

23 Jan 2017

MONTHLY MACRO INSIGHTS

Vol.1-6

In Brief

The New US President has indicated ambitions of achieving 3.5% growth for USA economy over a 10 year period. Inward looking policies that are being discussed in USA for achieving this high growth will create uncertainty in the global financial markets for some time. In this context, both the Government and RBI will display greater commitment to macroeconomic stability so as to avoid sharp depreciation of the currency or a sudden spike in interest rates in India which will derail the domestic growth prospects. Thus, Government at the current juncture is expected to pursue the path of fiscal consolidation and RBI is not expected to adopt too lax a monetary policy which will thwart macroeconomic stability especially when windfall from lower oil price has eroded to some extent post the OPEC deal, core inflation has been stubborn around 4.5% and narrowing of spread between G-Sec and US Treasury of 10 year that has motivated FIIs to pull out funds from Indian markets. Keeping in sight the implications for sovereign rating at one side and the improved buoyancy on account of expanded tax base on the other, we expect the government to work towards gaining more credibility by pursuing the path of fiscal prudence and stick to 3% fiscal deficit in Budget 2017-18 as outlined in the fiscal consolidation roadmap. We also do not expect any rate action from RBI on Feb 7, 2016 at this juncture as risks to growth and stability are evenly balanced and banks have reduced lending rates suo moto to spur investment and consumption spending. However, greater clarity will emerge on RBI's course of action once the extent of Government's commitment to macroeconomic stability is conveyed through the Budget.

Key Takeaway

- We expect Union Budget 2017-18 to walk on the path of fiscal consolidation and pitch for 3% fiscal deficit and lower corporate tax rates by phasing out exemptions in view of the expanded tax base following demonetisation.
- The adherence to fiscal consolidation roadmap is premised on a growth rebound of 8% plus in 2017-18 on the back of an expected sub 6% growth in 2016-17.
- The relatively lower growth in 2016-17 is due to demonetisation led transient disruption in industry and services sector in November and December 2016 reflected through lead indicators and tax collection.
- Higher growth in 2017-18 will be due to structural reforms in the areas of taxation, insolvency resolution, infrastructure financing apart from Government's concerted efforts to increase productivity in agriculture and industry in the past one year. This should pave the way for 8% plus potential growth rate. The reform measures will work towards easing supply side constraints.
- Revival of the domestic investment cycle can set the stage for potential growth of 10% given the low levels of GDP. Possibility of a 10% growth needs to be seen the context of India's real GDP which is around US\$2.2 trillion in 2016 compared to US\$16.6 trillion of USA. Given the level difference in real GDP, 1% growth in USA is equivalent to 7.5% growth in India in terms of incremental addition to output in a year. Post crisis, USA has grown at an average rate of 2% between 2010 and 2016 on a very high base. Given the huge untapped potential, 10% growth in the medium term should not appear ambitious.

Prof. Biswa Swarup Misra
chief.economist@bankofbaroda.com

Piyusha Hukeri
Annie Varghese

Table-1
FINANCIAL AND COMMODITIES MARKETS –
POST DEMONETISATION

	8- Nov 2016	1- Dec 2016	30- Dec 2016	20- Jan 2017
Call	6.22	6.13	6.13	5.99
G-Sec	6.9	6.33	6.63	6.47
Dollar	66.71	68.4	67.95	68.08
Pound	82.71	85.69	83.42	84.12
Crude	43.34	50.3	54.41	53.18
Sensex	27,591	26,560	26626	27034
Gold	30,700	28,800	28050	29500

Note

G-Sec refers to yield on 10 year G-Secs.
Call refers to Weighted average call money rate.
Crude refers to price of Indian basket of crude
Dollar and Pound refers to the respective exchange rates with respect to Indian rupee.
Gold refers to price of 10 gms of standard gold in Mumbai markets.

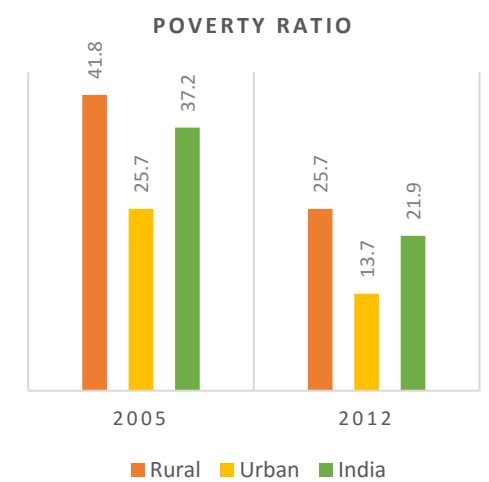
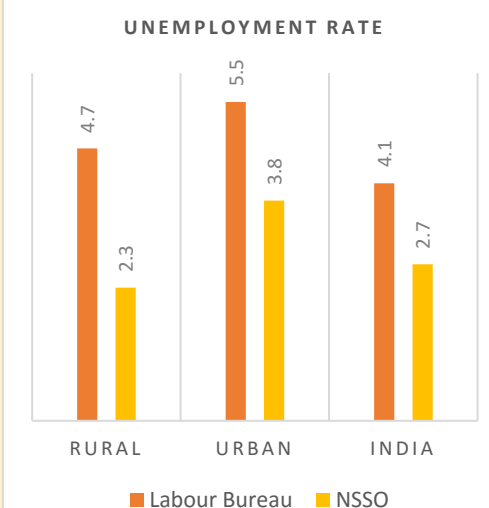
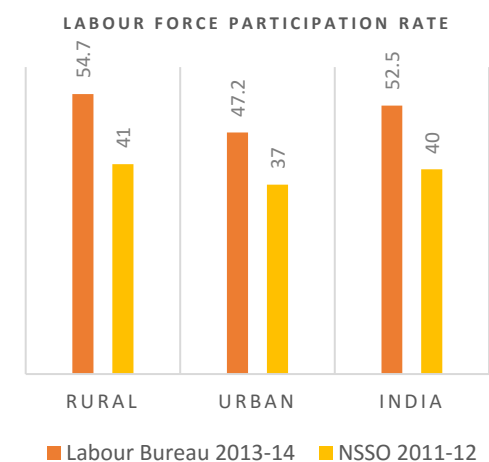
Inside

Growth Outlook-Global	3-5
World Trade Outlook	5
India's Growth Outlook	6
Industrial Production	7
Credit Growth	8
Inflation	8
Food Inflation	9
Drivers of Food Inflation	9-11
Inflation and Rate Outlook	11
External Sector	12
Exchange Rate Outlook	12
Fiscal Sector	13-14
Rate Decision by Major Central Banks	15-16
Financial and Commodities Markets	16
Drivers of International Crude Oil Prices	17
Banking	18-20
Annex:1 - Growth Projections	21
Annex:2 - Base Rate and MCLR of Select Banks	22
Annex:3- Monthly Macro Indicators	23
Annex:4- Quarterly Macro Indicators	24
Annex:5- Annual Macro Indicators	25
Indian Economy in Graphs	26-27

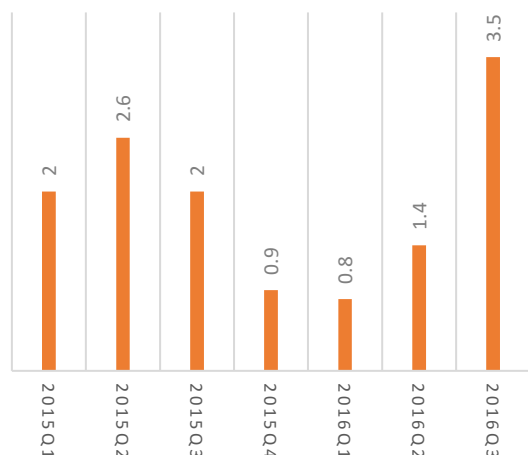
Key Takeaway

- We expect the Government to announce some concrete steps for the resolution of NPAs in the infrastructure sectors, base metal, textiles food processing, construction and mining so that both the corporate sector and the banking system are well positioned to script the revival of the investment cycle. In this context, a bad bank in some form might be announced to tackle the stock of NPAs systemically.
- We expect reiteration of Government's commitment to meet the capital needs of PSBs and provide for ways and means so as to make them become Basel-III compliant.
- IMF, World Bank and UN expect global growth to be better in 2017 driven by a resurgence in US driven by fiscal stimulus and improved prospects for oil exporting countries.
- While weak investment in emerging and developing economies and policy uncertainty in advanced economies will act as constraints, receding obstacles to commodity exporting emerging markets, robust domestic demand in emerging and developing commodity importers and fiscal stimulus in advanced economies could be stimulants to global growth.
- United Nations expects world trade to grow from 1.2% in 2016 to 2.7% in 2017 and 3.3% in 2018.
- Theresa May, on Jan 17, 2017 announced that Britain will opt for a clean exit from EU. In the words of the Prime Minister, 'Not partial membership of the European Union, associate membership of the European Union, or anything that leaves us half in, half out'.
- Though markets have initially welcomed the clarity in the thought process, uncertainty prevails about how the EU will react and the medium term economic consequences of the decision to exit. Britain expects to complete a final deal with the EU by March 2019 which would be voted on by both houses of Parliament.
- The world demand and supply position with regard to crude oil forecasted by IEA on Jan 19, 2017 for Q1 and Q2 of 2017 indicate that supply will fall short of demand after 3 years.
- Increase in rig count coupled with increased productivity of shale activity in terms of shorter drilling times or larger amounts of oil produced per well is making the US shale industry much more competitive.
- The moot point is that India's macroeconomic stability will not be thwarted by the increase in crude prices though India will lose some of the windfall associated with low crude prices. This is because crude oil prices will not breach the natural ceiling of US\$65 given the dynamics of oil industry despite the OPEC deal.
- Agriculture growth is expected to be more than 4% given the normal southwest monsoon. Though North East monsoon has been 45% below the LPA as on Dec 31, 2016, area under cultivation has increased by 6% till January 13, 2017 on a y-o-y basis.
- Crude oil prices has almost doubled in Jan 2017 on a y-o-y basis. Though oil prices are expected not to cross US\$65, demand side pressure on rupee will increase though it will not pose threat to macroeconomic stability.
- Industrial production has been robust in November 2016 partly due to base effect.
- Credit growth continues to be tepid and worsened post demonetisation. Credit growth, however, is expected to pick up post the Union Budget.

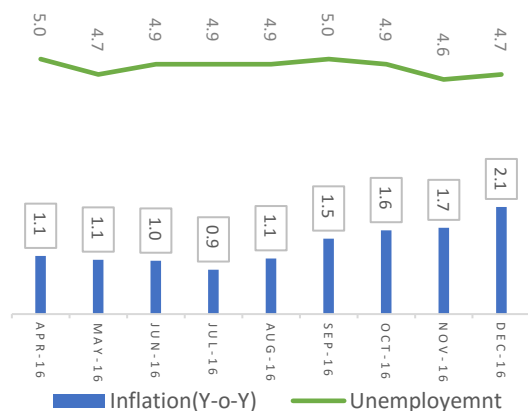
Indian Economy-Structural Coordinates



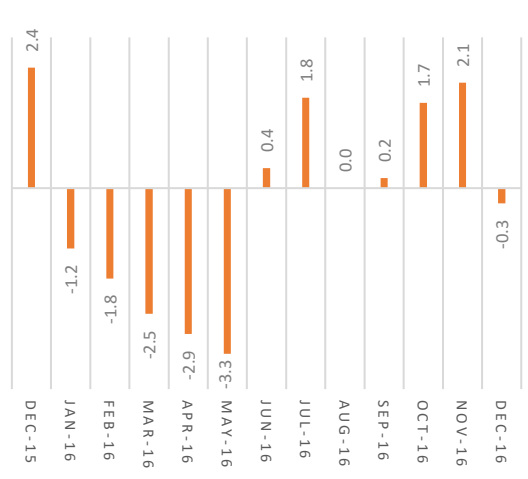
REAL GDP GROWTH OF US



US INFLATION AND UNEMPLOYMENT



CHANGE IN LABOUR MARKET CONDITION INDEX-USA



Growth Outlook-Global

World Bank

- World Bank in its Global Economic Prospects published on Jan 10, 2017 expects a moderate recovery from stagnant global trade, subdued investment, and heightened policy uncertainty observed in 2016. The recovery should lead to an increase in global economic growth to 2.7% in 2017 from an estimated 2.3% in 2016.
- Weak investment in emerging and developing economies and policy uncertainty in advanced economies will act as constraints, receding obstacles to commodity exporting emerging markets robust domestic demand in emerging and developing commodity importers and fiscal stimulus in advanced economies could be stimulants to global growth.
- Growth in advanced economies is expected to edge up to 1.8% in 2017 from 1.6% in 2016. Within advanced economies, growth in USA is expected to jump to 2.2% in 2017 from 1.6% in 2016 as manufacturing and investment growth gain traction. Growth in emerging market and developing economies as a whole would pick up to 4.2% in 2017 from 3.4% in 2016 amidst modestly rising commodity prices.
- Emerging market and developing economy commodity exporters are expected to expand by 2.3% in 2017 as against 0.3% in 2016, supported by gradually recovering commodity prices.
- Commodity-importing emerging market and developing economies, in contrast, should grow at 5.6% this year, unchanged from 2016.
- China is projected to continue an orderly growth slowdown to a 6.5% in 2017.
- Regional growth in South Asia is expected to pick up modestly to 7.1% in 2017 from 6.8% in 2016 with continued support from strong growth in India. Barring India, growth is expected to edge up to 5.5% in 2017, lifted by robust private and public consumption, infrastructure investment, and a rebound in private investment.
- India is expected to post growth of 7.6% in FY2018 compared to an expected 7% growth in 2016 as reforms loosen domestic supply bottlenecks and increase productivity.
- Overall prospects for emerging market and developing economies are dampened by tepid international trade, subdued investment, and weak productivity growth.

IMF

- IMF in its update on World Economic Outlook published on Jan 16, 2017 has projected economic activity to gather momentum in 2017 and 2018, especially in emerging market and developing economies.
- Global growth is projected to grow by 3.4% in 2017 and 3.6% in 2018 from an estimated 3.1% in 2016.
- IMF expect the growth to be widely diverse due to policy uncertainty in US and its ramifications on the global economy.

Growth Outlook-Global

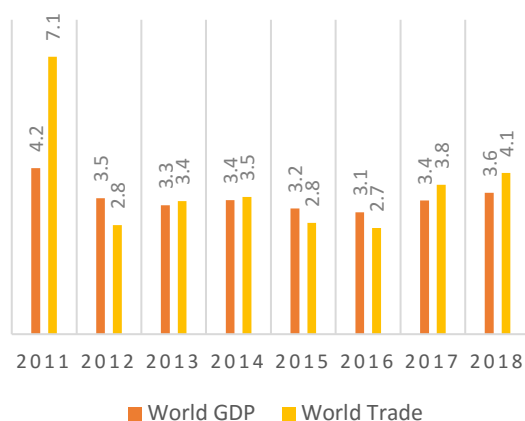
IMF

- IMF expects mixed growth prospects with advanced economies as they have been showing a better economic activity which would be fuelled further by the fiscal stimulus in the US. Even China is expected to grow relatively better driven by policy stimulus.
- Countries, with tighter financial conditions and emerging countries like India, Brazil and Mexico are expected to have lower growth due to their respective economy specific factors.
- Overall global growth could be better than projected if the stimulus turns out to be better than expected. However, if protectionist tendencies increase, global financial conditions remain tight, geopolitical tensions increase and China undergoes sharp growth deceleration then growth will be lower than the projected.
- The advanced economies are projected to grow by 1.9% in 2017 and 2.0% in 2018 led by better growth prospects in US, Germany, Japan, Spain, and the United Kingdom due to recovery in manufacturing sector and draw down of inventories.
- The US economy is expected to grow by 2.3% in 2017 and 2.5% in 2018 primarily driven by the expectations of an expansionary fiscal policy likely to be adopted by the new administration.
- China is expected to grow at 6.7% in 2017 given the policy stimulus. However, the risks to growth are more on downside due to structural issues such as higher corporate debt, budget constraints on state owned enterprises, higher growth of credit and uncertain external environment with adverse implications for capital flows.
- India's growth has been revised downwards from 7.6% in 2015 to 6.6% in 2016 to account for a disruption in the economic activities caused by withdrawal of specific currency note that impinged adversely on consumption and payment activities. The growth, however, is expected to surge to 7.2% in 2017.
- IMF noted that there has been revival of inflationary tendencies in advanced economies due to surge in oil prices due to restrictions on production, revival in demand of base metals and expectations of higher demand from US. It further held that the financial markets had factored in the shift in policy mix in the US which were reflected in increased yields.

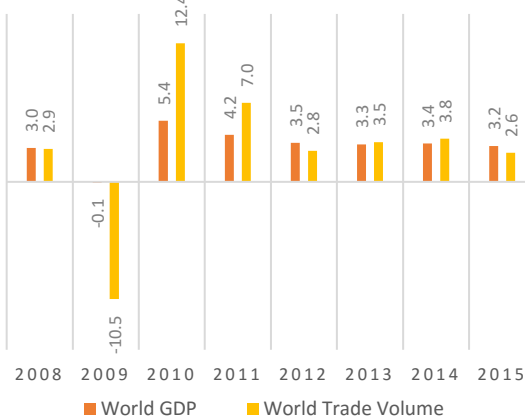
United Nation

- United Nations in its Report titled 'World Economic Situation and Prospects' published Jan 17, 2017 forecasts the world gross product to increase from 2.2% in 2016 to 2.7% in 2017 and 2.9% in 2018. UN has held that this gradual growth is reflective more of stabilization and does not project a revival in higher growth impulses.
- In 2016, growth in world gross product dropped to their slowest pace since the Great Recession of 2009. The sluggishness was due to slowdown in productivity, weak investment, low wage growth and higher debt levels.

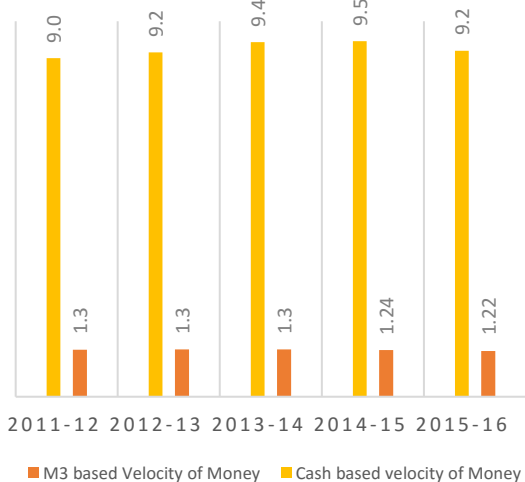
WORLD GROWTH AND TRADE OUTLOOK



WORLD OUTPUT AND TRADE GROWTH



VELOCITY OF MONEY



Growth Outlook-Global

United Nation

■ China's expansion is expected to remain stable, supported by the strong policy stimulus. It is expected to grow by 6.5% in 2017 and 2018 from 6.6% in 2016.

■ UN expects India to maintain its status as the fastest growing large developing economy due to robust private consumption and reforms orientation. Indian economy is set to grow by 7.7% in 2017 and 7.6% in 2018.

Employment and Inequality

■ The International Labour Organisation (ILO) released its Report titled, 'World Employment and Social Outlook -Trends 2017' on Jan 12, 2017 where it has predicted rising unemployment and worsening social inequality throughout 2017.

■ The global unemployment levels and rates are expected to remain high in the short term, as the global labour force continues to grow.

■ In particular, the global unemployment rate is expected to rise modestly in 2017 to 5.8% from 5.7% in 2016. This increase in unemployment rate would mean additional 3.4 million more unemployed people globally taking the total unemployment number to just over 201 million in 2017.

■ The Report states that job creation in India is not expected to pick up pace in 2017 and 2018 as unemployment rises slightly. In percentage terms, unemployment rate which was 3.4% in 2016 will continue at the same rate in 2017 and 2018 .

World Trade Outlook

United Nations

■ United Nations in its Report titled 'World Economic Situation and Prospects' published on Jan 17, 2017 expects world trade to grow from 1.2% in 2016 to 2.7% in 2017 and 3.3% in 2018.

■ The Report states that world trade growth would not exceed that of the world gross output.

World Trade Organisation

In its trade statistics and outlook published on Sep 27, 2016 WTO has observed that:

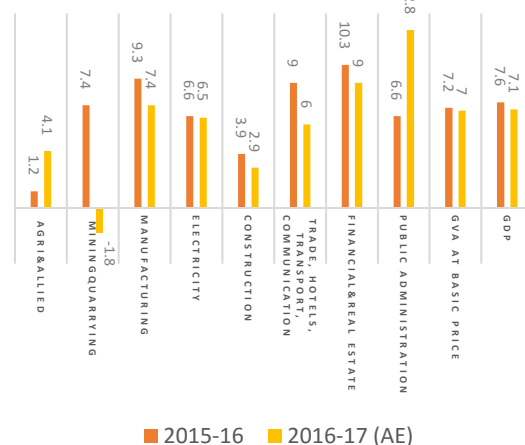
■ World merchandise trade volume is expected to grow by 1.7% in 2016, accompanied by real GDP growth of 2.2% at market exchange rates. This would be the slowest pace of trade and output growth since the financial crisis.

■ Trade growth was weaker than expected in the first half of 2016 due to falling import demand and slowing GDP growth in several major developing economies as well as in North America.

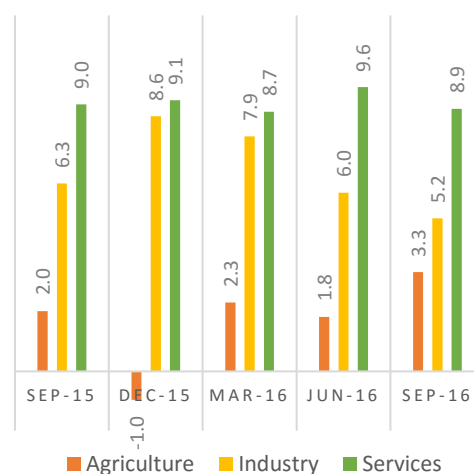
■ Trade in 2017 is expected to grow between 1.8% and 3.1%, a range being provided to reflect potential changes in the relationship between trade and output.

■ Certain trade-related indicators have improved, including export orders and container port throughput, but overall momentum in trade remains weak.

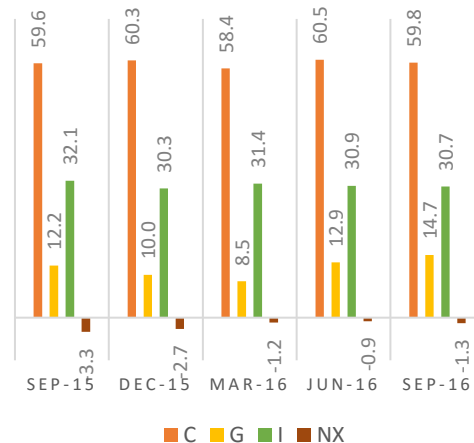
GDP GROWTH FOR 2016-17 (ADVANCED ESTIMATE)



SECTORAL GDP GROWTH



EXPENDITURE SHARE IN GDP



India's Growth Outlook

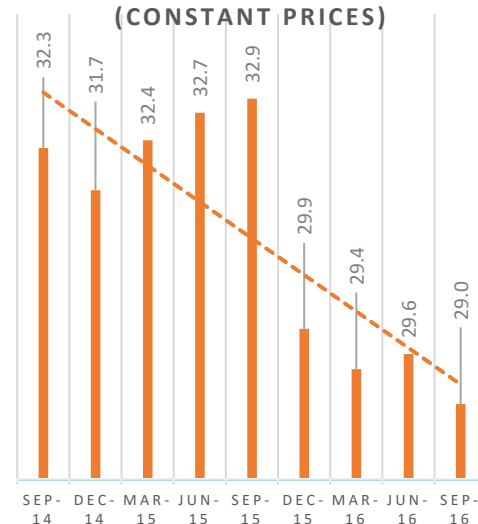
- GDP growth in 2016-17 as per Advanced Estimates released by CSO on Jan 6, 2017 is expected to be 7.1% as compared to 7.6% in 2015-16.
- GVA growth is projected to be 7.0% in 2016-17 as compared to 7.2% in 2015-16. GDP growth signified investment continues to be subdued.
- It is worthwhile to note that advanced estimates of GDP is based on extrapolation of economic indicators for the period Apr-Oct 2016. Data on only few indicators for November has been used for extrapolation.
- Moot point is that impact of demonetization, which will have a lagged impact reflected through different indicators, has not been captured.
- Without factoring in the impact of demonetisation, agriculture and public administration are the only two sectors estimated to experience growth acceleration, on a sectoral basis. The sectors such as manufacturing, construction, trade and finance sectors are expected to post sharp deceleration in growth as compared to the previous year. While, electricity is estimated to see minimal deceleration, mining is estimated to show degrowth of 1.8% as compared to growth of 7.4% in 2015-16.
- The GFCF at current and constant (2011-12) prices during 2016-17 are estimated at 26.6% and 29.1%, respectively, as against the corresponding rates of 29.3% and 31.2%, respectively in 2015-16.
- GVA growth for H1 of 2016-17 at 7.2% was the same as for H1 of 2015-16.
- The primary growth driver of the Indian economy, consumption spending supposed to be boosted by better monsoon and implementation of 7th Pay Commission recommendations has been adversely affected, due to demonetisation. More specifically, discretionary spending has suffered given the cash crunch.
- Moreover, while the private investment continued to languish, higher government spending will lend some support to the growth momentum.

RBI's Assessment of Growth Outlook

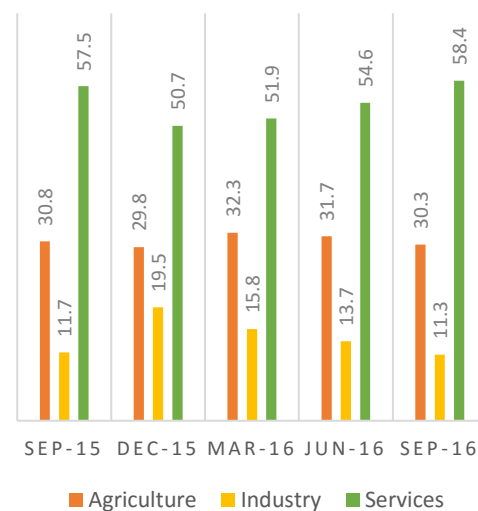
Financial Stability Report- In assessing the macroeconomic impact of demonetization, RBI in its Financial Stability Report (FSR) published on Dec 29, 2016 has held that

- There is a dampening effect on inflation with a temporary loss of momentum in the growth of real GVA. RBI did not change its growth forecast for 2016-17 which it had earlier revised downwards from 7.6% to 7.1% with evenly balanced risks.
- Immediate financial impact of withdrawal of SBNs was a surge in bank deposits with a commensurate fall in currency in circulation.
- The precise impact of SBN withdrawal on the economy would be difficult to capture at this stage and the disruptions in the cash intensive sectors of the economy are likely to be transitory. In the interim, policy measures to sterilise the impact of excess liquidity resulted in higher investment in government securities by the banking system and a fall in Reserve Bank's investments in government securities as also credit to commercial banks.
- FSR states that notwithstanding the short-term disruptions in certain segments of the economy, withdrawal of SBNs is expected to significantly transform the domestic economy in the long run in terms of greater intermediation and increasing efficiency gains through adoption of digital modes of payments.

**GFCF AS PER CENT OF GDP
(CONSTANT PRICES)**



**SECTORAL SHARE IN GVA
(CONSTANT PRICES)**

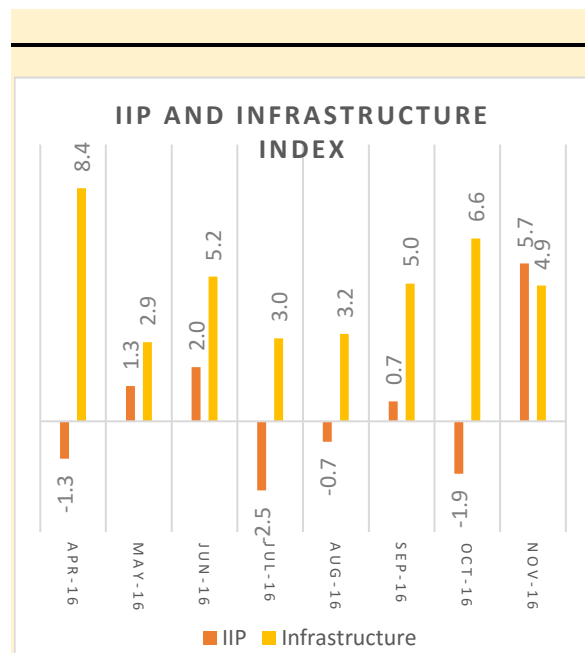


**GDP Components of Spending - Share and Growth
(Current Prices)**

Component	Attribute	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16
Consumption Spending	Share	59.6	60.3	58.4	60.5	59.8
	Growth	9.5	13.6	14.3	11.7	12.4
Government Spending	Share	32.1	30.3	31.4	30.9	30.7
	Growth	7.4	1.5	-2.1	-2.4	-4.1
Investment Spending	Share	12.2	10.0	8.5	12.9	14.7
	Growth	5.8	6.6	6.4	24.3	20.8
Exports	Share	19.4	19.1	19.7	20.0	20.2
	Growth	-6.2	-8.6	-0.9	5.4	4.1
Imports	Share	22.7	21.8	20.9	20.9	21.5
	Growth	-5.1	-8.7	-3.4	-3.5	-5.4

Industrial Production

- IIP jumped by 5.7% in Nov'16 following a degrowth of -1.8% in Oct'16 and a positive growth of 0.67% in Sep'16 on y-o-y basis.
- All the segments as per sectoral and used based classification exhibited positive growth in Nov'16. Within manufacturing, six out of the twenty two industry groups (as per 2 - digit NIC -2004) have shown negative growth in Nov'16 on a y-o-y basis.
- If we look at the m-o-m seasonally adjusted (SA) numbers, IIP grew by 1.77% in Nov'16 compared to -1.64% in Oct'16. Except in July and October, IIP on a m-o-m SA basis has shown positive growth in all months during Apr-Nov FY'17.
- The Eight Core Industries (infrastructure) comprising nearly 38% of the weight of items included in the IIP, recorded growth of 4.9% in Nov'16 on y-o-y basis. Infrastructure segment had a cumulative growth of 4.9% during Apr-Nov, FY'17 compared to 2.5% during Apr-Nov, FY'16. All segments except crude and natural gas registered positive growth in Nov'16.
- The Manufacturing PMI dipped below the threshold of 50 for the first time since the beginning of the financial year. PMI at 49.6 in Dec'16 while it was at 49.1 in Dec'15. The December reading for PMI indicates that cash crunch took its toll on new business orders and factory output. Cash flow issues among firms also led to reductions in purchasing activity and employment. The services PMI contracted consequently for two months of Nov and Dec 2016 reflecting the impact of withdrawal of SBNs.
- The jump in IIP to 5.7% in November 2016 compared to -1.8% contraction in October could be primarily due to base effect. The headline IIP growth is a Y-o-Y figure. In 2015, Puja vacation were in October and Dipavali on November. In 2016 both these festivals were in October. November 2016 had thus 25 working days compared to only 22 in November 2015, which itself partly explains the relatively higher IIP growth in November 2016.
- Capital goods production which is driven by the insulated cables production rose by 185% due to base effect. Sequentially, IIP in November 2016 is lower than that of October 2016, which itself had a depressed production. If we combine Oct and Nov we find y-o-y growth is 1.7%. IIP figures for December 2016 is also likely to be low again on account of base effect.
- On the whole there is nothing to cheer about the November IIP growth as cumulative growth for April-Nov this fiscal at 0.4 percent is even lower than 3.8% recorded for the same period last fiscal.
- The low IIP growth should be seen in the light of the volume and value dichotomy observed in the industrial sector. Being anchored to the 2004-05 base, IIP numbers signify more of noise than signal.
- In this context, credit flowing to industry could be an alternative indicator to ascertain momentum in industrial activity.



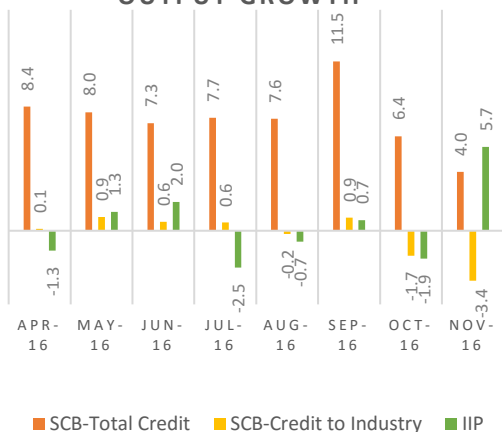
IIP-Sectoral and Used based Components Growth-Nov 2016

Sectors	Weight	Nov-2016	Nov-2015	Apr-Nov FY 17	Apr-Nov FY 16	
Mining	14.2	3.9	1.7	0.3	2.1	Sectoral
Manufacturing	75.5	5.5	-4.6	-0.3	3.9	
Electricity	10.3	8.9	0.7	5.0	4.6	
Basic	45.7	4.7	-0.5	4.1	3.9	Use Based
Capital	8.8	15.0	-24.4	-18.9	4.7	
Intermediate	15.7	2.7	-1.5	3.4	2.0	
Consumer Durable	8.4	9.8	12.2	6.9	11.8	
Consumer Non Durable	21.3	2.9	-4.8	-1.8	-0.5	
Consumer Goods	29.8	5.6	1.0	1.8	4.1	
General	100	5.7	-3.4	0.4	3.8	

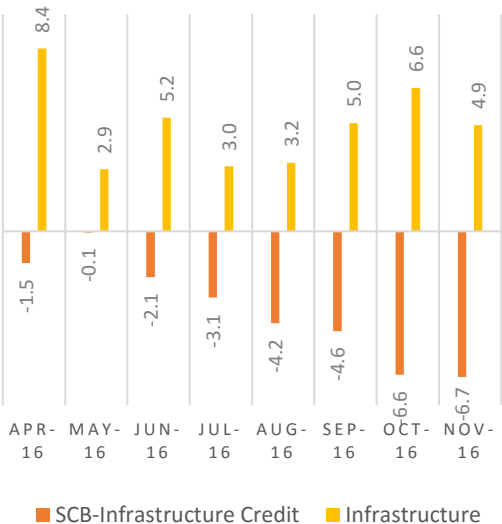
Core Sector Growth

Sector	Weight	Nov-2016	Nov-2015	Apr-Nov FY 17	Apr-Nov FY 16
Coal	4.4	6.4	3.8	1.6	4.3
Crude Oil	5.2	-5.4	-3.3	-3.5	-0.4
Natural Gas	1.7	-1.7	-3.9	-3.7	-2.3
Refinery Products	5.9	2.0	1.7	8.0	2.3
Fertilizers	1.3	2.4	13.9	4.5	11.0
Steel	6.7	5.6	-6.8	8.2	-1.5
Cement	2.4	0.5	-1.7	4.3	2.4
Electricity	10.3	10.2	5.6	5.4	5.8
Infrastructure Index	37.9	4.9	0.6	4.9	2.5

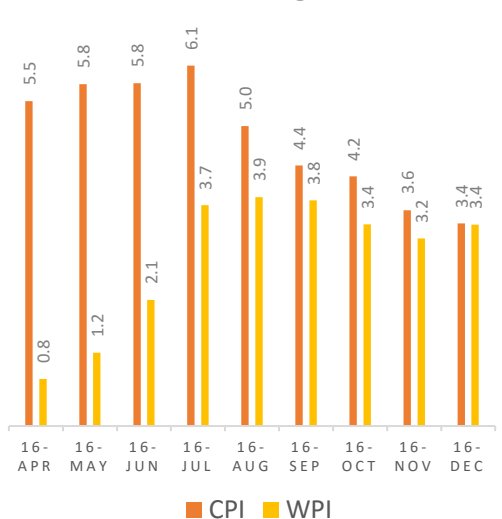
INDUSTRIAL CREDIT AND OUTPUT GROWTH



INFRASTRUCTURAL OUTPUT AND CREDIT GROWTH



INFLATION



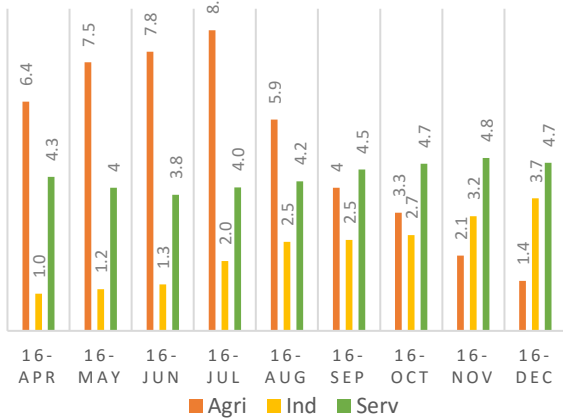
Credit Growth

- Credit growth from the banking system decelerated to 4% in Nov'16 from an already low 6.4% in Oct'16 on a y-o-y basis
- Credit growth from the banking system has moderated to 7.6% during Apr-Nov, FY'17 compared to 8.3% average loan growth during the same period of FY'16.
- While credit to industry and infrastructure has been lack luster, service sector credit growth has been relatively better at 10.9% during Apr-Nov, FY'17 compared to average growth of 6.8% during the same period in FY'16.
- Within Services, the segments which exhibited better credit growth in Nov 2016 on a y-o-y basis include professional services (24.5%), personal loan (15.2%) Loan to Housing (15.6%), Consumer durables (18.2%), Vehicle Loans (21.4%) and Credit Card Outstanding (23.1%).
- It may be observed that all the above segments within services have undergone deceleration in credit growth in Nov'16 compared to Oct'16, possibly reflecting the impact of demonetization, though temporary, on services sector.
- Credit to industry degrew by 3.4% in Nov'16 on the back of -1.7% growth Oct'16, 0.9% in Sep'16 and -0.2% in August on y-o-y basis.
- Average growth in Bank credit to industry was -0.3% during Apr-Nov, FY'17 compared to 4.9% growth recorded during Apr-Nov, FY'16.
- Credit to infrastructure sectors used to be in the 8-10% range between Apr'15 and Mar'16 is experiencing anemic growth since Apr'16.
- Credit growth to infrastructure has been negative in each of the eight months and was -3.6% during Apr-Nov, FY'17 compared 8.8% during Apr-Nov, FY'16.
- Credit growth around 5% partly reflects poor credit appetite by Industry. Poor credit offtake from the banking system is also partly due to the focus on stressed asset management by PSBs which are one of the major financiers of infrastructure projects.

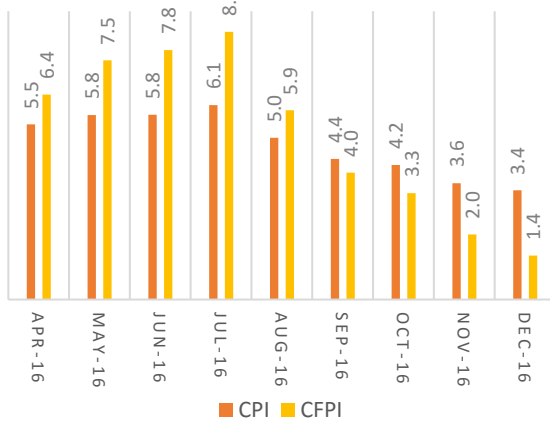
Inflation

- The comprehensive GDP deflation based inflation has increased successively from -1.1% in Sep-15 quarter to 4.55% for Sep-2016 quarter.
- Inflation as per the latest reading which is for Dec' 16 indicates that while retail inflation continues to fall, wholesale inflation reversed its declining trend. However, both CPI and WPI were recorded at 3.4%
- While WPI based inflation rose to 3.4% in Dec'16 from 3.15% in Nov' 16, CPI based inflation fell to 3.41% in Dec'16 from 3.63% in Nov'16 on y-o-y basis.
- Notwithstanding their diverse movements on y-o-y basis, both CPI and WPI Inflation were positive on m-o-m seasonally adjusted (SA) basis. While CPI inflation on m-o-m SA basis was around 0.5% WPI inflation was 0.7% in Dec'16.
- Agriculture related product inflation which had been a matter of concern since Apr'16 has eased significantly in the past five months on y-o-y basis.
- Fuel and power, and manufactured products inflation is slowly building up as suggested by WPI inflation.

SECTORAL INFLATION TREND



INFLATION AND FOOD INFLATION



Food Inflation-Converging Trends From WPI and CPI

	(y-o-y)						
	Food	Pulses	Cereals	Veg	Fruits	Egg	Sugar
CPI							
Weight	45.86	2.38	9.67	6.04	2.89	0.43	1.36
16-Apr	6.4	34.2	2.5	5.0	1.7	6.6	11.2
16-May	7.5	31.6	2.6	10.8	2.6	9.0	14.1
16-Jun	7.8	26.9	3.1	14.8	2.8	5.5	16.8
16-Jul	8.35	27.5	3.9	14.0	3.5	9.3	21.9
16-Aug	5.9	21.9	4.1	1.0	4.4	9.6	24.8
16-Sep	4.0	14.3	4.3	-7.1	6.0	9.9	25.9
16-Oct	3.3	4.1	4.4	-5.7	4.4	9.5	23.6
16-Nov	2.0	0.3	4.8	-10.4	4.6	8.6	22.3
16-Dec	1.4	-1.6	5.3	-14.6	4.7	6.4	21.1
WPI							
Weight	14.33	0.72	3.37	1.74	2.1	0.19	1.73
16-Apr	4.7	36.5	4.2	2.9	-1.8	1.4	17.3
16-May	8.2	35.8	5.9	13.3	3.9	11.1	22.4
16-Jun	8.6	26.6	7.8	17.2	6.4	4.4	26.4
16-Jul	12.6	38.3	9.2	28.4	17.4	11.5	33.0
16-Aug	8.9	34.2	9.5	0.2	13.9	9.8	35.4
16-Sep	6.4	24.0	9.1	-10.9	14.1	10.0	32.9
16-Oct	4.8	22.0	8.3	-10.0	6.0	10.3	30.9
16-Nov	1.5	21.7	7.3	-24.1	2.5	4.5	31.8
16-Dec	-0.7	18.1	7.5	-33.1	0.0	2.5	28.0

Sugar includes 'Sugar and confectionary' in CPI. Sugar under WPI is covered under manufactured products

- Though WPI inflation has not reached the stage of concern, gradual building up of manufactured products inflation and fuel inflation given the developments relating to fuel supply needs close monitoring.
- Services inflation is gradually gaining momentum from 3.8% in June'16 and reached 4.7% in Dec'16.
- RBI has highlighted the concerns regarding inflation given the CPI inflation excluding food and fuel remaining steady and OPECs agreement to cut crude oil production.

Food Inflation

- Food inflation is significantly low at retail (CPI) and is negative at the wholesale (WPI) level in Dec'16 on y-o-y basis.
- Food inflation at 8.4% which had been the major driver of high print for CPI in July'16 has successively come down to 3.3% in Oct'16 and further to 1.4% in Dec'16 on y-o-y basis.
- Food component of WPI based inflation which has been on a downward trend since Aug'16 has turned negative -0.7% in Dec'16 on y-o-y basis.
- The CPI food inflation which had turned positive (0.67%) on m-o-m seasonally adjusted (SA) basis in Dec'16 from negative in Nov'16(-0.67%).
- Seasonally Adjusted WPI food inflation has also turned positive (0.97%) in Dec'16 from -1.23% in Nov '16.
- Except in Oct'16 and Dec'16, in the rest three months between Aug'16 and Dec'16, seasonally adjusted M-o-M food inflation has been negative.
- Thus, despite firming up of sequential food inflation both at the retail and wholesale level, the cushion from previous months' negative food inflation has created a favourable scenario for food prices.
- Inflation of vegetables which used to be more than 10% during May-July 2016 has turned negative from Sep'16 through Dec'16. Significant moderation is seen in the inflation for Pulses.
- Only Sugar continues to exhibit double digit inflation both in the CPI and WPI basket from July'16 through Dec'16.
- Egg in CPI basket though has moderated in last two months but still shows higher single digit inflation.

Drivers of Food Inflation

- Rainfall in adequate quantity, at the appropriate time and spatially well distributed, generally have an assuaging effect on food inflation.

Winter Rainfall

- For the country as a whole, cumulative winter rainfall beginning with Jan 1, 2017 and till Jan 11, 2017 been 31% above LPA.
- The above LPA rainfall is contributed by only the northwest region which had a 111% above LPA rainfall. All other regions had rainfall around 60% less than the normal.

Monsoon-North East

- Though IMD had predicted a normal North-East monsoon season (October-December) 2016, for the country as a whole, cumulative rainfall during this year's post-monsoon (beginning Oct 1, 2016) has so far up to 31 December been 45% below LPA.
- As on Dec 31, Northwest (-73%) had the highest departure from the LPA followed by Southern Peninsula (-60%) and East and North East (-27%) and Central India at (-14%).
- As on Dec 31, 2016, only 5 out of 36 meteorological subdivisions had received excess rainfall. As on that date, 26 sub divisions had received deficient rain. Only 5 sub divisions had normal rainfall.
- It may be noted that the Southern Peninsula receives about 30% of its annual rainfall during the NE monsoon season. Tamil Nadu in particular receives about 48% of its annual rainfall during this season.

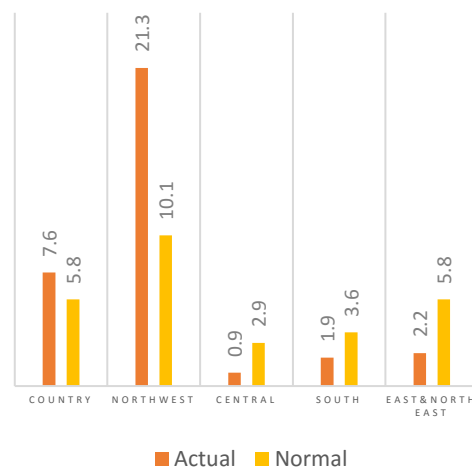
Monsoon-South West

- Seasonal rainfalls over Northwest India, Central India, South Peninsula and Northeast India were 95%, 106%, 92% and 89% of their respective LPA.
- Out of the total 36 meteorological subdivisions, 11 sub-divisions constituting 30% of the total area of the country received normal rainfall and 3 sub-divisions received excess rainfall (13% of the total area) during the season.
- However, 8 sub-divisions constituting 26% of the total area of the country received deficient seasonal rainfall.
- Monthly rainfall over the country as a whole was 89% of LPA in June, 107% of LPA in July, 91% of LPA in August and 97% of LPA in September.

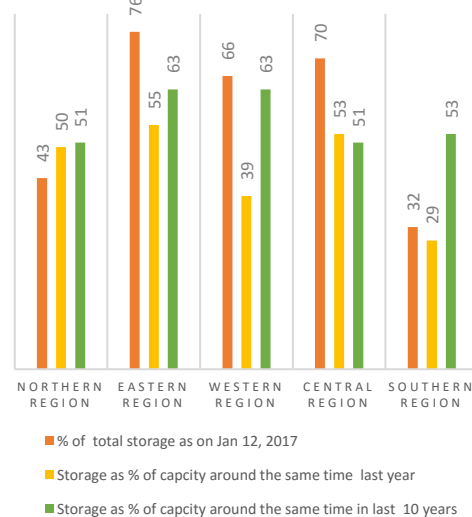
Storage in Reservoirs

- Water level in 91 large reservoirs across the country was 54% of their combined capacity as on Jan 12, 2017. The live storage in these reservoirs is 127% of their live storage in the corresponding period of last year and 99% of storage of average of last 10 years.
- Thus, the overall storage position is better than the corresponding period of last year in the country as a whole but is less than the average storage of last ten years during the corresponding period.
- The numbers of reservoirs having storage more than last year are 58 and reservoirs having storage more than average of last ten years are 43.
- The number of reservoirs having storage less than or equal to 50% with respect to last year are 13 and having storage less than or equal to 50% with reference to average of last ten years are 17.
- States having better storage than last year for corresponding period are Punjab, Rajasthan, Jharkhand, Odisha, West Bengal, Gujarat, Maharashtra, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, AP&TG (Two combined projects in both states) and Telangana.

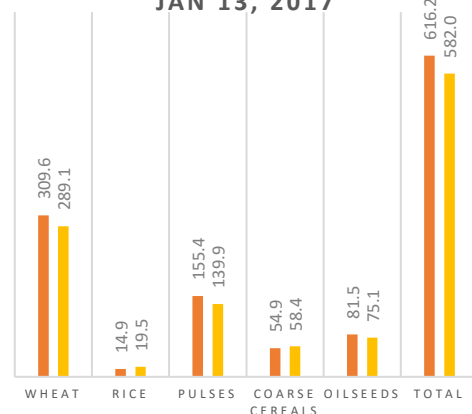
WINTER SEASONAL RAINFALL (JAN 1-11, 2017)



RESERVOIR STORAGE AS ON JAN 12, 2017



RABI CROP SOWING AS ON JAN 13, 2017



Drivers of Food Inflation

Storage in Reservoirs

- States having lesser storage than last year for corresponding period are Himachal Pradesh, Andhra Pradesh, Tripura, Karnataka, Kerala and Tamil Nadu and Uttarakhand.

Progress in Cultivation

- As per preliminary reports received from the States, the total area sown under Rabi crops as on 13th January 2017 stands at 616.21 lakh hectares as compared to 581.95 lakh hectare this time in 2016. This amounts to 5.9% growth on y-o-y basis.
- Wheat has been sown/transplanted in 309.60 lakh hectares, rice in 14.92 lakh hectares, pulses in 155.35 lakh hectares, coarse cereals in 54.87 lakh hectares and area sown under oilseeds is 81.47 lakh hectares.
- Higher sowing was reported from Jharkhand, Uttar Pradesh, Rajasthan and Madhya Pradesh, while lower sowing was reported from Karnataka, Tamil Nadu and Maharashtra.
- Crop sowing in the ongoing rabi season remained marginally higher than the average of the past five years as on Jan 13, 2017 owing to continued increase in acreage under pulses and wheat.
- Sowing of rice and coarse cereals, however, remained lower than the previous five years' average (normal of corresponding week), while oilseed acreage was stagnant.

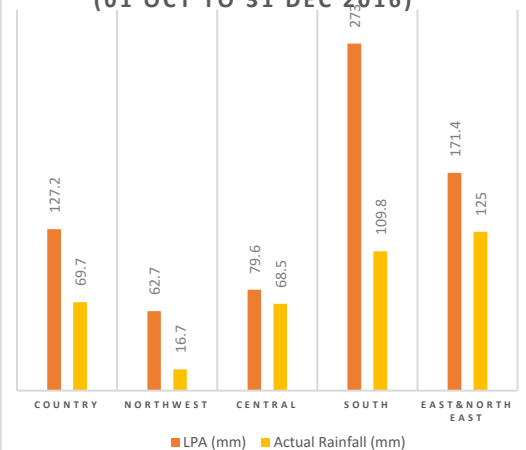
Drivers of Food Inflation

- The Ministry of Agriculture has set the country's grain production target at 270.10 million tonne (mt) for the 2016-17 crop year (July-June), 6.7% higher than the actual grain production of 253.23 mt in 2015-16.
- As per the 1st Advance Estimates for 2016-17, total production of Kharif foodgrains is estimated at 135.03 million tonnes which is a new record. If realized, production will be higher by 11.02 million tonnes as compared to last year's Kharif foodgrains production of 124.01 million tonnes.
- Production of Kharif rice is estimated at 93.88 million tonnes, and that of Kharif pulses is estimated at 8.70 million tonnes a new record.
- To give a boost to production of rabi crops, Government has upwardly revised the procurement prices of a number of rabi crops.

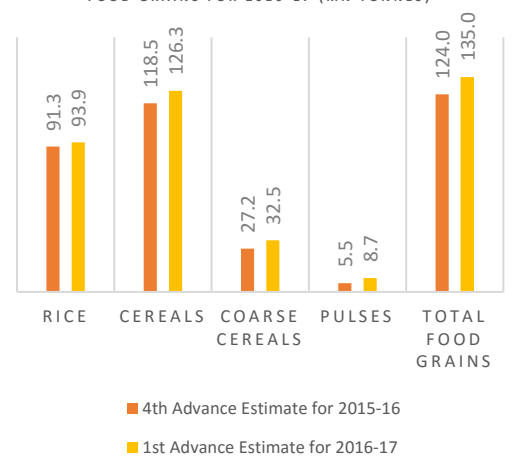
Inflation and Rate Outlook

- Relatively higher GDP deflator based inflation coupled with stubborn core inflation at around 4.5%, does not leave RBI much room to lower policy rates from the current levels.
- The fact that commercial banks have reduced lending rates suo moto and rupee has a depreciating bias, RBI will be conservative to adopt too lax a monetary policy which will threaten macroeconomic stability.
- We do not expect any rate action at this juncture as risks to growth and stability are evenly balanced.
- However, greater clarity will emerge on RBI's course of action once the fiscal stance is clear from the Budget.

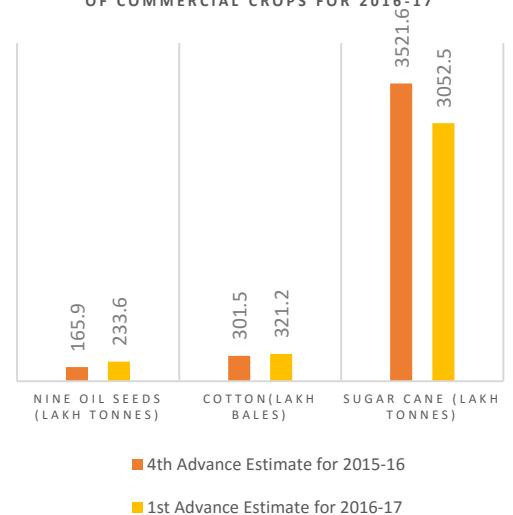
**NORTH EAST SEASONAL RAINFALL (MM)
(01 OCT TO 31 DEC 2016)**



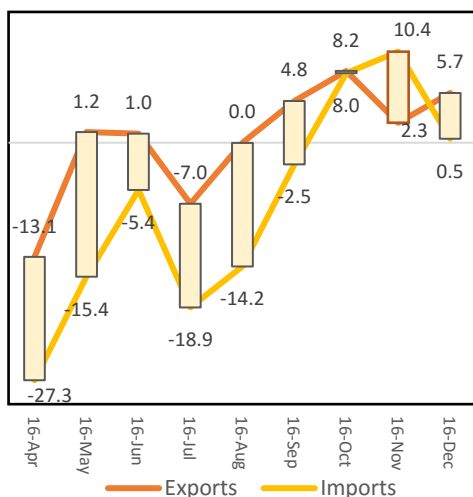
FIRST ADVANCE ESTIMATE OF PRODUCTION OF FOOD GRAINS FOR 2016-17 (MN TONNES)



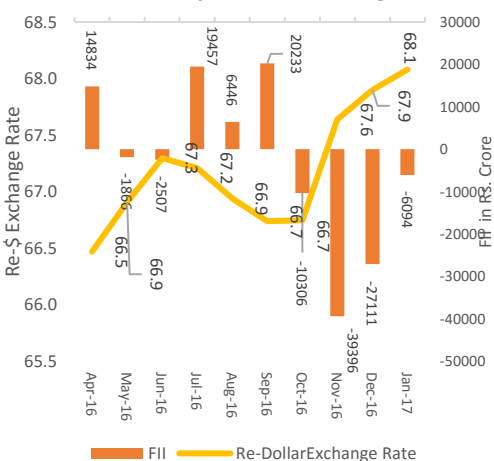
FIRST ADVANCE ESTIMATE OF PRODUCTION OF COMMERCIAL CROPS FOR 2016-17



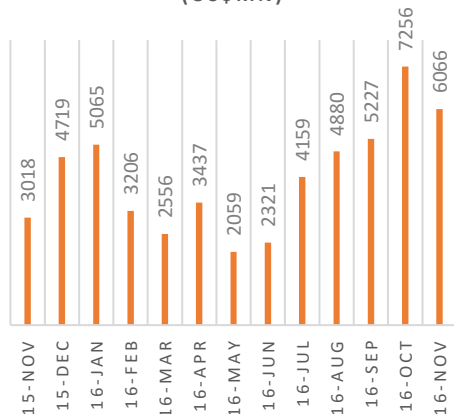
Export and Import Growth



FII and Rupee Dollar Exchange Rate



FDI EQUITY INFLOW (US\$ MN)



External Sector

- India's trade competitiveness has deteriorated continuously since April 2016 through December 2016 as reflected in a rise in 36-Currency Export and Trade Based Weights REER and also the 6-Currency Trade Based Weights REER.
- Export growth accelerated in December 2016 by 5.7% on the back of a 2.3% growth in Nov 2016 on a y-o-y basis to US\$23.88bn. Exports have positive growth consecutively for the past three months reflecting global growth gaining some momentum.
- Cumulative value of exports for the period April-December 2016-17 was US\$ 198.81 bn registering a growth of 0.75% on y-o-y basis.
- Non-petroleum exports in December 2016 grew by 5.4% to US\$ 211.18 bn on y-o-y basis. During April - December 2016-17 Non-petroleum exports grew by a meagre 2.2% on y-o-y basis to reach US\$ 176.83bn.
- Imports increased by 0.46% on y-o-y basis to reach US\$ 34.25bn in December 2016. While oil imports grew by 14.61%, non oil imports exhibited degrowth of 2.98% to reach US\$6.67bn and 26.61 bn respectively in December 2016.
- Cumulative value of imports for the period April-December 2016-17 was US\$ 275.36 bn registering a negative growth of 7.42% on y-o-y basis. Oil and non-oil imports for the period Apr-Dec 2016-17 registered a decline of 10.78% and 6.42% on y-o-y basis to reach US\$68.26 bn and US\$214.43bn respectively.
- While the decline in non-oil imports by 3% on y-o-y basis in Dec 2016 on a low base reflects the slowdown in economic activity following the demonetization initiative, the growth in oil imports from 5.9% in Nov 2016 to 14.6% in December 2016 reflects the impact of higher crude oil prices following the decision by OPEC to curb production.

Exchange Rate Outlook

- US Fed effected a rate hike in Dec, 2016. The bullish stance on USA growth by the new president has prompted market participants to expect rate hike by the Fed relatively at a faster pace. This could encourage capital flight from emerging markets. India will also experience pressure of capital outflow. The extent of capital outflow will be governed by the growth prospects.
- IEA expects oil demand to outstrip supply in Q1 and Q2 of 2017 after a gap of 3 years supporting oil prices at higher levels. However, increase in production and productivity from fracking will put price around US\$65 as the ceiling. Notwithstanding the ceiling to crude price, India will lose quite a bit of the windfall gain.
- Increase in oil import bill as well as the transient dip in India's growth following demonetization will also add to the pressure on rupee in the short term.
- Thus, a confluence of external developments and transitional domestic economic adjustment will create a depreciating bias for the Indian rupee.
- Notwithstanding the depreciating bias, the exchange rate will get support from the expected improvement in growth prospects in 2017-18.
- However, the rupee-dollar level will be guided by the support that growth receives from the Budget without putting stability at stake.

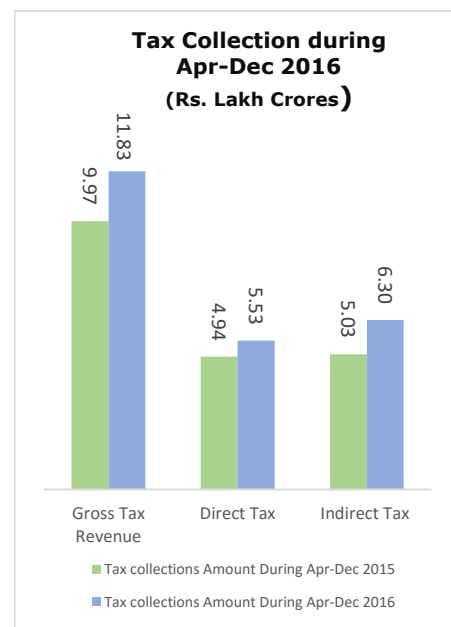
Fiscal Sector

GST Roll Out

- In its ninth meeting on January 16, 2017, the GST Council has set the date of 1 July for rolling out the goods and services tax (GST) after the Centre and the States struck a consensus on the contentious issue of sharing of administrative powers.
- As per the agreement arrived between the Centre and the States, small taxpayers with an annual revenue of less than Rs1.5 crore under GST will be divided between the states and the centre in the proportion of 90:10 for the purpose of scrutiny and audit. While West Bengal dissented, all the other states have agreed to the formula.
- Administrative control for all taxpayers above this revenue threshold will be shared equally between the Centre and the States for both goods and services.
- Further, through a special provision of the law, states will also be empowered under integrated GST (IGST) law to administer taxpayers in the ratio mentioned above. At present, the power to levy and collect IGST is with the central government.
- The Centre also agreed to the states' demands for taxation powers in territorial waters up to 12 nautical miles in the IGST law.
- The next meeting of the GST council is scheduled for 18 February when the council would finalize the draft laws-the central GST law, the state GST law and the IGST law-after incorporating the changes that have been agreed upon.
- It may be noted that the first six meetings of the GST Council were held on the following dates - 22-23 September, 2016; 30 September, 2016; 18-19 October, 2016; 3-4 November, 2016; 2-3 December, 2016 and 11 December, 2016.
- The seventh and eighth meetings of GST Council were held during Dec 22-23, 2016 and Jan 3-4, 2017 respectively. However, no consensus was reached on the much-debated issue on the administrative split, yet majority of the states had a positive attitude on the issue during the meeting.

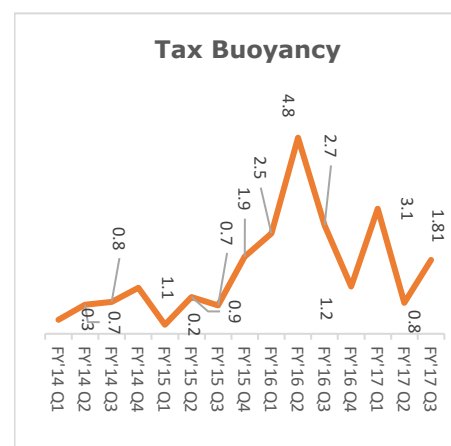
Tax Collection

- The figures for indirect tax collections (Central Excise, Service Tax and Customs) up to December 2016 show that net revenue collections are at Rs 6.30 lakh crore which is 25.0% more than the net collections for the corresponding period last year. Till December 2016, 81% of the Budget Estimates of indirect taxes for Financial Year 2016-17 has been achieved.
- As regards Central Excise, net tax collections stood at Rs.2.79 lakh crore during April-December, 2016 as compared to Rs.1.95 lakh crore during the corresponding period in the previous Financial Year, thereby registering a growth of 43.0%.
- Net Tax collections on account of Service Tax during April-December, 2016 stood at Rs. 1.83 lakh crore as compared to Rs.1.48 lakh crore during the corresponding period in the previous financial year, thereby registering a growth of 23.9%.



Growth in Tax Collection (%)

Component	Apr-Dec FY'17 over Apr-Dec FY'16	Oct-Dec 2016 over Oct-Dec 2015	Dec 2016 Over Dec 2015
Indirect Tax	25.2	23.5	16.4
Customs Duty	4.4	3.5	-5.0
Excise Duty	43.1	37.1	38.5
Service Tax	23.6	26.9	9.5
Direct	12.0	16.7	3.8
Total	18.7	20.0	3.8

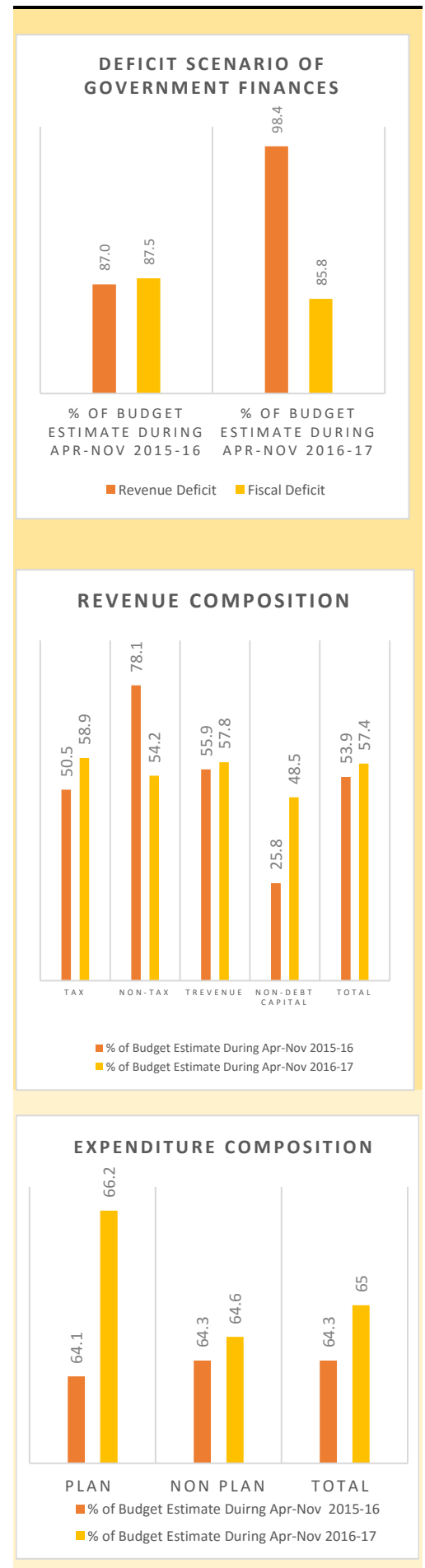


Tax Collection

- Net Tax collections on account of Customs during April-December 2016 stood at Rs. 1.67 lakh crore as compared to Rs. 1.60 lakh crore during the same period in the previous Financial Year, thereby registering a growth of 4.1%.
- The figures for Direct Tax Collections up to October, 2016 show that net collections are at Rs.5.53 lakh crore which is 12.01% more than the net collections for the corresponding period last year. Till December, 2016, 65.3% of the Budget Estimates of direct taxes for FY 2016-17 has been achieved.
- As regards the growth rates for Corporate Income Tax (CIT) and Personal Income Tax (PIT), in terms of gross revenue collections, the growth rate under CIT is 10.7% while that under PIT (including STT etc.) is 21.7%. However, after adjusting for refunds, the net growth in CIT collections is 4.4% while that in PIT collections is 24.6%. Refunds amounting to Rs.1,26,371 crore have been issued during April-December, 2016, which is 30.5% higher than the refunds issued during the corresponding period last year.

Implications of demonetisation for Government Revenue

- The Dec quarter (Oct-Dec, 2016) had a higher growth in overall tax collection compared to Apr-Dec, 2016 primarily driven by direct taxes. The excise duty collection also grew by a robust 378.5% in Dec'16. This suggests that economic activity might not have slowed down significantly, post demonetization. A dig into the details, however, suggests otherwise.
- Though direct tax collection grew by a robust 16.7% in the quarter ended Dec-2016, most of the growth was observed in Nov' 2016 (100% plus). The surge in direct tax collection could be due to revised filings of ITR which prompted the Finance Ministry to caution income tax payers to not to revise their ITR filings.
- Growth in direct tax collection has fallen to 3.8% in Dec 2016 compared to 16.7% during Oct-Dec 2016. Thus, increase in direct tax collection was governed by extraneous factors rather than reflecting the strength of the economy.
- Excise duty collection has not been affected much post demonetization. This need not reflect the strength of underlying industrial activity but may be more reflective of expanded industrial base for tax reporting purpose in the wake of the proposed implementation of GST on July 1, 2017.
- Service tax collection grew by 13.3% in November 2016 and 9.5% in December 2016 after a 50% plus growth in October which is leading to an overall growth of 26.9% for the December quarter. The important point to note in this context is the sharp deceleration in service tax collection indicating slowdown in service sector activity which has more than 55% weight in the GDP.
- The increase in tax collection has resulted in an increase in tax buoyancy in Q3 to 1.8 compared to the average tax buoyancy of around 1.3 for the period Q1 FY'14 and Q3 FY'17.
- It needs to be emphasized that the improved tax buoyancy which is observed in Q3' FY17 need not reflect the strength of the economy but as the positive consequences of demonetisation and the proposed roll out of GST.



Rate Decision by Major Central Banks

RBI

- As per our estimate given in the November 2016 edition of Monthly Macro Insights (http://www.bankofbaroda.co.in/Economic_Scenario.asp), RBI kept the policy rates unchanged in its fifth bi monthly policy review on Dec 7, 2016.
- Two broad forces drove the decision. First, upside risks to 5% inflation target by March 2017 because of waning base effect and stickiness of core CPI inflation. Second, hardening of yields on US Treasury following the election of Mr. Trump as the new US president and OPEC decision to cut crude production that will put pressure on the rupee to depreciate.

FED

- In its FOMC meeting during Dec 13-14, 2016, Fed increased the target range for federal funds rate to 1/2 to 3/4 % (0.50% to 0.75%) but strongly signalled it could still tighten monetary policy in 2017 as the labour market improves further and there is return to 2 per cent inflation.
- The Fed Chairperson held that US growth was looking stronger and rate increases would be needed to keep the economy from overheating and fuelling high inflation. In case of higher inflation, there is a possibility of an aggressive stance on interest rates going ahead.
- Fed conveyed that two to three rate increases are possible in 2017 if the job market continued to improve, inflation surges and major new risks did not arise. Further, the incoming governments promise to boost growth through tax cuts, spending and deregulation.
- The Fed also projected an aggressive rise in interest rates next year and in 2018, and restores its longer-run interest rate forecast to 3.0% from 2.9%.

ECB

- The Governing Council of the ECB on Jan 19, 2017 left the interest rate on the main refinancing operations, interest rates on the marginal lending facility and the deposit facility unchanged at 0.00%, 0.25% and -0.40% respectively.
- The Governing Council continues to expect the key ECB interest rates to remain at current or lower levels for an extended period of time, and well past the horizon of the net asset purchases.
- ECB decided to continue its QE program at €80 billion per month until the end of March 2017. From April 2017, the net asset purchases are intended to continue at a monthly pace of €60 billion until the end of December 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim.

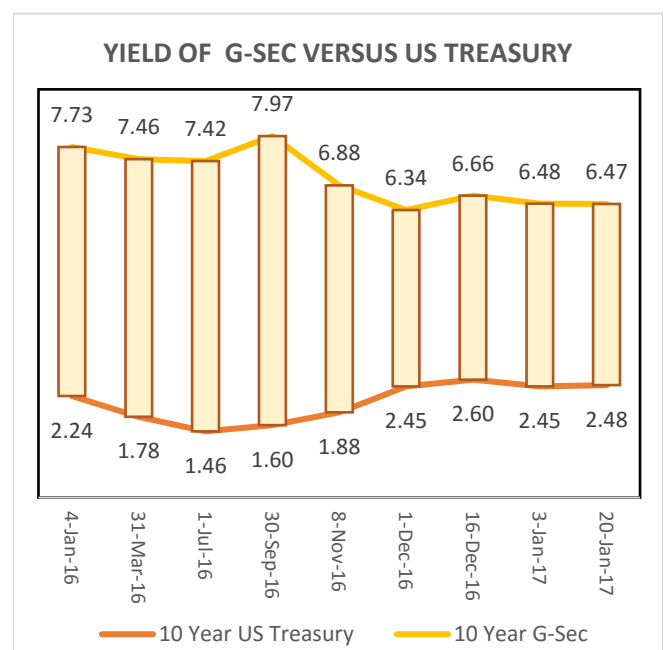
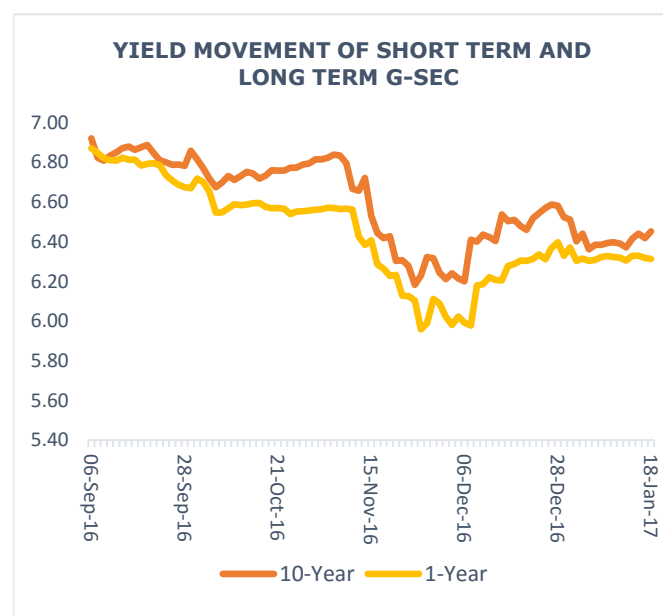
RBI-Policy Rates

- Following the policy review on Dec 7, 2016, the new policy rates and ratios are as given below

Policy Rates and Ratios (%)

Repo- 6.25
Reverse Repo- 5.75
Bank rate -6.75
MSF- 6.75
CRR- 4
SLR- 20.75

REPO AND INFLATION DYNAMICS



Rate Decision by Major Central Banks

BoE

- At its meeting ended on 14 December 2016, the nine members of the MPC voted unanimously to maintain Bank Rate at 0.25%, the level to which they were cut in August in the wake of the Brexit vote.
- The Committee voted unanimously to continue with the programme of sterling non-financial investment-grade corporate bond purchases totalling up to £10 billion, financed by the issuance of central bank reserves.
- The Committee also voted unanimously to continue with the programme of £60 billion of UK government bond purchases to take the total stock of these purchases to £435 billion, financed by the issuance of central bank reserves.
- In the November Inflation Report, the Committee had projected the unemployment rate to rise to around 5.5% by the middle of 2018 and to stay at around that level throughout 2019.
- The MPC had also projected that due to the depreciation of sterling, CPI inflation was expected to rise to around 2.75% in 2018, before falling back gradually over 2019 to reach 2.5% in three years' time.

BoJ

- BoJ In its monetary policy meeting on Dec 20, 2016, BoJ decided to continue applying an interest rate of -0.1 % to the short term Policy-Rate Balances in current accounts that financial institutions park with it.
- The Bank will continue with long term interest rate targeting. The Bank will purchase Japanese government bonds (JGBs) so that 10-year JGB yields will remain at around 0%. With regard to the amount of JGBs to be purchased, the Bank will conduct purchases at more or less the current pace viz, an annual pace of increase in the amount outstanding of its JGB holdings of about 80 trillion yen.
- BoJ will continue with "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control," aiming to achieve the price stability target of 2%, as long as it is necessary for maintaining that target in a stable manner. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 25 and stays above the target in a stable manner.
- It may be noted that after years of failed stimulus, the BoJ adopted QQE, a fresh monetary policy approach in September 2016, introducing a target for 10-year interest rates in an effort to boost growth and re-inflate the economy.

Financial and Commodities Markets

- Foreign Portfolio Investors (FPIs) have purchased stocks worth about Rs 20,566 crore in 2016, but sold bonds to the tune of more than Rs 43,646 crore, resulting in net outflows of Rs 23,080 (USD 3.2 billion).
- Dollar strength and expectations of rate hike by the US Federal Reserve, the surprising US presidential outcome and the demonetisation drive, which created domestic cash crunch, sparked intense selling pressure in the capital markets.
- This FPI pullout is an emerging market phenomenon, not an Indian phenomenon. The selling in debt is due to the market expectation of sustained Federal rate hikes starting December 2016.
- The government announced to reduce its market borrowing to Rs 66,000 crore as against the earlier planned Rs 84,000 crore between January and February, 2017 due to higher realization under tax revenue following demonetisation which allowed SBNs to pay taxes.
- The inflow of surplus liquidity into banking system has resulted in the call money rates ruling around 6%, the one-year paper around 6.30% and 10-year bond around 6.60% indicating a flat yield curve.
- Gold prices which had dipped in December 2016 have begun surging given the wedding season demand as well as due to safe haven demand. Given the uncertainties pertaining US policy under the new administration and amid concerns over Britain's exit from the European Union.
- The close of calendar year 2016 saw stock indices gaining despite a slew of factors negatively affecting it such as slowdown in China, the gradual increase in international crude prices after OPEC decided to cut production, Brexit, improved growth prospects in US and consequent Fed rate hike, new administration with unconventional approach to economic policy in US and demonetisation. The BSE Sensex rose by 1.78% during calendar year 2016 while mid-cap index rose by 6.9%.
- Between December 16, 2016 and January 20, 2017, the BSE Sensex rose by about 2.1%. The mid-cap and small cap indices showed a growth of 2.8% and 5.3% respectively. Except three sub indices of BSE (Tech, Information Technology and Health Care), all other sub indices posted growth.
- The consumption related sub indices posted good growth. Consumer durables surged by 9.6% and FMCG posted 7.8% growth. The capital goods segment also grew by 5.2% and metals by 6.99%.
- Going forward, we expect the stock market would continue its upward movements though it might be transiently impacted by the earnings in Q3FY17. Given the fiscal space, it is expected that the Union Budget scheduled on Feb 1, 2017 would include measures that would improve growth prospects which have been dampened post demonetization.
- Apart from domestic developments, the external forces which will influence the stock market are, the policy stance in US under the new administration and its ramifications on global economy, Charting of Brexit, Electoral outcomes in France, Germany and a referendum in Italy.

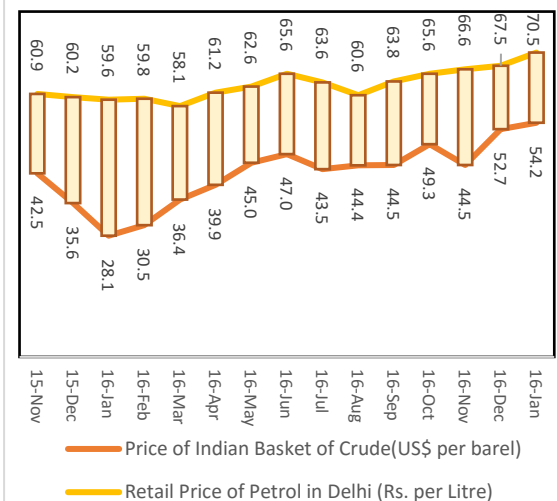
Drivers of International Crude Oil Prices

- The world demand and supply position with regard to crude oil forecasted by International Energy Agency(IEA) on Jan 19, 2017 for Q1 and Q2 of 2017 indicate that supply will fall short of demand after 3 years.
- On an average world supply of crude oil exceeded demand by 1.1 mn barrels per day during the calendar years 2014 to 2016.
- During the four year period 2013-16, oil demand on an average increased by 1.5 mn barrels per day in each year but oil supply increased by 1.9 mn barrels per day.
- IEA predicts, oil demand will increase by 1.3 mb/d in 2017 which is lower than the increase in demand observed during the past four years. The slow pace of increase in oil demand will be due to prospect of higher product prices on account of increase cost of crude oil and the possibility of a stronger US dollar
- However, it may be noted that demand on average has increased by 1.2 mb/d in each year in this century.
- In non-OPEC countries, the stabilisation since mid-December of Brent crude oil prices around the \$55/bbl level, and the assumption that lower output from the parties to the output agreement will probably see prices rise, is offering encouragement to higher cost producers.
- IEA has observed that activity in the US shale oil space is gaining momentum with rig count increasing for six straight months to November after reaching its lowest in May 2016.
- Increase in rig count coupled with increased productivity of shale activity in terms of shorter drilling times or larger amounts of oil produced per well, is making the US shale industry much leaner and fitter.
- The Saudi Arabia's oil minister indicated on 16 Jan 2017 that the OPEC output deal might not be extended beyond its six month expiry date.
- This announcement is significant if stocks are drawn in the first half of 2017 as agreed by OPEC and non-OPEC producers, the market will have tightened and prices stabilised but not at a sufficiently high level to allow another bonanza for high cost producers.
- The moot point from this analysis which is of significance to India's macroeconomic stability is that the existence of a natural ceiling to prices of crude oil governed by the dynamics of oil industry despite the OPEC deal.
- It may be observed that, OPEC has decided to reduce production by around 1.2 mb/d to bring its ceiling to 32.5 mb/d, effective 1st of January 2017 to restore a global oil demand and supply balance. The duration of this agreement is six months.
- The decision to reduce output to support prices got a further boost on Dec 10, 2016 as Non OPEC countries also agreed to reduce output by 558,000 barrels a day, the largest-ever contribution by non-OPEC countries. Russia has pledged to cut most among the non-OPEC countries at 300,000 barrels a day.
- The success of the OPEC to lift international crude prices will be dependent on two factors. First, some OPEC countries may not adhere to the agreed reductions. Second, as price of crude increases beyond a threshold, it will prompt many fracking companies in North Dakota and Texas to start drilling again, supplying more crude and driving the market back down.

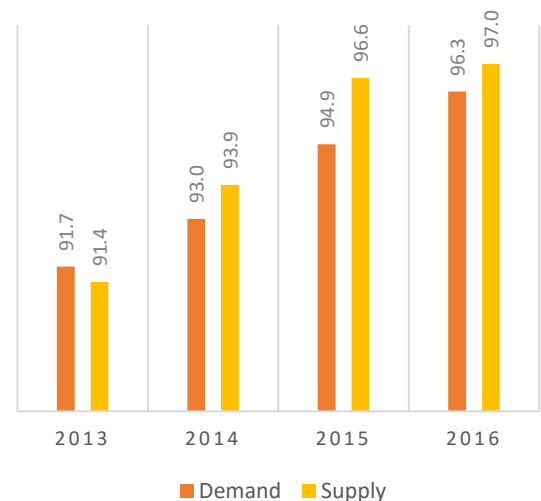
Implication of Oil price hike on India

- Price of Indian basket of crude has increased by 22% between end November and mid-January 2017. If we consider a slightly longer horizon, prices have increased by more than 93% during Jan-2016 and Jan 2017.
- An increase in oil prices poses a triple whammy, directly by influencing oil prices in the inflation basket and indirectly through pressure on government finances and the exchange rate.
- In the last five and half years, oil imports amounted to on an average 30% of total import bill for India. However, between November 2015 and Dec 2016, this ratio was only 22% reflecting the gain from cheaper crude oil prices.

Import Price of Crude and Retail Price of Petrol



WORLD OIL DEMAND AND SUPPLY (MN BARRELS PER DAY)



Banking

Competition in the Lending Space

- Though RBI has adopted a status quoist approach to policy rates, banks on their own have lowered benchmark lending rates taking advantage of the excess liquidity.
- Among select 12 banks (6 from the PSB space and 6 New Private Banks), all have revised down their 1 year MCLR. Further, 6 have revised their base rates and 3 have revised their FD rates for 1-2 years.
- Base rates of these rates varied within a range of 130 range. SBI, Axis Bank, HDFC Bank and ICICI Bank had the lowest base rate at 9.25% and IndusInd Bank had the highest base rate at 10.55%.
- SBI had the lowest MCLR rates at 8.00% in the 1-year tenure and IndusInd continued to have the highest MCLR rate at 9.10% in the 1-year tenure.
- Variation in MCLR drastically increased to a range of 110 bps from 55 bps in the previous month. Range among the 12 banks with respect to deposit rates jumped to 100 bps in January 2017 from 50 bps in December 2016 for term deposits of tenure between 1 year-2 years and for less than Rs. 1 crore.

Innovation

HDFC bank to introduce robot 'IRA'-HDFC Bank on Jan 9, 2017 launched a 'humanoid' in the domestic banking space. The bank showcased human-sized robot, Ira, developed in association with Kochi-based Asimov Robotics Pvt. Ltd, and will be deployed shortly in Mumbai.

Banks using online realty portals to source potential borrowers-Realty verticals of banks, property consultants as well as NBFCs are turning their attention to source business through online mode. For instance, Axis bank in its mobile app introduced a realty feature on Nov 9, 2016 which would facilitate home buyers to search and locate properties which are pre-approved by the Bank. Also, HDFC RED, the realty segment of HDFC Bank, deals exclusively with online buyers. Tata Capital introduced Online Home Store which offers online selection of the appropriate home and home loan.

Yes bank ties up with Bajaj electricals for vendor financing using blockchain -Yes Bank on Jan3, 2017 announced that it has implemented a multi-nodal Blockchain transaction to fully digitize vendor financing for Bajaj Electricals. The block chain transaction has been implemented on a blockchain-based smart contract written by fintech start-up Cateina Technologies. Capitalising on the efficiency and security features of Blockchain, Yes Bank has used the Hyperledger Fabric supported by IBM to design a vendor financing solution which allows Bajaj Electricals (anchor client) to digitize the process for discounting and disbursement of funds to its vendors by integrating seamlessly with Yes Bank's systems. The solution will also facilitate an automated debit from Bajaj Electricals' account by Yes Bank. This implementation would reduce entire process cycle for bill discounting from four days to almost real-time and eliminate paper trail and manual intervention. It may be noted that, ICICI Bank in October 2016 had successfully executed transactions in international trade finance and remittance using blockchain technology in partnership with Emirates NBD.

Financial Stability through RBI's lens

- RBI's Financial Stability Report for December 2016 published on Dec 29, 2016 has observed that the risks to the banking sector remained higher due factors such as continuous deterioration in asset quality, low profitability and liquidity.
- The assessment of systemic risk shows that the India's financial system remains stable. The stress on banking sector, particularly the PSBs remain significant.
- The business growth of scheduled commercial banks (SCBs) remained subdued with public sector banks (PSBs) continuing to lag behind their private sector peers.
- Profit after tax (PAT) for SCBs contracted on y-o-y basis in the first half of 2016-17 due to higher provisions, write-offs and lower growth in net interest income.
- The GNPA (gross non-performing advances) ratio of SCBs increased to 9.1% in September 2016 from 7.8% in March, pushing the overall stressed advances ratio to 12.3% from 11.5%.
- Large borrowers registered significant deterioration in their asset quality. The asset quality of large borrowers deteriorated significantly.
- The share of special mention accounts (SMA)-2 increased across bank-groups.
- Capital adequacy (CRAR) remained unchanged at 13.3% and the Tier-I-I leverage ratio at the system level increased marginally between March and September 2016.
- PSBs as a group continued to record losses.
- RoA for SCBs marginally improved to 0.4% from 0.3% and RoE increased to 5.0% in September 2016 from 3.2% in March 2016.
- The banking stability indicator shows that the risks to the banking sector remained elevated due to continuous deterioration in asset quality, low profitability and liquidity. Given the higher levels of impairment, SCBs may remain risk averse in the near future as they clean up their balance sheets and their capital position may remain insufficient to support higher credit growth.

Yes bank launches 'Yes Fintech'-YES Bank launched 'Yes Fintech', a business accelerator programme on Jan 17, 2017. The bank has tied up with T-Hub, a start-up incubator of the Telangana government, and AntHill, an IT solutions firm for this programme. The objective of the business accelerator programme is to support innovations in various spheres such as financial inclusion, MSME-centric solutions, lending, payments, risk management, trade finance, forex and treasury bank in collaboration with Fintech companies.

Development

BHIM App Launched – Government in its drive to enable cashless transactions through mobile phones has launched BHIM (Bharat Interface for Money) application on Dec 31, 2016. BHIM has been developed by NPCI. The application has hit more 5 million downloads so far. BHIM is interoperable with other UPI apps and bank accounts. It mainly facilitates easy mobile to mobile payment and transfer of funds. The unique feature of BHIM is that a bank account or virtual payment address is not required for payments or fund transfers. What is required is only the mobile number of the payee. The app is not bank specific and has been launched to promote cashless transaction across the urban as well as the rural population. NPCI aims to facilitate bill and insurance premium payments through this App by March 2017.

RBI extends period of enhanced limits on prepaid payment instrument (PPI) - The limit on PPI such as gift cards, corporate cards which was enhanced on Nov 22, 2016 by RBI to Rs. 20000 from earlier Rs. 10,000 till the period Dec 31, 2016 has now been extended till a comprehensive review of guidelines on PPI is completed. At present, 47 non-bank entities and 45 banks are part of the operating payment systems for PPI.

Bank of Baroda launches agriculture investment credit scheme in Rajasthan-Bank of Baroda has launched an agricultural investment credit scheme for the farmers of Rajasthan on Dec 31, 2016. Under the scheme, farmers can avail loans for various investment activities such as construction of farm ponds, installation of solar pumps, installation of micro irrigation, and for other agriculture and allied activities. The scheme is intended to improve the living standards of the farmers by raising their output and hence income. Timely repayment of the loan by the farmers will be incentivized under this scheme. Initially, the scheme will be implemented in the districts of Sri Ganganagar, Hanumangarh and Bikaner and thereafter will be gradually extended to all districts of Rajasthan. In this context, the Bank has already entered into tie-ups with leading suppliers of irrigation equipment to boost micro irrigation.

Yes bank launches 'Customisable Savings Account'-Yes Bank launched a Customised Savings Account on Jan 17, 2017, which can be opened via the Bank's website or by visiting any of its branches. The Customisable Savings Account is reported to have been designed to protect the customer from avoidable charges by eliminating unnecessary account features. The customer is provided with the option to choose debit cards, pricing options as an alternative to maintaining minimum balance, account benefit packages and other complimentary introductory offers on the Bank's products. The Customisable Savings Account offers an interest rate of 6% p.a. and maximum tax exemption benefit with 34% lesser investment in terms of balances.

Andhra Bank launches "AB E-VYAPAR"-Andhra Bank announced the launch of a cashless transaction initiative, 'AB e-vyapar' on Jan 16, 2017. The initiative eliminates the need for cards or PINs and works through mobile phones, requiring only an Aadhar number.

Findings of Stress Test on Indian Banks

- The resilience of the Indian banking system against macroeconomic shocks was tested through a series of macro stress tests for credit risk at system, bank group and sectoral levels.
- Among the bank groups, PSBs may continue to register the highest GNPA ratio. Under baseline scenario, the PSBs' GNPA ratio may increase to 12.5% in March 2017 and then to 12.9% in March 2018 from 11.8% in September 2016, which could increase further under a severe stress scenario. PSBs may continue to record the lowest CRAR among bank groups.
- Extant provisions as per cent of their total advances- 5.8% for PSBs, 2.3 per cent for PVBs and 4.1% for FBs as of September 2016 – seem to be insufficient to meet expected losses (ELs) under stress scenarios. Specifically, PSBs need to further increase their provisioning levels to meet the ELs arising from credit risk, under baseline and adverse macroeconomic risk scenarios.
- However, the present level of total capital (Tier-I plus Tier-II) as per cent of total advances across bank groups is expected to be sufficient to meet estimated unexpected losses (ULs) and expected shortfalls (ESs) arising from credit risk, even under severe macroeconomic stress conditions
- Credit risk arising from exposure to the infrastructure sector (specifically power, transport) was examined through a sectoral credit stress test where GNPA ratio of the sector was assumed to increase by a fixed percentage point impacting the overall GNPA ratio of the banking system. The results showed that shocks to the infrastructure segment will impact the profitability of banks considerably, with the most significant effect of the single factor shock being on the power and transport sectors
- The Stress Tests and Network Analysis shows that GNPA ratio of SCBs may increase further if macroeconomic conditions deteriorate further. Given the higher level of impairment, SCBs may remain risk averse in the near future as they focus on cleaning up their balance sheets and their capital positions may remain insufficient to support higher credit growth.

Global Regulatory Standards

- RBI has held that the BCBS proposals to apply non-zero risk weights and disallow exemption from the large exposure (LE) rules on banks' sovereign exposure are still work-in-progress.
- Reserve Bank has nonetheless allowed exemptions to the sovereign exposures from LE limits in its LE Framework which is in line with the BCBS' April 2014 LE standards.
- It may be noted that RBI had issued the Large Exposures Framework was issued on December 1, 2016 to limit a bank's exposure to a single counter-party or a group of connected counter-parties to complement the existing risk-based capital standards and to provide a back-stop measure to contain concentration risks.
- Also a complementary framework for discouraging large borrowers to depend solely on banks for their funding needs was released on August 25, 2016 to contain concentration risks for the banking system as a whole.

■ **Merger of SBI and Associates delayed-** It was reported on Jan 2, 2017 that the planned merger of the associate banks with SBI will now be undertaken in financial year 2017-18 pending approval from the government as well as the need for congruence accounting and IT systems of these banks with SBI. It may be observed that in May 2016, SBI had announced its decision to merge the Associate banks with itself by March 2017. In Nov 2016, the demonetisation impinged on the merger decision. It is now expected that the merger would be effected in Q1 of 2017-18.

■ **Banks should increase supply of Rs 500 notes to rural areas-**RBI, on Jan 4, 2017 instructed banks to supply at least 40% of bank notes in denomination of Rs. 500 or below to villages due to the ongoing Rabi season and reported hoarding of notes. Banks maintaining currency chests were advised to immediately augment issuance of fresh notes to rural branches of regional rural banks, district cooperative banks, other commercial banks, White Label ATM Operators (WLAOs) and post offices in rural areas on a priority basis. The requirement of cash to be distributed may be calculated by banks based on district wise mobilization of CASA deposits and the share of rural areas in it. Funding of off-site ATMs in rural areas were to be given preference over on-site ATMs for their superior reach.

SBI waives MDR charges for small merchants-SBI on Jan 9, 2017 waived merchant discount rate (MDR) on debit card transactions for all small merchants with annual turnover of less than Rs 20 lakhs. The charges have been waived up to Dec 31, 2017, to encourage merchants and customers who transact small amounts through cash to adopt digitalisation. The government had waived these charges post demonetisation up to Dec 31, 2016 to avoid inconvenience caused by paucity of cash. MDR is the commission charged by banks to the merchants for use point-of-sale (PoS) machines. Since 2012, RBI has capped MDR for debit card transactions up to Rs 2,000 at 0.75% and at 1% for all transactions above Rs 2, 000. MDR on credit cards is not capped and can go up to 2.5%.

IDFC bank launches Aadhar Pay- IDFC Bank, on Dec 26, 2016, launched the Aadhar-linked cashless merchant solution Aadhar Pay that uses a customer's smartphone to enable digital payments across the country. Aadhaar Pay has been developed by IDFC Bank along with NPCI and UIDAI. The differentiating factor between the Aadhar Pay which is an app and a POS machine transaction is that it does not charge any transaction fees from merchants and customers. The facility requires a bank account and Aadhar number to enable payment to merchants, with the fingerprint of the customer serving as the password, eliminating the need for PIN. Merchants can download the app through an SMS link, post linking of merchants' accounts with the Bank using e-KYC.

Initiatives

Novelis turns to Asian banks for refinance-Novelis Inc, the Atlanta headquartered arm of Hindalco of Aditya Birla group which is a leading producer of flat rolled aluminum products used in automobiles and beverage cans, is planning to refinance \$1.8 billion of its term loans for a period of five-and-a-half years. These term loans were last refinanced in 2010. This is reported to be the first time that Asian and Indian banks subscribe to a debt paper of a US company with Indian parent firm. The refinancing is undertaken by a syndicate of Indian and foreign banks like State Bank of India, Bank of Baroda, Axis Bank, ICICI Bank, Kotak Mahindra, ANZ, Barclays Bank, Citibank, Bank of Tokyo-Mitsubishi UFJ and ING Bank. The annual interest savings is estimated at \$90 million as the new syndication will be priced at a margin of Libor plus 185 bps, as against the prevailing price of LIBOR plus 325 bps.

SBI to raises \$500 mn through overseas market-SBI plans to raise \$500 mn through dollar-denominated senior unsecured notes as a tranche of its \$10 bn medium-term note programme. The bonds will be issued through the London branch of SBI on Jan 24, 2017 and will be listed on the Singapore Stock Exchange. The bonds will have a coupon rate of 3.25% payable semi-annually having a maturity of five years. Moody's and S&P Global Ratings have assigned "BAA3" and 'BBB' ratings respectively to the issue. The ratings reflect the high level of support receivable by the Bank in event of stress as well as the large size of the bank in terms of assets and deposits.

PAYTM to launch its Payment Bank in Feb 2017- RBI on Jan 3, 2017 approved the launch of the Paytm Payment Bank. It is expected to be operational in Feb 2017 through its first branch in Noida, Uttar Pradesh and then expand operations to the North East. As reported, the Bank plans to have around 100,000 banking correspondents and 200 million wallets, current and savings accounts. Prior to the assent of RBI, in Dec 2016, One97 Communications, the parent company, segregated its mobile wallet business-Paytm from the payment bank. It is reported that wallet accounts would be moved to the Bank. It may be noted that Airtel Payments Bank Limited was the first payments bank in India to commence operations simultaneously in Andhra Pradesh, Telangana and Rajasthan in Nov 2016.

Annex-2

Base Rate and MCLR of Select Banks

Name	Effective from	1 Y - MCLR	Effective from	Base Rate	Effective from	FD Rate for 1-2 years
Bank of Baroda	07-Jan-17	8.35	01-Jul-16	9.60	Nov-16	7.00
Bank of India	07-Jan-17	8.50	30-Sep-16	9.65	Dec-16	7.00
Canara Bank	07-Jan-17	8.45	11-Oct-16	9.60	Jan-17	6.90
Punjab National Bank	01-Jan-17	8.45	01-Jan-17	9.35	Jan-17	6.90
Union Bank of India	01-Jan-17	8.65	01-Dec-16	9.55	Nov-16	7.25
State Bank of India	01-Jan-17	8.00	01-Jan-17	9.25	Nov-16	6.90
Axis Bank	18-Jan-17	8.25	02-Jan-17	9.25	Dec-16	7.00
HDFC Bank	07-Jan-17	8.15	24-Oct-16	9.25	Jan-17	6.25
ICICI Bank	03-Jan-17	8.20	03-Jan-17	9.25	Dec-16	7.00
IndusInd Bank	17-Jan-17	9.10	17-Jan-17	10.55	Jan-17	7.15
Kotak Bank	01-Jan-17	9.00	06-Jan-17	9.30	Jan-17	6.75
Yes Bank	02-Jan-17	8.95	05-Oct-15	10.25	Nov-16	7.10

Note- All Banks in this sample except Kotak Mahindra Bank, Yes Bank and IndusInd Bank offer 4% interest rate on SB deposits. Yes bank offers 6% p.a interest rate on Saving Bank accounts for account balance of over Rs. 1 lakh. Kotak Mahindra bank offers 6% p.a interest rate on Saving Bank accounts for account balance of over Rs. 1 lakh and 5% p.a. interest rate on Saving Bank accounts for account balance upto Rs. 1 lakh. IndusInd Bank offers 5% interest rate on Saving Bank accounts for account balance of over Rs. 1 lakh - Rs. 10 lakh and 6% for account balance of over Rs. 10 lakh.

State Bank of India offers 6.90% for term deposits of 1 year to 455 days, 6.95% for term deposit of 456 days to less than 2 years and 6.85% for term deposit of 2 years.

Punjab National Bank offers 7.00% for term deposits of 1 year and 6.90% for term deposits of 1 to 2 years.

HDFC Bank offers 6.95% for term deposits of 1 year to 1 year 3 days and 6.25% for term deposits of 1 year 4 day to 2 years.

Kotak Mahindra Bank offers 6.75% for term deposits of 1 year to 389 days, 6.95% for term deposit of 390 days, 6.50% for term deposit of 391 days to less than 2 years and 6.25% for term deposit of 2 years.

ICICI Bank offers 6.90% for term deposits of 365 days to 389 days, 7.00% for term deposit of 390 days to 2 years

AXIS Bank offers 7.00% for term deposits of 1 year to less than 2 years and 6.75% for term deposits of 2 years.

IndusInd Bank offers 7.15% for term deposits of 1 year to less than 1 year 2 months, 7.05% for term deposit of 1 year 2 months to less than 2 years, and 6.75% for term deposit of 2 years.

Figures are in per cent.

Annex-1 Growth Projections – Pre and Post Demonetization			
Organisation	Growth Forecast	Growth Boosters	Potential Drags
Pre-Demonetization			
S&P July 22, 2016	8% Growth for 2016-17 and 2017-18	Strong consumption growth continues apace, the external accounts look reasonably resilient post-Brexit, and fiscal policy looks prudent. The structural reform drive continues to gain traction. Consumer confidence looks quite high and investor confidence seems buoyant.	Lack of investment pickup
IMF Oct 4, 2016	Marginally scaled up India's economic growth projections by 0.2 percentage points to 7.6 per cent each for 2016-17 and 2017-18 from its earlier review in July 2016.	India's economy benefitted from lower oil prices, effective policy actions and stronger external sector indicators	In the near term, private investment will be constrained by weak corporate and public bank balance sheets. Increasing capital buffers of banks, Timely Implementation of GST, elimination of poorly targeted subsidies, enhancing efficiency of mining sector and increasing electricity generation are key for higher growth.
World Bank June 20, 2016	India's economic growth to be at 7.6 percent in 2016-2017, followed by a modest acceleration to 7.7 percent in 2017-2018 and 7.8 percent in 2018-2019.	Economic activity in India has remained robust, supported mainly by domestic demand. Growth will continue to be driven by private consumption, which has benefited from lower energy prices and higher real incomes. The World Bank has also observed that an accommodative monetary stance, public investments in infrastructure, and progress on structural reforms, including new bankruptcy laws, should support a pickup in private investment	The most significant near-and medium-term risks stem from the banking sector and its ability to finance private investment which continues to face several impediments in the form of excess global capacity, regulatory and policy challenges, in addition to corporate debt overhang.
Post-Demonetisation			
ADB Dec 13, 2016	ADB expects India to grow 7.0% in 2016-17 as against 7.4% forecasted earlier.	The effects of transition are expected to be short-lived and Indian economy is to grow at 7.8% in 2017.	Weak Investment, agriculture slowdown and recent demonetization.
Fitch Nov 29, 2016	GDP growth to lower slightly to 6.9% in 2016-17 from 7.4% projected earlier	Implementation of the structural reform agenda is expected to contribute to higher growth & higher real disposable income would support growth but the anticipated recovery looks a bit less certain in light of ongoing weakness in the data.	Temporary disruptions in economic activity due to demonstration
Morgan Stanley Dec 9, 2016	Revised its growth estimate from 7.7% to 7.4% for 2016.	Overall growth story remains on track. Impact of demonetization to be short-term. Growth momentum back from April 2017 with support from consumption and exports.	Demonetization expected to affect near-term economic activity, thus leading to a slower pace of growth recovery.

Annex-3 Monthly Macro Indicators

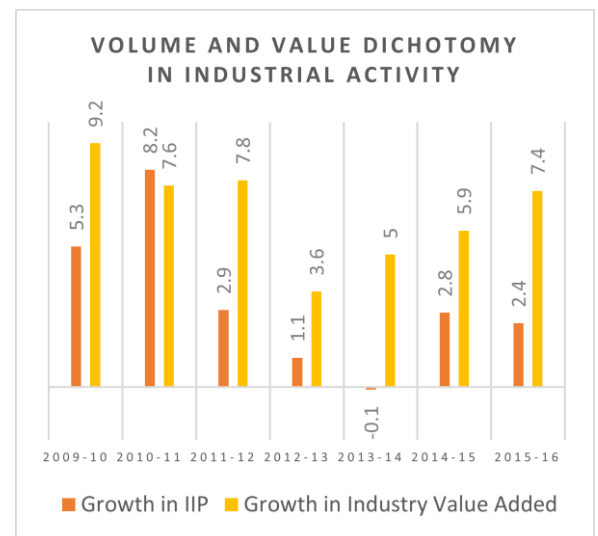
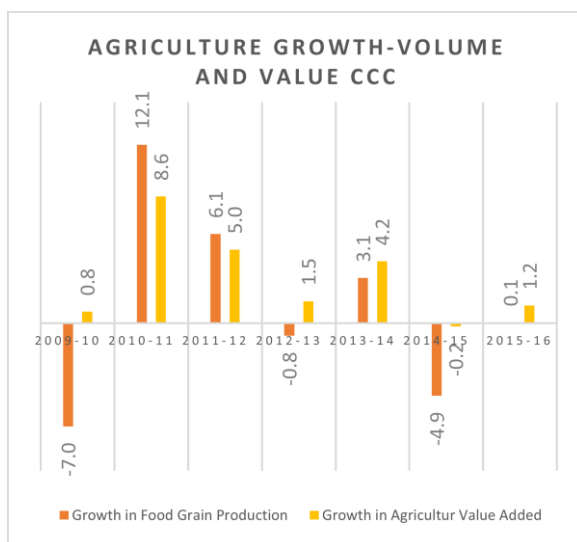
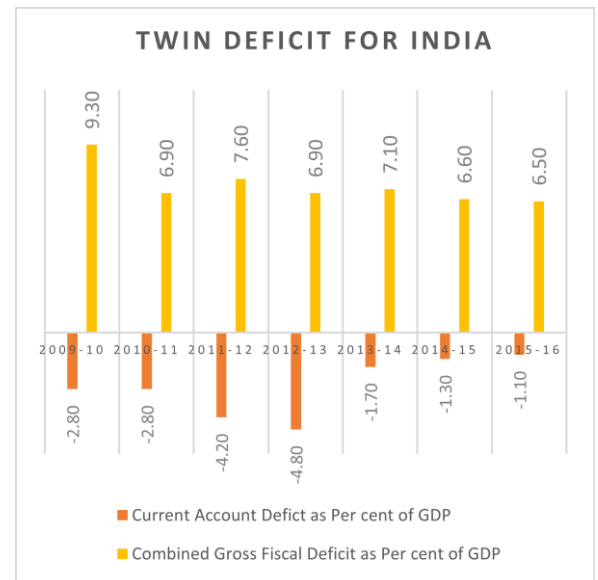
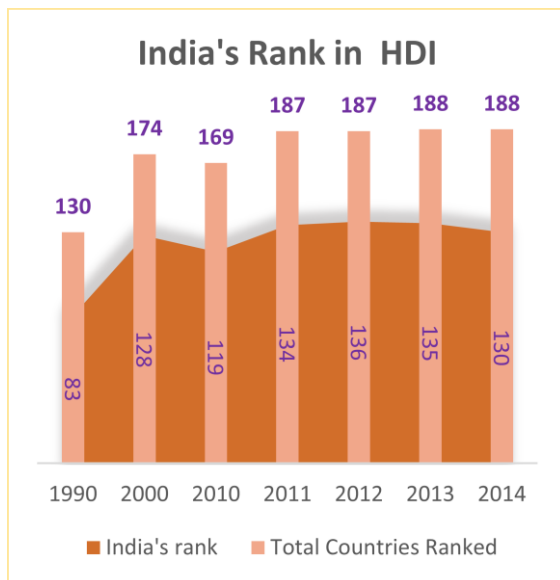
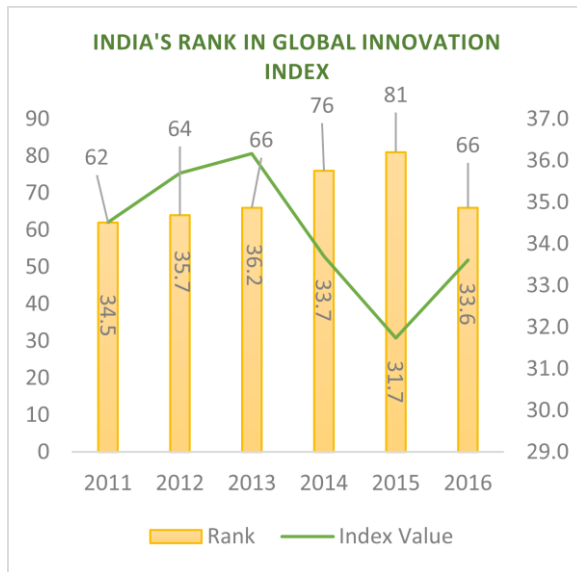
Indicator	15-Nov	15-Dec	16-Jan	16-Feb	16-Mar	16-Apr	16-May	16-Jun	16-Jul	16-Aug	16-Sep	16-Oct	16-Nov	16-Dec
Production														
IIP	-3.4	-0.9	-1.6	1.9	0.3	-1.3	1.3	1.95	-2.5	-0.7	0.7	-1.9	5.7	
Infrastructure	-1.3	0.9	2.9	5.8	6.4	8.5	2.8	5.2	3	3.2	5	6.6	4.9	
Prices														
WPI	-2	-1.1	-1.1	-0.9	-0.5	0.8	1.2	2.1	3.7	3.7	3.6	3.4	3.2	3.4
CPI	5.4	5.6	5.7	5.3	4.8	5.5	5.8	5.8	6.1	5.1	4.39	4.2	3.6	3.4
Agriculture	6.1	6.4	6.8	5.3	5.2	6.4	7.5	7.8	8.4	5.9	4	3.3	2.1	1.4
Industry	-1.4	-1.5	-1.2	-0.5	0.1	1	1.2	1.2	1.8	2.4	2.5	2.7	3.2	3.7
Services	3.8	4	3.9	4.4	4	4.3	4	3.8	4	4.2	4.5	4.6	4.8	4.7
Banking														
Reverse Repo (Rs. Mn)	79720	70233	77843	49575	153307	199432	48331	104234	96493	55863	99851	108037	187952	216296
Repo (Rs. Mn)	164022	136607	162492	143599	144912	113263	143911	53418	51953	64906	66210	98619	68773	47167
Aggregate Deposits	9.7	10.1	10.4	9.6	8.1	9.5	8.9	9.2	8.9	8.9	11.3	9.8	15.9	
Total Credit	8.6	9.2	9.5	9.7	9	8.4	8	7.3	7.7	7.6	11.5	6.4	4	
Non Food Credit	8.8	9.3	9.8	9.9	9.1	8.4	8.4	7.9	8.3	8.2	10.8	6.7	4.8	
Industrial Credit	5	5.3	5.6	5.4	2.7	0.1	0.9	0.6	0.6	-0.2	0.9	-1.7	-3.4	
Infrastructure Credit	8.7	8.4	9.8	9.1	4.4	-1.5	-0.1	-2.1	-3.1	-4.2	-4.6	-6.6	-6.7	
Service Credit	6.8	9.2	8.9	8.6	9.1	10.9	9.3	9.2	10.8	12.1	18.4	9.3	7.1	
Leading Indicators														
Manufacturing PMI	50.3	49.1	51.1	51.1	52.4	50.5	50.7	51.7	51.8	52.6	52.1	54.4	52.3	49.6
Service PMI	50.1	53.6	54.3	51.4	54.3	53.7	51	50.3	51.9	54.7	52	54.5	46.7	46.8
Composite PMI	50.2	51.6	53.3	51.2	54.3	52.8	50.9	51.1	52.4	54.6	52.4	55.4	49.1	47.6
Services														
Passenger Traffic: All Airports	20.8	16.8	17.9	19.6	20.4	17.3	17.5	16.8	23	19.6	20.8	19.7	18.6	
Foreign Tourist Arrivals	6.6	3.1	6.7	11.3	12	10.6	3.8	7.4	17.1	11.8	13.3	10.3	9.2	13.6
Goods Traffic Movement by Railways	-4.2	-0.9	0.3	-0.7	-1.2	-3.7	-0.6	3.0	-1.9	-3.7	-2.7	-2.6	5.5	-0.1
Automobile Sales: Total	-0.4	-1.5	3.1	10.2	10.2	14.5	7.7	7.2	8.9	16.8	15.8	7.2	-4.2	-16
Automobile Sales: Passenger Vehicle	7.2	5.1	-0.6	5.4	9.2	10.2	5.2	7.6	13.9	18.9	20.7	6.2	5.8	4.3
Automobile Sales: Commercial Vehicle	7	13.6	19.3	18.8	20.7	14.7	15.1	7.3	2.1	2.4	0.4	13.5	-7.1	-5.7
Automobile Sales: Two Wheelers	-1.3	-3.1	3.5	10.4	10.8	17.2	8.7	7.9	9.2	18.6	17.2	7.5	-5.2	-19.7
Automobile Sales: Three Wheelers	-13.3	-6.2	-3	20.4	-7.2	-21.7	-9.9	-6.6	-8.9	-11.9	-16.1	-2.1	-22	-37.3
External														
FDI-Equity (US \$mn)	3018	4719	5065	3206	2556	3437	2059	2321	4159	4880	5227	7256	6066	
FII-Net Portfolio Investment(US \$mn)	-3784	-2572	-1471	-2381	4328	1133	-385	-193	2726	1022	2991	-1818	-5478	
ECB(US \$mn)	3164	3034	1395	1353	1521	305	1318	1072	1203	3173	2463	1771	488	
Exports	-24.4	-14.8	-13.6	-5.7	-5.5	-6.7	-0.8	1.3	-6.8	-0.3	4.6	9.6	2.2	5.7
Imports	-30.3	-3.9	-11	-5	-21.6	-23.1	-13.2	-7.3	-19.1	-14.1	-2.5	8.1	10.4	2.3
Trade Balance(US \$mn)	-9782	-11664	-7639	-6542	-5071	-4845	-6273	-8116	-7761	-7674	-8339	-10160	-13008	-10369
Rupee-Dollar Exchange Rate	66.8	66.3	67.9	68.6	66.3	66.5	67.2	67.6	67.03	67	66.7	66.85	68.52	67.95
Rupee-Pound Exchange Rate	100.4	98.4	97.8	95.2	95.1	97.4	98.7	90.5	88.3	87.7	86.4	81.29	85.53	83.42
Rupee-Euro Exchange Rate	70.7	72.5	74.1	75.1	75.1	75.7	74.8	75	74.3	74.6	74.8	72.9	72.84	71.61
REER 36 Country (Trade Based Weight) Base 2004-05=100	113.2	110.2	110.8	110.2	110.9	110.6	110.9	112.6	113.5	113.87	114.51	115.13	115.39	116.75
Forex Reserves Outstanding*(US \$bn)	352	352	349	347	356	363	361	361	365	367	370	367	365	360
Note: All figures unless specified otherwise refers to y-o-y growth and are in per cent. PMI figures are numbers.														
*December 2016 figures refer to reserves as on Dec 23, 2016.														

Annex-4 Quarterly Macro Indicators

	2013-14		2014-15				2015-16				2016-17	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
GVA at Basic Prices Growth	6.3	4.9	7.4	8.1	6.7	6.2	7.2	7.3	6.9	7.4	7.3	7.1
Components Growth												
Agriculture, Forestry and Fishing	5	4.6	2.3	2.8	-2.4	-1.7	2.6	2	-1	2.3	1.8	3.3
Industry	5.2	3.9	8	5.9	3.8	5.7	6.7	6.3	8.6	7.9	6.0	5.2
Mining and Quarrying	2.1	8.1	16.5	7	9.1	10.1	8.5	5	7.1	8.6	-0.4	-1.5
Manufacturing	6.4	4.5	7.9	5.8	1.7	6.6	7.3	9.2	11.5	9.3	9.1	7.1
Electricity, Gas, Water Supply and Other Utility Services	3.8	5.8	10.2	8.8	8.8	4.4	4	7.5	5.6	9.3	9.4	3.5
Construction	4.4	0.8	5	5.3	4.9	2.6	5.6	0.8	4.6	4.5	1.5	3.5
Services	7.8	5.6	8.6	10.7	12.9	9.3	8.8	9	9.1	8.7	9.6	8.9
Trade, Hotels, Transport, Communication and Services Related to Broadcasting	10.5	7.8	11.6	8.4	6.2	13.1	10	6.7	9.2	9.9	8.1	7.1
Financial, Real Estate and Professional Services	7.1	6.7	8.5	12.7	12.1	9	9.3	11.9	10.5	9.1	9.4	8.2
Public Administration, Defence and Other Services	4.7	0.9	4.2	10.3	25.3	4.1	5.9	6.9	7.2	6.4	12.3	12.5
Expenditure components as % of GDP												
Net Taxes on Products	7.6	11.9	3.9	6.3	8.1	13.5	5.4	7.6	9.4	14.9	5.9	8.3
Final Consumption Expenditure	69.2	65.6	70.4	71.1	68.2	64.8	71.3	72.8	70.4	66.5	73.4	73.9
Final Consumption Expenditure: Private	61	56.5	58.3	57.9	57.9	56.4	59.8	59.6	60.3	58.4	60.5	59.8
Final Consumption Expenditure: Government	8.2	9.1	12.1	13.2	10.3	8.4	11.5	13.1	10.1	8.1	12.9	14.1
Gross Fixed Capital Formation	31.2	31.1	32.2	31.1	29.9	30.1	31.6	31.4	27.6	26.9	28.3	27.1
Change in Stocks	1.5	1.6	1.9	1.8	1.6	1.8	1.8	1.8	1.6	1.7	1.8	1.8
Valuables	1.3	1.5	1.6	1.4	1.3	1.8	1.5	1.4	1.3	1.3	0.7	0.7
Exports of Goods and Services	25.1	25.1	24.2	23.8	23	20.9	21	21	19.2	18.8	20.0	19.5
Import of Goods and Services	27.1	26.6	27.4	27.5	26.2	22.7	23.9	24.5	22	19.9	20.9	20.7
Discrepancies	-1.2	1.7	-3	-1.7	2.3	3.3	-3.3	-3.8	1.8	4.7	-3.4	-2.3
BoP Indicators												
Current Account as % of GDP	-0.9	-0.2	-1.5	-2.2	-1.5	-0.1	-1.2	-1.7	-1.3	-0.1	-0.1	-0.6
Trade Account as % of GDP	-3.2	-2.2	-3.6	-4.1	-3.6	-2.1	-3.3	-3.9	-3	-1.6	-1.5	-1.7
Capital Account as % of GDP	0	0	0	0	0	0	0	0	0	0	0	0
Financial Account as % of GDP	1	0.4	1.6	2.1	1.9	0	1.4	1.8	1.3	0.03	-0.01	0.77
Foreign Direct Investment as % of GDP	1.3	0.2	1.6	1.5	1.3	1.7	2	1.3	2	1.6	0.8	3.2
Foreign Portfolio Investment as % of GDP	0.5	1.9	2.6	1.9	1.2	2.3	0	-0.7	0.1	-0.3	0.4	1.1
Errors and Omission as % of GDP	-0.1	-0.2	0	0.1	-0.4	0.1	-0.2	-0.1	0	0	0	0.1
Accretion(-)/Depletion (+) of Forex (US\$bn)	-19.1	-7.1	-11.2	-6.9	-13.2	-30.1	-11.4	0.9	-4.1	-3.3	-6.9	-8.5
FDI(US\$bn)	6.1	0.9	7.6	7.5	6.9	9.3	10	6.5	10.7	8.8	4.1	17.2
FII(US\$bn)	2.4	9.3	12.4	9.8	6.3	12.5	0	-3.5	0.6	-1.5	2.1	6.05
External Debt: USD: Total (bn)	426.9	446.2	453.1	456.3	458.7	475	482.4	480.5	479.3	485.1	479.7	
External Debt: USD: Long Term (bn)	334.2	354.5	363.1	369.3	373.1	389.5	398.8	396.1	398.1	402.2	397.6	
External Debt: USD: Short Term (bn)	92.7	91.7	90.1	87	85.6	85.5	83.6	84.8	81.6	83.4	82.1	
External Debt: USD: Short Term: Trade Related (bn)	86.2	81.7	82	80.4	79	81.6	79.3	79.2	77.4	80	79.7	
Short Term Debt as % of Total Debt (bn)	21.7	20.5	19.9	19.1	18.7	18	17.3	17.6	17	17.2	17.1	
Note-Figures are in per cent unless specified otherwise.												

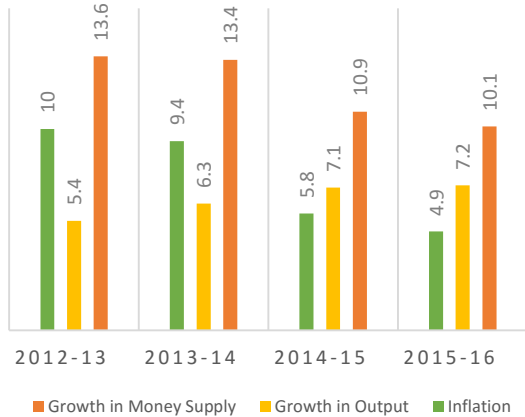
Annex-5										
Annual Macro Indicators										
Indicator	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Real Sector Growth										
GVA at Basic Price*	9.6	9.3	6.7	8.6	8.9	6.7	5.4	6.3	7.1	7.2
I. Agriculture	4.2	5.8	0.1	0.8	8.6	5.0	1.5	4.2	-0.2	1.2
II. Industry	12.2	9.7	4.4	9.2	7.6	7.8	3.6	5.0	5.9	7.4
Mining & quarrying	7.5	3.7	2.1	5.9	6.5	0.1	-0.5	3.0	10.8	7.4
Manufacturing	14.3	10.3	4.3	11.3	8.9	7.4	6.0	5.6	5.5	9.3
Electricity, Gas & Water Supply	9.3	8.3	4.6	6.2	5.3	8.4	2.8	4.7	8.0	6.6
Construction	10.3	10.8	5.3	6.7	5.7	10.8	0.6	4.6	4.4	3.9
III. Services	10.1	10.3	10.0	10.5	9.7	6.6	8.1	7.8	10.3	8.9
Food Grains Production (Mn Tonnes)	217.3	230.8	234.5	218.1	244.5	259.3	257.1	265.0	252.0	252.2
Industrial Production										
IIP	12.9	15.5	2.5	5.3	8.2	2.9	1.1	-0.1	2.8	2.4
Basic Goods	8.9	8.9	1.7	4.7	6	5.5	2.5	2.1	7	3.6
Capital Goods	23.3	48.5	11.3	1	14.8	-4	-6	-3.6	6.4	-2.9
Intermediate Goods	11.5	7.3	0	6	7.4	-0.6	1.6	3.1	1.7	2.5
Consumer	16.1	17.6	0.9	7.7	8.6	4.4	2.4	-2.8	-3.4	3
Consumer Durables	25.3	33.1	11.1	17	14.2	2.6	2	-12.2	-12.6	11.3
Consumer Non-Durables	12.3	10.2	-5	1.4	4.3	5.9	2.8	4.8	2.8	-1.8
Mining	5.2	4.6	2.6	7.9	5.2	-2	-2.3	-0.6	1.5	2.2
Manufacturing	15	18.4	2.5	4.8	9	3	1.3	-0.8	2.3	2
Electricity	7.3	6.3	2.7	6.1	5.5	8.2	4	6.1	8.4	5.7
Banking										
Aggregate Deposits Growth	23.8	22.4	19.9	17.2	15.9	13.5	14.2	14.1	10.7	9.9
Demand Deposit Growth	17.9	22	-0.2	23.4	-0.6	-2.6	5.9	7.8	11.2	13.1
SCBs food credit	-1	14.3	-4.6	4.1	4.9	32.6	26.5	18.6	2.1	-4.1
SCBs non-food credit	38.4	28.5	23	17.8	17.1	21.3	16.8	14	14.2	9.3
Fiscal Sector(Combined)										
Gross fiscal deficit	5.1	4	8.3	9.3	6.9	7.6	6.9	7.1	6.6	6.5
Gross primary deficit	-0.3	-1.2	3.3	4.5	2.4	3.2	2.3	2.3	1.7	1.6
Revenue deficit	1.3	0.2	4.3	5.7	3.2	4.1	3.4	3.2	2.6	2.5
External Sector										
Exports Growth	22.6	29.1	13.6	-3.5	39.8	22.5	-1.8	4.7	-1.3	-15.9
Imports Growth	24.5	35.5	20.7	-5.1	28.2	32.3	0.3	-8.3	-0.5	-15.3
Exports/GDP	13.6	13.4	15.4	13.4	15	16.8	16.7	17	15.4	12.8
Imports/GDP	20.1	20.8	25.2	22	22.4	27.1	27.4	24.9	22.5	18.5
Invisibles/ GDP	5.5	6.1	7.5	5.9	4.6	6.1	5.9	6.1	5.7	7.2
CAD /GDP	-1	-1.3	-2.3	-2.8	-2.8	-4.2	-4.8	-1.7	-1.3	-1.1
Foreign Investment/GDP	3.1	5	2.3	4.8	3.5	2.7	3	1.9	3.7	1.6
Import Cover of Reserves (Months)	12.5	14.4	9.8	11.1	9.5	7.1	7	7.8	8.9	
FII(US\$m)	3225	20328	-15,017	29048	29422	16812	27582	5009	40923	-3,516
FDI(US\$m)	16481	26864	32066	27146	22250	35855	22884	25274	31911	41043
Note: *For 2006-07 to 2011-12 figures represent rate of growth GDP at factor cost (2004-05 base). Figures are in per cent unless specified otherwise.										

Indian Economy in Graphs

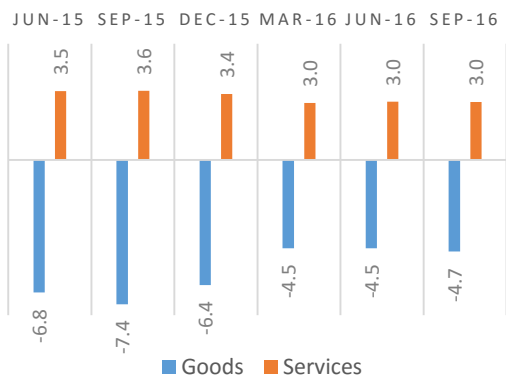


Indian Economy in Graphs

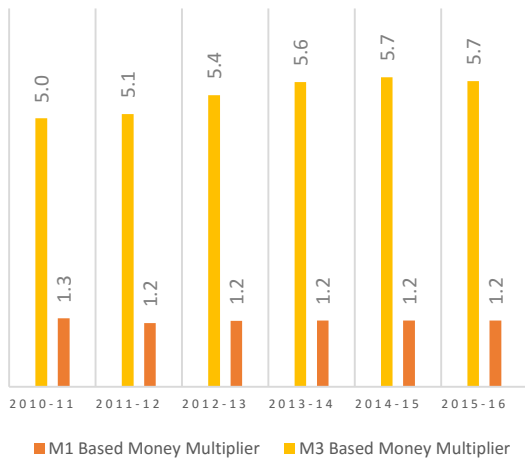
MONEY, OUTPUT AND PRICES



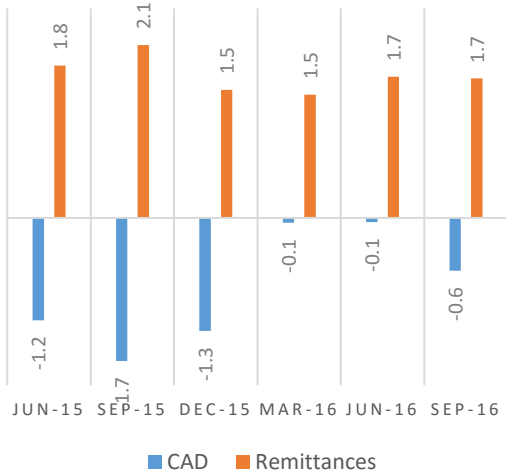
COMPOSITION OF TRADE ACCOUNT AS % OF GDP



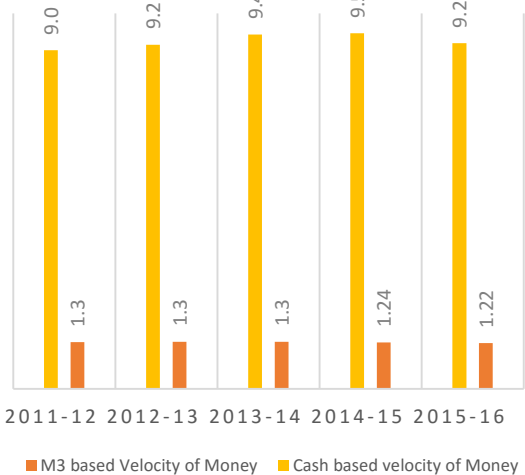
MONEY MULTIPLIER



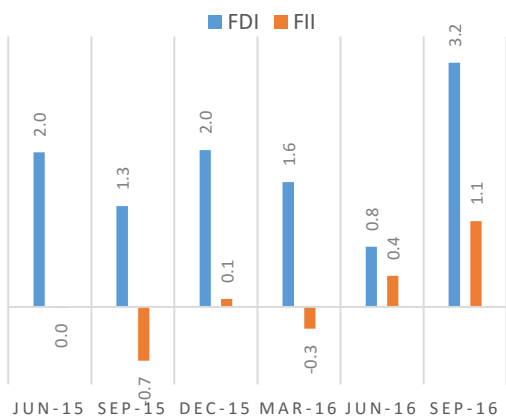
KEY INDICATORS OF CURRENT ACCOUNT AS % OF GDP



VELOCITY OF MONEY



KEY INDICATORS OF FINANCIAL ACCOUNT AS % OF GDP



Disclaimer:

The views expressed in this newsletter are personal views of the author and do not necessarily reflect the views of Bank of Baroda. Nothing contained in this publication shall constitute or be deemed to constitute an offer to sell/ purchase or as an invitation or solicitation to do so for any securities of any entity. Bank of Baroda and/ or its Affiliates and its subsidiaries make no representation as to the accuracy; completeness or reliability of any information contained herein or otherwise provided and hereby disclaim any liability with regard to the same. Bank of Baroda Group or its officers, employees, personnel, directors may be associated in a commercial or personal capacity or may have a commercial interest including as proprietary traders in or with the securities and/ or companies or issues or matters as contained in this publication and such commercial capacity or interest whether or not differing with or conflicting with this publication, shall not make or render Bank of Baroda Group liable in any manner whatsoever & Bank of Baroda Group or any of its officers, employees, personnel, directors shall not be liable for any loss, damage, liability whatsoever for any direct or indirect loss arising from the use or access of any information that may be displayed in this publication from time to time.

Visit us at www.bankofbaroda.com

Twitter: @bankofbaroda

Facebook: <https://www.facebook.com/officialbankofbarodapage/>

You Tube: <https://bitly.bobYT>

For further details about this publication, please contact

Prof. Biswa Swarup Misra

Chief Economist

Bank of Baroda

Phone:+9122 66985713

E-Mail: chief.economist@bankofbaroda.com

bs.misra@bankofbaroda.com

Notes