consultation, staff recommends that when fiscal space is rebuilt, future fiscal responsibility legislation should be underpinned by a

<sup>26</sup> To institutionalize financial discipline in public finances, the Fiscal Responsibility and Budget Management Act (2003) introduced a medium-term ceiling for the central government's fiscal deficit of 3 percent of GDP. India's public-debt-to-GDP ratio has been reduced from 83 percent in 2005 to 65 percent as at end-March 2015, due in large part to ongoing fiscal consolidation.

rule that provides room for counter-cyclical fiscal policy. In the meantime, pro-growth fiscal policy could be practiced by further improving the quality and efficiency of public expenditure.

**27. Implementing a robust goods and services tax (GST), improving revenue administration, and undertaking further subsidy reforms are policy priorities.** Specifically, staff recommends the following measures:

- *Tax reform.* India's revenue-to-GDP ratio remains considerably below its emerging market peers. The long-awaited GST should be implemented, as it would create a single national market, enhance the efficiency of intra-Indian movement of goods and services and boost GDP growth. As envisaged by the authorities in the recent Subramanian Committee recommendations, the GST should have minimal exemptions and a moderate single rate. Progress towards a new direct tax code, with smaller and streamlined deductions, would also help. Efforts to improve tax administration (as envisaged in the Tax Administration Reform Commission reports) should be stepped up as the scope for revenue gains is large. Staff supports the Finance Minister's plans to lower the corporate income tax rate while eliminating exemptions.
- *Subsidy reform.* Overhauling India's subsidy regime should continue via better targeting, improving efficiency, and reducing distortions. Untargeted food subsidies should be pared back, including by rationalizing the list of eligible beneficiaries and reforming the inefficient Food Corporation of India (FCI)—see Box 5 and Selected Issues Chapter VI. The current approach to non-food subsidy payments, namely direct benefit transfers, increased financial inclusion, and use of the *Aadhaar* system to better identify beneficiaries, should continue to yield large fiscal savings.

### **Authorities' Views**

**28. The authorities were confident that the central government fiscal deficit target for this year will be met.** They noted that revenue performance has been healthy, and reforms to the timing of public infrastructure spending make bunching of expenditures at the end of the fiscal year somewhat less likely. Lower world oil prices have given India the opportunity to recast its fuel subsidy architecture, eliminating waste while focusing scarce resources more effectively on the truly needy. The authorities pointed to high-quality reforms to gasoline, diesel, LPG, kerosene and fertilizer subsidy programs that, even as recently as three or four years ago, were unimaginable.

**29. While acknowledging that meeting the deficit targets for FY2016/17 and beyond will be challenging, the authorities did not agree that fiscal adjustment has paused this year.** They noted that the Seventh Pay Commission mandate, combined with the need to kick-start the investment cycle with public infrastructure spending, could make it difficult to achieve the deficit target of 3½ percent of GDP for FY2016/17. The GST is not likely to be implemented quickly, certainly not from the previously-planned April 2016, although it will support revenue performance over time. Even though the rate structure of the GST is likely to be revenue neutral, the authorities anticipated that a good GST design will support revenue administration improvements by encouraging firms to join the formal economy to take advantage of input tax credits. The authorities took note of staff's view that continued fiscal adjustment remains appropriate, given India's still-high general government deficit, even after recent consolidation

efforts, though they argued that India's revenue/GDP ratio is comparable with countries having a similar level of per capita GDP.

## D. Maintaining External Stability

**30. India's external position is broadly consistent with medium-term fundamentals and desirable policy settings, and reserves are assessed to be adequate** (Box 11 and Annex IV: Assessing Reserve Adequacy). International reserves have increased by \$48 billion since April 2014, standing at US\$352 billion at end-December 2015 (slightly above 150 percent of the Fund's reserve adequacy metric and around 8 months of import cover).<sup>27</sup> The build-up of reserves was driven by robust capital inflows (both FDI and FPI flows), although these have tapered off since April 2015. Foreign exchange (FX) intervention continues to be guided by the need to limit excessive volatility. Notwithstanding the reduction in external vulnerabilities, there is a need for vigilance given sharp movements in global commodity prices, potential volatility of global financial market conditions, and the deterioration in India's export performance.

**31. In the event of a surge in global financial market volatility, India should continue to rely on exchange rate flexibility as a key shock absorber.** To minimize disruptive movements in the currency divorced from fundamentals, continued exchange rate flexibility could be accompanied by judicious FX intervention (which can be in spot and forward markets, and via liquidity provision through swaps).

**32. India faces a challenge in increasing exports.** The contraction in merchandise exports has been partly due to the collapse in commodity prices, as refined petroleum products made up about 20 percent of the value of goods exports in 2014/15. The slowdown in global demand has also affected India's exports, as potentially has the appreciation of the rupee real effective exchange rate.<sup>28</sup> Achieving a significant export acceleration (as envisaged in the Foreign Trade Policy blueprint) would need to be underpinned by measures to reduce barriers to trade and lower the cost of doing business. Continued progress on alleviating supply-side bottlenecks would help enhance the effectiveness of exchange rate flexibility in lessening the impact of adverse external shocks, as well as in boosting exports in the long-term.

**33. While India's external financing requirements have declined, further enhancing the environment for attracting stable, non-debt creating capital flows, particularly FDI, remains important.** In the past year, several steps toward this goal have been taken, including by liberalizing caps on FDI inflows in several sectors (among them railways infrastructure, construction, defense, and insurance). This has resulted in US\$35 billion of FDI flows in calendar

<sup>27</sup> See also Selected Issues Chapter V for measures of capital account openness.

<sup>28</sup> The IMF's *World Economic Outlook* projects that the volume growth of non-oil import demand in India's major trading partners will average about 5½ percent during the next five years, significantly below the near 10 percent growth rate recorded during 2001–08. Using the average estimated income elasticity of 1.5, in the absence of further measures to enhance competitiveness, India's merchandise export growth will likely remain below 10 percent per annum (see Box 7 and M. Raissi and V. Tulin (2015), "Price and Income Elasticity of Indian Exports: Role of Supply-Side Bottlenecks," IMF WP 15/161).

2015 to October, up from US\$29 billion during the same period in 2014, more than counterbalancing the CAD. In addition, limits for foreign portfolio investors' (FPI) purchases of government bonds have been increased from January 1, 2016, which have the potential to bring in an additional US\$2.5 billion of inflows in the bond market in Q1 of 2016, if fully taken up. Nonetheless, a more conducive business environment is necessary to attract greater FDI and help the success of the "Make in India" initiative. Debt inflows, particularly in the form of external commercial borrowings (ECBs) by Indian corporates, have increased in recent years (though not in 2014/15), nonetheless India's external debt remains low at 24 percent of GDP at end-September 2015. Further liberalization of ECBs should proceed cautiously and be carefully monitored by the RBI, given the vulnerabilities of corporate balance sheets.<sup>29 30</sup>

### **Authorities' Views**

**34. The authorities agreed that external vulnerabilities are now much lower.** Like staff, they foresee a current account deficit of about 1½ percent of GDP for 2015/16, easily financed by FDI. They also agreed that reserves are at a healthy level, and the exchange rate is both flexible and broadly fairly valued. The recent slowdown in exports notwithstanding, the authorities were not overly concerned about near-term competitiveness. Nonetheless, they emphasized the importance of structural reforms, ease of doing business, and infrastructure investments to ensure that India's external outlook remains healthy over the medium term.

## **E. Structural Policies to Boost Growth and Employment**

**35. Priority areas for reforms are well known: addressing long-standing supply bottlenecks, labor and product market reforms, and improving the business climate.**

Building on recent progress, key measures include:

- *Power reforms.* Strengthening the UDAY scheme for state power distribution companies to mitigate the risk of moral hazard, including through strong conditionality aimed at reducing transmission losses and raising power tariffs when needed. Additional reforms should also be informed by India's commitments under the Paris climate change agreement (see Box 12).
- *Land reforms.* Streamlining and expediting land acquisition and simplification of procedures, at both the center and state levels.
- *Labor market reforms.* Greater labor market flexibility and product market competition remain essential to create jobs and raise growth. Recent steps by several states to increase labor market flexibility are welcome. Such reforms are key for increasing employment in the formal sector and employment of women, broadening the manufacturing base, and taking advantage of India's favorable demographics (see Selected Issues Chapter VII).

<sup>29</sup> The RBI announced relaxed rules in late-September 2015, which allow Indian companies to issue local-currency-denominated bonds overseas. These so-called Masala bonds transfer currency risk to foreign investors, will potentially open up new sources of funding for Indian firms, and broaden the set of Indian firms with access to offshore borrowing.

<sup>30</sup> The RBI also announced in September 2015 that a gradual increase in the foreign investor quota for domestic government bonds will be implemented from October 2015. The increase in limits for government securities will be announced every half year, and will be released every quarter.

- *Strengthening the business climate.* Efforts to improve India's business climate should continue. Staff welcomes the authorities' efforts to improve India's ranking on the World Bank's Doing Business indicators, particularly in the underperforming areas of resolving insolvency and enforcing contracts. Staff supports the recent introduction of state-based doing business indicators, which will encourage cross-state competition in attracting investment.

*Other reforms.* As elaborated in the 2015 India Article IV Staff Report, other key reform areas include: (i) rationalizing natural resource allocation; (ii) reorienting public expenditure towards growth-enhancing and social spending; and (iii) agricultural sector reforms, including reform of the Food Corporation of India (see the recommendations of the FCI Committee and Box 5). The above reforms are needed to raise potential growth, which is critical for poverty reduction in India.<sup>31</sup>

### **Authorities' Views**

**36. The authorities concurred with staff that structural reforms are critical to boosting India's growth prospects.** They felt that the UDAY power sector debt restructuring scheme would not give rise to moral hazard, and they noted that coal sector reforms had been successful, including the transparent re-auctioning of coal blocks. They welcomed the progress that has been made in improving India's ranking in the World Bank Ease of Doing Business survey. Major international partners, notably Japan, have accelerated efforts to boost the Prime Minister's "Make in India" campaign. Finally, the authorities noted that "cooperative federalism" is allowing some states to introduce major reforms—such as to land, labor, and agricultural markets—which are not yet politically feasible at the all-India level. Over time, they expected these reforms to fructify into healthy and inclusive job creation and growth.

## **STAFF APPRAISAL**

**37. The Indian economy is on a recovery path, helped by a large terms of trade gain, positive policy actions, improved confidence, and strengthened external buffers.** After bottoming out in 2012, growth has risen steadily with a revival of sentiment. Since late 2014, a halving of global oil prices has boosted economic activity, underpinned a further improvement in the current account and fiscal positions, and engendered a sharp decline in inflation. The important structural reforms that have been initiated will support growth prospects and enhance the resilience of the Indian economy. At present, however, there remains limited space for countercyclical macroeconomic policies to counteract the remaining economic slack and respond to domestic and external shocks.

**38. India's growth outlook remains favorable, but faces difficult challenges.** The economic recovery is expected to continue to be underpinned by private consumption. Higher public infrastructure investment and government initiatives to tackle supply-side bottlenecks and to repair corporate and financial sector strains should help crowd-in private investment.

<sup>31</sup> See R. Anand and V. Tulin (2014), "Defining and Explaining Inclusive Growth and Poverty Reduction," IMF WP 14/63.

Nonetheless, risks are tilted to the downside. The main risks relate to weak corporate and bank balance sheets, and renewed global financial market volatility. Continued anemic growth of India's trading partners could also weaken the sustainability of the growth recovery. On the upside, further structural reforms could lead to stronger growth, as would a sustained period of low global energy prices.

**39. India's financial system is generally sound, but public sector banks continue to face asset quality difficulties.** The RBI should continue to strengthen asset quality recognition and increase banks' provisioning as needed, and continue to monitor corporates' FX exposures. Augmenting capital buffers in public banks and implementing corporate governance reforms are of key importance to ensure the durability of the Indian growth recovery. The introduction of a Bankruptcy Bill is welcome which, together with strengthening out-of-court debt restructuring, should pave the way to a robust insolvency resolution regime and also help deepen domestic capital markets. Efforts should continue to build on India's commendable progress in financial inclusion, underpinned by new technologies and expanding the range of financial services.

**40. The monetary stance remains appropriately tight for achieving near-term inflation objectives.** Following the formal adoption of the flexible inflation targeting regime in early 2015, progress to enhance communication and improve policy transmission continues. Favorable inflation dynamics gave the RBI room to cut the policy rate, while maintaining positive real interest rates broadly consistent with the "glide path" towards the medium-term inflation target. Given upside risks to inflation, a re-emergence of inflationary pressures may require monetary tightening. Reducing still-high household inflation expectations will require a long period of low inflation which, unless underpinned by durable measures to boost food supply, may require a tight monetary stance for longer.

**41. Fiscal consolidation needs to be underpinned by revenue-raising reforms.** Although fiscal consolidation has paused, enhanced capital outlays and important fuel subsidy reforms are welcome. The medium-term fiscal targets are broadly appropriate, but to achieve them more efficient taxation (including through introduction of the GST) and further rationalization of subsidies (fertilizer and food) are essential. While public debt is sustainable, the general government deficit remains high and constrains the space for much-needed public investments.

**42. International reserves are assessed to be adequate and the external position is broadly consistent with medium-term fundamentals.** Notwithstanding the reduction in India's external vulnerabilities, there is a need for vigilance given potential volatility in global financial markets, and the deterioration in India's export performance. If global financial market volatility resurfaces, continued exchange rate flexibility could be accompanied by judicious foreign exchange intervention given India's increased and adequate reserve buffers. Achieving a significant export acceleration would need to be underpinned by measures to reduce barriers to trade and lower the cost of doing business. Further liberalization of external commercial borrowing should proceed cautiously, given the potential vulnerabilities of corporate balance sheets.

**43. Addressing long-standing supply bottlenecks, labor and product market reforms, and improving the business climate are crucial to achieving faster and more inclusive growth.** Enduring improvements in power distribution and natural resource allocation and pricing will be important in raising potential growth. Further reforms to increase labor market flexibility and facilitate land acquisition, including at the state level, are key to increasing employment in the formal sector and broadening India's manufacturing base.

**44.** It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

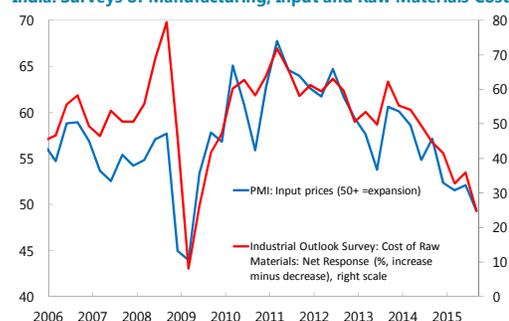
### Box 1. Oil Price Collapse: Impact on Indian Inflation<sup>1</sup>

*The collapse of oil prices accounts for close to half of the 3½ percentage point decline in Indian CPI inflation since the first half of 2014. Monetary policy should be watchful of the likely transitory nature of this decline in inflation.*

**Since mid-2014, a halving of global oil prices has boosted economic activity in India and underpinned further improvement in the current account and fiscal positions and a sharp decline in inflation.** India's terms of trade have improved by about 9½ percent, largely reflecting the reduction in imported oil prices (net petroleum imports were 5 percent of GDP in 2013/14). With deregulation of diesel prices in late 2014, the fuel subsidy bill has been reduced from about ¾ of one percent of GDP to just 0.1 percent of GDP, while the excise duties on petrol and diesel have been increased on multiple occasions since late 2014, with fiscal revenue impact of about 0.2 percent of GDP. Finally, with gasoline and diesel prices now free to move in line with international prices, their retail prices have declined by around 15–20 percent from mid-2014 levels.

**Staff analysis suggests that the collapse of oil prices could have contributed up to 1¾ percentage points to the decline in headline CPI inflation since mid-2014.** Assuming the full pass-through of lower petroleum-related production costs onto the domestic prices of goods and services, the direct impact of the 20-percent decline in domestic petroleum product prices on headline CPI inflation is estimated at about 1 percentage point.<sup>2</sup> Half of this is due to the contribution of lower consumer expenditure on petroleum products, which have a weight of about 2.5 percent in the CPI basket. The other half is due to the direct impact of lower petroleum prices on the production costs of various goods and services. Finally, the indirect impact (from lower oil prices reducing the cost of all other, i.e. non-petroleum, intermediate inputs) is estimated at nearly ¾ of one percentage point. In addition, the total impact of a reduction in petroleum products cost on the WPI inflation is estimated to be significantly larger, at about 3½ percentage points, reflecting the WPI product basket.

India: Surveys of Manufacturing, Input and Raw Materials Costs



Source: Haver Analytics.

**The assessed disinflationary impact should be seen as an upper bound.** The implicit assumption of zero demand price elasticity implies that the decline in petroleum costs is fully passed on to producer prices rather than into profit margins. Notwithstanding some pickup in FY2015/16 advance tax payments by India's largest firms, the underlying improvement in profits may reflect not only better margins from lower input costs, but also incipient demand recovery, resulting in part from an oil drop boost to real disposable incomes, in addition to reduced interest costs on account of recent policy rate cuts. Overall, the oil price drop has clearly led to a significant drop in Indian inflation. Monetary policy should take this into account, given the likely transitory nature of this decline.

<sup>1</sup>Prepared by Volodymyr Tulin.

<sup>2</sup>Estimates are obtained using India's 2007/08 Input-Output Tables, which provide information about the share of different inputs in the production cost structure of goods and services. The direct impact is estimated using the commodity-x-commodity flow matrix; the indirect impact is estimated using the Leontief Inverse matrix for commodities.

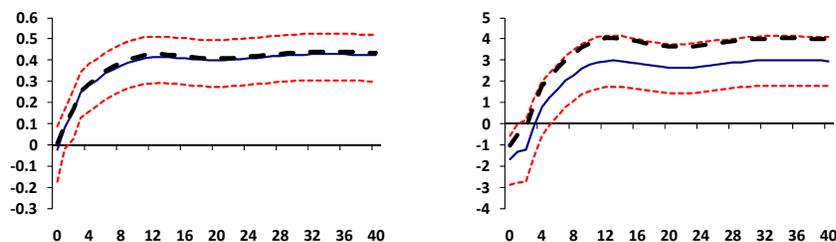
### Box 2. Oil Glut and the Indian Economy<sup>1</sup>

Following a positive supply-driven oil price shock (with prices falling by about half), growth is estimated to increase by about 0.3 percentage points and inflation to fall by 80 basis points after one year.

**This Box investigates the macroeconomic consequences of the recent oil glut for the Indian economy in terms of its effects on oil prices, real output, inflation and financial markets.** To do this, Mohaddes and Raissi (2015) integrate an oil price equation, which takes account of developments in the world economy as well as the prevailing oil supply conditions, within a reduced-form quarterly model of the global economy (the GVAR model for short).<sup>2</sup> To distinguish the oil glut shock (mainly driven by the U.S. oil revolution) from oil demand disturbances, they employ a set of dynamic sign restrictions on the impulse responses of their GVAR-Oil model (estimated over 1979Q2-2011Q2). More specifically, they require the oil glut to be associated with: (i) a decline in oil prices; (ii) an increase in oil production; and (iii) an increase in the sum of real GDPs across all major oil importers in their sample.

**The results indicate that the collapse of oil prices (which is equivalent to a 2.5 percent of GDP terms of trade gain for India) leads to higher growth and equity prices, and lower inflation.** Figure 1 shows the estimated median (blue solid) and median-target (black long-dashed) impulse responses for up to 40 quarters of key macroeconomic variables of India to a supply-driven negative oil-price shock, together with the 5th and 95th percentile bands.<sup>3</sup> The results suggest that following the U.S. oil revolution, with oil prices falling by 51 percent in the first year, Indian growth increases by about 0.3 percentage point after one year—either directly through higher urban consumption spending and lower input cost for corporate sector or indirectly from trade with the rest of the world (as global growth increases by 0.2–0.4 percentage point). The oil glut also creates a moderate temporary disinflation pressure in India (80 basis points on an annualized basis over 4 quarters) and boosts equity prices over the medium-term.

**Figure 1. Impact of Oil-Supply Shocks on India**  
Output                      Equity Prices



<sup>1</sup> Prepared by Mehdi Raissi.

<sup>2</sup> See K. Mohaddes and M. Raissi (2015), "The U.S. Oil Supply Revolution and the Global Economy" IMF WP 15/259.

<sup>3</sup> The bands refer to the fact that there are many structural models with identified parameters that provide the same fit to the data. They have nothing to do with sampling uncertainty and do not show statistical significance. The median-target impulse responses track a single structural model.

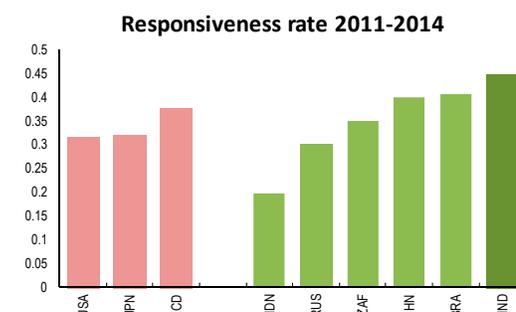
### Box 3. India's Progress on Structural Reforms<sup>1</sup>

Progress on structural reforms has been made in recent years, and India has done more than several other emerging market countries and many advanced economies. Still, expedited progress on structural reforms will be important to achieving stronger growth.

**India faces several structural impediments to growth.** These include: rigidities in product and labor markets; inefficient pricing and allocation of natural resources; an uncertain and burdensome business environment, including difficulties in acquiring land and regulatory clearances; and inefficient agricultural markets, including in the public system for food procurement, distribution, and storage.

#### The OECD produces a reform responsiveness indicator that measures the extent of reform in five broad areas:

(i) product and labor market regulations; (ii) human capital formation; (iii) tax and benefits systems; (iv) trade and investment regulation; and (v) innovation policies. The “responsiveness rate” indicator is constructed as the share of total policy recommendations from the OECD’s “Going for Growth” reports on which the government of the country has taken significant action over the following year.<sup>2</sup> It considers only legislated actions, and not announcements. Compared to OECD countries, BRIICS (Brazil, Russia, India, Indonesia, China, and South Africa) countries were active in financial market reform.



Source: OECD. The responsiveness rate indicates the share of total policy recommendations from the OECD’s “Going for Growth” reports on which the country has taken significant action.

#### The indicator shows that India has achieved more of the recommended reforms from 2011 to 2014 than other BRIICS.

India has taken steps to ease barriers to domestic and foreign competition in the banking sector. Recent actions to increase banking competition in India include issuing new bank licenses, liberalizing branch licensing, and guidelines on differentiated licenses for payment banks and small banks. In addition, a process of reviewing the current regulatory architecture and replacing most of the existing financial laws began in 2011, and a revised draft of a new Indian Financial Code was recently completed. In response to the slowdown in infrastructure investment in 2011/12, a process of reforms began which include: setting up a Cabinet Committee on Investments to streamline approvals, streamlining coal block auctioning, financial restructuring of state electricity distribution companies, allowing FDI of up to 100 percent in railway infrastructure, and tax-free infrastructure bonds for projects in the rail, road and irrigation sectors. The overall trend has been to increase the caps on allowed foreign investment, simplify regulations, and to move towards market-based pricing of natural resources. For example, gasoline and diesel prices were deregulated in 2010 and 2014 and the formula that fixes the price of natural gas is now revised every six months. First steps on labor market flexibility have been taken by the center—making it easier to comply with labor regulations and removing certain restrictions on overtime and women working night shifts—and in several Indian states.

<sup>1</sup> Prepared by Sonali Das.

<sup>2</sup> See OECD, 2015, “Economic Policy Reforms 2015 Going for Growth”, chapter 1. The sample of countries covered is: the OECD countries (since 2005); Brazil, China, India, Indonesia, Russia, and South Africa (since 2011); and Colombia and Latvia (since 2015).

### Box 4. Crowding-Out or Crowding-In? Public and Private Investment In India<sup>1</sup>

Since the mid-1990s, public investment, especially in infrastructure, has a significant positive impact on private investment in India.

#### Reviving public investment, as a key engine of growth, is an important objective of Indian policy-making.

The FY2015/16 Budget, in particular, focuses on investment in infrastructure, both through higher on-budget outlays as well as initiatives to facilitate off-balance sheet financing—including implementation of the National Investment and Infrastructure Fund and permitting tax-free infrastructure bonds. Moreover, recognizing the subdued private investment outlook, the rationale for the public investment thrust is not only to enhance long-term productive capacity of the economy but also to complement the private investment revival in the short-term.

**Staff research suggests that public investment has a long-lasting impact on output and has become complementary to private investment in India.** First, using a theory-based structural vector error-correction model differentiating long-run and short-run dynamics, it is shown that a policy-induced change in public investments has a statistically significant positive impact on output. Second, reflecting major structural changes that the Indian economy has undergone during the 1980s and early 1990s, the interaction between private and public investment during the past three decades has changed from “crowding out” to “crowding in”, see Figure 1. Third, public investment initiatives that target the infrastructure sector and those that result in completion tend to have more pronounced positive impact on both economic output and private investment.<sup>2</sup>

#### Notwithstanding a strong public investment impetus, policy challenges remain.

Interim multiplier estimates suggest that one additional rupee in public investment leads to an increase of about 1.1–1.25 rupee in private investment after 8 quarters.

Notwithstanding recent improvement in new investment project announcements, broad-based private investment recovery will hinge on progress in resolving corporate balance-sheet stress and enhancing banking system buffers commensurate with an investment-driven economic recovery. In addition, durable solutions to supply-side bottlenecks, such as energy availability and natural resource allocation, are needed to ensure viability of future public and private investment.<sup>3</sup> Finally, public sector challenges remain relating to implementation capacity and adequate and stable fiscal space.

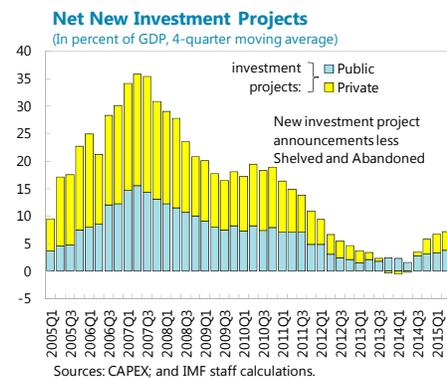
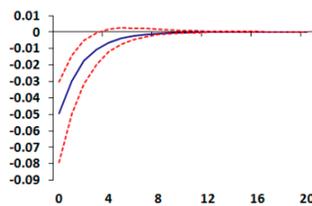
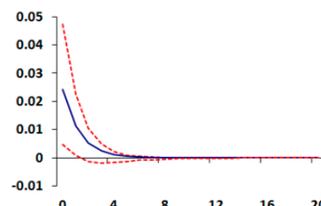


Figure 1. Responses of Private Investment to Government Investment Shock

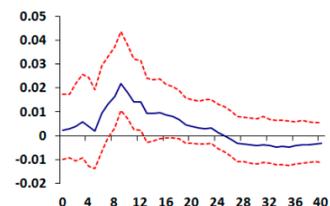
#### Annual Model (1950-2012)



#### Annual Model (1980-2012)



#### Quarterly Model (1996Q2-2015Q1)



<sup>1</sup> Prepared by Mehdi Raissi and Volodymyr Tulin.

<sup>2</sup> See G. Bahal, M. Raissi, and V. Tulin (2015), “Crowding Out or Crowding In? Public and Private Investment in India,” IMF WP 15/264 for details. Results are based on a novel data-set of quarterly aggregate public and private investment in India over 1996Q2-2015Q1 of investment-project-level data from the CapEx-CMIE database which distinguishes projects by sectors and completion/implementation progress.

<sup>3</sup> See Das and Tulin (2015) and Anand and Tulin (2014).

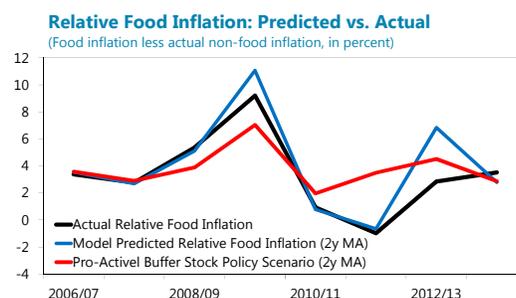
### Box 5. India: Reorienting the Role of the Food Corporation of India (FCI)<sup>1</sup>

*FCI reform is needed to reduce the rate and volatility of food inflation, incentivize growth of agricultural productivity, raise efficiency of grain markets, and better serve economically vulnerable households.*

**In the past few years, the FCI's dominant role<sup>2</sup> in the market of cereals has come under increasing public criticism which pinpointed market distortions, large leakages in the Public Distribution System (PDS),<sup>3</sup> and operating inefficiencies.** The FCI was established in 1965 as India faced major shortages of grains to stabilize markets through procurement, distribution, and maintenance of buffer stocks for food security and price stability purposes. Over time, as production increased substantially, India has emerged as a net cereal exporter and the largest exporter of rice in the world, while it has also built a cushion of massive buffer stocks of cereals. In addition, a particular area of policy criticism has been FCI's buffer stock practices which, as a result of essentially open-ended procurement and strong price incentives, have resulted in excessive buffer stocks that have been accompanied by high food inflation. The recommendations of the Shanta Kumar Committee Report on Reorienting the Role and Restructuring of FCI aim at refitting the PDS and revisiting the National Food Security Act (NFSA) to better serve the economically vulnerable households, improving operational efficiency, and implementing a pro-active buffer stock liquidation policy.

**Excessive cereal stock hoarding and a lack of pro-active buffer stock liquidation resulted in sustained inflationary pressures.** Although government's proactive response to a surge in global food prices during 2007-08 helped limit the impact on domestic food prices, cereals buffer stocks fell significantly below the norms. In subsequent years, however, excessive stock hoarding took place, supported in part by effectively open-ended procurement and strong growth of minimum support prices. Rice and wheat intake into the Central Pool between 2007/08 and 2012/13 averaged around 4 and 7 percent of annual output, respectively, while growth of minimum support prices averaged about 13 percent per year. As a result, during the last five years actual buffer stocks held with the Food Corporation of India (FCI) averaged more than double the norms. Substantial increases in the minimum support price were generally followed by rising inflation in key agricultural crops, fueling inflationary pressures. In addition, the inefficiencies of the buffer stock policy have been aggravated by the significant costs of carrying excess stocks, as the FCI's costs of acquiring, storing, and distributing food grains have been 40 to 50 percent more than the procurement prices.

**Staff research suggests that pro-active intake and liquidation of stocks can smooth consumption and stabilize prices.** A counter-factual buffer stock policy scenario entailing (i) lower cumulative buffer stock intake during 2007–2012 in accordance with the revised buffer stock norms, and (ii) pro-active buffer stock intake and liquidation policy (smoothing the growth rate of cereal consumption at around 1½ percent per year), could have directly reduced the standard deviation of relative food inflation during this period by half—from about 3¼ percentage points to about 1⅔ percentage points. Anti-inflationary benefits would likely have been larger given the strong second-round effects from elevated food inflation on core inflation. These results also imply that a potential buffer stock of pulses, if feasible, may be effective in stabilizing markets and containing inflation volatility.



Source: Anand, Kumar, and Tulin (2016).

Note: Predicted relative food inflation denotes model-based simulation of historic food inflation based on supply growth rate for six major food expenditure categories, overall private consumption and non-food inflation. Pro-active buffer stock policy scenario assumes (i) implementation of revised buffer stock norms by mid-2013, and (ii) smoothing of growth rate of cereals' consumption at slightly below 1½ percent per year through intake and release of buffer stocks.

<sup>1</sup> Prepared by Volodymyr Tulin.

<sup>2</sup> The share of public procurement has risen substantially in recent years, from an average of about 25 percent during 2002/03–2007/08 to about 32 percent during 2008/09–2013/14. The share of PDS purchases in consumption has also increased considerably.

<sup>3</sup> Estimated leakages (subsidized grains not reaching poor households) range from 40 to 60 percent, but are much higher in some states.

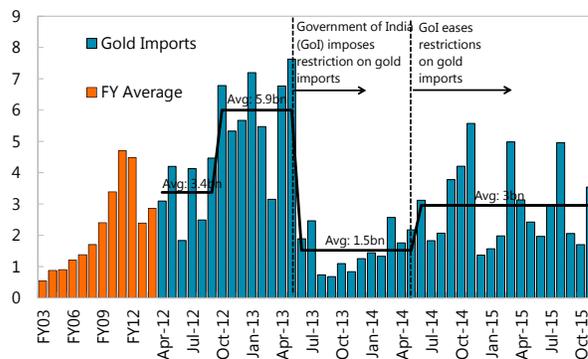
### Box 6. Gold: Macro-Financial Linkages<sup>1</sup>

While import demand for gold is mainly affected by inflation, international gold prices, and financial inclusion, the Government of India's recently announced gold schemes could lower gold imports by about 10 percent annually if implemented successfully.

#### Persistently-high inflation (depressing real returns) prompted a surge in gold imports in FY2011/12, which subsequently led to a marked deterioration in India's current account balance.

India is the world's second-largest consumer of gold (about a quarter of world demand), and depends heavily on imported gold which meets about 90 percent of its domestic demand.<sup>2</sup> Gold imports reached a record high in FY2011/12 (US\$56 billion, or 3 percent of GDP) and remained elevated in FY2012/13, contributing to the widening of current account deficit to 4.8 percent of GDP in FY2012/13. They were sharply curtailed in FY2013/14 before partially rebounding in FY2014/15 with the liberalization of administrative restrictions on their import.<sup>3</sup> As domestic inflation and international gold prices have fallen, and financial inclusion has been improved, import demand for gold has remained below the FY2011/12 highs.

**Momentum in Gold Imports**  
(In billions of USD per month)



Source: Haver Analytics.

**Indian Gold Imports**

	Volume (mt)	Price (\$/oz)	Value (US\$ bn)
FY2003/04	612	378	7
FY2004/05	878	414	10
FY2005/06	826	477	11
FY2006/07	818	628	14
FY2007/08	797	766	16
FY2008/09	880	868	21
FY2009/10	982	1024	29
FY2010/11	1106	1295	41
FY2011/12	1219	1647	56
FY2012/13	1141	1654	54
FY2013/14	731	1328	28
FY2014/15	890	1240	35

**The government has recently announced two schemes to reduce gold imports: a Gold Monetization Scheme (GMS) and a Sovereign Gold Bonds (SGBs) scheme.** While the GMS intends to bring the private holdings of gold into circulation, and reduce the reliance on gold imports (as domestic recycling improves), the SGBs scheme aims at converting the investment demand for gold (estimated at about 300 tons annually) into paper demand. If successful (see Selected Issues Chapter III for pre-requisites), these schemes could lower gold imports by about 10 percent annually.

<sup>1</sup> Prepared by Mehdi Raissi and Silvia Iorgova.

<sup>2</sup> This reflects a deep cultural affinity for gold and residents' perception of gold as a "safe" asset. The perception of safety, coupled with limited availability of alternative investment opportunities, has contributed to a concentration of household savings in gold-related investments.

<sup>3</sup> On May 13, 2013, the Reserve Bank of India restricted the import of gold by banks on a consignment basis, followed by the 20:80 scheme on July 22, 2013 under which all nominated banks/agencies were to ensure that at least 20 percent of every lot of imported gold was exclusively made available for the purpose of exports.

### Box 7. India: Export Elasticities and the Role of Supply Rigidities<sup>1</sup>

India's exports are constrained by sluggish external demand. Alleviating supply-side bottlenecks, in the energy sector in particular, is vital for better export performance in the long-run and also for enhancing the effectiveness of exchange rate flexibility as a shock-absorber in the short-run.

**While Indian exports are sensitive to international relative-price competitiveness and external demand, binding supply-side constraints (notably energy shortages) dampen price responsiveness in the short term.** Export performance is affected by short-term fluctuations in international relative prices, with an estimated average elasticity of about -0.5 (see Table 1). Furthermore, non-manufacturing exports appear to be slightly more demand elastic in the long run, but significantly less price-elastic in comparison to manufacturing exports. The negative sign of the average short-run income elasticity on crude materials and chemical products likely reflects India's net commodity importer status. Finally, energy shortages may reduce the responsiveness of Indian exports to real depreciation while they appear not to matter when relative price changes are unfavorable.

**Sluggish global economic growth prospects present a challenge for India in achieving significant export growth acceleration in the coming years.** The volume growth of non-oil import demand in India's major trading partners is expected at about 5½ percent during the next five years, significantly below the near 10 percent growth rate recorded during 2001–08. In the absence of further measures to enhance competitiveness, India's merchandise export growth rates will likely remain in single digits. Consolidating the recent gains in inflation reduction, alleviating supply-side bottlenecks, and improving the business climate will be key to ensuring competitiveness in the long term.

**Continued exchange rate flexibility, as well as further structural reforms to ease supply-side bottlenecks, are important for facilitating exports.** In the face of external shocks, international relative price flexibility, with the exchange rate as a shock absorber, can help increase India's exports in the short run. In addition, continued progress on alleviating supply-side bottlenecks, in the energy sector in particular, would help enhance the effectiveness of exchange rate flexibility in lessening the impact of adverse external shocks as well as in boosting exports in the long-term.

#### Non-Oil Imports of India's Trading Partners

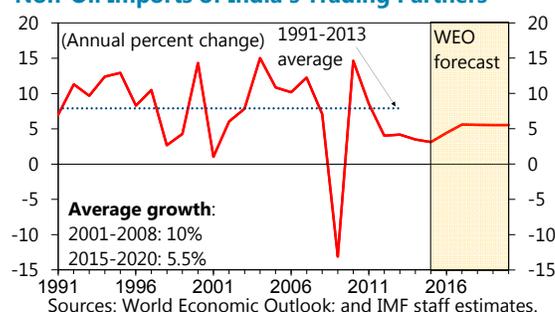


Table 1. Pooled Mean Group Estimates of the Long-run and Short-run Export The Role of Supply-Side Constraints

Dependent variable: India's sector-specific export volume			
	All industries	Manufacturing	Non-manufacturing 1/
<b>Long-run coefficients</b>			
Global demand volume 2/	1.34 *** (0.05)	1.29 *** (0.07)	1.48 *** (0.06)
Relative price 3/	-0.99 *** (0.11)	-1.11 *** (0.16)	-0.84 *** (0.16)
Energy deficit 4/	-0.005 *** (0.001)	-0.008 *** (0.002)	-0.002 *** (0.001)
<b>Short-run coefficients</b>			
Error-correction term	-0.19 *** (0.03)	-0.17 *** (0.03)	-0.22 *** (0.05)
Δ Global demand volume	-0.03 (0.07)	0.28 *** (0.08)	-0.33 *** (0.08)
Δ Relative price	-0.57 *** (0.09)	-0.65 *** (0.10)	-0.47 *** (0.16)
Energy deficit * min[0, Δrelative price]	0.004 * (0.002)	0.004 ** (0.002)	0.003 (0.004)
NxT	1012	483	529

Source: M. Raissi and V. Tulin, 2015, "Price and Income Elasticity of Indian Exports—The Role of Supply-Side Bottlenecks" IMF WP 15/161.  
 Note: Standard errors are reported in parenthesis. \*\*\*, \*\*, \* denote significance at 1, 5, and 10 percent, respectively.  
 1/ Includes food, crude materials, minerals and chemicals.  
 2/ Product-specific world imports, volume index.  
 3/ India's trade-weighted product-specific export price (in partner's currency) relative to partners' product price, index. Increase signifies appreciation.  
 4/ Energy deficit is defined as peak energy demand deficit, weighted by sector-specific energy intensity. One unit corresponds to a sector with energy share in gross output of one percent and a situation of one percent economy-wide peak demand energy deficit.

<sup>1</sup> Prepared by Mehdi Raissi and Volodymyr Tulin.

### Box 8. Spillovers to India from China's Rebalancing<sup>1</sup>

*A one percent permanent negative GDP shock in China could have major global macroeconomic repercussions (with world growth falling by ¼ of one percentage point), but its impact on India is limited.*

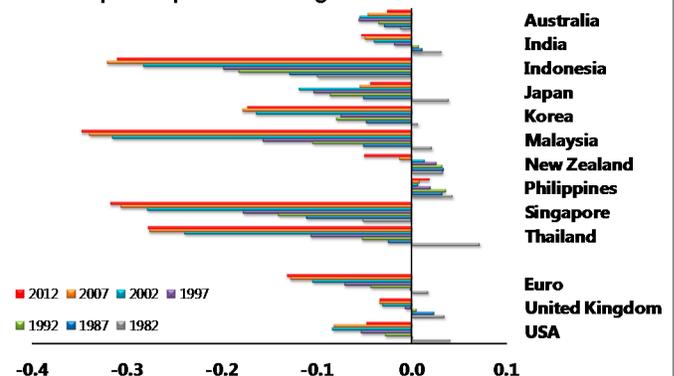
**This Box investigates empirically how shocks to GDP in China are transmitted to India, conditional on alternative configurations of cross-country linkages in the global economy.** A dynamic multi-country model (Global VAR) is used to determine the size and speed of the transmission of China GDP shocks to India. This framework consists of 26 region-specific models (including a single Euro Area region comprising 8 of the 11 countries that adopted the euro in 1999). These individual models are solved in a global setting where core macroeconomic variables of each economy are related to corresponding foreign variables (constructed exclusively to capture each country's bilateral exposures to the other countries due to trade and financial linkages). Spillovers are transmitted across economies via trade, financial, and commodity price channels. The model has both real and financial variables: real GDP, inflation, the real equity price, the real exchange rate, short and long-term interest rates, and the price of oil. All data are quarterly in frequency, for the period 1979Q2 to 2013Q1.

**The results show that output shocks emanating in China have important global effects, but their impact on India is limited (likely due to India's narrow trade/financial exposures to China).** A permanent one percent decline in China's real GDP would translate into lower overall growth globally.

Countries most heavily exposed to China's growth slowdown are those within the Asian regional supply chain and commodity exporters (following the China shock, the price of oil falls by about 6½ percent). After one year, the China shock would reduce output in Malaysia and Singapore by about 0.35 percent and in Indonesia and Thailand by about 0.3 percent. The effects on the GDP of the Euro Area, Japan, UK, and the United States are generally smaller. Output in India would be affected by less than 0.1 percent after one year, as the positive impact of the fall in the price of oil partly offsets the decline

in demand from China (with which India has weak trade links) and that of India's other trading partners (which are themselves adversely affected by the GDP shock in China). Note that the approach taken here not only accounts for direct exposures of countries to shocks but also indirect effects through secondary or tertiary channels. Nonetheless, if the shock to China's GDP is combined with a spike in global financial market volatility (leading to exchange rate pressures, higher bond yields and lower equity prices), the impact on most countries, including India, would be significantly larger.<sup>2</sup>

Output Responses to a Negative GDP Shock in China



Notes: Depicts the change in GDP of a given country after one year associated with a 1% (permanent) negative shock to China's GDP (equivalent to a one-off 1% shock to GDP Growth in China in the first year) using time-varying weights.

<sup>1</sup> Prepared by Mehdi Raissi.

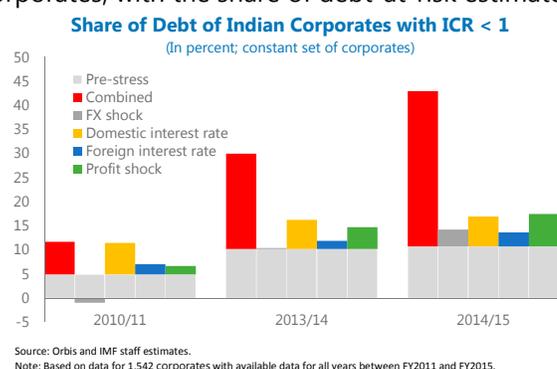
<sup>2</sup> See Cashin, Mohaddes and Raissi (2016), forthcoming IMF working paper for details.

### Box 9. Corporate and Banking Sector Vulnerabilities<sup>1</sup>

Past deterioration in macroeconomic conditions and supply-side bottlenecks, particularly in infrastructure, have led to the build-up of high corporate vulnerabilities, with a strong negative impact on banks' asset quality. Banks face potential recapitalization needs. Staff estimates that these should be manageable, but may require further fiscal outlays.

**The vulnerabilities of the Indian corporate sector remain high, reflected in profitability pressures and high leverage, particularly among large corporates.** Supply side bottlenecks—particularly in infrastructure, and the iron and steel sectors—continue to affect negatively corporate profitability. The median return on assets (ROA) of Indian corporates has continued to decline and at 4.6 percent in FY2014/15 was the lowest over the past decade. Corporate leverage is now one of the highest across emerging market economies, with leverage of the largest corporates (top 1 percent) persistently higher than for other firms. The median debt-to-equity ratio of the top corporates (on a gross debt basis) has been at more than 175 percent each year since FY2008/09, relative to less than 130 percent for other firms (245 percent and 113 percent at end-FY2015, respectively; see Selected Issues Chapter I).

**Stress tests of corporate balance sheets confirm that exposure to potential shocks is high.** Corporates' debt repayment capacity, after improving in FY2013/14, showed signs of marginal deterioration in FY2014/15. Corporate debt-at-risk—the share of debt owed by firms with an interest coverage ratio (ICR) below one—edged up to 10.8 percent, following an improvement to 10.2 percent in FY2013/14 (Figure).<sup>2</sup> An upward shift in domestic interest rates continues to be a key risk for Indian corporates, with the share of debt-at-risk estimated to increase to 17 percent in case of a 250 basis point rise in domestic rates. Indian firms are now also more vulnerable to profitability, foreign currency and foreign interest rate shocks. In extreme stress conditions—captured by an unprecedented combination of extreme adverse shocks calibrated to India's experience in the aftermath of the global financial crisis and the 2013 'taper tantrum'—the corporate sector's debt-at-risk can reach 42 percent.<sup>3</sup> Importantly, corporate sector risks continue to be considerably higher than in the aftermath of the global financial crisis, when debt-at-risk even under the largest risk factor (domestic interest rates) was at levels comparable to the FY2014/15 baseline.



**The weaker position of domestic corporates has translated into substantial deterioration of banks' asset quality in view of the strong bank-corporate nexus in India.** The share of stressed assets at public sector

<sup>1</sup> Prepared by Silvia Iorgova.

<sup>2</sup> All statistics and the stress test results are based on a sample of 1,542 firms with consistently available balance sheet and income statement data between FY2010/11 and FY2014/15, to avoid coverage and survivorship bias.

<sup>3</sup> The combined shock includes an assumed 29 percent rupee depreciation; a 250 basis point (bps) increase in the domestic interest rate; a 400 bps rise in foreign interest rates; and a 25 percent decline in the portion of operating income not affected by these shocks. The results present an upper bound on impact of shocks, as it is assumed that corporates do not hedge against any foreign currency risks.

### Box 9. Corporate and Banking Sector Vulnerabilities (Concluded)

banks (PSBs)—including gross non-performing assets (NPAs) and restructured assets—in total advances increased to 13.5 percent at end-March 2015 from 11.9 percent a year earlier. A significant share of stressed loans—more than 41 percent—are concentrated in the infrastructure and iron and steel sectors, which have been impacted adversely by the domestic supply-side issues and by export headwinds. With reform measures to address structural bottlenecks, new NPA formation may decelerate. However, the accumulation of restructured loans, which accounted for 8.1 percent of PSBs' total loans at end-FY2014/15, poses a challenge. These loans, while not classified as non-performing, have modified terms to ameliorate possible borrower debt repayment difficulties, and hence imply substandard quality. Further transition of restructured loans to NPA status, and the need to provision new restructured loans at the NPA provisioning rate, coupled with the phase-in of Basel III capital requirements by March 2019, are expected to necessitate additional capital injections in the PSBs in the coming years.

**Banking sector stress-test simulations suggest that potential recapitalization needs should be manageable, but may require further fiscal outlays.** The simulations evaluated the impact of further deterioration in loan quality on banks' capital base, assuming a 15 percent transition of restructured advances to NPAs in each year to end-FY2018/19, and minimum 60 percent provisioning against NPAs. The analysis was carried out on a bank-by-bank basis, with slippage, recovery and write-off rates calibrated on banks' recent performance, and using the Tier 1 capital ratio as a hurdle rate (including the 2.5 percent capital conservation buffer (CCB) and additional buffers of up to 2 percent). Even in a severe scenario of continuous deterioration of PSBs' asset quality on a scale commensurate with their recent experience, recapitalization costs should be manageable, at 2.9 percent of FY2018/19 GDP (cumulative over four years, including a 2 percent extra buffer; left Table).<sup>4</sup> Costs are more modest, at 1.8 percent of FY2019 GDP, in the case of further reforms (right Table). Such milder stress is associated with an about 4 percentage-point decline in PSBs' median Tier 1 ratio and a 1.7 percentage-point rise in the median NPL ratio. However, these estimates may be subject to downward bias, given remaining forbearance on the classification of certain loans as restructured.

#### Public Sector Banks: Capitalization Needs under Severe Stress

(In percent of 2018/19 GDP)

(Minimum Common Equity Tier 1 (CET-1) Capital + CCB)

	Assumed Credit Growth		
	Slow	Base	Fast
	(0.9 x GDP growth)	(1 x GDP growth)	(1.1 x GDP growth)
Government Share			
6.125 - 8 (0)	1.31	1.39	1.50
7.125 - 9 (1)	1.61	1.71	1.83
8.125 -10 (2)	1.91	2.02	2.16
Total Bank Recapitalization			
6.125 - 8 (0)	1.95	2.07	2.24
7.125 - 9 (1)	2.40	2.55	2.74
8.125 -10 (2)	2.86	3.03	3.24

Source: IMF staff estimates based on FitchRatings; Bankscope; World Economic Outlook; and bank annual reports.

Note: Column to the left shows range of minimum CET-1 + CCB requirements.

#### Public Sector Banks: Capitalization Needs under Milder Stress

(In percent of 2018/19 GDP)

(Minimum Common Equity Tier 1 (CET-1) Capital + CCB)

	Assumed Credit Growth		
	Slow	Base	Fast
	(0.9 x GDP growth)	(1 x GDP growth)	(1.1 x GDP growth)
Government Share			
6.125 - 8 (0)	0.63	0.71	0.81
7.125 - 9 (1)	0.94	1.03	1.14
8.125 -10 (2)	1.24	1.34	1.47
Total Bank Recapitalization			
6.125 - 8 (0)	0.91	1.03	1.18
7.125 - 9 (1)	1.37	1.51	1.68
8.125 -10 (2)	1.82	1.98	2.18

Source: IMF staff estimates based on FitchRatings; Bankscope; World Economic Outlook; and bank annual reports.

Note: Column to the left shows range of minimum CET-1 + CCB requirements.

<sup>4</sup> Out of the 2.9 percent of GDP capitalization need, about 0.8 percent of GDP would be needed for phase-in of Basel III.

### Box 10. Expanding Financial Inclusion in India<sup>1</sup>

The ambitious agenda of the Indian government to extend financial access to the unbanked segments of the population has accounted for a sizable rise in new bank accounts. Further policies should seek to boost transactional volumes in these accounts, including via digitalization and better financial literacy.

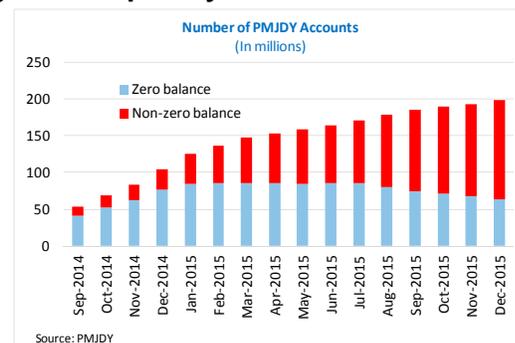
**In an effort to enhance financial services availability, curb inequality and boost domestic growth, the government of India has made financial inclusion a key national priority.** The financial inclusion

agenda—*Pradhan Mantri Jan-Dhan Yojana* (PMJDY)—envisages universal access to basic banking services by 2018.

The number of PMJDY bank accounts to previously unbanked persons has increased sharply to 198 million at end-December 2015, from less than 54 million in September 2014, split at 40-60 percent between rural and urban areas (Figure). PMJDY is backed by the unique biometric

identification of each citizen (*Aadhaar*), and is facilitated by fixed-point agents—“Bank Mitra”—which execute financial transactions on the part of banks. India’s Postal network,

with 154,000 points of presence across villages, is expected to act as a key agent for banks. To incentivize use of the accounts, there has been a gradual channeling of add-on services, including debit cards and direct benefit transfers (DBT; e.g., subsidies, and direct cash payments for social programs), as well as bundling of life and accident insurance, and pension products.<sup>2</sup> Women are explicitly targeted under the scheme, with overdraft facilities and other benefits provided on a priority basis to the wife in each family. In April 2015, the Government of India also set up *Pradhan Mantri MUDRA Yojana* (PMMY) to provide refinancing for micro-finance institutions that lend to small and medium-sized unbankable businesses, primarily of scheduled castes (CS) and scheduled tribes (ST), with schemes targeting various growth stages and funding needs.



**Propelling further financial inclusion hinges on enabling sufficient transactional volumes on PMJDY accounts, digitalization, and more extensive financial literacy.** The number of zero-balance accounts is still high, at 32 percent of all accounts as of end-December 2015 (Figure). Average balances also remain small (at about Rs. 1,500) and transactional volumes are limited, reflecting in part the continued prevalence of cash payments in rural India. Further channeling of subsidies and social payments (e.g., food and fertilizer subsidies, and health insurance), as well as more points-of-access would facilitate higher use and transactional volumes.<sup>3</sup> Digitalization via the linking of PMJDY accounts to mobile payments—as envisaged in the government’s *Jan Dhan-Aadhaar-mobile phone* (JAM) scheme—can offer considerable efficiency gains through better integration of financial services, ease of use and reduction in costs. Further mobile internet penetration via the government’s “Digital India” initiative would provide a much needed impetus, with Post offices already rolling out affordable devices.<sup>4</sup> Importantly, concerted efforts to increase the financial literacy of the poor population which lacks experience with financial products is crucial for PMJDY’s success.

<sup>1</sup> Prepared by Silvia Iorgova.

<sup>2</sup> These include *Aadhaar*-enabled micro-ATMs and RuPay debit cards to replace cash transactions, *Pradhan Mantri Suraksha Bima Yojana* (PMSBY) on accidental death insurance; *Pradhan Mantri Jeevan Jyoti Beema Yojana* (PMJJBY) on life insurance; *Atal Pension Yojana* (APY) on defined pension for citizens in the unorganized sector.

<sup>3</sup> The government may want to raise commissions on transfers to boost the scheme’s business viability for banks.

<sup>4</sup> Mobile internet penetration in India is still limited, with projected 232 million users by end-2015. However, growth has been brisk, at an estimated 33-34 percent in 2014 and 2015 (see KPMG-FICCI M&E Industry Report 2015).

### Box 11. External Sector Assessment<sup>1</sup>

*Staff assesses that India's external position is broadly consistent with medium-term fundamentals and desirable policy settings.*

#### Current Account and Exchange Rates

The current account deficit (CAD) narrowed further in FY2014/15, helped by lower commodity-import prices, and is projected to remain contained at about 1.3 percent of GDP in FY2015/16. As of December 2015, the real effective exchange rate (REER) was about 7 percent higher than the average REER in FY2014/15, with appreciation pressures coming in part from the terms of trade gain.

The External Balance Assessment (EBA) CA regression estimates a norm of about -3.9 percent of GDP for India in FY2015/16. However, in staff's judgment, global financial markets could not be counted on to reliably finance a deficit of that size, in light of India's current (albeit reduced) vulnerabilities. Given the risks with global financial market volatility, staff assesses that a smaller CA of about -2½ percent of GDP is a more appropriate norm.<sup>2</sup> The underlying CA in FY2015/16, which is the CA adjusted for temporary factors,<sup>3</sup> is estimated to be -2 percent of GDP. Thus, staff assesses the CA gap to be about ½ percent of GDP, or in a range of -½ to +1½ percent of GDP.

The EBA Index REER and Level REER regression approaches estimate an overvaluation of about 8 and 12 percent for the 2015 average REER, respectively. Staff assesses the REER gap to be in a range of -5 to +10 percent.<sup>4</sup>

#### Capital Account Flows and International Investment Position

India's financial account is dominated by portfolio equity and FDI flows. Nonetheless, debt flows, particularly in the form of external commercial borrowings by Indian corporates, have increased in recent years. Net portfolio debt flows were particularly large in FY2014/15. Given that portfolio debt flows have been volatile and the exchange rate has been sensitive to such flows and to changes in global risk aversion, attracting more stable sources of financing would reduce vulnerabilities.

India's net international investment position (NIIP) deteriorated slightly to -18 percent of GDP in FY2014/15, from -12 percent in FY2010/11. Reserves, at US\$352 billion at end-December 2015, are adequate (see Annex IV). India's external debt, at 24 percent of GDP as at end-September 2015, remains moderate when compared to other emerging market economies. Moreover, the maturity profile of external debt is favorable as the share of long-term external debt in total debt is about 80 percent and the ratio of short-term external debt to foreign exchange (FX) reserves is low. With a CAD of under 2½ percent of GDP projected for the medium term and higher GDP growth, the NIIP-to-GDP ratio is expected to remain broadly stable.

<sup>1</sup> Prepared by Sonali Das.

<sup>2</sup> See *2015 External Sector Report*, IMF Policy Paper, June 26, 2015.

<sup>3</sup> This estimated underlying CA incorporates the EBA-estimated cyclical adjustment, and also takes account of the temporary impact of higher tariffs on gold imports as well as the temporary part of the terms of trade gain (about ½ of one percent of GDP).

<sup>4</sup> This range incorporates both the implication of the CA gap and the REER regression approaches. The staff assessed CA gap implies an undervaluation in the range of -7.5 to 2.5 percent for the FY2015/16 average REER.

### Box 12. Climate Change in India<sup>1</sup>

Given India's high vulnerability to climate change and dominance of coal-based energy sources, the Government has pledged to curb emission intensity and to expand renewable energy capacity.

**Global climate change is expected to have a significant impact on the Indian economy.**<sup>2</sup> A large proportion of the population relies on climate sensitive sectors, such as agriculture. Research suggests that India is among the most vulnerable countries to extreme climate events, where Bosello et. al. (2012)<sup>3</sup> estimate that growth could be almost 4 percentage points lower than potential for a 1.9°C increase by 2050.

**At the same time, India is the fourth-largest emitter of CO<sub>2</sub> in the world, after China, U.S. and the EU.** India accounted for around 7 percent

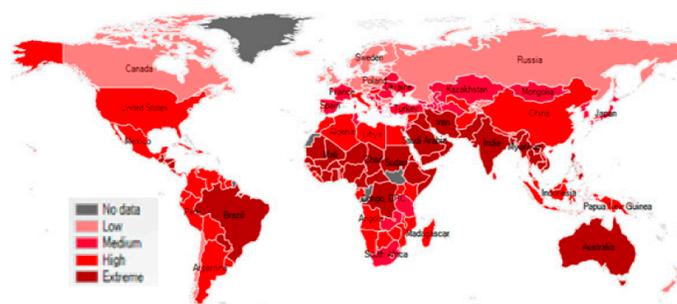
of global emissions in 2014, but in terms of per capita emissions, India is among the lowest and its contribution to cumulative global CO<sub>2</sub> is only 3 percent, compared to 21 and 18 percent by the U.S. and the EU, respectively. A key concern is the dominance of inefficient coal-based energy sources (more than 60 percent of electricity is generated by burning coal). With growing population and economic development, electricity demand is expected to increase rapidly.

**India launched a National Action Plan on Climate Change in 2008 and has made tangible progress.** The action plan includes adaptation and mitigation strategies at national and state levels, with a voluntary goal of reducing the emission intensity of GDP 20-25 percent below its 2005 level by 2020. Key measures include: (i) expanding renewable energy capacity fivefold from 2014 to 2022; (ii) introducing and increasing the clean energy process on coal; (iii) promoting climate-resilient agriculture systems and smart cities; and (iv) developing domestic carbon markets. India currently spends 3 percent of GDP on adaptation measures and is assessed to be on track to achieve its voluntary pledges by the 2014 United Nations Environment Program Emission Gap Report.

**Post 2020, India has pledged to curb emissions intensity by 33 to 35 percent by 2030 from its 2005 level.** India has targeted to increase the share of non-fossil-based electric power capacity from 30 to 40 percent of total power generation,<sup>4</sup> and to create an additional (cumulative) carbon sink of 2.5-3 GtCO<sub>2</sub>e through forest cover by 2030. Preliminary government estimates suggest that achieving these targets will require at least \$3.5 trillion (at 2014-15 prices) in domestic and foreign investment, and implementation of an array of technologies with support from developed nations.

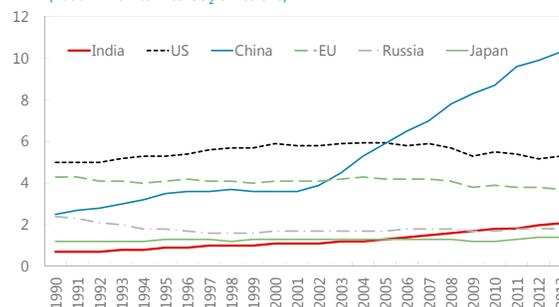
#### Impacts of Climate Change

By Geographical Location



Source: Verisk Maplecroft (2015) Climate Change Exposure Index.

#### Absolute CO<sub>2</sub> Emissions (1000 million tonnes CO<sub>2</sub> emissions)



Source: Trends in Global CO<sub>2</sub> Emissions Report (2014), European Commission Joint Research Centre.

<sup>1</sup> Prepared by Purva Khera and Ran Bi.

<sup>2</sup> See "After Paris: Fiscal, Macroeconomic and Financial Implications of Global Climate Change", IMF Staff Discussion Note, January 2016.

<sup>3</sup> Bosello, F., Eboli, F., and Pierfederici, R. (2012). Assessing the Economic Impacts of Climate Change. An Updated CGE Point of View. FEEM Working Paper, No. 2.

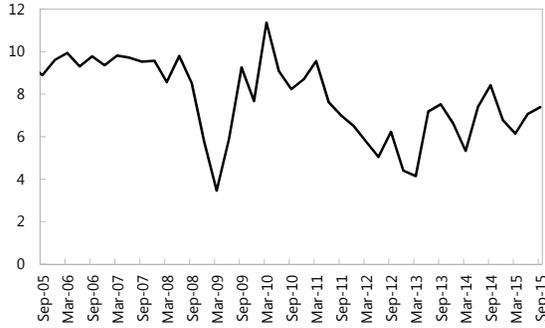
<sup>4</sup> India recently launched an International Solar Alliance (ISA) to boost solar energy in developing countries.

**Figure 1. India: Growth and Activity**

Indian economy is on recovery path, supported mainly by private consumption.

Economic recovery continues...

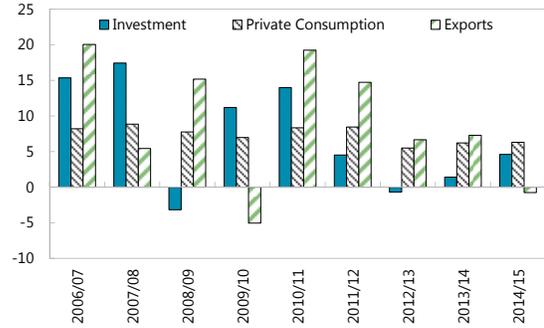
**GDP Growth**  
(In percent, yoy)



Sources: CEIC; and IMF staff calculations.

...driven by private consumption.

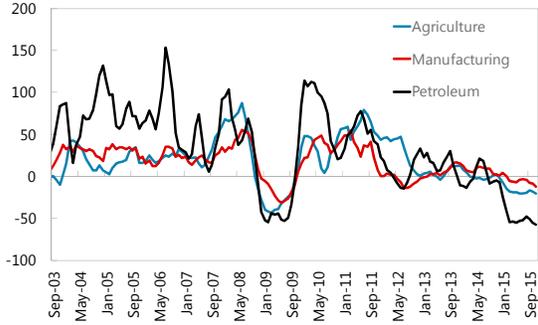
**Demand Components of GDP**  
(In percent, yoy)



Sources: CEIC; and IMF staff calculations.

Weak export performance has been primarily driven by commodities (particularly processed fuels)...

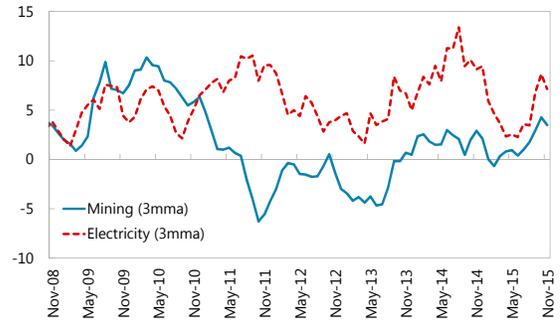
**Exports**  
(yoy percent change, based on 3mma of value of exports in US\$)



Sources: Haver Analytics; and IMF staff calculations.

...with growth in electricity production due to gradual reduction in supply-side bottlenecks.

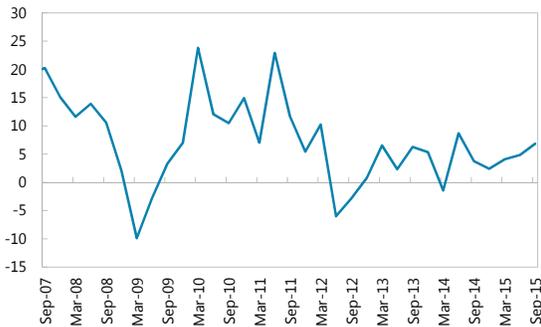
**Production: Mining & Electricity**  
(Percent change, yoy)



Sources: CEIC; and IMF staff calculations.

There is an incipient recovery in investment...

**Gross Fixed Capital Formation, Real**  
(yoy percent change)

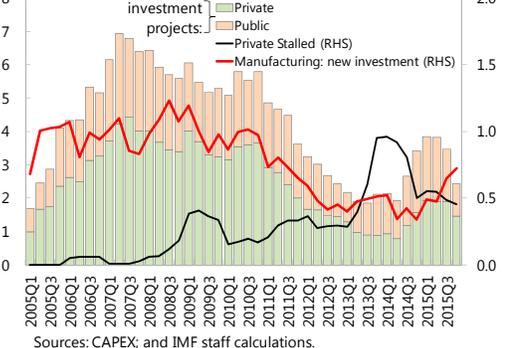


Source: Haver Analytics.

...with more new projects gradually coming on stream.

**New Investment Projects**

(In trillion Rupees per quarter, 4-quarter moving average)



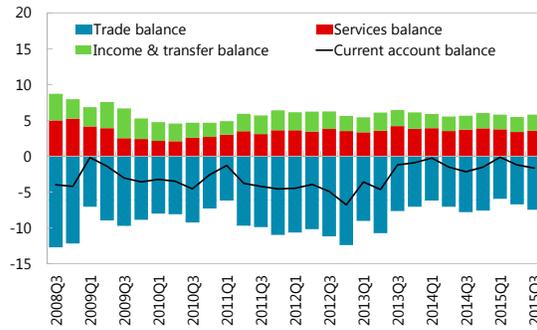
Sources: CAPEX; and IMF staff calculations.

**Figure 2. India: External Vulnerabilities**

*India's external position remains sustainable.*

*The current account deficit has remained small...*

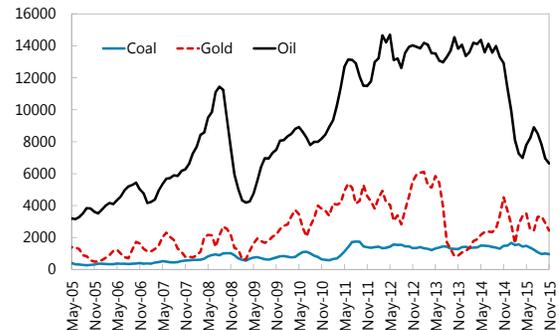
**Current Account Balance**  
(In percent of GDP)



Sources: CEIC; and IMF staff calculations.

*...helped by lower commodity-import prices.*

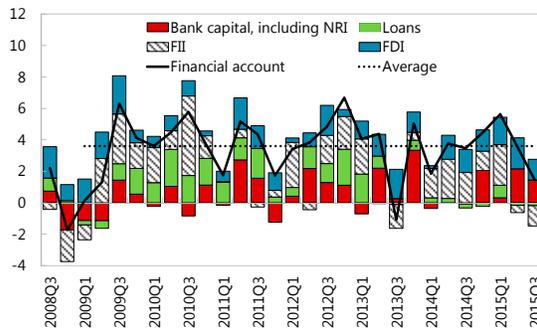
**Imports: Principle Commodities**  
(In millions of US Dollars, 3mma)



Sources: CEIC; and IMF staff calculations.

*Financing of the deficit is shifting from portfolio investment to FDI.*

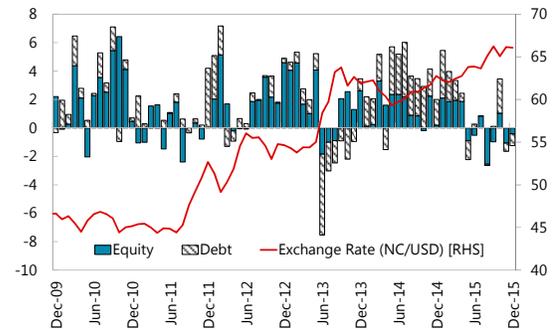
**Financial Account**  
(In percent of GDP)



Sources: CEIC; and IMF staff calculations.

*Recently, portfolio investment flows have reversed.*

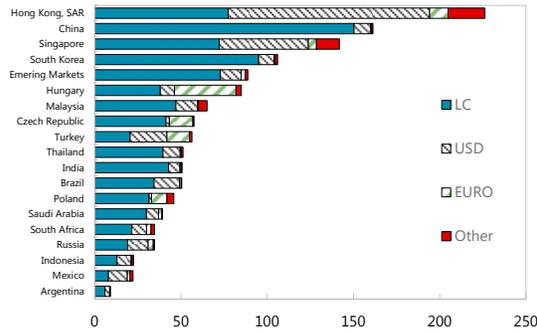
**FII Flows - Equity and Debt**  
(In billions of USD)



Source: CEIC.

*Foreign exchange (FX) exposures of corporates are limited.*

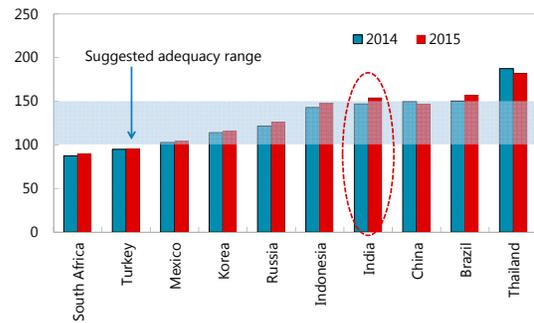
**Non-Financial Corporate Debt, 2015Q1**  
(In percent of GDP)



Sources: BIS; IIF.

*International reserves are adequate.*

**Estimated Reserve Adequacy**  
(Official reserves as a percent of IMF country-specific metric)



Sources: IMF, International Financial Statistics; and IMF staff calculations.

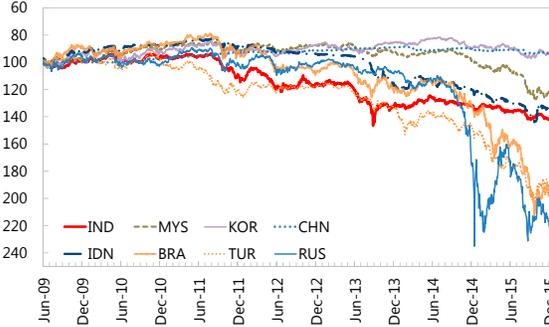
### Figure 3. India: Financial Markets

Indian financial markets were buoyant over the last year.

Indian rupee has remained relatively stable over the past two years, unlike some other emerging market currencies.

#### Exchange Rate

(Index, June 1, 2009=100, NC/US\$)

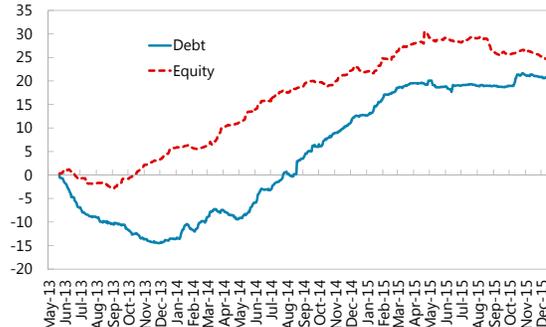


Sources: Bloomberg; and IMF staff calculations.

Portfolio investment inflows slowed in early 2015.

#### Debt and Equity Inflows

(In billions of US Dollars, cumulative since 22 May, 2013)

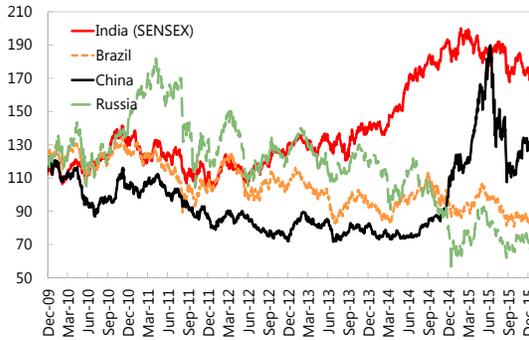


Source: Bloomberg.

Strong stock market gains have tapered off recently...

#### Stock Market Indices

(June 1, 2009 = 100)

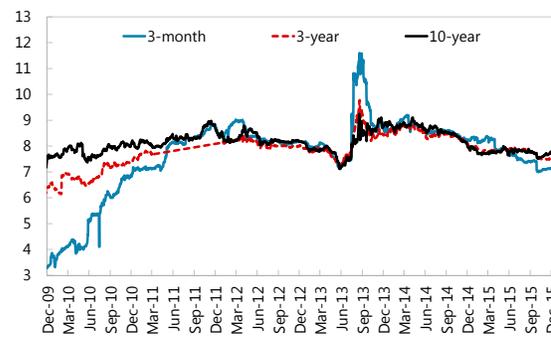


Source: Bloomberg.

...while bond yields have declined across the term structure.

#### Bond Yields

(In percent)

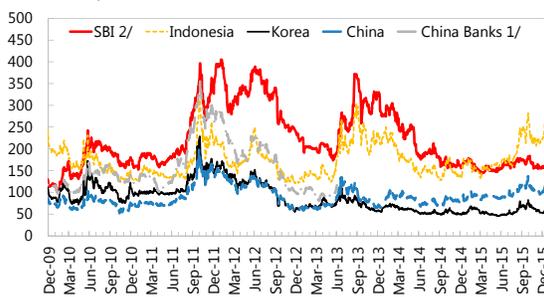


Source: Bloomberg.

Spreads on the proxy CDS for the Indian sovereign have remained low.

#### Credit Default Swap: SBI versus Sovereigns

(Basis points)



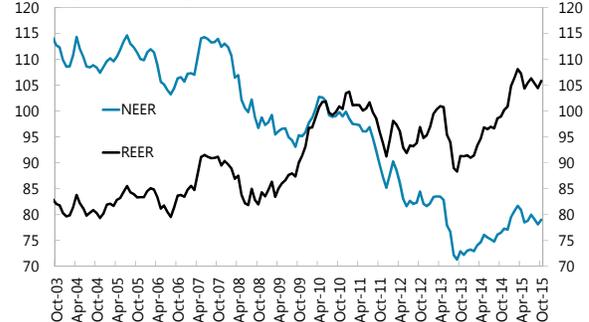
Source: Bloomberg.

1/ Average of Bank of China and China Development Bank.  
2/ SBI is used as proxy for Government of India.

India's real and nominal effective exchange rates have strengthened significantly since late-2013.

#### Nominal and Real Effective Exchange Rates

(Index, 2010=100)



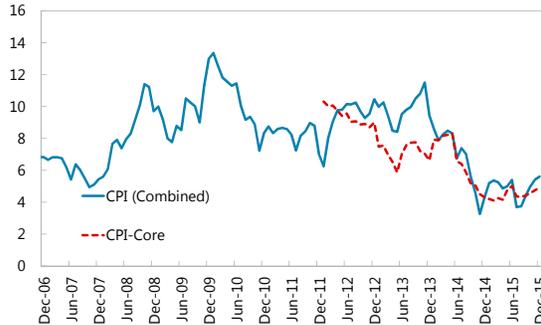
Sources: IMF, Information Notice System; and IMF staff estimates.

### Figure 4. India: Monetary Developments

While inflation has declined markedly, upside risks remain.

CPI inflation has declined sharply...

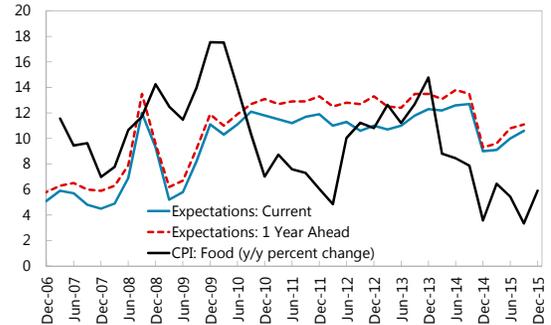
**Inflation**  
(In percent, yoy)



Sources: CEIC; and IMF staff calculations.

...although household inflation expectations remain elevated, there has been some softening in the recent past.

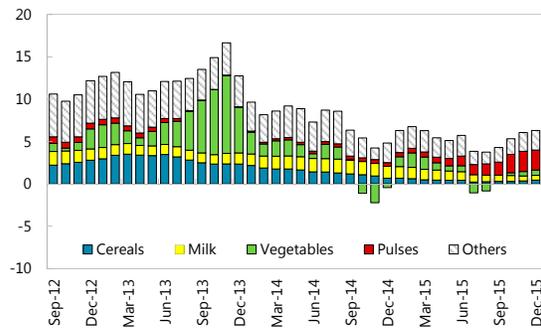
**Household Inflation Expectations and Food Inflation**  
(In percent)



Sources: CEIC; Haver Analytics; and IMF staff calculations.

Pulses have been a key driver of food inflation in recent months.

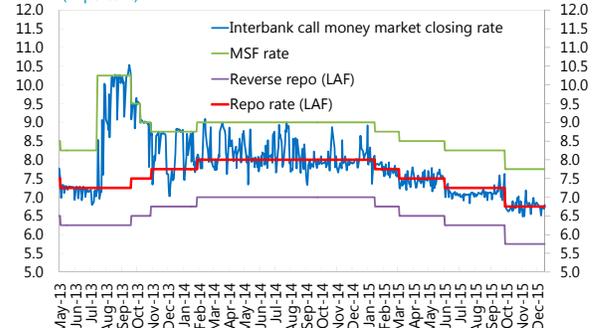
**CPI Food Inflation: Contributions**  
(In percent, yoy)



Sources: CEIC; and IMF staff calculations.

The policy repo rate has been cut by a cumulative 125 basis points in 2015.

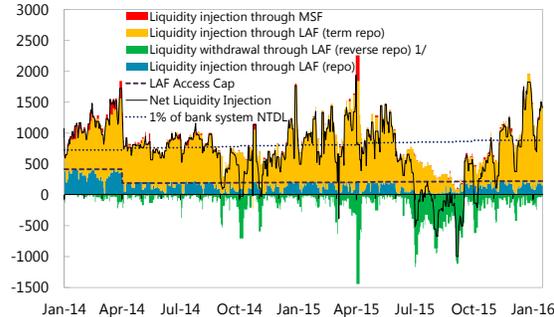
**Interest Rates**  
(In percent)



Sources: Reserve Bank of India; and IMF staff calculations.

Liquidity conditions have tightened in the past few months.

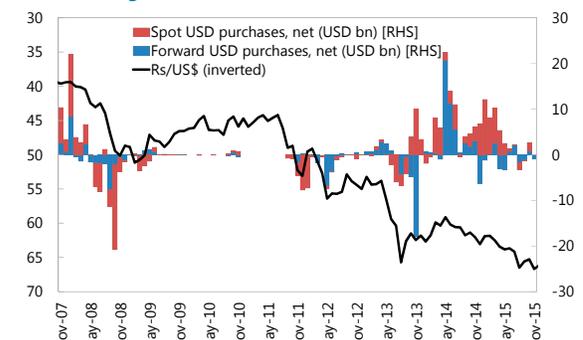
**Daily Liquidity Operations**  
(In billions of Rupees)



Source: Reserve Bank of India.  
1/ Overnight and term.

Since late-2013 international reserve buffers have been rebuilt, with forward FX liabilities now also fully covered.

**Exchange Rate and Intervention**



Sources: CEIC; Bloomberg; and IMF staff calculations

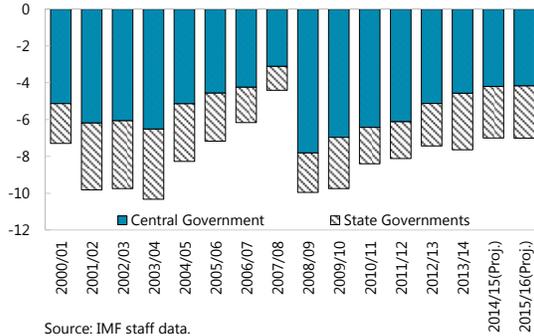
**Figure 5. India: Fiscal Developments**

Although fiscal consolidation has stalled, the Indian Budget's greater emphasis on increased public investment is welcome.

The general government deficit has been slowly declining, but remains high...

**Government Balance**

(In percent of GDP) 1/

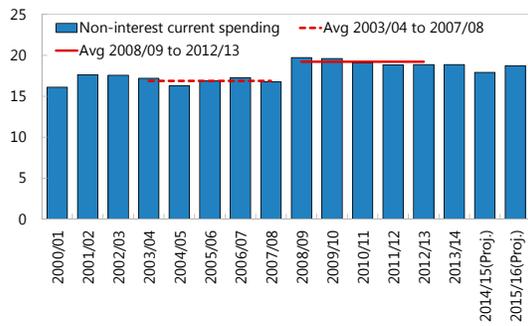


Source: IMF staff data.  
1/ Includes subsidy-related bond issuance.

Current spending has fallen, but remains above the pre-crisis average...

**General Government Non-interest Current Spending**

(In percent of GDP)

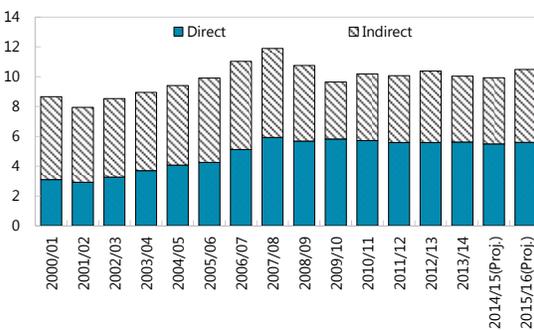


Source: IMF staff data.

Revenue is projected to pick up modestly, mostly due to robust indirect tax receipts...

**Central Government Revenue**

(In percent of GDP)

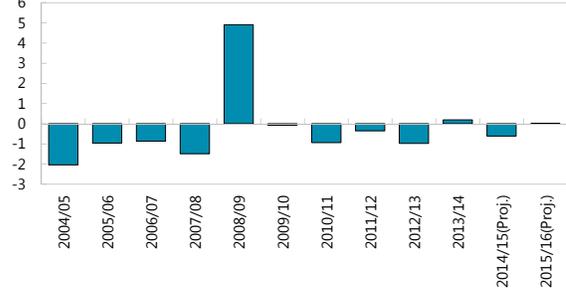


Source: IMF staff data.

... while the fiscal impulse is estimated to be slightly positive this year.

**General Government Fiscal Impulse 1/**

(In percent of GDP)

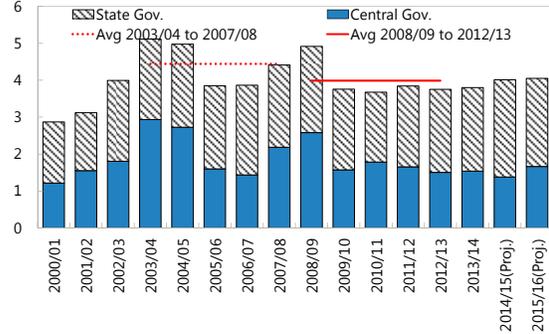


Source: IMF staff calculations.  
1/ Defined as difference between current and previous year budget deficits, using business cycle-adjusted revenues.

...while the central government budget targets higher capital outlays.

**Capital Spending**

(In percent of GDP)

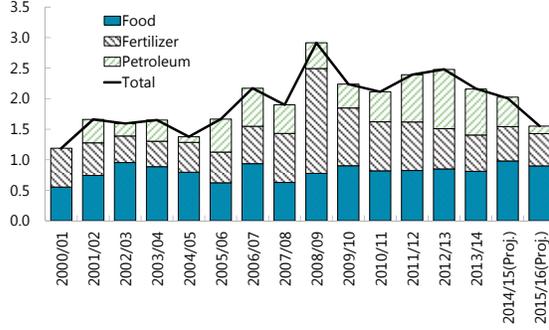


Source: IMF staff data.

...while energy subsidies have fallen significantly following the deregulation of gasoline and diesel prices and other reforms.

**Government Subsidies**

(In percent of GDP)



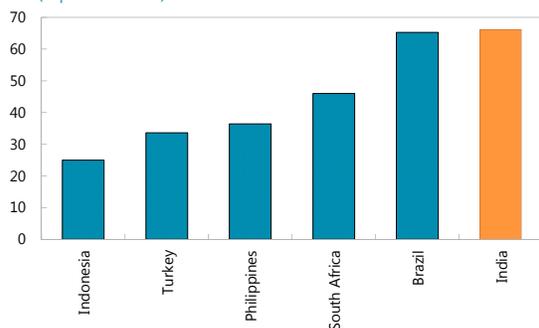
Source: IMF staff data.

### Figure 6. India: Fiscal Vulnerability Indicators

While India's public debt is large compared to emerging market (EM) peers, the debt profile is favorable.

India's public debt is relatively large in comparison with other major emerging market economies...

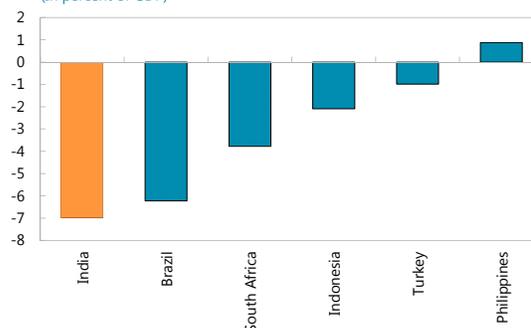
**General government gross public debt, 2014**  
(In percent of GDP)



Source: IMF, World Economic Outlook.

...as is the general government fiscal deficit.

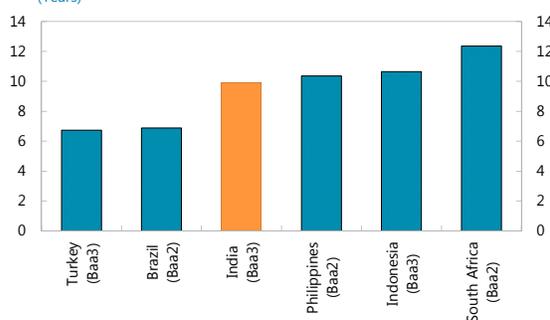
**General government fiscal balance, 2014**  
(In percent of GDP)



Source: IMF, World Economic Outlook.

However, debt roll-over risks are mitigated by the long average maturity of Indian debt,...

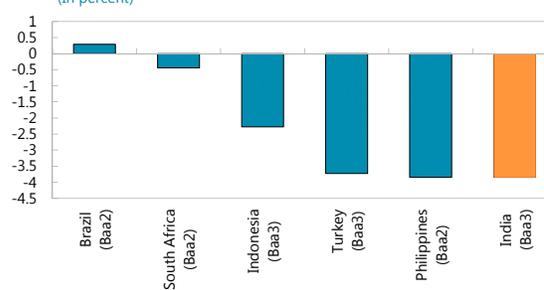
**Average government debt maturity 1/**  
(Years)



Source: Bloomberg.  
1/ As of November 3, 2015.

...and India's automatic debt dynamics are favorable.

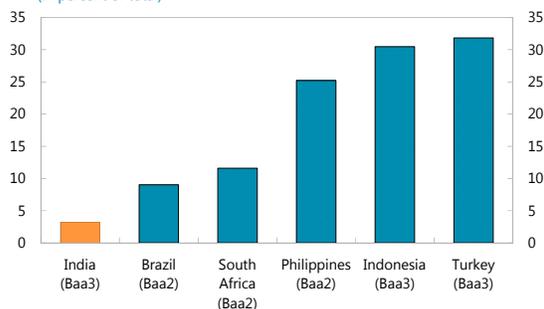
**Projected interest-growth differential, 2015-20 1/**  
(In percent)



Sources: IMF, World Economic Outlook; Bloomberg.  
1/ Calculated as the weighted average coupon rate on government debt less the average nominal GDP growth forecast over the next five years.

Currency risks affecting Indian public debt are minimal...

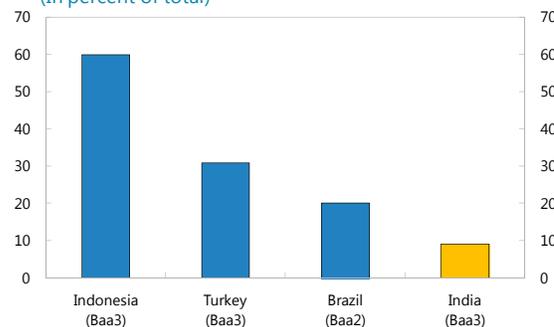
**Government Debt in Foreign Currency 1/**  
(In percent of total)



Source: Bloomberg.  
1/ As of November 3, 2015

...and exposure to non-resident investors is limited.

**Government Debt held by Non-Residents, 2013**  
(In percent of total)



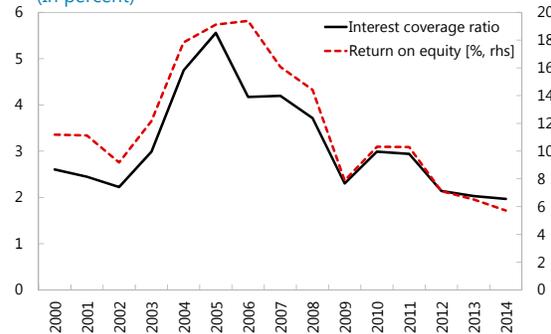
Source: Moody's and IMF staff estimates.

**Figure 7. India: Corporate and Banking Sectors**

*The corporate-banking nexus continues to play a critical role in domestic financial stability. Financial stress in the corporate sector remains high, leading to a deterioration in bank asset quality.*

Corporate sector vulnerabilities have persisted...

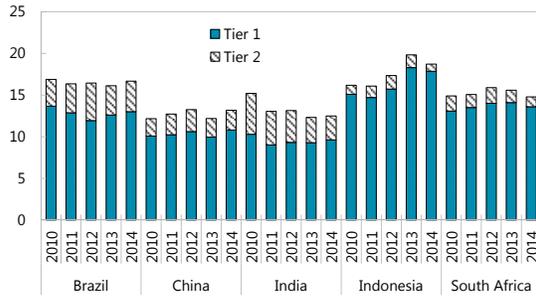
**Corporate Debt Repayment Capacity and Profitability**  
(In percent)



Source: IMF, Corporate Vulnerability Utility.

Banks' capital positions are broadly unchanged from the previous year, but are weaker relative to other EMs...

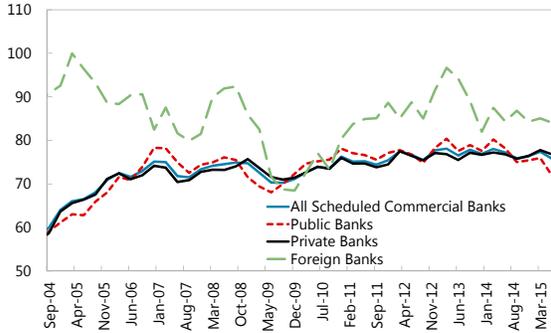
**Capital Adequacy Ratios 1/**  
(In percent of risk-weighted assets)



Source: IMF, Financial Soundness Indicators.  
1/ 2010 data for India are as of Q3 2010.

Altogether, PSBs' loan-to-deposit ratio has contracted...

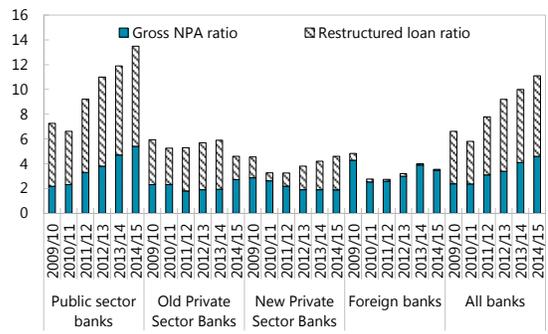
**Banks' Loan to Deposit Ratio**  
(In percent)



Sources: CEIC; and IMF staff calculations.

...leading to a further increase in banks' stressed loans (NPAs and restructured loans), in particular for public sector banks (PSBs).

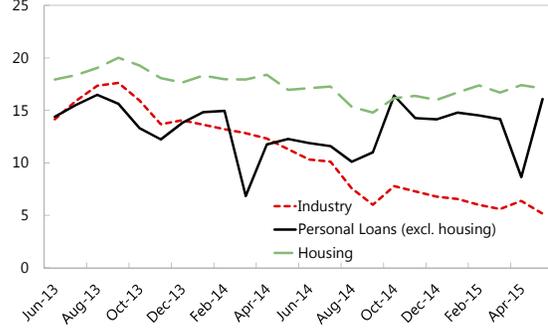
**Banks' Nonperforming and Restructured Assets**  
(In percent of outstanding advances)



Source: IMF, Financial Soundness Indicators.

...and credit to the corporate sector, especially to industry, has grown at a far slower pace than to other sectors.

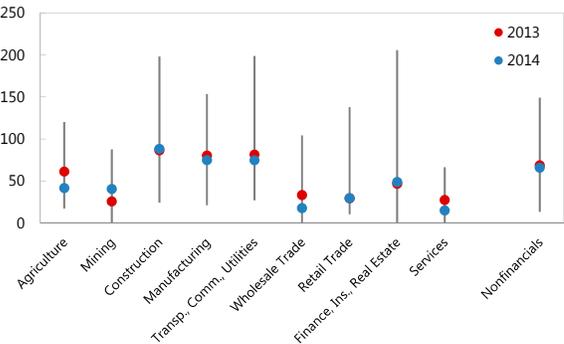
**Growth of Bank Credit, by Sector**  
(In percent, yoy)



Sources: RBI; and IMF staff calculations.

...and corporate leverage has edged down, with the exception of the mining sector.

**Corporate Leverage Ratios, by Sector**  
(Debt to Equity Ratio - Median, 25th and 75th percentiles)



Sources: IMF, Corporate Vulnerability Utility; and IMF staff calculations.

Table 1. India: Millennium Development Goals, 1990–2014 1/

	1990	1991	1993	1995	2001	2004	2006	2009	2011	2012	2013	2014	Status of Progress
<b>Goal 1: Eradicate extreme poverty and hunger 2/</b>													
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	...	...	46.06	...	...	38.4	...	31.43	21.25	...	...	...	Poverty: Achieved.
Poverty headcount ratio at national poverty lines (% of population)	...	...	45.3	...	...	37.2	...	29.8	21.9	...	...	...	
Poverty gap at \$1.90 a day (2011 PPP) (%)	...	...	12.3	...	...	9.26	...	7.02	4.27	...	...	...	Hunger: Off-track.
Income share held by lowest 20%	...	...	9.09	...	...	8.63	...	8.54	8.2	...	...	...	
Prevalence of underweight, weight for age (% of children under 5)	...	...	...	...	...	...	...	43.5	...	...	...	...	
Prevalence of undernourishment (% of population)	...	23.8	22.4	21.6	17.6	21.1	20.6	16.3	15.4	15.3	15.2	...	
<b>Goal 2: Achieve universal primary education 3/</b>													
School enrollment, primary (% net)	78.2	...	...	...	81.2	...	...	93.9	93.3	93.1	...	...	Moderately on-track.
Primary completion rate, total (% of relevant age group)	...	...	...	73.9	73.7	...	...	99.6	96.5	...	...	...	
Persistence to grade 5, total (% of cohort)	...	...	...	57.3	61.4	...	...	...	...	...	...	...	
Literacy rate, youth total (% of people ages 15-24)	...	61.9	...	...	76.4	...	81.1	...	86.1	...	...	...	
<b>Goal 3: Promote gender equality 4/</b>													
School enrollment, primary and secondary (gross), gender parity index (GPI)	...	...	0.7	0.7	0.8	...	...	1.0	1.0	1.0	...	...	On-track.
Literacy rate, youth (ages 15-24), gender parity index (GPI)	...	0.7	...	...	0.8	...	0.8	...	0.9	...	...	...	
Share of women in wage employment in the nonagricultural sector (% of total nonagricultural employment)	12.7	13.0	13.7	14.4	16.8	17.9	...	19.1	...	...	...	...	
Proportion of seats held by women in national parliaments (%)	5.0	...	...	...	8.8	8.3	8.3	10.8	11.0	11.0	11.0	11.4	
<b>Goal 4: Reduce child mortality 5/</b>													
Mortality rate, under-5 (per 1,000)	125.8	122.2	115.4	108.7	87.7	77.7	71.5	62.7	57.2	54.5	52.1	49.8	Moderately on-track due to the sharp decline in recent years.
Mortality rate, infant (per 1,000 live births)	88.3	86.1	81.7	77.5	64.2	57.8	53.9	48.2	44.4	42.6	40.9	39.3	
Immunization, measles (% of children ages 12-23 months)	56.0	43.0	59.0	72.0	57.0	64.0	69.0	78.0	84.0	83.0	83.0	83.0	
<b>Goal 5: Improve maternal health 6/</b>													
Maternal mortality ratio (modeled estimate, per 100,000 live births)	560.0	...	...	460.0	...	...	...	...	...	...	190.0	...	Off-track.
Births attended by skilled health staff (% of total)	...	...	34.2	...	...	...	46.6	...	...	...	...	...	
<b>Goal 6: Combat HIV/AIDS, malaria, and other diseases 7/</b>													
Prevalence of HIV, female (% ages 15-24)	...	...	...	...	...	...	...	...	...	...	...	...	Moderately on-track.
Prevalence of HIV, total (% of population ages 15-49)	...	...	...	...	...	...	...	...	...	...	...	...	
Condom use, population ages 15-24, female (% of females ages 15-24)	...	...	...	...	...	...	5.6	...	...	...	...	...	
Condom use, population ages 15-24, male (% of males ages 15-24)	...	...	...	...	...	...	14.6	...	...	...	...	...	
Incidence of tuberculosis (per 100,000 people)	217.0	216.0	216.0	216.0	216.0	212.0	205.0	191.0	180.0	176.0	171.0	...	
Tuberculosis case detection rate (% of all forms)	81.0	81.0	54.0	59.0	47.0	48.0	52.0	60.0	60.0	59.0	58.0	...	
<b>Goal 7: Ensure environmental sustainability 8/</b>													
CO2 emissions (metric tons per capita)	0.79	0.83	0.88	0.96	1.12	1.20	1.29	1.62	1.66	...	...	...	On-track for water; off-track for sanitation; unclear for rest.
Terrestrial protected areas (% of total land area)	4.75	4.72	4.89	4.93	5.03	5.03	5.03	5.03	...	5.21	...	...	
GDP per unit of energy use (constant 2011 PPP \$ per kg of oil equivalent)	4.88	4.74	4.92	5.15	6.00	6.50	7.05	7.14	7.77	7.79	...	...	
Improved water source (% of population with access)	70.5	71.5	73.6	75.6	81.5	84.5	86.5	89.4	91.3	92.2	93.1	94.1	
Improved sanitation facilities (% of population with access)	16.8	16.9	18.8	20.8	26.6	29.6	31.6	34.6	36.5	37.5	38.5	39.5	
Percentage of slum households to urban households (slum reported towns)	...	...	...	...	...	...	...	...	22.17	...	...	...	
<b>Goal 8: Develop a global partnership for development 9/</b>													
Debt service (public and publicly guaranteed debt and IMF only, % of exports of goods, services and primary income)	29.08	28.59	26.66	31.73	12.79	7.71	3.04	2.43	1.77	1.75	3.05	...	On-track for 'make available the benefits of new technologies, especially ICT'.
Fixed telephone subscriptions (per 100 people)	0.58	0.66	0.87	1.25	3.64	4.16	3.57	3.11	2.69	2.50	2.32	2.13	
Mobile cellular subscriptions (per 100 people)	0.00	0.00	0.00	0.01	0.62	4.70	14.52	44.12	73.20	69.92	70.78	74.48	
Internet users (per 100 people)	0.00	...	0.00	0.03	0.66	1.98	2.81	5.12	10.07	12.58	15.10	18.00	
<b>General indicators</b>													
Fertility rate, total (births per woman)	3.88	3.79	3.63	3.47	3.08	2.88	2.75	2.60	2.53	2.51	2.48	...	
Life expectancy at birth, total (years)	58.53	58.82	59.47	60.19	62.56	63.72	64.46	65.41	65.96	66.21	66.46	...	
Literacy rate, adult total (% of people ages 15 and above)	...	48.22	...	...	61.01	...	62.75	...	69.30	...	...	...	
GNI per capita, Atlas method (current US\$)	390	350	330	380	460	620	810	1150	1410	1500	1530	1570	

Source: World Bank, *World Development Indicators 2014* (October 2015 version) and Indian Ministry of Statistics and Programme Implementation.

1/ Years shown in table are those with data available for the most indicators.

2/ Halve, between 1990 and 2015, the proportion of people whose income is less than the poverty line. Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

3/ Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

4/ Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels of education no later than 2015.

5/ Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

6/ Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

7/ Have halted by 2015, and begun to reverse, the spread of HIV/AIDS. Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.

8/ Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water. By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.

9/ Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Address the Special Needs of the Least Developed Countries. Address the Special Needs of landlocked countries and small island developing states. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth. In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.

**Table 2. India: Selected Social and Economic Indicators, 2011/12–2016/17 1/**

<b>I. Social Indicators</b>						
<b>GDP (2014/15)</b>						
Nominal GDP (in billions of U.S. dollars):	2,051					
GDP per capita (U.S. dollars):	1,584					
<b>Population characteristics (2014/15)</b>						
Total (in billions):	1.30					
Urban population (percent of total):	32					
Life expectancy at birth (years):	66.0					
<b>Poverty (percent of population)</b>						
Headcount ratio at \$1.90 a day (2011):	21.3					
Undernourished (2011):	15.4					
<b>Income distribution (2011, WDI)</b>						
Richest 10 percent of households:	30.0					
Poorest 20 percent of households:	8.2					
Gini index (2011):	33.6					
<b>II. Economic Indicators</b>						
	2011/12	2012/13	2013/14	2014/15	2015/16 Proj.	2016/17 Proj.
<b>Growth (in percent)</b>						
Real GDP (at market prices)	6.6	5.1	6.9	7.3	7.3	7.5
Industrial production	2.9	1.1	-0.1	2.8	...	...
<b>Prices (percent change, period average)</b>						
Consumer prices - Combined	9.5	9.9	9.4	5.9	5.0	5.3
<b>Saving and investment (percent of GDP)</b>						
Gross saving 2/	34.7	31.5	30.8	30.2	29.8	29.6
Gross investment 2/	38.9	36.3	32.5	31.6	31.1	31.1
<b>Fiscal position (percent of GDP) 3/</b>						
Central government deficit	-6.1	-5.1	-4.6	-4.2	-4.2	-4.0
General government deficit	-8.1	-7.4	-7.6	-7.0	-7.0	-7.0
General government debt 4/	68.1	67.5	65.8	66.1	66.3	65.7
Structural balance (% of potential GDP)	-8.4	-7.3	-7.5	-6.9	-6.9	-6.9
Structural primary balance (% of potential GDP)	-3.9	-2.8	-2.8	-2.2	-2.3	-2.1
<b>Money and credit (y/y percent change, end-period)</b>						
Broad money	13.5	13.6	13.4	10.8	11.1	13.6
Credit to private sector	17.8	13.5	13.7	9.2	11.1	13.7
<b>Financial indicators (percent, end-period)</b>						
91-day treasury bill yield (end-period) 5/	9.0	8.2	8.9	8.3	7.2	...
10-year government bond yield (end-period) 5/	8.6	8.0	8.9	7.8	7.7	...
Stock market (y/y percent change, end-period) 6/	-10.5	8.4	18.7	24.9	-9.1	...
<b>External trade 7/</b>						
Merchandise exports (in billions of U.S. dollars)	309.8	306.6	318.6	316.5	277.9	280.1
(Annual percent change)	20.9	-1.0	3.9	-0.6	-12.2	0.8
Merchandise imports (in billions of U.S. dollars)	499.5	502.2	466.2	461.5	429.8	449.3
(Annual percent change)	30.3	0.5	-7.2	-1.0	-6.9	4.5
Terms of trade (G&S, annual percent change)	-6.1	-0.3	2.3	3.5	7.0	1.8
<b>Balance of payments (in billions of U.S. dollars)</b>						
Current account balance	-78.2	-88.2	-32.4	-26.7	-27.7	-34.8
(In percent of GDP)	-4.2	-4.8	-1.7	-1.3	-1.3	-1.5
Foreign direct investment, net	22.1	19.8	21.6	31.3	34.2	37.4
Portfolio investment, net (equity and debt)	17.2	26.9	4.8	42.2	-6.8	12.4
Overall balance	-12.8	3.8	15.5	61.4	22.7	40.8
<b>External indicators</b>						
Gross reserves (in billions of U.S. dollars, end-period)	294.4	292.0	304.2	341.6	364.3	405.1
(In months of imports) 8/	6.1	6.4	6.7	7.9	8.0	7.9
External debt (in billions of U.S. dollars, end-period)	360.8	409.4	446.3	475.2	513.3	550.4
External debt (percent of GDP, end-period)	19.6	22.3	23.8	23.2	24.0	23.6
Of which: Short-term debt 9/	7.5	9.0	9.8	9.0	9.6	9.7
Ratio of gross reserves to short-term debt (end-period) 8/	2.1	1.8	1.7	1.9	1.8	1.8
Debt service ratio 10/	6.0	5.9	5.9	7.5	7.1	7.8
Real effective exchange rate (percent change) 11/						
(based on annual average level)	-3.4	-2.3	-2.4	7.3	6.0	...
Exchange rate (rupee/U.S. dollar, end-period) 5/	50.3	54.4	61.0	62.6	66.8	...
<b>Memorandum item (in percent of GDP)</b>						
Fiscal balance under authorities' definition	-5.8	-4.9	-4.3	-4.0	-3.9	-3.8

Sources: Data provided by the Indian authorities; CEIC Data Company Ltd; Bloomberg L.P.; World Bank, *World Development Indicators*; and IMF staff estimates and projections.

1/ Data are for April–March fiscal years.

2/ Differs from official data, calculated with gross investment and current account. Gross investment includes errors and omissions.

3/ Divestment and license auction proceeds treated as below-the-line financing.

4/ Includes combined domestic liabilities of the center and the states, and external debt at year-end exchange rates.

5/ For 2015/16, as of 6 January 2016.

6/ For 2015/16, year-to-date as of 6 January 2016.

7/ On balance of payments basis.

8/ Imports of goods and services projected over the following 12 months.

9/ Short-term debt on residual maturity basis, including estimated short-term NRI deposits on residual maturity basis.

10/ In percent of current account receipts, excluding grants.

11/ For 2015/16, year-to-date as of November 2015.

**Table 3. India: Balance of Payments, 2011/12–2016/17 1/**

(In billions of U.S. dollars)

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
				Prel.	Proj.	Proj.
	(In billions of U.S. dollars)					
Current account balance	-78.2	-88.2	-32.4	-26.7	-27.7	-34.8
Merchandise trade balance	-189.8	-195.7	-147.6	-144.9	-151.8	-169.2
Merchandise exports	309.8	306.6	318.6	316.5	277.9	280.1
Merchandise imports	499.5	502.2	466.2	461.5	429.8	449.3
Oil	155.0	164.0	164.8	138.3	...	...
Non-oil	334.4	326.7	285.4	309.7	...	...
Non-factor services balance	64.1	64.9	73.0	76.6	83.6	93.2
Receipts	142.3	145.7	151.5	157.7	172.1	190.1
<i>Of which</i> : software services	62.2	65.9	69.4	73.1	...	...
Payments	78.2	80.8	78.5	81.1	88.5	96.9
Income, net	-16.0	-21.5	-23.0	-24.1	-27.0	-30.7
Transfers, net	63.5	64.0	65.3	65.7	67.5	71.9
Capital and Financial account balance	67.8	89.3	48.8	89.3	50.4	75.6
Direct investment, net	22.1	19.8	21.6	31.3	34.2	37.4
<i>Of which</i> : direct investment in India	33.0	27.0	30.8	35.3	49.2	56.1
Portfolio investment, net	17.2	26.9	4.8	42.2	-6.8	12.4
Government borrowing, net	2.3	1.0	1.0	1.7	0.2	0.8
Commercial borrowing, net	10.3	8.5	11.8	1.6	7.9	11.8
Short-term credit, net	6.7	21.7	-5.0	-0.1	2.1	2.2
NRI deposits, net	11.9	14.8	38.9	14.1	12.8	11.1
Other capital, net 2/	-2.7	-3.4	-24.3	-1.4	-0.1	-0.1
Errors and omissions	-2.4	2.7	-0.9	-1.1	0.0	0.0
Overall balance	-12.8	3.8	15.5	61.4	22.7	40.8
Valuation changes 3/	2.4	-6.2	-3.3	-24.0	0.0	0.0
Increase in gross reserve stock (-) (including valuation changes)	10.4	2.4	-12.2	-37.4	-22.7	-40.8
Memorandum items:						
Foreign exchange reserves	294.4	292.0	304.2	341.6	364.3	405.1
In months of next year's imports (goods and services)	6.1	6.4	6.7	7.9	8.0	7.9
Current account balance (percent of GDP)	-4.2	-4.7	-1.7	-1.3	-1.3	-1.5
Merchandise trade balance (percent of GDP)	-10.1	-10.5	-7.9	-7.1	-7.1	-7.2
Direct investment in India (percent of GDP)	1.8	1.5	1.6	1.7	2.3	2.4
Overall balance (percent of GDP)	-0.7	0.2	0.8	3.0	1.1	1.7
Gold Imports (billions U.S. dollars)	56.5	53.8	28.7	34.4	37.0	...
GDP in USD	1,880.1	1,858.7	1,876.8	2,051.2	2,137.4	2,336.6

Sources: CEIC Data Company Ltd; and IMF staff estimates and projections.

1/ Data are for April-March fiscal years.

2/ Net other capital is sum of net banking capital (RBI format), rupee debt, and net other capital (RBI format) less net NRI deposits.

3/ Calculated as difference between the stock of reserves and the overall balance of BOP.

**Table 4. India: Reserve Money and Monetary Survey, 2011/12–2015/16 1/**

	2011/12	2012/13	2013/14	2014/15	2015/16	
					June	November
<b>Reserve money</b>	(In billions of rupees, end-period)					
Reserve money	14,263	15,149	17,327	19,285	18,949	19,814
Net domestic assets of RBI	-459	-432	-698	-1,988	-3,530	-3,476
Claims on government (net)	5,357	5,906	6,987	3,645	4,444	4,498
Center	5,344	5,905	6,976	3,610	4,435	4,496
States	13	1	11	35	8	2
Claims on commercial sector	40	31	88	148	63	71
Claims on banks	48	404	486	1,877	458	921
Other items (net)	-5,904	-6,773	-8,259	-7,658	-8,495	-8,966
Net foreign assets of RBI	14,722	15,581	18,025	21,273	22,479	23,291
	(Contribution to twelve-month reserve money growth)					
Reserve money	3.6	6.2	14.4	11.3	10.2	13.2
Net domestic assets of RBI	-6.8	0.2	-1.8	-7.4	-11.7	-9.0
Claims on government (net)	10.1	3.8	7.1	-19.3	-12.8	-6.1
Net foreign assets of RBI	10.4	6.0	16.1	18.7	22.0	22.3
<b>Monetary survey</b>	(In billions of rupees, end-period)					
Broad money (M3)	73,848	83,898	95,174	105,456	108,106	112,604
Currency with public	10,237	11,411	12,458	13,863	14,309	14,812
Deposits	63,583	72,455	82,696	91,446	93,707	97,640
Non-bank deposits at RBI	28	32	20	146	90	152
Net domestic assets	58,411	67,532	75,934	82,949	84,560	88,073
Domestic credit	73,661	83,769	94,902	100,457	103,428	106,939
Net credit to government	23,737	27,090	30,449	30,062	32,045	33,102
<i>Of which:</i> RBI	5,357	5,906	6,987	3,645	4,444	4,498
Credit to commercial sector	49,923	56,679	64,453	70,396	71,382	73,837
<i>Of which:</i> commercial bank lending	46,119	52,605	59,941	65,364	66,306	68,679
Nonfood	45,305	51,640	58,956	64,420	65,192	67,590
Other items (net)	-15,250	-16,237	-18,967	-17,508	-18,868	-18,866
Net foreign assets	15,438	16,367	19,239	22,506	23,547	24,531
	(Twelve-month percent change)					
Broad money (M3)	13.5	13.6	13.4	10.8	10.6	10.8
Net domestic assets	14.3	15.6	12.4	9.2	8.3	8.3
Domestic credit	18.4	13.7	13.3	5.9	7.1	8.5
Net credit to government	19.6	14.1	12.4	-1.3	3.8	6.3
Credit to commercial sector	17.8	13.5	13.7	9.2	8.7	9.5
<i>Of which:</i> commercial bank lending	17.0	14.1	13.9	9.0	8.8	9.8
Nonfood	16.8	14.0	14.2	9.3	9.0	9.9
Net foreign assets	10.8	6.0	17.6	17.0	19.6	20.5

Sources: CEIC Data Company Ltd.; IMF International Financial Statistics; and Fund staff calculations.

1/ Data are for April–March fiscal years.

**Table 5. Central Government Operations, 2011/12–2016/17 1/**

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
				Est.	Proj.	Proj.
	(In percent of GDP)					
<b>Revenue</b>	<b>8.9</b>	<b>9.1</b>	<b>9.2</b>	<b>9.1</b>	<b>8.8</b>	<b>8.8</b>
Taxes	7.2	7.5	7.2	7.2	6.7	6.8
Income tax	5.6	5.6	5.6	5.5	5.6	5.6
Excise tax	1.6	1.8	1.5	1.5	1.8	2.0
Service tax	1.1	1.3	1.4	1.3	1.5	1.6
Customs duties	1.7	1.7	1.5	1.5	1.5	1.5
Other taxes	0.0	0.0	0.0	0.1	0.0	0.0
Less: States' share	2.9	2.9	2.8	2.7	3.8	4.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue 2/	1.7	1.6	2.0	1.8	2.1	2.1
Property income	0.8	0.7	1.0	0.9	1.2	1.1
Sale of goods and services	0.3	0.2	0.2	0.3	0.2	0.2
Miscellaneous and unidentified revenue	0.5	0.6	0.7	0.6	0.7	0.7
<b>Expenditure</b>	<b>15.0</b>	<b>14.2</b>	<b>13.8</b>	<b>13.3</b>	<b>13.0</b>	<b>12.9</b>
<b>Expense 3/</b>	<b>13.3</b>	<b>12.7</b>	<b>12.3</b>	<b>11.9</b>	<b>11.4</b>	<b>11.3</b>
Compensation of employees 4/	1.1	1.1	1.0	1.1	1.0	1.2
Interest	3.1	3.1	3.3	3.2	3.3	3.3
Subsidies 5/	2.4	2.5	2.2	2.0	1.6	1.4
Food	0.8	0.9	0.8	1.0	0.9	0.8
Fertilizer	0.8	0.7	0.6	0.6	0.5	0.5
Petroleum	0.8	1.0	0.8	0.5	0.1	0.1
Grants and other expense 6/	6.8	6.0	5.8	5.6	5.5	5.4
<b>Net acquisition of nonfinancial assets</b>	<b>1.7</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>	<b>1.7</b>	<b>1.7</b>
Gross Operating Balance	-4.5	-3.6	-3.0	-2.8	-2.5	-2.5
<b>Net lending / borrowing (overall balance)</b>	<b>-6.1</b>	<b>-5.1</b>	<b>-4.6</b>	<b>-4.2</b>	<b>-4.2</b>	<b>-4.0</b>
Net financial transactions	-6.1	-5.1	-4.6	-4.2	-4.2	-4.0
Net acquisition of financial assets	-0.2	-0.4	-0.4	-0.3	-0.4	-0.3
Domestic	-0.2	-0.4	-0.4	-0.3	-0.4	-0.3
Currency and deposits	0.0	-0.2	-0.2	-0.1	-0.2	-0.1
Loans	0.0	0.0	0.1	0.1	0.1	-0.1
Share and other equity	-0.2	-0.3	-0.3	-0.2	-0.3	-0.2
Net incurrence of liabilities	5.9	4.7	4.2	3.9	3.8	3.7
Domestic	5.8	4.6	4.1	3.8	3.7	3.6
Debt securities 7/	4.9	4.2	4.0	3.5	3.3	3.6
Other accounts payable	0.9	0.5	0.1	0.3	0.4	0.0
Foreign	0.1	0.1	0.1	0.1	0.1	0.1
Loans	0.1	0.1	0.1	0.1	0.1	0.1
<b>Memorandum items:</b>						
Balance under authorities' definition	-5.8	-4.9	-4.3	-4.0	-3.9	-3.8
Primary balance	-3.0	-2.0	-1.3	-1.0	-0.9	-0.7
Central government debt 8/	52.7	52.1	50.0	49.1	48.3	46.8

Sources: Data provided by the Indian authorities; and Fund staff estimates and projections.

1/ Data for April - March fiscal years

2/ In 2010/11 and subsequent years, auctions for wireless spectrum are classified as sale of nonfinancial assets.

3/ Includes the surcharge on Union duties transferred to the National Calamity Contingency Fund.

4/ Pensions are included under expense not otherwise classified.

5/ Includes subsidy-related bond issuance.

6/ Other expense includes purchases of goods and services.

7/ Debt securities include bonds and short-term bills, as well as loans.

8/ External debt measured at historical exchange rates.

**Table 6. General Government Operations, 2011/12–2016/17 1/**

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
			Est.	Proj.	Proj.	Proj.
	(In percent of GDP)					
<b>Revenue</b>	<b>19.1</b>	<b>19.7</b>	<b>19.8</b>	<b>19.6</b>	<b>20.4</b>	<b>20.6</b>
Taxes	16.4	17.0	16.7	16.6	17.2	17.4
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	2.7	2.7	3.1	3.0	3.2	3.1
<b>Expenditure</b>	<b>27.2</b>	<b>27.2</b>	<b>27.4</b>	<b>26.6</b>	<b>27.4</b>	<b>27.6</b>
Expense	23.4	23.4	23.6	22.6	23.4	23.6
<i>of which: interest</i>	4.5	4.5	4.7	4.7	4.6	4.8
Net acquisition of nonfinancial assets	3.8	3.8	3.8	4.0	4.0	4.0
Gross Operating Balance	-4.3	-3.7	-3.8	-3.0	-3.0	-3.0
<b>Net lending (+)/borrowing (-) (fiscal balance)</b>	<b>-8.1</b>	<b>-7.4</b>	<b>-7.6</b>	<b>-7.0</b>	<b>-7.0</b>	<b>-7.0</b>
Net financial worth, transactions	-8.1	-7.4	-7.6	-7.0	-7.0	-7.0
Net acquisition of financial assets	-0.4	-0.4	-0.5	-0.3	-0.4	-0.3
Domestic	-0.4	-0.4	-0.5	-0.3	-0.4	-0.3
Currency and deposits	-0.1	-0.2	-0.2	-0.1	-0.2	-0.1
Loans	-0.1	0.0	0.0	0.1	0.1	-0.1
Equity and investment fund shares	-0.2	-0.3	-0.3	-0.2	-0.3	-0.2
Net incurrence of liabilities	<b>7.7</b>	<b>7.0</b>	<b>7.2</b>	<b>6.7</b>	<b>6.6</b>	<b>6.7</b>
Domestic	7.6	7.0	7.1	6.6	6.5	6.6
Debt securities	6.5	5.6	5.8	5.4	5.0	5.4
Other accounts payable	1.1	1.3	1.3	1.2	1.5	1.1
Foreign	0.1	0.1	0.1	0.1	0.1	0.1
Loans	0.1	0.1	0.1	0.1	0.1	0.1
<b>Memorandum items:</b>						
Primary balance	-3.6	-2.9	-2.9	-2.3	-2.4	-2.2
Nondefence capital expenditure	3.1	3.0	3.1	3.4	3.4	3.3
State and union territory governments' balance 2/	-2.0	-2.4	-2.2	-2.8	-2.9	-2.9
General government debt 3/	68.1	67.5	65.8	66.1	66.3	65.7

Sources: Data provided by the Indian authorities; state level data from the RBI Study on State Finances; and Fund staff amalgamate and prepare projections.

1/ The consolidated general government comprises the central government (CG) and state governments. Data for April-March fiscal year.

2/ The authorities treat states' divestment proceeds, including land sales, above-the-line as miscellaneous capital receipts. IMF Staff definition treats divestment receipts as a below-the-line financing item.

3/ Includes combined domestic liabilities of CG and states governments, inclusive of MSS bonds, and sovereign external debt at year-end exchange rates.

Table 7. India: Macroeconomic Framework, 2011/12–2020/21 1/

	2011/12	2012/13	2013/14	Prel. 2014/15	Projections					
					2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Growth (percent change)										
Real GDP (at factor cost)	6.9	4.9	6.6	7.2	7.3	7.5	7.5	7.6	7.7	7.7
Non-agricultural sector	7.0	5.0	4.7	7.6	9.2	8.2	8.3	8.4	8.4	8.4
Prices (percent change, period average)										
Consumer prices	8.1	9.9	9.4	5.9	5.0	5.3	5.3	5.5	5.3	5.0
Saving and investment (percent of GDP)										
Gross saving 2/	34.7	31.5	30.8	30.2	29.8	29.6	29.6	30.3	30.8	31.4
Gross investment 3/	38.9	36.3	32.5	31.6	31.1	31.1	31.6	32.5	33.1	33.8
Money and credit (y/y percent change, end-period)										
Broad money	13.5	13.6	13.4	10.8	11.1	13.6	15.4	15.5	15.2	14.7
Credit to private sector	17.8	13.5	13.7	9.5	11.1	13.7	16.6	17.0	17.0	16.3
Fiscal position (percent of GDP)										
Central government balance 4/	-6.1	-5.1	-4.6	-4.2	-4.2	-4.0	-3.9	-3.9	-3.7	-3.6
General government balance 4/	-8.1	-7.4	-7.6	-7.0	-7.0	-7.0	-6.8	-6.6	-6.2	-6.0
General government debt 5/	68.1	67.5	65.8	66.1	66.3	65.7	64.9	64.1	63.0	61.8
External trade (percent change, BOP-basis)										
Merchandise exports (in volume terms)	20.9	-1.0	3.9	5.8	0.8	4.9	6.5	8.5	8.2	8.0
Merchandise imports (in volume terms)	30.3	0.5	-7.2	8.3	13.0	10.0	7.5	7.3	7.3	7.3
Balance of payments (in billions of U.S. dollars)										
Current account balance	-78.2	-88.2	-32.4	-26.7	-27.7	-34.8	-52.1	-62.1	-71.4	-79.6
(in percent of GDP)	-4.2	-4.7	-1.7	-1.3	-1.3	-1.5	-2.0	-2.2	-2.3	-2.4
Foreign direct investment, net	22.1	19.8	21.6	31.3	34.2	37.4	40.7	44.4	48.8	53.6
Portfolio investment, net (equity and debt)	17.2	26.9	4.8	42.2	-6.8	12.4	26.2	28.6	31.4	34.5
Overall balance	-12.8	3.8	15.5	61.4	22.7	40.8	41.1	40.3	42.1	46.3
External indicators										
Gross reserves (in billions of U.S. dollars, end-period)	294.4	292.0	304.2	341.6	364.3	405.1	446.3	486.6	528.7	575.0
(in months of imports) 6/	6.1	6.4	6.7	7.9	8.0	7.9	7.9	7.9	7.9	7.9
External debt (in billions of U.S. dollars, end-period)	360.8	409.4	446.3	475.2	511.2	544.2	584.2	628.5	678.0	733.4
External debt (percent of GDP, end-period)	19.2	22.0	23.8	23.2	23.9	23.3	23.0	22.7	22.2	21.9
Of which : short-term debt 7/	7.4	8.9	9.8	9.0	9.6	9.7	9.9	10.2	10.3	10.4
Ratio of gross reserves to short-term debt (end-period)	2.1	1.8	1.7	1.9	1.8	1.8	1.8	1.7	1.7	1.6
Debt service (percent of current account receipts)	6.0	5.9	5.9	7.5	7.1	7.8	7.9	8.3	8.5	8.3
GDP in billion US\$	1,880.1	1,858.7	1,876.8	2,051.2	2,137.4	2,336.6	2,544.3	2,773.9	3,047.4	3,352.1

Sources: Data provided by the Indian authorities; CEIC Data Company Ltd; and IMF staff estimates and projections.

1/ Data are for April–March fiscal years unless otherwise mentioned.

2/ Differs from official data, calculated with gross investment and current account.

3/ Statistical discrepancy adjusted.

4/ Divestment and license auction proceeds are treated as financing; includes subsidy related bond issuance.

5/ Includes combined domestic liabilities of the center and the states, inclusive of MSS bonds, and sovereign external debt at year-end exchange rates.

6/ Imports of goods and services projected over the following twelve months.

7/ Including short-term debt on contracted maturity basis, all NRI deposits, and medium and long-term debt on residual maturity basis, different from authority's definition.

**Table 8. India: Indicators of External Vulnerability, 2011/12–2015/16 1/**

	2011/12	2012/13	2013/14	2014/15	2015/16	Vintage 2/
<b>Financial indicators</b>						
General government debt (percent of GDP)	68.1	67.5	65.8	66.1	66.3	(Projection)
Broad money (percent change, 12-month basis)	13.5	13.6	13.4	10.9	11.0	(December 2015)
Private sector credit (percent change, 12-month basis)	17.8	13.5	13.7	9.2	11.2	(December 2015)
91 day T-bill yield (percent; end-period)	8.5	8.2	8.7	8.3	7.2	(January 2016)
91 day T-bill yield (real, percent; end-period) 3/	0.3	-1.6	-0.7	2.3	1.6	(December 2015)
<b>External indicators</b>						
Exports (percent change, 12-month basis in US\$) 4/ 5/	20.9	-1.0	3.9	-0.6	-12.2	(Projection)
Export volume (percent change, 12-month basis) 5/	10.5	1.1	4.4	4.4	3.8	(Projection)
Imports (percent change, 12-month basis in US\$) 4/ 5/	30.3	0.5	-7.2	-1.0	-6.9	(Projection)
Import volume (percent change, 12-month basis) 5/	8.8	1.6	-4.0	6.7	11.8	(Projection)
Terms of trade (percent change, 12 month basis) 5/	-6.1	-0.3	2.3	3.5	7.0	(Projection)
Current account balance (percent of GDP)	-4.2	-4.8	-1.7	-1.3	-1.3	(Projection)
Capital and financial account balance (percent of GDP)	4.4	4.7	1.8	1.3	1.3	(Projection)
<i>Of which</i> : Net portfolio investment (debt and equity)	0.9	1.5	0.3	2.1	-0.3	(Projection)
Other investment (loans, trade credits, etc.)	1.5	2.3	1.2	0.8	1.1	(Projection)
Net foreign direct investment	1.2	1.1	1.1	1.5	1.6	(Projection)
Foreign currency reserves (billions of US\$)	294.4	292.0	304.2	341.6	364.3	(Projection)
Official reserves (in months of imports of goods and services)	6.1	6.4	6.7	7.9	8.0	(Projection)
Ratio of foreign currency reserves to broad money (percent)	20.1	18.9	19.5	20.2	20.7	(December 2015)
Total short-term external debt to reserves (percent) 6/	47.2	56.3	60.5	53.8	56.5	(Projection)
Total external debt (percent of GDP)	19.6	22.3	23.8	23.1	24.0	(Projection)
<i>Of which</i> : public sector debt	3.7	3.7	3.7	3.4	3.3	(Projection)
Total external debt to exports of goods and services (percent)	79.8	90.5	94.9	100.0	114.1	(Projection)
External interest payments to exports of goods and services (percent)	1.4	1.7	1.7	1.8	2.3	(Projection)
External amortization payments to exports of goods and services (percent)	13.0	14.7	19.2	20.5	23.0	(Projection)
Exchange rate (per US\$, end-period)	50.3	54.4	61.0	62.4	64.8	(December 2015)
REER (percent change; based on annual average level)	-3.4	-2.3	-2.4	7.3	6.0	(November 2015)
<b>Financial market indicators</b>						
Stock market index (end-period)	17404	18865	22386	27957	26118	(December 2015)
Foreign currency debt rating						
Moody's Investor Services	Baa3	Baa3	Baa3	Baa3	Baa3	(December 2015)
Standard and Poor's	BBB-	BBB-	BBB-	BBB-	BBB-	(December 2015)
Fitch Ratings	BBB-	BBB-	BBB-	BBB-	BBB-	(December 2015)
Spread of benchmark bonds (basis points, end of period) 6/	231.8	611.4	608.5	581.4	549.2	(December 2015)

Sources: Data provided by the Indian authorities; Bloomberg L.P.; CEIC Data Company Ltd.; IMF, *Information Notice System* and staff estimates and projections.

1/ Data for April-March fiscal years.

2/ Latest date available or staff estimate, as noted.

3/ Equals nominal yield minus actual CPI inflation.

4/ Terms of trade including goods and services. Goods volumes are derived from partner country trade price deflators, and services volumes are derived using U.S. CPI from the WEO database.

5/ Including short-term debt on contracted maturity basis, all NRI deposits, and medium and long-term debt on residual maturity basis, different from authorities' definition.

6/ 10-year sovereign bond spread over U.S. bond.

**Table 9. India: Financial Soundness Indicators, 2010/11–2014/15**

	2010/11	2011/12	2012/13	2013/14	2014/15
Measures of financial strength and performance 1/					
Risk-weighted capital adequacy ratio (CAR)	14.2	14.2	13.9	12.9	12.8
Public sector banks	13.1	13.2	12.4	11.4	11.4
Old Private Sector Banks	14.5	14.1	13.7	13.3	13.5
New Private Sector Banks	16.9	16.7	17.5	16.6	16.1
Foreign banks	17.0	16.8	17.9	17.2	16.1
Number of institutions not meeting 9 percent CAR					
Public sector banks	0	0	0	0	0
Old Private Sector Banks	0	0	0	0	0
New Private Sector Banks	0	0	0	1	0
Foreign banks	0	0	0	0	0
Net nonperforming loans (percent of outstanding net loans) 2/					
Public sector banks	0.9	1.2	1.7	2.2	2.5
Old Private Sector Banks	1.0	1.5	2.0	2.7	3.2
New Private Sector Banks	0.5	0.6	0.7	0.9	1.4
New Private Sector Banks	0.6	0.4	0.4	0.6	0.8
Foreign banks	0.7	0.6	1.0	1.1	0.5
Gross nonperforming loans (percent of outstanding loans)					
Public sector banks	2.4	2.9	3.4	4.1	4.6
Old Private Sector Banks	2.3	3.2	3.8	4.7	5.4
New Private Sector Banks	2.0	1.8	1.9	2.0	2.7
New Private Sector Banks	2.6	2.2	1.9	1.9	2.0
Foreign banks	2.5	2.7	3.0	3.9	3.2
Restructured loans (percent of outstanding loans)					
Public sector banks	3.5	4.7	5.8	5.9	6.4
Old Private Sector Banks	4.2	5.7	7.2	7.2	8.1
Old Private Sector Banks	2.9	3.5	4.0	4.0	4.2
New Private Sector Banks	0.6	1.1	1.2	1.8	1.9
Foreign banks	0.2	0.1	0.2	0.1	0.1
Net profit (+)/loss (-) of commercial banks 3/					
Public sector banks	1.0	1.0	1.0	0.7	0.7
Public sector banks	0.8	0.8	0.7	0.4	0.4
Old Private Sector Banks	1.0	1.0	1.1	0.9	0.8
New Private Sector Banks	1.3	1.4	1.5	1.6	1.7
Foreign banks	1.6	1.6	1.9	1.4	1.7
Balance sheet structure of all scheduled banks					
Loan/deposit ratio	75.1	77.5	78.1	78.0	77.4
Investment in government securities/deposit ratio	28.7	29.4	29.7	29.2	29.7
Lending to sensitive sectors (in percent of outstanding advances)					
Real estate	16.7	15.7	15.7	16.3	17.1
Capital market	2.2	1.7	1.5	1.3	1.4
Commodities	0.0	0.0	0.0	0.0	0.0

Source: Reserve Bank of India; Bankscope and IMF staff estimates.

1/ Some loan classification and provisioning standards do not meet international standards.

2/ Gross nonperforming loans less provisions.

3/ In percent of total assets.

## Annex I. Key Policy Actions 2015–16<sup>1</sup>

Monetary Policy	
<b>February 3, 2015</b>	<b>SLR:</b> Statutory liquidity ratio (SLR) of banks reduced by 50 basis points (bps) to 21.5 percent from 22.0 percent.
<b>February 20, 2015</b>	<b>Monetary policy framework agreement:</b> The Ministry of Finance and RBI signed an agreement on a new monetary policy framework that formalized flexible inflation targeting as the prime objective of the central bank with headline CPI inflation as the nominal anchor. The RBI is now mandated to bring inflation down to 6 percent by January 2016 and target an inflation of 4 (+/-2) percent in all subsequent financial years.
<b>September 29, 2015</b>	<b>Repo rate:</b> RBI reduced the policy repo rate by 125 bps from 8.00 percent to 6.75 percent in four phases: (i) 25 bps each on January 15, March 4, June 2, 2015; and 50 bps on September 29—the two cuts in January and March being out-of-policy cycle.
<b>December 18, 2015</b>	<b>Bank lending rates:</b> The RBI issued fresh guidelines on computing interest rates on advances based on the marginal cost of funds to be operational effective April 1, 2016. The guidelines would help improve monetary transmission and ensure transparency in the methodology followed by banks for determining interest rates on advances.
Financial Sector	
<b>June 8, 2015</b>	<b>Strategic debt restructuring scheme:</b> RBI allowed banks to undertake 'strategic debt restructuring (SDR)' by converting loan dues to equity shares to provide banks with enhanced capabilities to initiate change of ownership in accounts which fail to achieve the projected viability milestones.
<b>June 12, 2015</b>	<b>Interest Rate Futures:</b> RBI introduced cash settled Interest Rate Futures (IRF) on 5-7 year and 13-15 year Government Securities.
<b>August 20, 2015</b>	<b>Infrastructure funding:</b> Government approved the framework for setting up of the National Investment and Infrastructure Fund (NIIIF) with an initial corpus of Rs 200 billion with 49 percent government equity contribution to solicit equity participation from strategic domestic and foreign partners. Funds would extend equity support to infrastructure nonbank financial corporations/financial institutions that could leverage the additional equity to scale up debt financing of projects.
<b>August 14, 2015</b>	<b>Governance of public sector banks:</b> Government launched a seven pronged plan— <i>Indradhanush</i> —to revitalize the operations of public sector banks. The seven elements include more flexibility and professionalism in appointments; formation of boards of bureau; enhancing bank capitalization; de-stressing stressed assets, strengthening risk control measures and NPA disclosures; providing more autonomy in decision making; activating a robust framework of accountability; and initiating governance reforms.
<b>August 19, 2015</b>	RBI grants approval to 11 applicants for Payments Bank.

<sup>1</sup> Prepared by Sudip Mohapatra.

<b>September 29, 2015</b>	<b>Masala Bond:</b> RBI issued a new framework allowing corporates to issue rupee denominated plain vanilla (masala) bonds in overseas market with a minimum maturity of 5-years with end-use restrictions. Accordingly, corporates would be allowed to borrow up to \$750 million under automatic route and anything above under the approval route, while overseas investors would be eligible to hedge their exposure in rupee through permitted derivative products of Indian banks.
<b>September 29, 2015</b>	<b>FPI (Foreign Portfolio Investment) limit:</b> RBI raised the limits for FPI investment in Government securities, in rupee terms, to 5 percent of the outstanding stock by March 2018, which is expected to open up room for an additional ₹1,200 billion. FPIs have also been permitted to invest in the State Development Loans (SDLs), up to a limit of 2 percent of the outstanding stock by March 2018, estimated to an additional ₹500 billion by March 2018.
<b>November 30, 2015</b>	<b>External Commercial Borrowings (ECB) Policy:</b> RBI issued a revised framework for ECB policy with a view to making it more liberal, with fewer restrictions on end uses and higher all-in-cost ceiling for long term borrowings and borrowings denominated in rupee.
<b>December 21, 2015</b>	<b>Bankruptcy law:</b> Government introduced the Insolvency and Bankruptcy Code, 2015 in the Lok Sabha (lower house) that proposes to consolidate the insolvency resolution process into a single law by repealing/amending multiple laws currently in operation. The code proposes two separate tribunals to adjudicate complaints of bankruptcy: (i) the National Company Law Tribunal for companies and limited liability partnerships firms; and (ii) the Debt Recovery Tribunal for individuals and partnerships. The process would be managed by licensed insolvency professional hired by Insolvency Professional Agencies that must close each case within a time bound period of 180 days, extendable by another 90 days. The code has provision for an insolvency regulator, the Insolvency and Bankruptcy Board of India, to maintain oversight over the insolvency resolution process.
<b>Fiscal Policy</b>	
<b>February 28, 2015</b>	<b>Fiscal consolidation:</b> Fiscal consolidation road map was delayed by one year; the new road map proposes to achieve central government fiscal deficit of 3 percent of GDP by 2017/18 instead of 2016/17. Accordingly, the fiscal deficit target for 2015/16 has been set at 3.9 percent in place of the earlier 3.6 percent.
<b>February 28, 2015</b>	<b>Corporate tax:</b> Budget 2015/16 proposed cutting basic rate of corporate tax to 25 percent from current 30 percent over the next four years, accompanied by removal of exemptions. The government has published a draft roadmap for public comment.
<b>February 28, 2015</b>	<b>Service tax:</b> Service tax rate increased to 14 percent from 12.36 percent.
<b>February 28, 2015</b>	<b>Fourteenth Finance Commission recommendation:</b> Government accepted the recommendation to raise share of states from central pool of taxes to 42 percent from 32 percent. The government also appointed a sub-group of state chief ministers to rationalize centrally sponsored schemes (CSS) to make commensurate savings at the centre.
<b>February 28, 2015</b>	<b>GAAR (General Anti-Avoidance Rule):</b> GAAR on tax avoidance has been deferred by 2 years; will be effective from April 1, 2017.

<b>May 6, 2015</b>	<b>GST Bill:</b> Constitution Amendment Bill related to GST (goods and services tax) is passed in the Lok Sabha (lower house) and pending approval of Rajya Sabha (upper house). The Bill seeks to replace central and state indirect taxes currently levied on goods and services, with the GST. The government committee chaired by Chief Economic Advisor, Ministry of Finance, has submitted its recommendations on revenue neutral tax rates.
<b>May 9, 2015</b>	<b>Social Security:</b> The government announced three insurance schemes: (i) <i>Pradhan Mantri Suraksha Beema Yojana</i> that offers cover of Rs 0.2 million for accidental death/disability with an annual premium of Rs 12; (ii) <i>Pradhan Mantri Jeevan Jyoti Beema Yojana</i> that offers cover of Rs 0.2 million for death with an annual premium of Rs 330; and <i>Atal Pension Yojana</i> that would provide a fixed minimum pension between Rs 1,000 and Rs 5,000 per month on contribution basis.
<b>May 13, 2015</b>	<b>Fertilizer subsidy:</b> Government approved a new urea policy that aims at maximizing domestic production and increasing the energy efficiency of urea units, though prices would continue to remain at the current level.
<b>September 1, 2015</b>	<b>MAT:</b> The government accepted the recommendations of the High Level Committee to exempt minimum alternate tax (MAT) levied on FIIs.
<b>November 19, 2015</b>	<b>Pay Commission:</b> The Seventh Central Pay Commission report submitted to the government recommended an overall pay increase of 23.55 percent. The proposed date for implementation of these recommendations is January 1, 2016.
<b>November 20, 2015</b>	<b>Discoms debt restructuring:</b> The government announced <i>Ujwal Discom Assurance Yojna</i> (UDAY) scheme to restructure debt owned by state-owned power distribution companies (discoms) and to set in place a framework to improve their operational and financial efficiency through monitoring of target activities related to transmission and distribution losses and periodic tariff revisions. Under the scheme, states, on a voluntary basis, would be required to take over 75 percent of the discoms' debt (as of September 30, 2015) over two years (50 percent in the first year and 25 percent in the second year) and issue bonds in the market, which would not be counted within the states' fiscal deficit limits for the first two years, FY2015/16 and FY2016/17.
<b>Structural Policy</b>	
<b>January 1, 2015</b>	<b>NITI Aayog:</b> Government notified the creation of NITI (National Institution for Transforming India) Aayog, the body to replace the Planning Commission. The new institution will provide strategic and technical advice to central government and states regarding different aspects of policy.
<b>January 2, 2015</b>	<b>Special Economic Zone (SEZ):</b> Government notified SEZs (Amendment) Rules, 2014, which would allow dual use of non-processing areas in SEZs.
<b>March 12, 2015</b>	<b>FDI (Foreign Direct Investment) in insurance:</b> The Insurance Laws (Amendment) Bill, 2015 was passed by Parliament, and raises composite foreign equity investment cap to 49 percent (both FDI and FPI) in insurance companies.
<b>March 20, 2015</b>	<b>Mines and Minerals</b> (Development and Regulation) Amendment Bill, 2015 passed by Parliament. The amended law permits all new mining leases through auction by competitive bidding, including e-auction.
<b>March 20, 2015</b>	<b>Coal Mines Bill, 2015:</b> Parliament passed the bill that enables government to allocate coal mines through auctions as well as allowing private companies to mine coal for sale in the open market.

<b>March 27, 2015</b>	<b>Price Stabilisation Fund (PSF):</b> Government approved PSF as a Central Sector Scheme, with a corpus of Rs.500 crores, to support market interventions for price control of perishable agri-horticultural commodities. PSF would be used to advance interest free loan to State Governments and Central agencies to support their working capital and other expenses on procurement and distribution interventions for such commodities.
<b>June 5, 2015</b>	<b>Financial Redress Agency:</b> Government constituted a task force to set up Financial Redress Agency (FRA) for financial consumers. It will deal with complaints of low values and large numbers, functioning on a pan-India basis.
<b>June 25, 2015</b>	<b>Urban development initiative:</b> Government launched three schemes for urban areas. The schemes are: (i) Smart Cities; (ii) Atal Mission for Rejuvenation and Urban Transformation (AMRUT); and (iii) Housing for All in urban areas.
<b>July 2, 2015</b>	<b>Agriculture markets:</b> Government approved a scheme to integrate 585 regulated wholesale markets in various states in three phases during 2015/16, 2016/17 and 2017/18 on an electronic platform. It would help develop a national e-market by asking states to carry out reforms on a voluntary basis to benefit from the scheme.
<b>July 3, 2015</b>	<b>Black money:</b> Government notified the new black money act passed by the Parliament that provides for a one-time 'compliance window' of three months until September 30 for disclosure of foreign income and assets to escape prosecution with a 60 percent penalty. Those failing to pay, however, would face a more stringent penalty of 120 percent and could also face criminal prosecution with a jail term of up to ten years, beginning April 1, 2016.
<b>July 16, 2015</b>	<b>Composite cap on foreign investment:</b> Government simplified foreign investment by clubbing all forms of foreign investment (FDI and FPI) in Indian companies under a single, composite ceiling. However, banking and defence sectors would continue to operate under separate caps—one for foreign portfolio investment and the other for overall foreign investment.
<b>November 24, 2015</b>	<b>Comprehensive revision of FDI policy:</b> Limits for FIPB approval raised to Rs. 50 billion; FDI up to 100 percent allowed in coffee, rubber, cardamom, palm oil, olive oil tree plantations, broadcasting, and non-scheduled air transport services; 49 percent FDI in defence through automatic route; and limits raised for satellite establishment, construction development projects, duty free shops.
<b>November 25, 2015</b>	<b>Labor reform:</b> President approved amendments to 15 central labor laws passed by the legislative assembly of Madhya Pradesh. Some of the key amendments include easing retrenchment norms, three months' compensation to retrenched workers, raising overtime hours and night shift for women.
<b>January 13, 2016</b>	<b>Agricultural reform:</b> Government approved a modified crop insurance scheme, <i>Pradhan Mantri Fasal Bima Yojana</i> (Prime Minister's Crop Insurance Scheme), to provide a social security net to most farmers across the country. The scheme would require farmers to contribute a much smaller share of the total premium: 2 percent of the sum insured for kharif crop; 1.5 percent for rabi crop; and 5 percent for commercial and horticulture crops. The balance of the premium would be contributed by the central and state governments, to be shared equally.

## Annex II. India: Risk Assessment Matrix

Nature/Source of Threat	Likelihood	Impact	Policies to Minimize Impact
<b>Domestic Risks</b>			
<b>Balance sheet risks</b>	<b>M</b>	<b>H:</b> Continued corporate stress could add to bank non-performing assets, raising capital concerns and reducing lending in the medium term, thereby adversely affecting the investment recovery.	Strengthen oversight of financial and corporate risks. Enhance loss-absorbing buffers in public sector banks. Policies to incentivize genuine corporate restructuring and improvements to insolvency framework.
<b>Setbacks in structural reform process</b>	<b>L</b>	<b>M:</b> Difficulty in passing key bills (GST and Land Acquisition) and slow progress on reforming factor and product markets, including agriculture, could weigh on investment and growth, stoke inflation, and weaken investor sentiment.	Facilitate state-led reform initiatives. Enhance revenue raising efforts; continue to address long-standing supply bottlenecks through non-legislative measures; and strengthen the business climate.
<b>External Risks</b>			
<b>Tighter or more volatile global financial conditions</b>	<b>M</b>	<b>M:</b> While external vulnerabilities have declined considerably, the impact from risk re-pricing or a surge in global financial market volatility could be very disruptive, particularly against the backdrop of recent large capital inflows, sluggish exports, and weak corporate balance sheets.	Enhance the environment for attracting stable non-debt creating capital flows, particularly FDI. Rupee flexibility and monetary policy tightening. Given adequate level of international reserves, provide foreign currency liquidity to prevent disorderly movements in the exchange rate.
<b>Structurally weak growth in key advanced and emerging economies</b>	<b>H/M</b>	<b>M:</b> Deterioration of economic outlook in key advanced and emerging market countries would cloud the sustainability of the recovery in India, both for exports and investment.	Structural reform will raise returns to investment and strengthen domestic sources of growth.
<b>Increased volatility of global energy prices</b>	<b>M</b>	<b>M:</b> Significant effects on the current account deficit, inflation. While volatility in energy prices can have an adverse impact, persistently-low energy prices are beneficial for India given its net energy importer status.	Improve targeting of transfers to shelter the most vulnerable; accelerate reform of remaining fuel subsidies; smooth volatility of domestic fuel prices through fiscal measures; provide dollar liquidity to oil marketing companies as required, to address disruptive exchange rate volatility.
<p><i>"L"=Low; "M"=Medium; "H"=High.</i></p> <p><i>This matrix shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline. The Risk Assessment Matrix reflects staff views on the source of risks and overall level of concern as of the time of discussions with authorities.</i></p>			

## Annex III. India: Public and External Debt Sustainability Analysis<sup>1</sup>

*India's public debt remains sustainable given manageable interest rate costs and expected recovery in the economy's real GDP growth rate (with growth higher than projected in the 2015 Article IV Staff Report).<sup>2</sup> Under the baseline, assuming gradual fiscal consolidation, the public debt-to-GDP ratio is forecast to decline gradually to around 61¾ percent of GDP in the medium term from the current level of about 66 percent, with gross financing needs also declining slightly to about 10¾ percent of GDP in 2020/21. Negative growth shocks represent one of the major risks to the debt outlook. In addition, realization of contingent liabilities coming from future bank recapitalization needs and liabilities of the electricity distribution companies may also push the debt trajectory up above the 70 percent benchmark, before the debt-to-GDP ratio declines gradually in the medium term. On the other hand, the captive domestic investor base is likely to mitigate the impact of any real interest rate shocks. India's external debt, currently at 24 percent of GDP, remains sustainable.*

### 1. India's public debt sustainability analysis is based on the following assumptions:

- **Macroeconomic assumptions.** Growth is forecast at 7.3 percent (at market prices) in 2015/16, gradually rising to 7¾ percent in the medium term. CPI inflation is projected to decline from about 6 percent in 2014/15 to around 5 percent in 2020/21. This baseline scenario assumes continued implementation of structural reforms that do not require legislative approval, and a gradual global economic recovery scenario as outlined in the WEO.
- **Fiscal Assumptions.** The 2014/15 central government fiscal deficit came in at 4.0 percent of GDP (below the authorities' deficit target of 4.1 percent of GDP), which corresponds to 4.2 percent under the Fund's definition. Over the medium term, the central government's fiscal deficit (as per IMF definition) is expected to decline slowly toward 3.6 percent of GDP, while state government deficits should decline to about 2.3 percent of GDP. Staff projections (which are based on current policies and assume no major legislative changes) imply that the central government will underperform against its fiscal adjustment targets.
  - Tax performance, especially for income taxes, is expected to increase slightly as ongoing administrative measures continue to be implemented and base broadening is expected to continue. Introduction of the Goods and Services Tax (GST) is not assumed in this baseline, as it requires further legislative changes.

<sup>1</sup> Prepared by Mehdi Raissi, and Volodymyr Tulin.

<sup>2</sup> The analysis of public debt sustainability is based on the framework developed for market access countries. See [Staff Guidance Note for Public Debt Sustainability Analysis in Market Access Countries](#), IMF, May 2013.

- At the same time, while savings from reduced fuel subsidies have already been realized as diesel prices have been deregulated, the planned gradual introduction of cash transfers should help rationalize spending over the medium term. However, the Food Security Act and fertilizer subsidies will keep the subsidy bill high.
- Public banks are expected to be recapitalized to reach Basel III targets (baseline assumes 0.3 percent of FY2018/19 GDP cumulative over the next four years). Recent announcements indicate state governments will assume a large portion of the debt of electricity distribution companies (up to 3 percent of GDP), but since the actual agreements have not yet been reached, this is incorporated only into the contingent liabilities shock scenario.

**2. Under the baseline projection, India's debt ratio and gross financing needs will enter a gradual declining path from 2016/17.** India's primary deficit is projected to trend downward and remain below its debt-stabilizing threshold (estimated at 2.9 percent of GDP based on the 2020/21 projections) in the projection years. Therefore, gross financing needs are expected to remain at slightly above 12 percent of GDP in 2015/16 before gradually declining to about 10¾ percent in 2020/21. Automatic debt dynamics arising from the interest rate-growth differential will on average reduce the debt ratio by close to 2¼ percentage points per year from 2015/16 to 2020/21. As a result, the public debt-to-GDP ratio is expected to fall from about 66 percent in 2014/15 to 61¾ percent in 2020/21. The medium-term public debt-to-GDP ratio is about 3 percentage point higher than envisaged in the last Staff Report, reflecting an upward data revision of the historical public debt path and projected slower nominal GDP growth, in part as a result of reduced inflation and the adoption of flexible inflation targeting.

**3. India faces relatively low risks to debt sustainability under the baseline, but could be vulnerable to slower real GDP growth and a contingent liability shock.** The heat map suggests that the debt burden benchmark and the gross financing needs threshold are exceeded under a contingent liability shock. A contingent liability shock (which could arise from losses at public banks and debt restructuring of electricity distribution companies)<sup>4</sup> pushes the debt-to-GDP ratio to around 73 percent in 2016/17 and 2017/18. While not flagged as a main risk by the heat map, a one-standard deviation shock to real GDP growth increases the debt-to-GDP ratio to just below 70 percent in 2017/18, only marginally lower than the threshold of 70 percent above which the heat map flags the risk. Both shocks, however, do not change the downward debt trajectory in the medium term. Lack of fiscal adjustment is another principal risk to debt sustainability in India's context. An unchanged primary balance would slow the debt reduction in the near term. Finally, the combined macro-fiscal shock also has a large level effect but does not change the direction of the debt trajectory. As a result, the asymmetric fan chart suggests that upside risks to debt ratio dominate in the medium term. Overall, risks are mitigated by the fact that most of the public debt is financed through a captive domestic investor base, the very small

<sup>4</sup> The contingent liabilities shock is customized to reflect: (i) the central government bearing the full cost of PSBs' recapitalization in a severe stress scenario (about 3 percent of GDP), and (ii) state governments assuming 75 percent of the debt of the electricity distribution companies (about 2.5 percent of GDP).

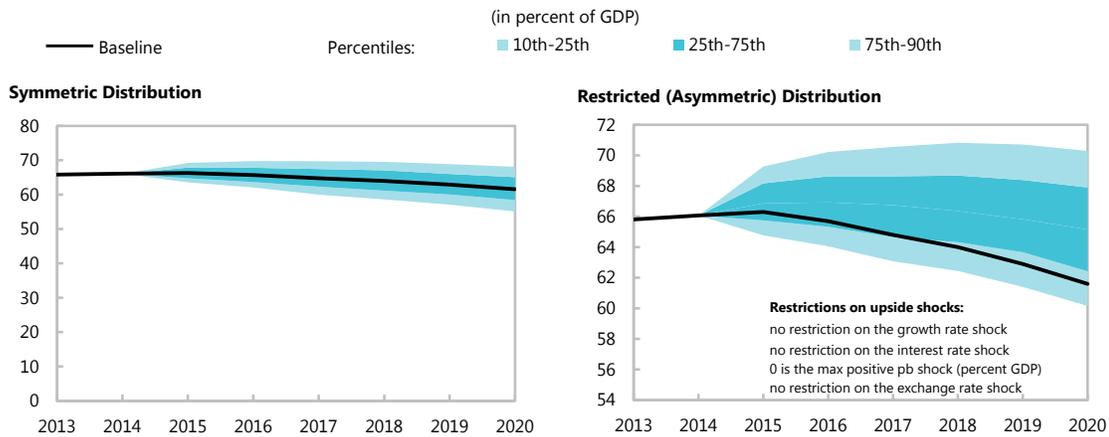
external debt is mostly from official creditors, and adequate international reserves are available in the rare case that external financing needs arise. Risks that could improve India's public debt sustainability include better tax buoyancy, a GST and a new Direct Tax Code (including improvements in tax administration) that improve efficiency and lead to near-term revenue gains. A stronger revival of the economy could also return India to the debt dynamics prevailing before the global financial crisis.

**4. There is no evidence of a systematic projection bias in the baseline assumptions and the projected fiscal adjustment is in line with other countries' experiences.** India's forecast track record is comparable to that of all other surveillance countries. The median forecast errors for real GDP growth, primary balance and inflation during 2006–14 are all close to the median among all surveillance countries. India's projected fiscal adjustment (an improvement of around three-quarters of one percentage point in cyclically-adjusted primary balance/GDP over the medium term) is modest and should be achievable. This magnitude of adjustment is also in line with other countries' experiences, with a three-year adjustment in cyclically-adjusted primary balance at the 64 percentile among all surveillance countries with market access. The boom-bust analysis is not triggered because India had a negative output gap in 2014/15.

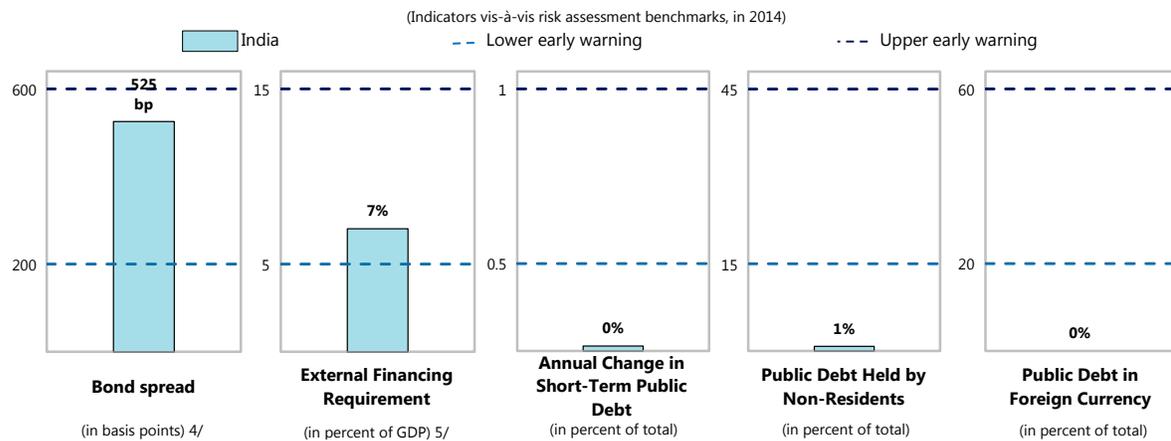
**Figure 1. India Public DSA—Risk Assessment**  
Heat Map

Debt level <sup>1/</sup>	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs <sup>2/</sup>	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile <sup>3/</sup>	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

**Evolution of Predictive Densities of Gross Nominal Public Debt**



**Debt Profile Vulnerabilities**



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

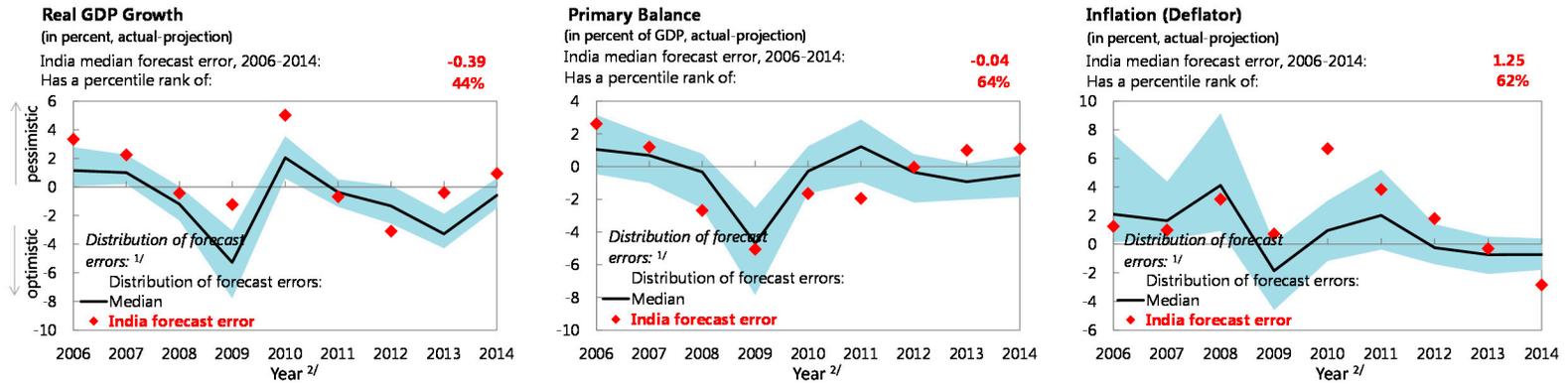
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 08-Oct-15 through 06-Jan-16.

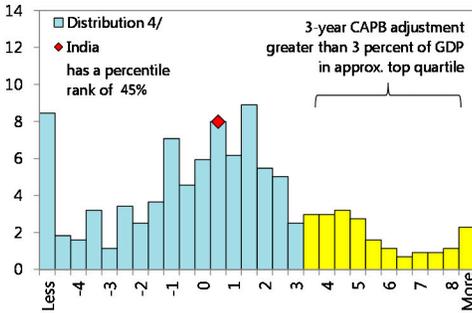
5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

**Figure 2. India Public DSA—Realism of Baseline Assumptions**  
Forecast Track Record, versus surveillance countries

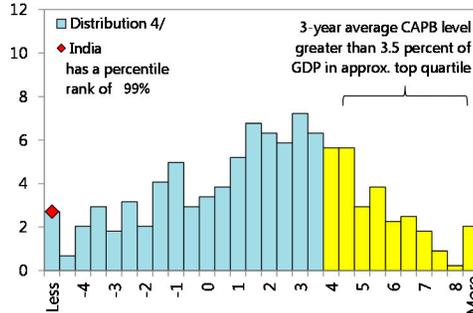


**Assessing the Realism of Projected Fiscal Adjustment**

**3-Year Adjustment in Cyclically-Adjusted Primary Balance (CAPB)**  
(Percent of GDP)

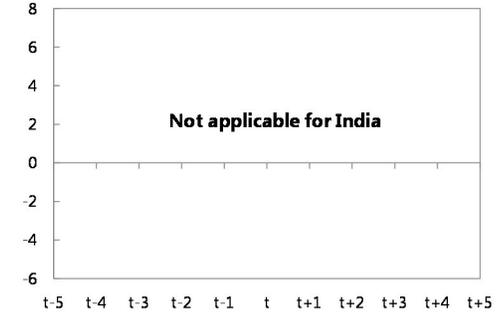


**3-Year Average Level of Cyclically-Adjusted Primary Balance (CAPB)**  
(Percent of GDP)



**Boom-Bust Analysis<sup>3/</sup>**

**Real GDP growth**  
(in percent)



Source : IMF Staff.

1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for India, as it meets neither the positive output gap criterion nor the private credit growth criterion.

4/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

**Figure 3. India Public DSA—Baseline Scenario**

(in percent of GDP unless otherwise indicated)

	Debt, Economic and Market Indicators <sup>1/</sup>										As of January 06, 2016		
	Actual			Projections									
	2004-2012 <sup>2/</sup>	2013	2014	2015	2016	2017	2018	2019	2020				
Nominal gross public debt	73.9	65.8	66.1	66.3	65.7	64.8	64.0	62.9	61.6				
Public gross financing needs	12.3	12.2	12.1	12.1	11.9	11.6	11.4	10.9	10.7				
Real GDP growth (in percent)	7.8	6.9	7.3	7.3	7.5	7.5	7.6	7.7	7.7	Ratings	Foreign	Local	
Inflation (GDP deflator, in percent)	6.7	6.3	3.0	2.8	4.4	4.4	4.1	4.2	4.3	Moody's	Baa2	Baa3	
Nominal GDP growth (in percent)	15.0	13.6	10.5	10.3	12.2	12.3	12.1	12.3	12.4	S&Ps	BBB	BBB	
Effective interest rate (in percent) <sup>4/</sup>	7.7	8.0	7.9	7.7	8.2	8.1	8.0	7.9	7.9	Fitch	BBB-	BBB-	

As of January 06, 2016

Sovereign Spreads

10Y LT (bp) <sup>3/</sup> 557

5Y CDS (bp) 164

Ratings

Moody's

S&amp;Ps

Fitch

Foreign

Local

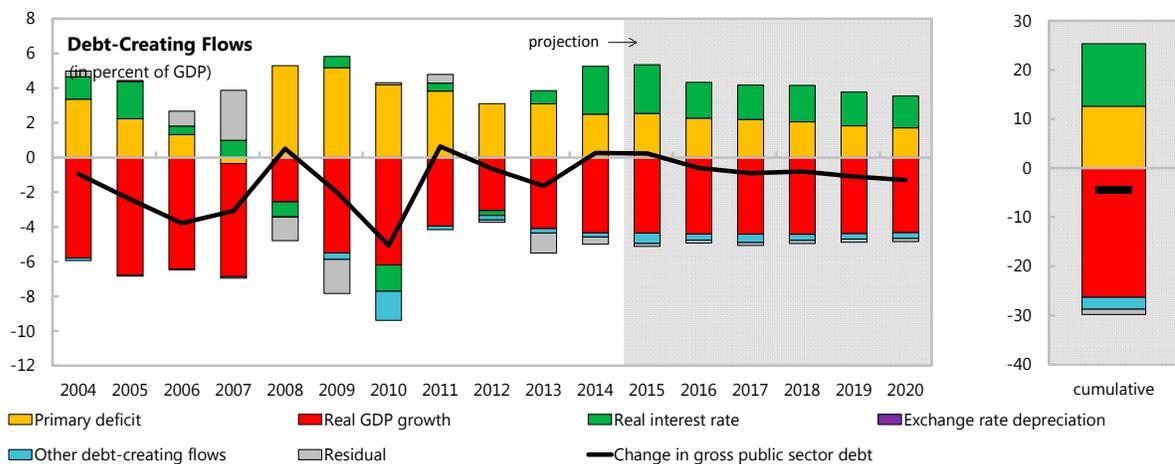
Baa2

BBB

BBB-

**Contribution to Changes in Public Debt**

	Actual			Projections							cumulative	debt-stabilizing primary balance <sup>9/</sup>
	2004-2012	2013	2014	2015	2016	2017	2018	2019	2020			
Change in gross public sector debt	-1.9	-1.6	0.3	0.2	-0.6	-0.9	-0.8	-1.1	-1.3	-4.5		
Identified debt-creating flows	-2.0	-0.5	0.7	0.4	-0.4	-0.7	-0.6	-0.9	-1.1	-3.4		
Primary deficit	3.1	3.1	2.5	2.5	2.3	2.2	2.1	1.8	1.7	12.6		
Primary (noninterest) revenue and grants	19.1	19.6	19.4	20.2	20.4	20.5	20.6	20.7	20.8	123.3		
Primary (noninterest) expenditure	22.3	22.7	21.9	22.8	22.7	22.7	22.7	22.6	22.5	136.0		
Automatic debt dynamics <sup>5/</sup>	-4.8	-3.3	-1.6	-1.5	-2.3	-2.4	-2.3	-2.4	-2.5	-13.6		
Interest rate/growth differential <sup>6/</sup>	-4.8	-3.3	-1.6	-1.5	-2.3	-2.4	-2.3	-2.4	-2.5	-13.6		
Of which: real interest rate	0.4	0.8	2.8	2.8	2.1	2.0	2.1	1.9	1.8	12.7		
Of which: real GDP growth	-5.2	-4.1	-4.3	-4.3	-4.4	-4.4	-4.4	-4.4	-4.3	-26.3		
Exchange rate depreciation <sup>7/</sup>	0.0	0.0	0.0	...	...	...	...	...	...	...		
Other identified debt-creating flows	-0.3	-0.3	-0.2	-0.6	-0.4	-0.5	-0.4	-0.3	-0.3	-2.5		
Consolidated General Govt - Domestic F-0.3	0.0	0.0	0.0	-0.6	-0.4	-0.5	-0.4	-0.3	-0.3	-2.5		
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Please specify (2) (e.g., ESM and Euroare	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual, including asset changes <sup>8/</sup>	0.1	-1.1	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-1.0		



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

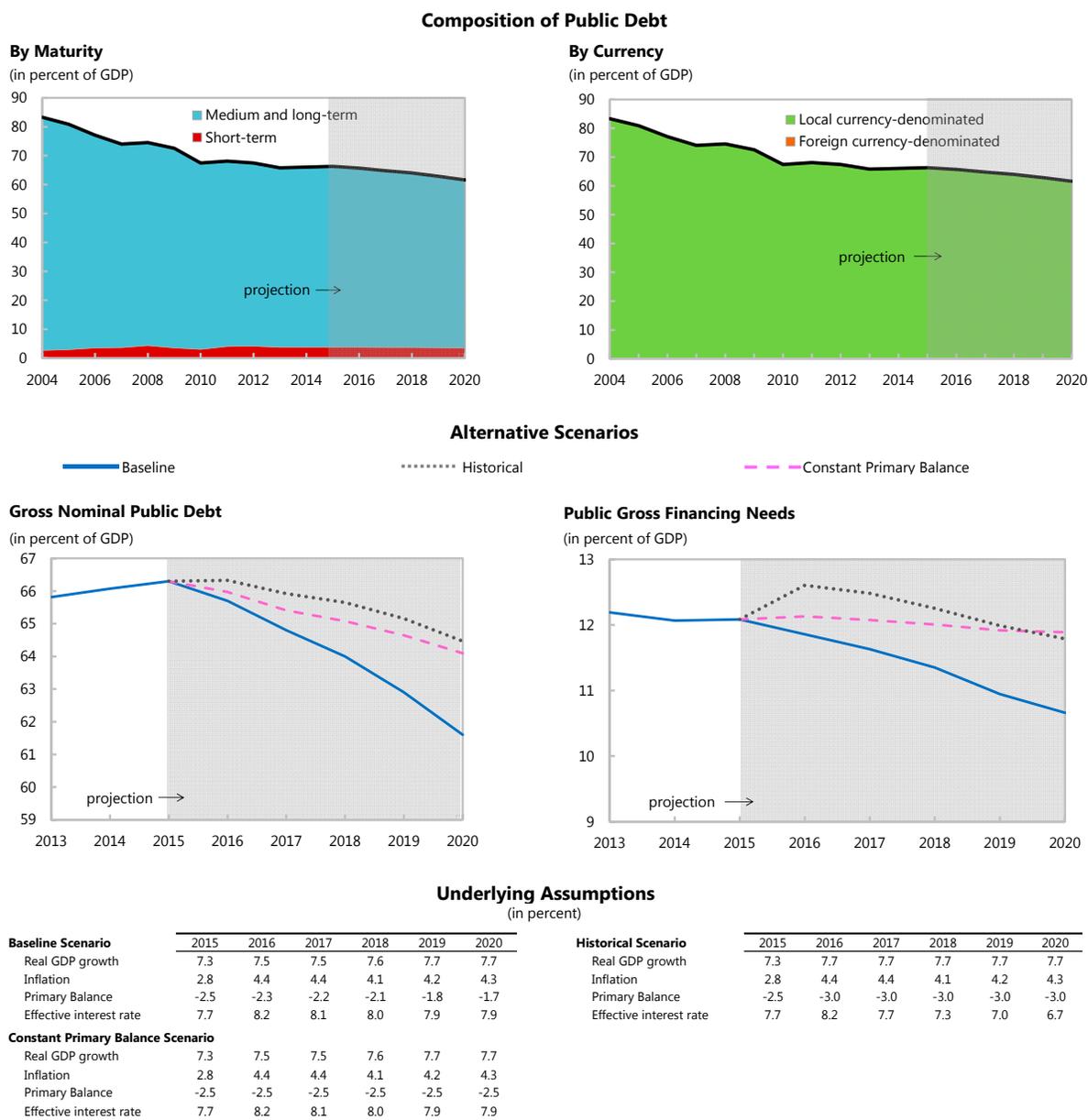
3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as  $[(r - \pi(1+g) - g + ae(1+r)] / (1+g+\pi+g\pi)$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate; $a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .7/ The exchange rate contribution is derived from the numerator in footnote 5 as  $ae(1+r)$ .

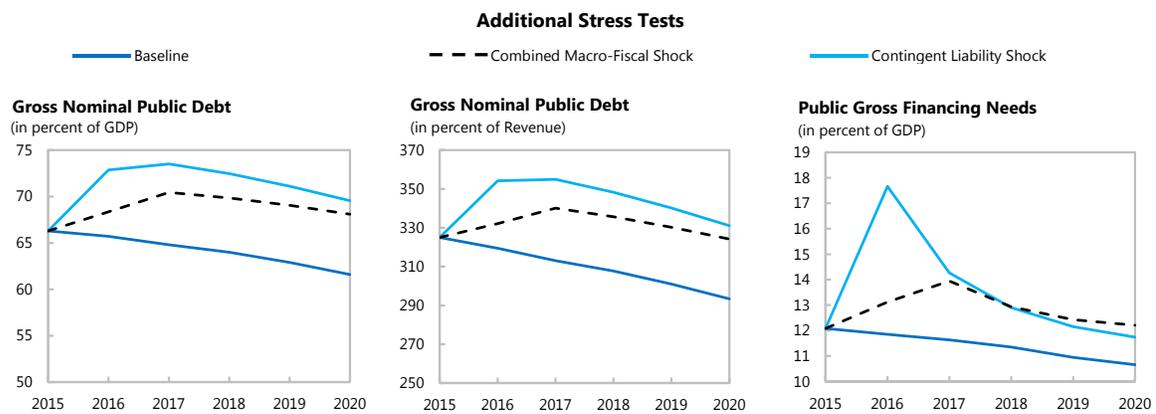
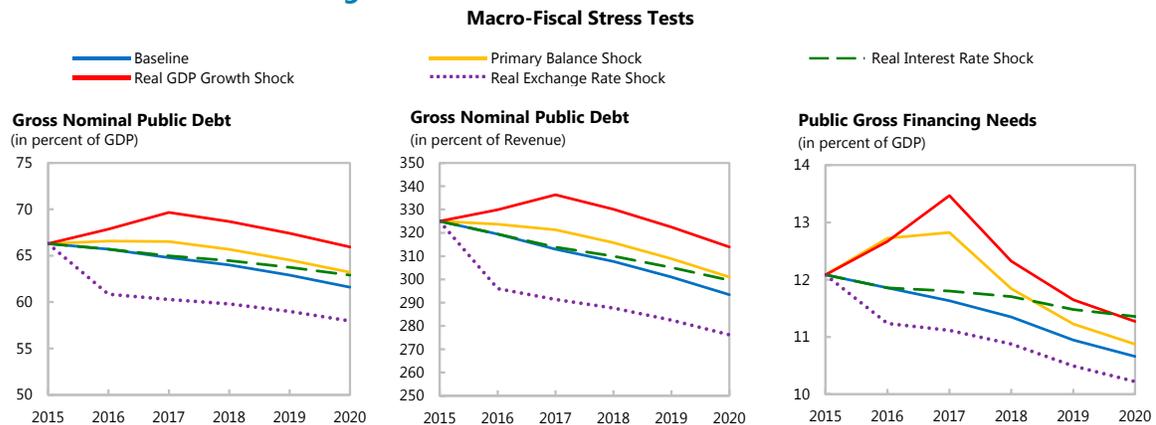
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

**Figure 4. India: Public DSA—Composition of Public Debt and Alternative Scenarios**

Source: IMF staff.

**Figure 5. India Public DSA—Stress Tests**

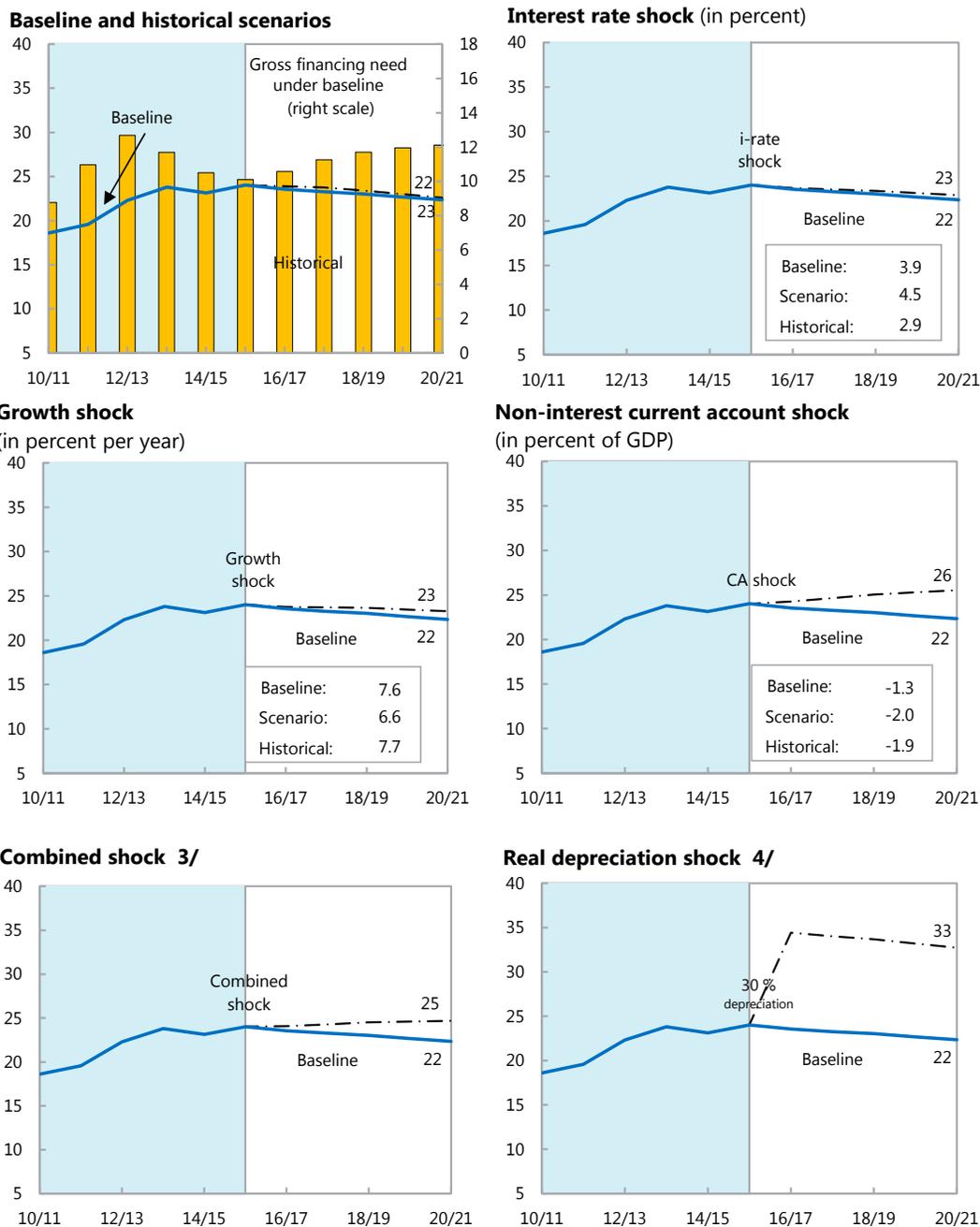


**Underlying Assumptions**  
(in percent)

	2015	2016	2017	2018	2019	2020
<b>Primary Balance Shock</b>						
Real GDP growth	7.3	7.5	7.5	7.6	7.7	7.7
Inflation	2.8	4.4	4.4	4.1	4.2	4.3
Primary balance	-2.5	-3.1	-3.1	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.2	8.1	8.1	8.0	7.9
<b>Real Interest Rate Shock</b>						
Real GDP growth	7.3	7.5	7.5	7.6	7.7	7.7
Inflation	2.8	4.4	4.4	4.1	4.2	4.3
Primary balance	-2.5	-2.3	-2.2	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.2	8.4	8.5	8.6	8.7
<b>Combined Shock</b>						
Real GDP growth	7.3	5.3	5.4	7.6	7.7	7.7
Inflation	2.8	3.9	3.9	4.1	4.2	4.3
Primary balance	-2.5	-3.1	-3.4	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.5	8.6	8.7	8.8	8.9
<b>Real GDP Growth Shock</b>						
Real GDP growth	7.3	5.3	5.4	7.6	7.7	7.7
Inflation	2.8	3.9	3.9	4.1	4.2	4.3
Primary balance	-2.5	-2.3	-2.2	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.2	8.1	8.1	8.0	7.9
<b>Real Exchange Rate Shock</b>						
Real GDP growth	7.3	7.5	7.5	7.6	7.7	7.7
Inflation	2.8	13.4	4.4	4.1	4.2	4.3
Primary balance	-2.5	-2.3	-2.2	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.5	8.3	8.2	8.1	8.0
<b>Contingent Liability Shock</b>						
Real GDP growth	7.3	5.3	5.4	7.6	7.7	7.7
Inflation	2.8	3.9	3.9	4.1	4.2	4.3
Primary balance	-2.5	-7.4	-2.2	-2.1	-1.8	-1.7
Effective interest rate	7.7	8.9	8.3	8.2	8.1	8.0

Source: IMF staff.

**Figure 6. India: External Debt Sustainability: Bound Tests 1/2/**  
(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.  
 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.  
 2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.  
 3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.  
 4/ One-time real depreciation of 30 percent occurs in 2016/17.

**Table 1. India: External Debt Sustainability Framework, 2010–2020**  
(In percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing non-interest current account 6/ -3.8
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
<b>Baseline: External debt</b>	18.6	19.6	22.3	23.8	23.1	<b>24.0</b>	<b>23.6</b>	<b>23.3</b>	<b>23.0</b>	<b>22.7</b>	<b>22.4</b>	
Change in external debt	-0.5	1.0	2.7	1.5	-0.7	0.9	-0.5	-0.3	-0.3	-0.4	-0.3	
Identified external debt-creating flows (4+8+9)	-3.5	0.6	2.0	-0.3	-4.3	-1.6	-2.3	-2.2	-2.0	-1.9	-1.9	
Current account deficit, excluding interest payments	2.5	3.9	4.4	1.3	0.9	0.8	0.8	1.3	1.3	1.4	1.4	
Deficit in balance of goods and services	-49.4	-55.9	-56.4	-54.1	-49.6	-45.3	-43.5	-44.5	-45.1	-45.2	-44.9	
Exports	22.3	24.5	24.6	25.1	23.1	21.1	20.1	20.3	20.7	20.8	20.7	
Imports	-27.2	-31.3	-31.8	-29.0	-26.5	-24.2	-23.4	-24.1	-24.5	-24.5	-24.3	
Net non-debt creating capital inflows (negative)	-2.5	-2.1	-2.6	-1.4	-3.6	-1.3	-2.1	-2.6	-2.7	-2.7	-2.7	
Automatic debt dynamics 1/	-3.4	-1.1	0.2	-0.2	-1.6	-1.1	-1.0	-0.9	-0.7	-0.6	-0.6	
Contribution from nominal interest rate	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.0	1.0	
Contribution from real GDP growth	-1.6	-1.1	-1.0	-1.5	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	
Contribution from price and exchange rate changes 2/	-2.2	-0.3	0.8	0.9	-0.5	...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	3.0	0.3	0.7	1.8	3.7	2.5	1.8	2.0	1.8	1.6	1.6	
External debt-to-exports ratio (in percent)	83.5	79.8	90.5	94.9	100.0	114.1	117.1	114.4	111.4	109.2	108.2	
<b>Gross external financing need (in billions of US dollars) 4/</b>	149.9	202.1	232.9	219.3	215.6	215.9	247.1	286.7	324.5	364.2	405.8	
in percent of GDP	8.8	11.0	12.7	11.7	10.5	10.1	10.6	11.3	11.7	12.0	12.1	
						Historical Average	Standard Deviation					
<b>Scenario with key variables at their historical averages 5/</b>						<b>24.0</b>	<b>23.9</b>	<b>23.7</b>	<b>23.4</b>	<b>23.0</b>	<b>22.6</b>	<b>-4.1</b>
<b>Key Macroeconomic Assumptions Underlying Baseline</b>												
Real GDP growth (in percent)	10.3	6.6	5.1	6.9	7.3	7.7	2.1	7.3	7.5	7.5	7.6	7.7
GDP deflator in US dollars (change in percent)	13.5	1.2	-5.2	-4.4	2.0	3.4	7.9	-2.8	1.7	1.3	1.3	2.0
Nominal external interest rate (in percent)	2.0	2.0	2.1	1.9	1.9	2.9	1.1	2.2	2.9	3.3	4.2	4.6
Growth of exports (US dollar terms, in percent)	36.7	18.7	0.0	3.9	0.9	14.8	14.2	-5.1	4.5	10.1	10.7	10.3
Growth of imports (US dollar terms, in percent)	28.7	24.5	0.9	-6.6	-0.4	14.9	14.8	-4.5	5.4	12.4	10.6	9.9
Current account balance, excluding interest payments	-2.5	-3.9	-4.4	-1.3	-0.9	-1.9	1.4	-0.8	-0.8	-1.3	-1.3	-1.4
Net non-debt creating capital inflows	2.5	2.1	2.6	1.4	3.6	2.4	1.0	1.3	2.1	2.6	2.7	2.7

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt;  $r$  = change in domestic GDP deflator in US dollar terms,  $g$  = real GDP growth rate,

$e$  = nominal appreciation (increase in dollar value of domestic currency), and  $a$  = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.  $r$  increases with an appreciating domestic currency ( $e > 0$ ) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

## Annex IV. Assessing Reserve Adequacy in India<sup>1</sup>

*This note analyzes the adequacy of international reserves in India using the reserve optimizing model of Jeanne and Rancière (2011) and the IMF's risk-weighted reserve adequacy metric. The results show that India's international reserves are adequate to cover a broad set of risks.*

**India's international reserves have increased by about \$50 billion since end-March 2014, and stand at \$352 billion at end-December 2015.** The current account deficit (CAD) of 1.3 percent of GDP in 2014/15 was comfortably financed by capital flows, resulting in an increase in international reserves. The main capital flows were: (i) inflows from foreign institutional investors (FII), who made net purchases of Indian equities and debt of about \$45 billion in 2014/15; (ii) net FDI flows, at about \$33 billion in 2014/15; and (iii) non-resident Indian deposits and overseas borrowings by banks amounting to \$14 billion. The CAD is projected to remain at about 1.3 percent of GDP in 2015/16.

**Given that any sudden stops or reversal of capital inflows could expose India to significant risks, holding an adequate level of international reserves is essential for the country to reduce its vulnerability.** India is susceptible to surges in global financial market volatility as well as commodity-price shocks, and should hold reserves for precautionary purposes. However, there is little consensus in the literature on what constitutes an adequate level of reserves from a precautionary perspective. This Annex analyses international reserves in India using the reserve optimizing model of Jeanne and Rancière (2011), and compares the findings with those of the IMF's risk-weighted metric. The results show that India's international reserve levels are adequate to cover a broad set of risks.

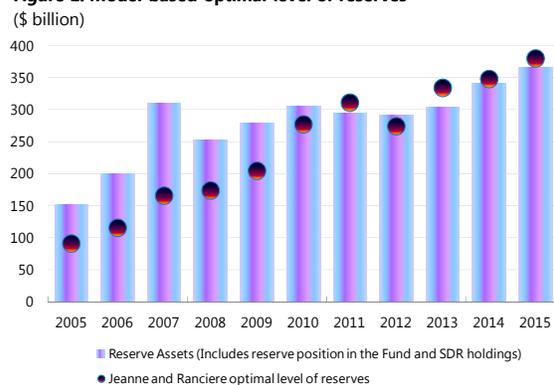
**The Reserve Optimizing Model of Jeanne and Rancière<sup>2</sup>:** This model describes reserves accumulation as an optimization problem in which risk-averse policy makers choose the level of reserves to provide optimal insurance against a sudden stop in consumption, given the cost of holding reserves. When a sudden stop occurs, external debt cannot be rolled over and output falls below its long-run growth path. Higher reserves mitigate the fall in output and help smooth national consumption. However, there is a cost to holding reserves as they yield a lower return than other assets in the economy. In this model the optimal level of reserves is determined by the size and probability of the sudden stop, the potential loss in output and consumption, the opportunity cost of holding reserves, and the degree of risk aversion. Based on a calibrated version of this model to Indian data, the optimal level of reserves in India is estimated to be just above the projected actual holdings in 2015 (see Figure 1).

<sup>1</sup> Prepared by Sonali Das.

<sup>2</sup> See O. Jeanne and R. Rancière (2011), "The Optimal Level of International Reserves for Emerging Market Countries: A New Formula and Some Applications," *Economic Journal*, Vol. 121(555), pages 905–930.

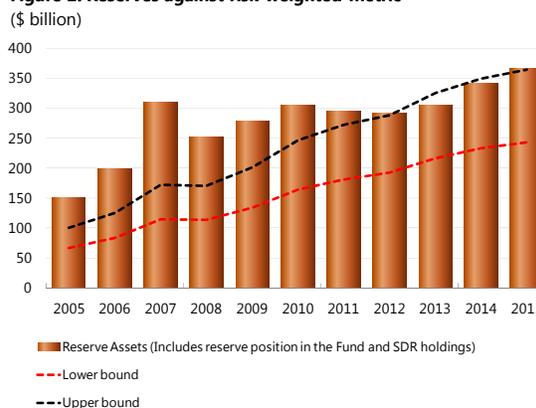
**The IMF's Risk-Weighted Approach<sup>3</sup>** employs a metric that reflects the relative risk levels of different potential sources of balance of payments pressure—the relative risk weights are based on tail event outflows associated with periods of exchange market pressure in different countries—and assesses how large a stock of reserves might be needed relative to this risk-weighted measure, to cover for outflows from different sources. For India the metric is constructed as 30% of short-term debt + 15% of other portfolio liabilities + 5% of M2 + 5% of exports. Coverage in the region of 100-150 percent of the metric can be regarded as adequate. Figure 2 shows India's reserve coverage against the proposed adequacy range of 100-150 percent (dashed lines). In 2015, the projected level of reserves in India is at 151 percent of the IMF's reserve adequacy metric.

**Figure 1. Model-based optimal level of reserves**



Source: IMF staff calculations based on Jeanne and Ranciere (2011).

**Figure 2. Reserves against risk-weighted metric**



Source: IMF staff calculations.

**The IMF's 'unadjusted' assessing reserve adequacy (ARA) metric is used for India.** IMF (2015) proposes a new ARA metric, the 'adjusted' ARA metric, to account for controls on capital outflows, which should reduce the risk of resident capital flight. The adjusted ARA metric halves the weight on broad money—the proxy for resident flight—resulting in a lower needed stock of reserves. This approach is not appropriate for India for two reasons. First, de facto measures show that India's integration with international capital markets has increased significantly over the past three decades.<sup>4</sup> Second, the adjusted ARA metric uses a composite index to measure capital account openness that is based on de jure indices which: (i) tally both inflow and outflow restrictions; (ii) do not distinguish between controls on residents and non-residents; (iii) count even minimal registration requirements as restrictions; (iv) do not capture whether controls would potentially bind in an outflow event; and (v) end in 2012—thus not measuring easing of restrictions in subsequent years. These indices are not granular enough to measure the extent of

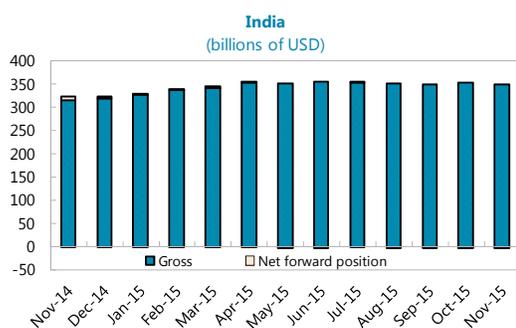
<sup>3</sup> Developed in IMF (2011), "Assessing Reserve Adequacy," and further analyzed and amended in IMF (2013), "Assessing Reserve Adequacy – Further Considerations," and IMF (2015), "Assessing Reserve Adequacy—Specific Proposals".

<sup>4</sup> See E. Prasad, 2009, "Some New Perspectives on India's Approach to Capital Account Liberalization," NBER Working Paper No. 14658, and Selected Issues Chapter V.

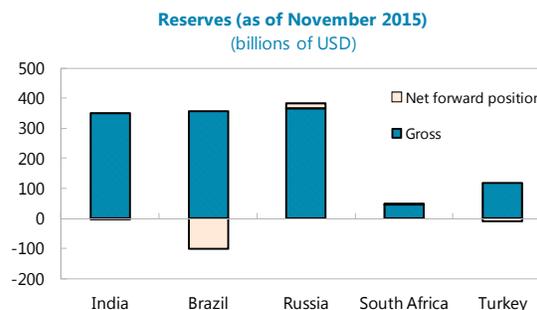
capital account liberalization in India. To deem a lower level of reserves to be adequate as a result of using a dated and coarse measure of capital controls that has not changed for India since the early 1990s—even though the capital account has become increasingly open—would be to go against the spirit of the assessing reserve adequacy exercise.

**Overall, India’s level of foreign reserves is adequate to cover a broad set of risks.** However, international reserves are only one part of a country’s defense against shocks. No one measure is complete and can fully capture the range of factors that bear on a country’s resilience against shocks. While it could be argued that a sound macroeconomic and prudential policy framework is likely more important than reserves in limiting country vulnerabilities, the present uncertainties in global financial markets related to the prolonged use of accommodative monetary policies by advanced economies may warrant holding a higher level of reserves than suggested by the IMF’s reserve adequacy framework.

**Assessment of reserve adequacy should also take into account a central bank’s other external buffers, such as forward FX liquidity positions and bilateral/multilateral swap lines.** The RBI has purchased about \$36 billion in both spot and forward markets from January to November 2015. As at end-November 2015, the net outstanding forward FX purchases of the RBI stood at \$1.5 billion. The net forward position was negative \$3 billion. RBI’s reserve holdings, net of forwards, compares favorably with other EMs (see text chart on the right). Regarding other lines of defense, the RBI and Bank of Japan have a Currency Swap Arrangement of \$50 billion, and the Brazil, Russia, India, China and South Africa (BRICS) have a Contingent Reserve Arrangement (CRA) of \$18 billion.



Source: IMF, SDDS dataset.



Source: IMF, SDDS dataset.

## Annex V. Subsidy Reform Progress<sup>1</sup>

*Subsidy reforms have played an important role in fiscal consolidation efforts of the past few years. Better targeting, improving efficiency, and reducing distortions are imperative for further rationalization of subsidies.*

**The major subsidies of the Government of India, for the first time in a decade, are expected to dip below 2 percent of GDP in 2015-16.** The Government provides major subsidies for food, fertilizer and petroleum products. The strong reform efforts over the last year and a half have resulted in a drastic decline in the subsidy bill, primarily on account of reduced fuel subsidies.

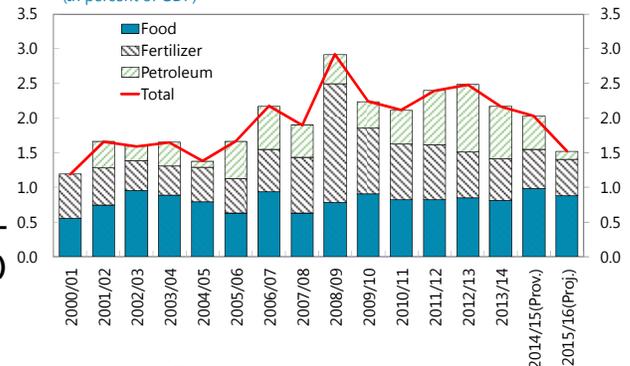
**With the majority of states yet to complete identification of beneficiaries and nationwide about one-third of eligible beneficiaries uncovered, the pan-India rollout of the National Food Security Act (NFSA) remains tentative.** The near-term impact of the NFSA—

which aims to provide subsidized rice, wheat and coarse cereals to 67 percent of the population—on the

government's fiscal position is thus likely to remain limited. Digitization and biometric seeding of Public Distribution System (PDS) beneficiaries are being pursued all over the country. In addition, some pilot experiments for cash transfers are being carried out in selected urban areas. In this regard, in addition to enhancing the PDS until the full NFSA rollout, the High Level Committee on restructuring of the Food Corporation of India (FCI) has recommended bringing down the coverage rate to about 40 percent which is more than adequate to cover the below-poverty-line households.

**Government Subsidies**

(In percent of GDP)



Source: IMF staff data.

**Reforms have been recently implemented to help reduce energy subsidies and prevent their recurrence.**

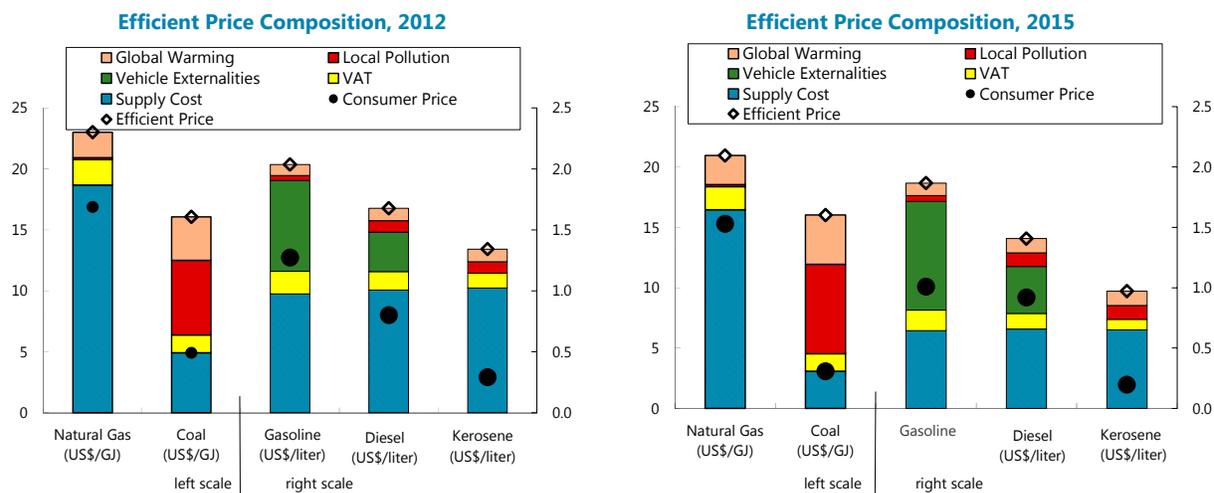
These measures include:

- Gasoline and diesel prices were deregulated in 2010 and 2014, respectively, and now move in line with international prices. Excise duties on petrol and diesel have been raised on multiple occasions over the past year.
- The formula for fixing the price of natural gas also has been revised and gas prices have been raised, with a provision to revise prices every six months. LPG subsidies have been reduced and fixed on a per cylinder basis, and since early 2015 delivered via the direct benefits transfer scheme with nationwide coverage. The nationwide introduction of the modified direct cash transfers scheme for LPG (*PAHAL* scheme) yielded an estimated 10 to 20 percent subsidy bill savings, in part as a result of de-duplication initiatives and reduced leakages. While around 3 million households have given up cash subsidy under the “Give it Up” campaign, LPG subsidies have remained untargeted and in practice highly regressive.
- Both allocation and distribution reforms are being pursued in the kerosene sector; and the Indian states are being incentivized to undertake distribution reforms to improve targeting to the needy.

As allocation and distribution reforms are rolled out, the under-recovery burden of the oil companies is expected to be completely eliminated, which will help free up resources towards exploration and investment activities. With the ensuing substantial reduction in the fuel subsidy bill, the drop in international oil prices presents an opportunity to increase fuel taxation levels to generate additional indirect tax revenues and raise

<sup>1</sup> Prepared by Volodymyr Tulin.

the overall tax ratio. In addition, staff research suggests that from an economic efficiency perspective, fuel taxation in India remains significantly below the levels that would internalize negative externalities relating to pollution, traffic accidents, and global warming.<sup>2</sup>



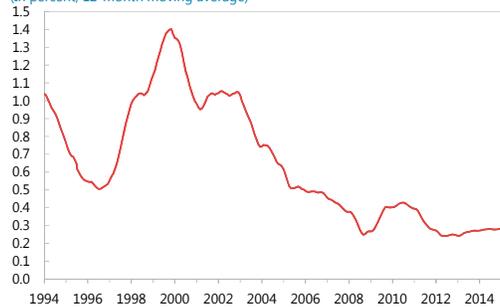
Source: IMF staff data, based on Abdallah and others (2015).

Source: IMF staff data, based on Abdallah and others (2015).

### New Urea Policy 2015-19 targets increasing domestic production and fertilizer use efficiency, however, savings are likely to be modest and key distortions remain largely unaddressed.

With regard to the Nutrient Base Subsidy policy, movement control of phosphorus and potassium (PK) fertilizers has also been liberalized by merging the freight subsidy with the nutrient subsidy on pro-rata basis. Mainly technology-driven, combined fertilizer subsidy bill savings are expected to amount to less than 0.1 percent of GDP over the next four years. In addition, there are plans for a phased introduction of direct benefit transfers. However, the Maximum Retail Price of urea, which accounts for about three-quarters of the fertilizer subsidy bill, has been kept essentially unchanged for over a decade and is heavily subsidized—both relative to costs and relative to PK-fertilizers—which has resulted in unbalanced fertilizer use and leakages.

**Urea: Maximum Retail Price Relative to World Market Price**  
(In percent, 12-month moving average)



Source: World Bank and IMF staff calculations.

**Subsidy rationalization reforms should to be underpinned by the JAM<sup>3</sup> trinity (financial inclusion, biometric identification and use of mobile technology) and better targeting.** As at end-December 2015, *Aadhaar* coverage has reached over 950 million persons, and the number of *Jan-Dhan Yojana* bank accounts now exceeds 198 million. *Aadhaar* has proved instrumental in enabling better access to banking services. The JAM trinity is being contemplated as the next important initiative. In this regard, greater use of 2011/12 Socio-Economic and Caste Census could help improve welfare outcomes across the regions and social groups and to monitor impact, particularly as the federal government embarks on implementing the recommendations of the Fourteenth Finance Commission by enabling greater revenue sharing with the states and also downsizing centrally-sponsored schemes.

<sup>2</sup> See C. Abdallah, D. Coady, S. Gupta, and E. Hanedar (2015), "The Quest for the Holy Grail: Efficient and Equitable Fiscal Consolidation in India", IMF WP 15/152.

<sup>3</sup> *Jan Dhan Yojana, Aadhaar*, mobile communications.



# INDIA

## STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

January 27, 2016

Prepared By

Asia and Pacific Department

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## FUND RELATIONS

(As of December 31, 2015)

### Membership Status:

Joined December 27, 1945; Article VIII.

### General Resources Account

	SDR Million	% Quota
Quota	5,821.50	100.00
Fund Holdings of Currency (Holdings Rate)	4,885.02	83.91
Reserve Tranche Position	936.58	16.09
Lending to the Fund		
New Arrangements to Borrow	844.09	

### SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	3,978.26	100.00
Holdings	2,889.00	72.62

**Outstanding Purchases and Loans:** None

### Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	10/31/91	06/30/93	1,656.00	1,656.00
Stand-By	01/18/91	04/17/91	551.93	551.93
EFF	11/9/81	05/01/84	5,000.00	3,900.00

### Projected Payments to Fund

(SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Principal	0.00	0.00	0.00	0.00	0.00
Charges/interest	0.61	0.61	0.61	0.61	0.61
<b>Total</b>	0.61	0.61	0.61	0.61	0.61

**Exchange Rate Arrangement:**

As per the Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), the exchange rate in India is classified as floating. The exchange rate of the rupee is determined in the interbank market, where the Reserve Bank of India (RBI) intervenes at times. The RBI's role is to modulate excessive volatility so as to maintain orderly conditions. On August 20, 1994, India accepted the obligations of Article VIII, Sections 2, 3, and 4 of the IMF Articles of Agreement. India maintains the following restrictions on the making of payments and transfers for current international transactions, which are subject to Fund approval under Article VIII, Section 2(a): restrictions related to the nontransferability of balances under the India-Russia debt agreement; restrictions arising from unsettled balances under inoperative bilateral payments arrangements with two Eastern European countries; and a restriction on the transfer of amortization payments on loans by non-resident relatives. The Executive Board has not approved these restrictions.

**Article IV Consultation:**

The previous Article IV consultation discussions were held in December 2014. The Staff Report (IMF Country Report No. 15/61) and associated Selected Issues (IMF Country Report No. 15/62) were discussed by the Executive Board on February 13, 2015.

**FSAP Participation and ROSCs:**

The pilot FSSA/FSAP report was issued in January 2001; a fiscal transparency ROSC was issued in February 2001 (<http://www.imf.org/external/np/rosc/ind/fiscal.htm>); the data model of the ROSC (Country Report No. 04/96) was issued in April 2004. The missions for the FSAP Update took place in 2011, and concluding meetings were held in Delhi and Mumbai in January 2012—the FSSA Update report was published in January 2013 (Country Report No. 13/8). Detailed assessment reports on FSAP-related papers were issued in August 2013 and published as Country Reports No. 13/265–268.

**Technical Assistance:**

<b>Dept</b>	<b>Purpose</b>	<b>Date of Delivery</b>
FAD	State level fiscal database and debt register	11/04
FAD	Pilot study on public private partnerships	12/04
STA	Balance of payments statistics	9/05
LEG	AML/CFT	5/08
LEG	AML/CFT	10/08
STA	Workshop on national accounts	03/10, 5/15
LEG	Insolvency regime workshop	7/13
ICD	Financial programming	11/13
STA	Government finance statistics	1/14
MCM	Macroeconomic modeling for inflation targeting	2/14
STA	Sectoral accounts and balance sheets	3/14

## INDIA

MCM	Technical cooperation and IMF/RBI on stress test	4/14, 3/15
APD	Financial programming for Ministry of Finance	7/14, 10/14
MCM	Macroprudential issues	10–12/14, 5/15
MCM	Developing a forecasting and policy analysis system (FPAS)	11/14, 8/15
ICD	Financial programming for new Indian Economic Service staff	3/15
MCM	Strengthening systemic risk analysis—Briefing at HQ	6/15
FAD	Advice on GST revenue estimates	7/15
LEG	Insolvency and out-of-court settlement workshop	8/15
ICD	South Asia Regional Training and Technical Assistance Center discussions	10–12/15

**Outreach and Other Activities:**

<b>Dept</b>	<b>Purpose</b>	<b>Date of Delivery</b>
APD	Article IV outreach: Conference call, blog, presentation at ICRIER	2/15
OMD	“Seizing India’s Moment, blog, IMF	3/15
APD	<i>IMF Survey</i> article, “India’s economic picture brighter, but investment, structural reforms key”	3/15
APD	Presentation on India Article IV conclusions, Delhi University economics department	3/15
APD	National Stock Exchange, Mumbai, Panel on Indian budget	3/15
APD	Citibank Conference on India economic outlook	3/15
APD	India Article IV outreach, Bloomberg TV, <i>IMF Survey</i>	3/15
RES	NIPFP – Ministry of Finance research conference	3/15
OMD	Managing Director lecture at Lady Sri Ram College, “Seizing India’s Moment”	3/15
OMD	Managing Director lecture at RBI on spillovers and unconventional monetary policy	3/15
APD	Presentation on female labor force participation, NCAER	4/15
APD	Interview on India economic outlook, <i>Indian Express</i>	4/15
APD	<i>The Economist</i> India conference, Mumbai	6/15
APD	“South Asia: Strong macro performance, risks heightened”, South Asia Reg. Update	6/15
APD	Interview on Indian economic outlook, Zee TV	7/15
APD	Lectures on tax policy and administration at IAS Institute, Mussorie	7/15
FAD	Conference on expenditure management, IIM-Bangalore	8/15
APD	Interview on Indian economic outlook, <i>Financial Express</i>	8/15
APD	ICRIER G-20 Conference	8/15
MCM	Op Ed on financial deepening, <i>Hindu Business Line</i>	9/15
APD	ICRIER Conference on G20 (co-sponsored by IMF)	9/15
APD	Presentation on India economic outlook, Desai Academy of Economics, Mumbai	10/15
APD	TV, print outreach on WEO release, <i>ET Now</i> , <i>Economic Times</i> , <i>Thomson Reuters</i>	10/15
APD	“India better placed among emerging markets to tackle outflows”, article, <i>Econ. Times</i>	10/15
APD	“South Asia: Robust growth amid global uncertainty”, South Asia Regional Update	10/15
RES	Presentation on <i>World Economic Outlook</i> at Ministry of Finance	11/15
RES	<i>World Economic Outlook</i> presentation, ICRIER	11/15
OMD	Recorded video remarks on GST by Managing Director, Ministry of Finance/Assocham event	12/15

RES NIPFP – Ministry of Finance Research Conference

12/15

**Resident Representative:**

A resident representative's office was opened in November 1991. Mr. Thomas Richardson has been the Senior Resident Representative since August 2012.

## RELATIONS WITH THE WORLD BANK GROUP

In Bank FY15 (July 1, 2014–June 30, 2015), IBRD/IDA lending in India totaled US\$3.8 billion (of which US\$2.1 billion IBRD and US\$1.7 billion IDA). IFC committed US\$1.3 billion in FY15. The World Bank Group's (WBG) Country Partnership Strategy (CPS) for India for 2013–2017<sup>1</sup> focuses on helping India accelerate poverty reduction and boost shared prosperity, and is closely aligned the Government's 12<sup>th</sup> Five-Year Plan, and its goal of "faster, sustainable, and more inclusive growth." To make a meaningful contribution to India's many development challenges, the volume of WBG support—from IBRD, IDA, and IFC—should reach \$4 billion annually over the five-year period of the CPS.

Under the Strategy, the WBG aims to contribute to India's development by deepening and strengthening engagement in three priority areas: integration, rural-urban transformation and inclusion. "Integration" seeks to increase market integration by focusing on addressing infrastructure gaps and investment climate as key measures needed to help low-income states converge more quickly with their faster-growing neighbors. With 600 million people expected to live in India's cities by 2031, "rural-urban transformation" will require intensified engagement to improve the management and livability of medium-sized cities. "Inclusion" will entail a stronger focus on human development with improvements in healthcare systems and nutrition, on the quality of education at all levels, as well as on better access to finance and social protection for the underprivileged. A common theme across these three areas of engagement will be an emphasis on improved governance, sustainability, and gender equality.

Two key strategic shifts are central to the WBG program in India: increased support to 14 low-income and special category states<sup>2</sup> and to urbanization. The Bank is working with the Government to rebalance its lending portfolio, so that 30 percent of all IBRD/IDA lending will be directed to these states, which together account for 61.5 percent of India's 270 million people living in poverty. Many of these states also have human development indicators—high infant mortality, high child malnutrition, low female literacy—on par with the poorest countries in the world. IFC's LIS investment portfolio covers a broad range of sectors, complemented its advisory services. Engagement in more advanced states and at the central level will focus on activities that are transformative and innovative. Urbanization presents tremendous opportunities, both for agriculture and poverty reduction, and competitiveness. WBG support focuses on government efforts at the national, state and city levels to help improve the livability of medium-sized cities.

A robust knowledge portfolio complements and underpins financing and includes: (i) focus on in-depth analytical work on key cross-sectoral questions; (ii) inform design and implementation of future interventions by drawing on impact evaluations; (iii) respond quickly and flexibly with demand-driven technical assistance and just-in-time knowledge support to help reform and implementation; (iv) broker South-South and across-state knowledge exchanges; (v) develop flexible programmatic approaches to develop analytic and advisory activities; and (vi) scale-up training

<sup>1</sup> See <http://openindia.worldbankgroup.org> for a visualization on the WBG country strategy.

<sup>2</sup> Low-income and special category states include: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, and eight northeast states (Assam, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, and Uttarakhand). IFC excludes Himachal Pradesh and Uttarakhand.

capacity. The Advisory Services and Analytical (ASA) program has been strategically realigned to enhance the implementation of the CPS and its contribution to the twin goals of poverty reduction and shared prosperity. A clustered approach enables WBG teams to work on multi-sectoral development challenges in areas such as poverty and shared prosperity, water, urban, service delivery, human development outcomes, public-private partnerships, social inclusion and gender and economic integration.

The India Performance and Learning Review (PLR)<sup>3</sup>—the mid-term assessment of the Strategy— noted that the India program has been scaled up over the last three years and is being delivered in the context of a strengthened partnership between the Government of India and WBG. The 2014 National Elections brought to power the National Democratic Alliance (NDA), led by Prime Minister Narendra Modi. Stressing the importance of WBG as the “Knowledge Bank”, Prime Minister Modi and President Jim Kim agreed to scale up support in six strategic priority areas of engagement. Cutting-edge, global knowledge and financing is being mobilized from across the “One World Bank Group” to help: rejuvenate the Ganga; develop smart cities and improve urban service delivery; improve rural sanitation and end open defecation; provide 24/7 electricity to all, including an ambitious push on solar energy; and provide youth with training and skills development. The Bank Group will also scale up engagement to help modernize India’s massive railway system and improve India’s business climate. In the remainder of the CPS period more emphasis will also be placed on addressing India’s high malnutrition rates and helping to create opportunities for greater economic and social inclusion of people belonging to Scheduled Castes and Scheduled Tribes and women.

#### India: World Bank Financial Operations

	(In millions of U.S. dollars) <sup>1/</sup>
	2014/15 <sup>2/</sup>
<b>Commitments<sup>3/</sup></b>	<b>23,490</b>
IBRD	12,168
IDA	11,322
<b>Disbursements</b>	<b>2,227</b>
IBRD	918
IDA	1,309
<b>Repayments</b>	<b>2,227</b>
IBRD	948
IDA	1,279
<b>Debt outstanding and disbursed</b>	<b>36,442</b>
IBRD	12,110
IDA	24,332

Source: World Bank.

1/ On an Indian fiscal year basis beginning April 1.

2/ April 1, 2014 through March 31, 2015.

3/ Based on loan approval date.

<sup>3</sup> The India PLR was discussed at the WBG Board of Executive Directors on October 29, 2015.

## RELATIONS WITH THE ASIAN DEVELOPMENT BANK

The Asian Development Bank (AsDB) operations in India began in 1986. Cumulative public sector loan commitments totaled \$31.9 billion as of 30 September 2015 for 192 loans. With an additional \$3.0 billion in private sector loans (the latter without government guarantee), total loan commitments on a cumulative basis amount to \$34.9 billion. These funds have been provided from AsDB's ordinary capital resources (OCR). Also, AsDB has approved equity investments amounting to \$0.5 billion. AsDB's lending and equity activities are summarized below.

### India: Asian Development Bank Financial Operations (sovereign and non-sovereign) (In millions of U.S. dollars, as of 30 September 2015)

Calendar Year	OCR Loan Commitments	Private Equity	Disbursements
1986–90	2,361.3	15.9	354.3
1991–95	3,551.0	59.5	2,222.8
1996	600.0	--	605.6
1997	563.0	15.4	645.0
1998	250.0	--	620.4
1999	625.0	--	605.2
2000	1,150.0	--	487.0
2001	1,500.0	--	269.8
2002	1,183.6	15.0	576.5
2003	1,512.0	0.6	658.2
2004	1,200.0	29.7	401.6
2005	417.3	15.0	698.3
2006	1,485.0	67.6	711.9
2007	1,311.4	--	1,493.2
2008	2,482.6	18.6	1,655.6
2009	1,811.0	40.0	1,551.7
2010	2,119.6	0.0	1,858.1
2011	2,872.9	20.0	1,544.6
2012	2,098.9	--	1,411.8
2013	2,341.5	82.0	1,173.1
2014	2,834.7	82.0	1,631.3
2015	620*	35.0*	984.4*
<b>Total</b>	<b>34,890.8</b>	<b>496.3</b>	<b>22,160.4</b>

Source: Asian Development Bank.

\*As of 30 September 2015.

AsDB's India Country Partnership Strategy (2013–2017) (CPS) is based on three strategic pillars: (i) inclusive growth; (ii) environmental sustainability; and (iii) regional cooperation and integration. The CPS is anchored to AsDB's Strategy 2020 and has been designed to support the Government of India's 12th Five Year Plan (2012–2017) vision of faster, more inclusive, and sustainable growth. The CPS emphasizes robust infrastructure development, job creation and access to jobs, regional connectivity, and environmental sustainability. The backbone of the India program will be energy, transport, and urban services. On a selective basis, ADB will also invest in special purpose vehicles for infrastructure financing, water resources management, skills development, and state-level fiscal reforms.

## STATISTICAL ISSUES

1. Macroeconomic statistics are adequate for surveillance, but weaknesses remain in the timeliness and coverage of certain statistical series. India has an intricate system for compiling economic and financial statistics and produces a vast quantity of data covering most sectors of the economy. India subscribed to the Special Data Dissemination Standards (SDDS) on December 27, 1996 and started posting its metadata on the Dissemination Standards Bulletin Board on October 30, 1997. It is currently in observance of the SDDS, although it uses flexibility options for timeliness of data on general government operations and on the periodicity and timeliness of labor market data.
2. The data module of the Report on Observance of Standards and Codes (ROSC, IMF Country Report No. 04/96) was published in April 2004. It assesses India's data dissemination practices against the SDDS requirements and assesses the quality of six datasets based on the Data Quality Assessment Framework (DQAF) developed by STA.
3. **National accounts and employment statistics:** In January 2015 the Central Statistical Office (CSO) released a new series of national accounts, with base year 2011/12. In addition to the shift in the base year for measuring growth, the revisions reflected a review of source data and compilation methods, and implementation of 2008 SNA. Due to weaknesses in estimating taxes less subsidies on products in constant prices and as supply-side data remain of better quality than expenditure-side data, Gross Value Added is preferred as a proxy for measuring economic growth. For current price estimates, the data sources provide adequate coverage of economic activities, and the methodology is broadly consistent with international standards and best practices. Nonetheless, a sales-tax-based extrapolation of trade turnover value from the base year does not provide an accurate gauge of growth of economy-wide value added from trade. Constant price estimates of GDP deviate from the conceptual requirements of the national accounts, in part because the Wholesale Price Index (WPI) is used to derive volume estimates for many economic activities. The WPI is not the price counterpart for GDP by type of activity because the WPI includes some product taxes whereas GDP by activity does not include product taxes. Therefore, the WPI can be influenced by changes in tax rates. Further, the WPI weights include imports but the prices for the index are collected only on domestic goods. Large revisions to historical series, the relatively short time span of the revised series, and major discrepancies between GDP by activity and GDP by expenditure complicate analysis. There are long-standing deficiencies in employment data: they only cover the formal sector, which accounts for a small segment of the labor market, and are available only with a substantial lag.
4. **Price statistics:** A revised all-India Consumer Price Index (CPI) with new weights was released in early 2011, which covers combined rural and urban India, with 2009/10 as a base year. As well, separate corresponding urban and rural CPI series are published. The CPIs are published with a lag of about one month. In early 2015, the CPI weights were updated using 2011/12 expenditure data and the CPI series has been revised from January 2015. Since January 2006, the Labour Bureau has published a CPI for industrial workers with a 2001 base year. Presently, there also remain four CPIs, each based on the consumption basket of a narrow category of consumers (namely industrial workers,

urban and non-manual employees, agricultural laborers, and rural laborers). With the exception of the industrial workers CPI, these other indices are based on weights that are over ten years old. The WPI has a 2004/05 base year, for which data are also subject to frequent and large revision, usually upward. A new series of the WPI, also using 2011/12 base year, are likely to be released in March 2016. The authorities have been encouraged to develop a Producer Price Index to replace the WPI. New RBI price series on residential property price indexes have helped surveillance in this area, though geographic coverage remains limited, and price data for commercial real estate are not available. The RBI has started producing a series covering rural wage data, which helps surveillance, but economy-wide wage data are scant.

5. **External sector statistics:** The concepts and definitions used to compile balance of payments statistics are broadly in line with the sixth edition of the *Balance of Payments Manual* (BPM6). However, trade data have quality, valuation, timing, and coverage problems, and data on trade prices, volumes, and composition are not regularly available on a timely basis. External debt statistics are available on a quarterly basis with a one quarter lag. Estimates of short-term external debt are presented in the debt statistics on an original maturity basis. The short-term maturity attribution on a residual maturity basis is only available annually (and excludes residual maturity of medium- and long-term nonresident Indian accounts). The international investment position (IIP) statistics cover the sectors prescribed in the BPM6 and these data are disseminated within six months of the reference period in respect of annual data.<sup>4</sup> Coverage of direct investment positions data is hampered by the absence of appropriate legal or institutional authority. India began disseminating the Data Template on International Reserves and Foreign Currency Liquidity as prescribed under the SDDS in December 2001. More up-to-date information on certain variables, such as total foreign reserves, foreign currency assets, gold, and SDRs, are available on a weekly basis and are disseminated as part of a weekly statistical supplement on the RBI web site.

6. **Monetary and financial statistics:** The RBI web site and the RBI *Bulletin* publish a wide array of monetary and financial statistics, including reserve money and its components, RBI's survey, monetary survey, liquidity aggregates (outstanding amounts), interest rates, exchange rates, foreign reserves, and results of government securities auctions. In 2011, the RBI started publishing a weighted average lending interest rate and other lending rates at annual frequency. The frequency and quality of data dissemination have improved substantially in recent years.

7. Concepts and definitions used by the RBI to compile monetary statistics are in broad conformity with the guidelines provided in the *Monetary and Financial Statistics Manual* (MFSM). Nevertheless, the following concepts and principles deviate from the MFSM. First, the resident sector data do not provide sufficient information on the sectoral distribution of domestic credit. Specifically, under their present sectorization scheme, the authorities subdivide the resident nonbank sector data by (i) central government; (ii) state government; and (iii) the commercial sector (including other financial corporations, public and other nonfinancial corporations, and other resident sectors).

<sup>4</sup> The IIP as published by the RBI values equity liabilities at acquisition cost, while the Fund uses market prices, resulting in substantial differences.

Second, commercial banks add accrued interest to credit and deposit positions on a quarterly basis only (instead of the prescribed monthly basis).

8. The RBI reports monetary data for IFS on a regular basis. Since October 2006, the RBI has initiated the electronic reporting of monetary data, which is a major improvement from the previous paper-based reporting which was prone to errors and delays. India has also submitted to STA test data (starting from December 2001 data) on the Standardized Report Forms (SRFs) that have been developed to implement the methodology outlined in the MFSM. STA is working with the authorities in resolving the outstanding data issues on the development of the SRFs.

9. **Government finance statistics:** The Ministry of Finance (MoF) is responsible for compiling and disseminating the GFS. India reports the budgetary central government cash flow statement within one month after the reference month and stock of liabilities within one quarter after the reference quarter. With the agreement of the authorities, STA uses these data to compile a monthly cash flow statement for publication in the *International Financial Statistics*, following the *GFSM 2001* presentation, with some missing breakdowns, particularly for expenditure. Data on fiscal performance at the state level are available only at annual frequency and with a considerable lag. Data on the functional and economic classification of expenditures are available with considerable lag. There is also scope to improve the analytical usefulness of the presentation of the fiscal accounts. For example, classification of government expenditure between developmental/nondevelopmental and plan/nonplan obscures the economic nature and impact of fiscal actions. The MoF reports central government data (on a cash basis) for publication in the *Government Finance Statistics Yearbook* (GFSY), the latest reported data corresponding to 2010. Two years after the reference year, the Ministry of Finance reports general government data to STA in the *GFSM 1986* format, that staff reworks to the *GFSM 2001* presentation for inclusion in the GFSY (latest reported data correspond to 2008). Data on the general government operations are not internationally comparable as they exclude data on the operations of the extra-budgetary funds, local governments, and social security funds. Under the SDDS, India disseminates annual general government data within 3 quarters after the reference year, using the timeliness flexibility option but meets the SDDS specifications for central government debt and operations.

**India: Table of Common Indicators Required for Surveillance**  
(As of January 7, 2016)

	Date of latest observation	Date received	Frequency of Data 1/	Frequency of Reporting 1/	Frequency of Publication 1/
Exchange Rates	01/06/15	01/06/15	D	D	D
International reserve assets and reserve liabilities of the monetary authorities 2/	12/18/16	12/25/15	W	W	W
Reserve/base money	12/18/15	12/25/15	W	W	W
Broad money	12/11/15	12/25/15	BW	W	W
Central bank balance sheet	Nov. 2015	12/10/15	M	M	M
Consolidated balance sheet of the banking system	Oct. 2015	12/10/15	M	M	M
Interest rates 3/	01/06/16	01/06/16	D	D	D
Consumer price index	Nov. 2015	12/14/15	M	M	M
Revenue, expenditure, balance and composition of financing - General Government 4/ 5/	2013/14	05/12/15	A	A	A
Revenue, expenditure, balance and composition of financing - Central Government 4/ 5/	Nov. 2015	12/31/15	M	M	M
Stocks of central government and central government-guaranteed debt 6/	Nov. 2015	12/31/15	M	M	M
External current account balance	Sept. 2015	12/22/15	Q	Q	Q
Exports and imports of goods and services	Sept. 2015	12/22/15	Q	Q	Q
GDP/GNP	Sept. 2015	12/31/15	Q	Q	Q
Gross external debt	Sept. 2015	12/31/15	Q	Q	Q
International Investment Position	Sept. 2015	12/31/15	Q	Q	Q

1/ Daily (D), Weekly (W), Biweekly (BW), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA)

2/ Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

3/ Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

4/ Foreign, domestic bank, and domestic nonbank financing.

5/ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state governments.

6/ Including currency and maturity composition.

**Statement by the IMF Staff Representative**  
**February 12, 2016**

This statement contains information that has become available since the staff report was circulated to the Executive Board. This information does not alter the thrust of the staff appraisal.

1. **Historical GDP figures for FY2011/12–FY2014/15 have been revised.** India's Ministry of Statistics released (on January 29), revised estimates for the national accounts for these years, which suggest a more gradual growth recovery during the period 2012–14. The revision to FY2014/15 growth has been minor (down to 7.2 percent from 7.3 percent). However, the revised series for GDP (at market prices) indicates that growth accelerated from 5.6 percent in FY2012/13 to 6.6 percent in FY2013/14, compared to an acceleration from 5.1 percent to 6.9 percent, respectively, in the previous data vintage.
2. **The Q3 FY2015/16 estimate for real GDP growth at market prices was also released, indicating quarterly growth of 7.3 percent, in line with staff forecasts.** This suggests some moderation in momentum, as growth in the first half of FY2015/16 has been revised upward from 7.2 percent to 7.6 percent. This GDP data (at market prices) indicates that domestic demand, primarily private consumption, remains a key growth driver, while an increase in exports (on a seasonally adjusted basis) indicates a likely bottoming out of export receipts. However, the ongoing investment recovery remains unsteady, as growth of capital formation decelerated from 7.3 percent in the first half of the fiscal year to 3.1 percent in the third quarter of FY2015/16. Finally, the services PMI rose to a ten-month high in December 2015, on account of improved new business orders and upbeat expectations.
3. **The Reserve Bank of India (RBI) kept its policy repo rate unchanged at 6.75 percent on February 2, in line with market expectations.** The RBI stated in its latest bi-monthly monetary policy statement that the rationale for its decision was the absence of major new inflationary developments and a reasonable pace of economic recovery. The RBI did caution that the implementation of the recommendations of the Seventh Pay Commission would have an inflationary impact for a period of up to two years. With regard to the forthcoming Union Budget, the RBI noted that pro-growth structural reforms that also keep spending in check would create greater space for monetary policy. Recent data indicates that since mid-December 2015, bank credit growth has picked up from 9.9 percent to 11.6 percent.
4. **International reserves have declined by US\$ 1.2 billion in 2016, standing at US\$ 349 billion at the end of January 2016.** Net portfolio investment outflows (both equity and debt) amounted to US\$ 1.3 billion in January 2016, and so far in February there have been net inflows of about US\$ 190 million. Foreign direct investment inflows have been robust, amounting to US\$ 35 billion during the first eight months of FY2015/16, an increase of 25 percent over the corresponding period of the previous fiscal year. International reserves now represent about 8 months of next year's imports of goods and services. Official intervention

data indicates that the RBI's net spot sale of foreign currency amounted to only US\$ 179 million in December 2015, with outstanding net forward purchases of foreign currency standing at US\$ 2 billion at end-December. The Indian rupee depreciated by about 2.5 percent in January 2016, and has changed little since.

5. **The Indian authorities have taken further steps to enhance the recently introduced gold monetization schemes.** In mid-January, the government launched a second tranche of the Sovereign Gold Bond Scheme and in late January, the RBI modified certain aspects of the Gold Monetization Scheme (GMS). For example, with the GMS, the RBI allowed early withdrawals of medium- and long-term government deposits, following minimum lock-in periods of three and five years, respectively.

**Statement by Subir Gokarn, Executive Director for India  
Himanshu Joshi, Senior Advisor, and Mohua Roy, Advisor  
February 12, 2016**

1. On behalf of our authorities, we would like to thank staff for presenting a comprehensive and balanced assessment of recent macroeconomic and financial sector developments in India and the evolving outlook. The mission team had broad-based and open discussions with our authorities, who broadly share the staff's assessment.
  
2. The Indian economy has embarked on a steady growth path during the past two years. During FY2014-15, India's GVA (gross value added at basic prices) growth recovered to 7.1 per cent from 6.3 per cent recorded in the previous fiscal year. The same year, India's services sector grew by 10.3 per cent, manufacturing by 5.4 per cent, and agriculture by 1.3 per cent. More recently, India's GVA (at basic prices) growth during October-December 2015 (FY 2015-16) stood at 7.1 per cent, making it the fastest growing major economy. Our authorities took advantage of the sharp decline in the global oil and commodity prices to significantly reduce fuel subsidies and increase excise taxes on petroleum products. Resources obtained from lower subsidies and higher excise taxes have helped in lowering deficits and increasing capital expenditure. Inflation is expected to remain within the target band set under the new monetary policy framework put in place in February 2015. This would also be supported by a sustainable medium-term fiscal consolidation strategy being pursued by our authorities.
  
3. While the recovery in various sectors of the economy has not been uniform, our authorities have taken swift and effective policy measures to address the challenges facing the economy. Progress is visible in several areas, particularly in the ease of doing business. Some key reforms on the anvil, most notably the Goods and Services Tax (GST), would further spur economic activity and exert a downward pressure on inflation. Export growth and foreign capital inflows, however, face some risks from the slowdown in global demand and heightened volatility in global financial markets. The authorities recognize that bank balance sheets need to be strengthened and have taken action in this direction.

**Recent Macroeconomic Developments**

*GDP growth and Short-term Outlook*

4. The Indian economy recorded a growth of 7.3 per cent in the first three quarters (April-December) of FY2015-16 as compared with 7.4 per cent during the same period last year. The Advance Estimates have placed India's FY2015-16 GDP growth at 7.6 per cent as compared with 7.2 per cent last year. Despite rainfall deficiency, rural incomes have been supported by allied activities such as dairy and horticulture leading to a marginal increase in agricultural growth. While manufacturing has recorded acceleration in output growth during the first three quarters, other industrial sectors have decelerated, due to weak investment demand with some slowdown in capital goods production. This is being sought to be corrected by several major policy initiatives by the authorities which are supported by a pick-up in corporate profitability on account of declining input costs. Overall, the Reserve

Bank of India's (RBI's) industrial outlook survey indicates expansion of activity at an accelerated pace in Q4. In January 2016, activity in India's services sector, as reflected in Nikkei purchasing managers' index, increased at its fastest pace in over a year and a half. While the current growth impetus is steady, it remains below the medium-term potential. Our authorities recognize the need for reviving private investment to put the economy durably on a higher growth trajectory.

5. The outlook for the Indian economy beyond the current year has also improved significantly. Several positive factors such as steady disinflation, a modest current account deficit, fiscal rectitude, improvement in regulatory environment for business, and scaling up of infrastructure, have contributed to this improvement. However, the slowdown in global growth and trade accompanied by higher volatility in global financial markets could impose some constraints on growth.

### **Fiscal Policy**

6. India continues on a path of steady fiscal consolidation. The GFD of the Central Government, which was contained at 4.0 per cent of GDP in FY2014-15 against the budgeted target of 4.1 per cent of GDP, is targeted to decline further to 3.9 per cent of GDP in FY2015-16. During April-December 2015, the fiscal position of the Central Government was considerably better than in the corresponding period of the previous year as reflected in key deficit indicators. Although the authorities have slightly extended the timeframe for reaching the GFD-GDP goal-post of 3 per cent upto 2017-18, they have, at the same time, expressed a binding commitment for a path of medium-term fiscal consolidation. Tax collections, and especially indirect taxes, have been buoyant. The authorities have taken several administrative and technological initiatives to further boost revenues. They have made concerted efforts to usher in the GST regime. Based on recommendations of the Tax Administration Reforms Commission, the government has set up a Tax Council to obtain multidisciplinary inputs and bring about greater coherence in formulation of tax policy. On the expenditure side, the growth in capital expenditure at 33.54 per cent reflects the Government's commitment to support investment. Other measures for expenditure management, subsidy reforms, and direct benefits transfer (DBT) have also yielded substantial benefits. As a result, so far during FY2015-16 (up to January 29, 2016), net market borrowings have been lower than in the corresponding period of the previous year.

7. There are three broad emergent trends that are likely to have a strong positive impact on the fiscal situation over the medium term.

- The GST implementation would contribute to an efficiency-enhancing centralization of the indirect tax system. Apart from the revenue potential of a self-enforcing tax, as powerfully demonstrated by the experience of states which had implemented the Value Added Tax (VAT) regime in 2005, there are significant efficiency gains to be obtained from lower transportation and logistics costs. It is also likely to increase the indirect tax base.

- The recommendations of the Fourteenth Finance Commission<sup>1</sup> (FFC) will contribute to a significant decentralization of expenditure from the centre to the states. Based on the premise that state governments will be better able to target expenditures to meet their social and economic objectives, this should lead to greater efficiency of public expenditure.
- The country's infrastructure deficit requires significantly large resources to be bridged. While the state has to play a much larger role in accelerating investment into infrastructure especially in provision of resources, private sector skills in execution and operation can contribute in delivering effective infrastructure services. This re-framing of the notion of Public-Private Partnerships is manifest in the recently constituted National Investment and Infrastructure Fund (NIIF).

The changes in the fiscal dynamics mentioned above are expected to incentivize buoyancy and efficiency in the taxation system, increase public spending in infrastructure and other key sectors and improve public accountability.

### **Inflation and Monetary and Exchange Rate Policies**

8. Inflation, which had moderated significantly since 2014, has stayed along the projected trajectory during FY2015-16 so far. CPI inflation rose to 5.6 per cent in December 2015 from 5.4 per cent in November 2015, with inflation in all major groups registering an increase. To manage food inflation, the authorities have implemented supply side measures, allowed imports and released stocks through PDS. A Price Stabilization Fund has been established to support market interventions in perishable agri-horticultural commodities, with the aim of managing non-cereal food inflation. Inflation is likely to remain range-bound in the remaining months of FY2015-16. Both near-term and longer-term inflation expectations of households have moderated but are still in the low double digits. In the latest round of Inflation Expectations Survey of Households, the proportion of respondents expecting price rise by 'more than current rate' for prices in general has decreased marginally as compared with the previous rounds of both 3 month and 1 year ahead periods. Regarding the medium-term inflation target of 4 per cent, the Reserve Bank's endeavor is to keep the economy anchored to the projected disinflation path that should take inflation down to 5 per cent by March 2017.

9. Owing to the easing of inflationary pressures, RBI has been able to reduce the policy rate by 125 basis points since January 2015. Overall, the monetary policy stance continues to

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<sup>1</sup> The Constitution of India requires the setting up of a Finance Commission every five years, or earlier. The Finance Commission recommends the distribution of the net proceeds of taxes of the Union between the Union and the states. The report of the Fourteenth Finance Commission was submitted to the Parliament in February 2015. The states' share in the net proceeds of the Union tax revenues would now be 42 per cent, up from the current level of 32 per cent (which was recommended by the previous Finance Commission). This is the largest ever change in the percentage of devolution to the states. In the past, when Finance Commissions have recommended an increase, it has been in the range of 1-2 per cent increase. As compared to the total devolutions in 2014-15, the total devolution of the States in 2015-16 is expected to increase by over 45 per cent.

be accommodative while awaiting further data on inflation. Further monetary policy measures will depend on developments in both the disinflationary process and forthcoming Union Budget.

10. India's current account deficit (CAD) declined sharply from 4.8 per cent of GDP in FY2012-13 to 1.7 per cent in FY2013-14. It has declined further to 1.6 per cent during July-September 2015 aided mainly by a sharp decline in oil prices. While year-on-year exports have contracted for the thirteenth successive month in December 2015, there has been positive growth on a month-on-month basis. The decline in imports has slowed down in December 2015. India's trade deficit has widened to USD 11.7 billion in December 2015 from USD 9.8 billion in November 2015. Financing of the CAD has been facilitated by the large inflow in FDI – USD 28.65 billion during FY2015-16 so far (April-November 2015), despite net outflows from the Foreign Portfolio Investors (FPIs), reflecting global financial volatility. India's foreign exchange reserves, which are now at USD 349 billion (as of January 29, 2016), are up by USD 7.5 billion from the level at end-March 2015.

11. India has successfully weathered large capital outflows and currency volatility in emerging markets caused by uncertainty about the normalization of US monetary policy in 2015. The nominal exchange rate of the Indian rupee remained stable among only a few such currencies of other emerging markets in 2015 even as forward-looking market liberalization policies have attracted a good deal of foreign capital in recent years.

### **Financial Sector**

12. Credit growth has generally remained above 10 per cent with some pick-up in the recent month's incremental credit growth. Strong growth has been observed in personal loans and non-bank flows from both domestic and foreign sources, which is expected to support recovery going forward. The recent period has also seen stabilization of corporate leverage that would improve credit growth going forward.

13. Indian banks continue to be well-capitalized at the system level and above the regulatory minimum. The capital to risk-weighted assets ratio (CRAR) of SCBs at the system level declined moderately to 12.7 per cent from 13.0 per cent between March and September 2015, whereas the Tier-I leverage ratio increased to 6.5 per cent from 6.4 per cent during the same period.

14. Our authorities also plan to increase the capital of public sector banks (PSBs) by Rs.700 billion funded by the budget in the four year period leading up to FY2018-19, in addition to introducing differentiated capital support based on parameters of efficiency and business growth. Further, managerial autonomy in decision making would be assured. Although, weaker credit quality has somewhat depressed the profitability of PSBs and has resulted in lower credit growth, the impact on GDP growth remains muted due to the relatively low credit intensity of the Indian economy. Meanwhile, our authorities have created institutions for reconstruction/resolution of bad assets.

15. Though the elevated level of NPAs continues to be a key concern, the stress test for credit risk conducted by the RBI suggests that, under the baseline macroeconomic scenario, the GNPA ratio may rise to 5.4 per cent by September 2016 from 5.1 per cent seen in September 2015, but it is expected to subsequently improve to 5.2 per cent by March 2017. However, current indications about improvements in the corporate operating profits margins are expected to provide an impetus for deleveraging and reduction in NPAs going forward. RBI is taking steps to contain the strains on banking sector. These steps include:

- i. deciding that all restructured loans (with minor exceptions) will be classified as non-performing assets (NPAs), thus attracting provisioning;
- ii. introducing strategic debt restructuring that, *inter alia*, allows banks to convert their loans into equity, thus enabling faster recovery of bad loans by quicker sale of assets;
- iii. increasing the ceiling on FDI in Asset Reconstruction Companies (ARCs);
- iv. Establishing a Central Registry of Information on Large Credits (CRILC); and
- v. bringing out guidelines for early intervention through Joint Lenders Forum (JLF) and Corrective Action Plan (CAP).

16. The predominance of bank finance in India even as banks face challenges on asset quality, profitability and capital, implies a need for diligent governance, review of business models, and strong capital planning and dividend policies. The Reserve Bank has taken steps to arrest the deterioration of asset quality by tightening the norms for recognition of impaired assets and permitting viability based restructuring, while asking banks to be proactive in better credit management and early recognition of stress. The ‘Indradhanush’ initiative to revamp the functioning of PSBs aims at a multi-pronged approach that includes setting up of Banks Board Bureau for making senior appointments, capitalization, de-stressing, empowerment and framework for accountability and governance reforms.

17. A number of initiatives have been taken by our authorities to expand financial inclusion, including the scheme for disbursement of direct benefits into bank accounts, payments banks and small finance banks (SFBs) for small payments/finance needs in the economy, revising the priority sector guidelines with a specific focus on small and marginal farmers and micro-enterprises and refinancing of loans to micro/small business entities engaged in manufacturing, trading and service activities.

### **Structural Reforms**

18. Our authorities have initiated a number of reform measures to raise the potential growth of the economy. These include progressive liberalization of FDI limits in several sectors to improve access to capital. The setting up of the NIIF for financing infrastructure and measures to ease supply constraints in the mining sector are expected to boost infrastructure development. Efforts are also being made to improve operational efficiency in power generation. In the agriculture sector, which is critical to inflation management, our authorities have operationalized an irrigation scheme to ensure irrigation to all cultivated lands and have recently launched a new Crop Insurance Scheme for farmers. Labor skilling and reforms of inflexible labor regulations are underway in some states. The Digital India program is aimed at enabling improved access to information and services/facilities to

enhance transparency and efficiency. The recently launched ‘Start-up India, Stand-up India’ aims at encouraging startup-entrepreneurial ventures to give impetus to employment generation and wealth creation. Our authorities have also announced a funding corpus for start-ups and fiscal incentives to enable these ventures to take quick roots.

### **Conclusion**

19. The Indian economy is on the path of steady progress despite adverse headwinds from the global growth slowdown, weak investment demand and structural issues from the past. Headline inflation has been on a downward trend and fiscal and external balances have improved over time. Our authorities are committed to the fiscal consolidation path stated in the Union Budget 2015-16. Adequate foreign exchange reserves provide a buffer in the event of unwarranted turmoil in the global financial system. The IMF has retained the growth forecast for India at the same level that was projected earlier. With these enabling macroeconomic conditions, combined with broad-based structural reforms, the Indian economy is poised to achieve a higher sustainable growth path going forward.