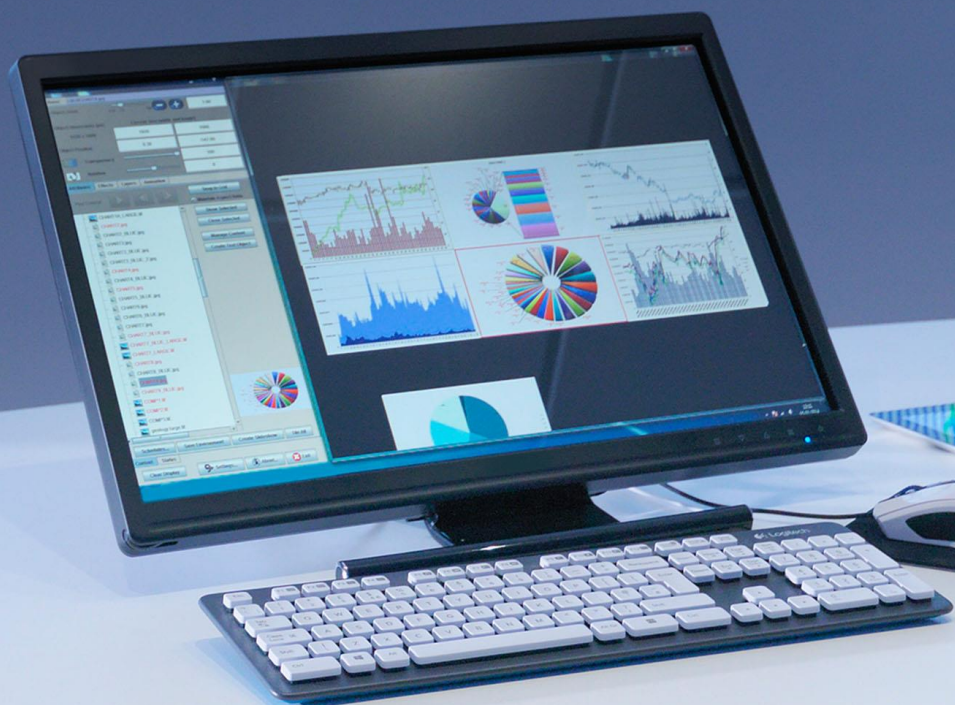


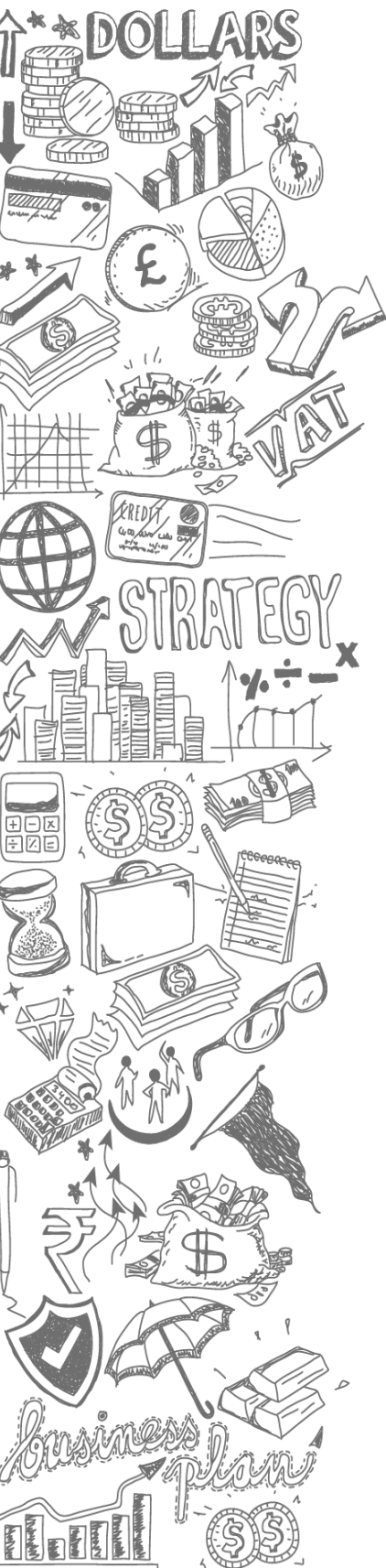
August 2017

# Economy Watch

## Monitoring India's macro-fiscal performance



Building a better working world



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## Highlights

1. RBI reduced the repo rate by 25 basis points in its August 2017 review.
2. CPI inflation increased for the first time in four months to 2.4% in July 2017. This was primarily due to a slower contraction in vegetable prices, which decreased by (-) 16.5% in June 2017 and by (-) 3.6% in July.
3. PMI signals sharp contraction in manufacturing and services following GST.
4. IIP contracted for the first time in June 2017 to its lowest level in the last four years as a result of subdued demand and GST-related uncertainties.
5. The Center's fiscal deficit during 1QFY18 stood at 80.8% of the annual budgeted target, while the revenue deficit during this period was at 119.3% of the corresponding budgeted target.
6. Gross central tax revenues grew by 15.2% in the first quarter of FY18, while non-tax revenues contracted by (-) 6.5% during this period.
7. Following demonetization and the implementation of GST, the number of PIT assesses has gone up significantly, signaling tangible compliance improvement over the medium term.
8. Currency in circulation (excluding non-demonetized currency) had decreased to 84.0% of the total demonetized currency by 23 July 2017 from 84.5% on 14 July 2017, indicating the beginning of a slowdown in the rate of re-monetization.
9. Growth in non-food credit at 4.8% in June 2017 remained extremely low, although it does represent an improvement from 4.1% in May 2017.
10. The IAD at 4.5% in June 2017, increasing from 3.8% in May 2017 signals continued strengthening of aggregate demand. However, indications are that the trend was reversed in July 2017.

## Foreword: Capital expenditure targeted to grow in line with GDP growth



The Indian economy is developing on a twin track mode. On the one hand, growth parameters such as IIP and PMI indicate subdued growth performance. On the other hand, stock prices have shot up, indicating considerable optimism about the Indian economy. On the monetary side also, while there is clamor for further reduction in the policy rate, there is excessive liquidity in the system. It is this excess liquidity that, to a large extent, has been driving up the stock prices, and any rate reduction would not

lead to an increase in the demand in the system given that liquidity is already abundant. If the Indian economy is drawn into a low real growth and low inflation phase, the nominal growth would come down and, given the tax buoyancies, the overall tax revenue growth would fall below budget expectations, thereby putting pressure on maintaining the fiscal deficit target.

The RBI has reduced its dividend to the Central Government by more than half over the previous year, from INR65, 876 crore to INR30, 659 crore (*Economic Times, 11 August 2017*). An important reason behind this move is the increased costs of re-monetization for the RBI.

The Government has come out with a Medium Term Expenditure Framework, indicating its expenditure projections for the period up to FY20. The fiscal deficit targets have been retained at 3.2% in FY18 and 3% each in FY19 and FY20. This is in line with the recommendations of the Fiscal Responsibility and Budget Management (FRBM) Review Committee. Given the fiscal deficit targets and limited increases in the tax to GDP ratio, the Central Government's capital expenditure to GDP ratio remains stagnant at 1.8% for the three-year period until FY20, implying that in absolute terms, it will grow in line with GDP growth. Clearly, the Government would remain constrained in expanding infrastructure through increased capital expenditure. The potential crowding-in of private investment would also remain largely unrealized.

Given that at the end of the first quarter of FY18, the actual fiscal deficit is already 81% of the annual budgeted amount and the uncertainties relating to GST might adversely affect the indirect tax revenues in the second and third quarters of FY18, the Government could be facing an uphill task in meeting the fiscal deficit target. It is quite possible that the Government might lean relatively more on non-GST indirect taxes and cesses for making up for the shortfall in domestic indirect tax revenues. Given lackluster growth prospects, the need for augmenting government expenditure while maintaining the fiscal deficit target might prove to be an uphill task.

The mid-term review's admission of a growth slowdown from the pre-Budget Economic Survey projection of an average growth exceeding 7% is candid and realistic. Apart from two consecutive although short-term impacts emanating from de-monetization and the GST, the economy continues to show deficient investment and export demand, driving the appreciation of the rupee. There are macro implications from farm loan waivers in addition to sectoral problems in the power and telecommunication sectors. These are expected to weigh down India's growth pulse in the short run. We should reach closer to our potential growth exceeding 7.5% in FY19.

**D.K. Srivastava**  
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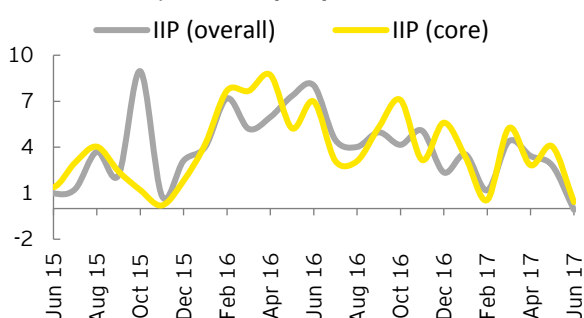
# 1 Growth: Sharp contraction in manufacturing and services after GST

## A. Industry growth: IIP contracts to a four-year low in June 2017

IIP contracted for the first time in June 2017 to its lowest level in the last four years as a result of subdued demand and GST-related uncertainties and partly due to the base effect.

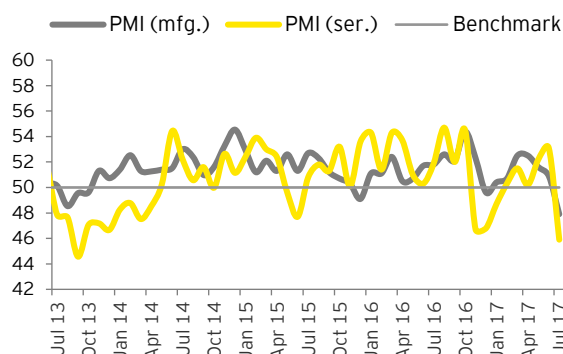
- IIP contracted (with 2011–12 as base) by (-) 0.1% (y-o-y) in June 2017, as compared to a growth of 2.8% (revised) in May 2017 (Chart 1). IIP growth has shown a falling trend for the four consecutive quarters since 2QFY17. It fell to 2.0% in 1QFY18 from 3.1% in 4QFY17.
- The manufacturing sector, which accounts for over 77% of the overall IIP, witnessed a contraction of (-) 0.4% in June from a growth of 2.6% (revised) in May 2017.
- Output of the capital goods industry contracted sharply by (-) 6.8% in June 2017 as compared to (-) 1.4% (revised) in May 2017. Output of consumer durables contracted by (-) 2.1% in June 2017 from a growth of 0.8% (revised) in May 2017. Output growth of infrastructure/construction goods continued to remain subdued at 0.6% in June 2017, although it was marginally higher than 0.2% (revised) in May 2017.
- Output of eight core infrastructure industries, with a weight of 40.3% in the overall IIP, grew at a meager 0.4% (y-o-y) in June 2017 (4.1% in May 2017). This was due to moderation in the output of electricity (0.7%) and crude oil (0.6%) and a contraction in the output of coal ((-) 6.7%), cement ((-) 5.8%) and petroleum refineries ((-) 0.2%) during the month.

Chart 1: IIP growth (% y-o-y)



Source: Office of the Economic Adviser, Ministry of Commerce and Industry

Chart 2: NIKKEI PMI



Source: NIKKEI PMI, Markit Economics

## B. PMI: Signals sharp contraction in manufacturing and services post-GST

Disruption in business activities and the adverse impact of rate hike on demand after GST dragged down the PMI for manufacturing and services in July 2017. Although GST-related uncertainties may be temporary, a revival in overall demand is crucial for a sustained recovery in PMI.

- Headline manufacturing PMI (sa) dipped to 47.9 in July after the introduction of GST, the lowest level since February 2009 (Chart 2). The downturn was broad-based across all sub-sectors, namely, consumer, intermediate and investment goods. New orders and output decreased for the first time since the demonetization-related downturn recorded in December 2016, with rates of contraction the steepest since February 2009 in both cases.
- Headline services PMI (sa) contracted even more sharply from June's eight-month high of 53.1 to 45.9 in July 2017, its lowest level since September 2013. This was due to uncertainties related to GST and continued overall lack of demand in the system.
- Composite PMI Output Index (sa) fell sharply to 46 in July 2017 from 52.7 in June 2017, reflecting the contraction in services and manufacturing output in July.

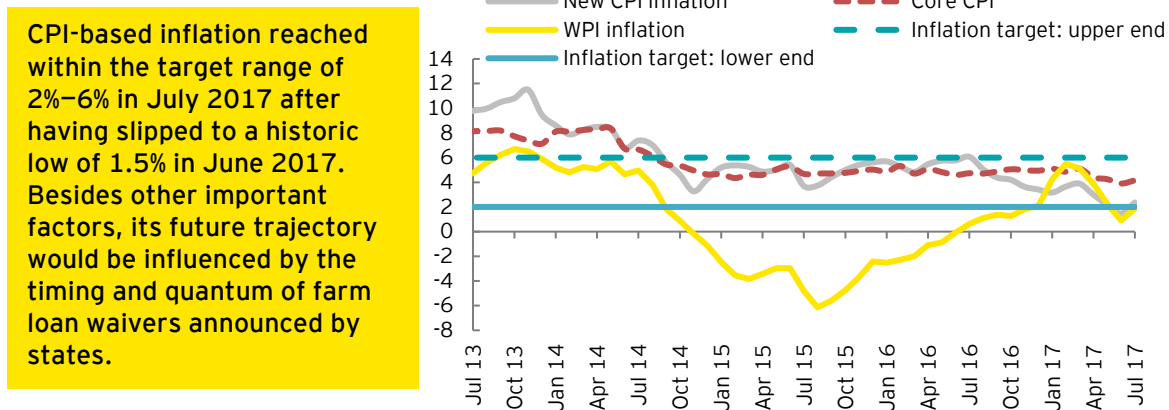


## 2 Inflation: CPI inflation rises for the first time in four months due to a slowdown in the rate of contraction in food price

CPI inflation increased for the first time in four months to 2.4% in July 2017 primarily due to a slower contraction in vegetable prices.

- ▶ CPI-based inflation (Chart 3) increased to a three-month high of 2.4% in July 2017 from a historic low of 1.5% in the previous month as the fall in food price inflation reflected by the Consumer Food Price Index eased to (-) 0.3% in July 2017 from (-) 2.1% in the previous month.
- ▶ Contraction in the price of vegetables eased significantly to (-) 3.6% from (-) 16.5% in June 2017.
- ▶ Fuel and lighting inflation increased to 4.9% in July 2017 from 4.5% in June 2017. Administered prices of LPG and kerosene are set to rise with the calibrated reduction in subsidy.
- ▶ Core CPI inflation (excluding food and fuel and light) increased to 4.2% in July 2017 after declining to 3.9% in June 2017 from a peak of 5.1% in March 2017. Inflation in medicines and health-related services increased from 3.5% in June to 4.0% in July 2017.
- ▶ As per the RBI monetary policy statement released on 2 August 2017, the future trajectory of inflation would depend upon (a) the impact of the implementation of house rent allowances (HRA) under the 7th Central Pay Commission (CPC), (b) the impact of the price revisions withheld ahead of the GST and (c) the disentangling of the structural and transitory factors shaping food inflation.

**Chart 3: Inflation (y-o-y; %)**



CPI-based inflation reached within the target range of 2%–6% in July 2017 after having slipped to a historic low of 1.5% in June 2017. Besides other important factors, its future trajectory would be influenced by the timing and quantum of farm loan waivers announced by states.

Source: MOSPI

WPI-based inflation also rose to 1.9% in July 2017 from an 11-month low of 0.9% in June 2017 because of a sharp rise in food price inflation.

- ▶ Inflation in vegetables turned positive at 21.9% in July 2017 from (-) 21.2% in June 2017 after 11 successive months of contraction.
- ▶ WPI-based inflation for food articles increased to 2.1% in July 2017 after reaching a historic low of (-) 3.5% in the previous month due to increase in vegetable prices. This was despite further fall in the inflation in food grains (cereals and pulses) to a historic low of (-) 7.8% ((-) 4.7% in June 2017). Particularly, inflation in pulses was at (-) 32.6% in July 2017 as compared to (-) 25.5% in June 2017..
- ▶ Fuel and power inflation slowed to a seven-month low of 4.4% in July 2017 from 5.3% in June 2017.
- ▶ In contrast to the overall trend, WPI core inflation increased marginally to 2.2% in July 2017 from 2.1% in June 2017.
- ▶ Inflation based on the newly constructed WPI food price index, consisting of primary food articles and manufactured food products, reached 2.1% from (-) 1.3% in the last month.



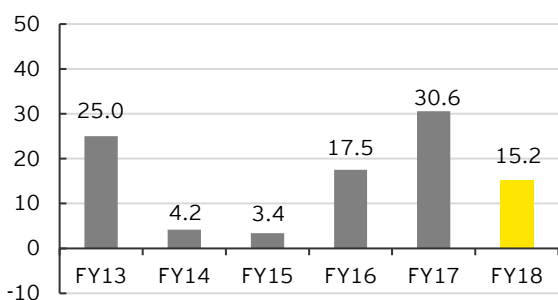
### 3 Fiscal performance: Fiscal deficit reached 81% of annual budgeted target during 1QFY18

#### A. Tax and non-tax revenues

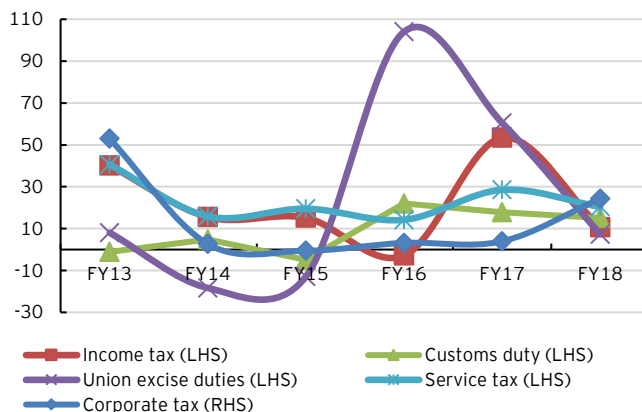
Gross central tax revenues grew by 15.2% in the first quarter of FY18, while non-tax revenues contracted by (-) 6.5% during this period.

- ▶ Gross taxes grew by 15.2% in 1QFY18, compared to 30.6% in the corresponding period of FY17 (Chart 4).
- ▶ Growth in direct taxes up to June FY18 was lower at 16.6% as compared to 26.9% in the same period of FY17.
- ▶ Growth in indirect taxes was also lower at 14% during 1QFY18 as compared to the corresponding value of 33.6% in FY17. Growth in indirect tax revenues may get adversely affected in the coming few months as a result of a contraction in manufacturing and services, as also reflected in the contraction in the July 2017 numbers for manufacturing and services PMI due to uncertainties after the introduction of GST.
- ▶ Growth in income tax revenues was at 10.6% during April-June FY18 as compared to 53.4% in the corresponding period of FY17 (Chart 5).
- ▶ Corporate tax revenues witnessed a growth of 24.3% during 1QFY18 as compared to just 3.9% in 1QFY17.
- ▶ Growth in excise duties was much lower at 7.9% during April-June FY18 as compared to the corresponding value of 60.5% in FY17 due to a slowdown in production.
- ▶ Growth in customs duties was at 15% during April-June FY18 as compared to the corresponding value of 17.8% in FY17.
- ▶ Service tax revenues grew by 20.4% up to June FY18, compared to 28.5% in the corresponding period of FY17.

**Chart 4: Growth in cumulated gross tax revenues up to June 2017**



**Chart 5: Growth in cumulated tax revenues up to June 2017**



Source: Monthly Accounts, Controller General of Accounts, Government of India

- ▶ During April-June FY18, non-tax revenues contracted by (-) 6.5% as compared to (-) 40.6 in the same period of FY17.
- ▶ Total receipts from disinvestment up till 3 August 2017 amounted to INR8,427.59 crore, which is 11.6% of the annual budgeted target.

#### B. Expenditures: Revenue and capital

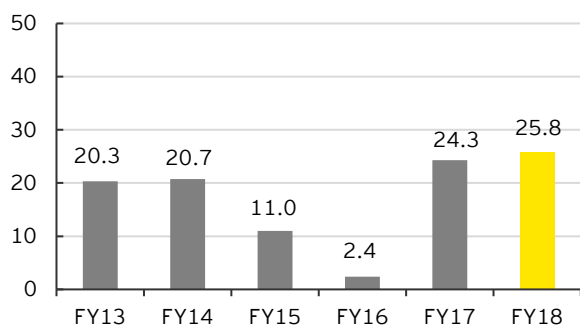
- ▶ Total expenditure grew by 27.1% during April-June FY18, down from 54% up till May 2017. However, this was higher as compared to the corresponding value of 18.8% in FY17.



- ▶ Growth in revenue expenditure was at 25.8 % up to June FY18 as compared to 24.3% in the same period of FY17 (Chart 6).
- ▶ Growth in the Center's capital expenditure increased sharply to 39.5% during April–June FY18 as compared to a contraction of (-) 16.4% in FY17. Unlike previous years, advancement of the Budget presentation enabled the Central Government to frontload capital expenditure in the beginning of the fiscal year (Chart 7).
- ▶ As per the recently released Medium Term Expenditure Framework by the Ministry of Finance (10 August 2017), the Center's total expenditure is projected to grow by 9% and 10.9% in FY19 and FY20 respectively. The corresponding growth rates for revenue expenditure are 8.8% and 10.3%, while for capital expenditure these stand at 10.1% and 14.4%. These projections are contingent on certain assumptions with respect to nominal GDP growth, fiscal and revenue deficit, and gross tax to GDP ratio for the two years.

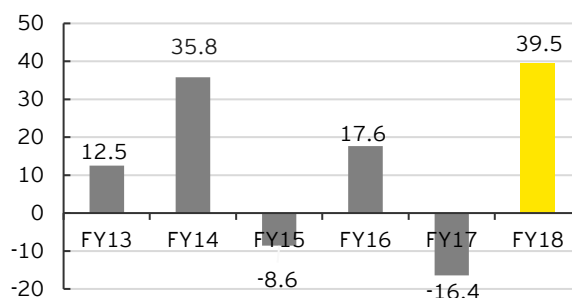
The advancement of the Budget presentation for FY18 enabled the Central Government to frontload capital expenditure in the beginning of the fiscal year. It grew by 39.5% during 1QFY18 as compared to a contraction of (-) 16.4% in the corresponding period of FY17.

**Chart 6: Growth in cumulated revenue expenditure up to June 2017**



Source: Monthly Accounts, Controller General of Accounts, Government of India

**Chart 7: Growth in cumulated capital expenditure up to June 2017**

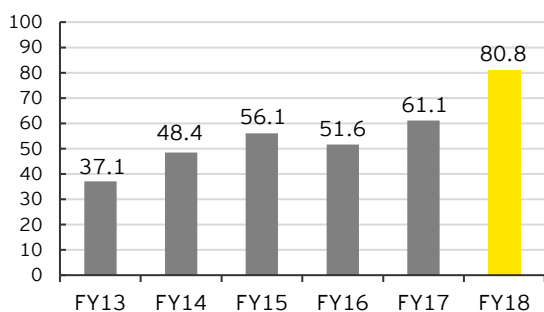


### C. Fiscal imbalance

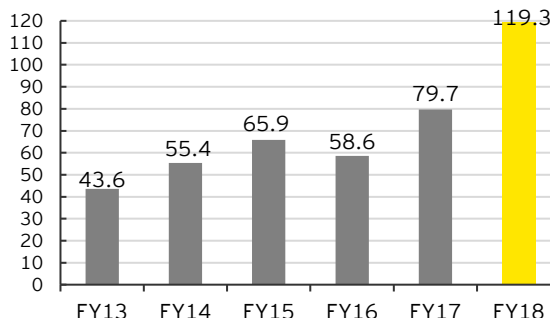
- ▶ Fiscal deficit in 1QFY18 stood at 80.8% of the annual budgeted target as compared to 61.1% in the corresponding period of FY17 due to a sharp rise in the Center's revenue as well as capital expenditure (Chart 8).
- ▶ The Center's revenue deficit had crossed the 100% mark up till June 2017. Revenue deficit during 1QFY18 was at 119.3% of the annual budgeted target as compared to 79.7% during 1QFY17 (Chart 9).

The Center's fiscal deficit during 1QFY18 stood at 80.8% of the annual budgeted target, while the revenue deficit during this period was at 119.3% of its annual budgeted target.

**Chart 8: Fiscal deficit up to June 2017 as a % of annual budgeted estimate for FY18**



**Chart 9: Revenue deficit up to June 2017 as a % of annual budgeted estimate for FY18**



Source: Monthly Accounts, Controller General of Accounts, Government of India



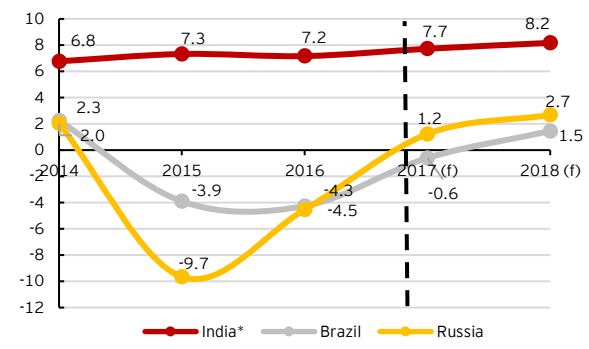
## 4 India: Comparative economic prospects

- ▶ OECD projects India's private consumption growth to be the highest among major developing and some key developed nations.
- ▶ In most of the countries, growth in private consumption is forecasted to be largely stagnant because of slower wage growth.
- ▶ In 2017 and 2018, private consumption in Russia and Brazil is expected to recover from a sharp contractionary phase witnessed in 2015 and 2016.

**Table 1: Real private consumption expenditure (% y-o-y)**

Country	2014	2015	2016	2017 (f)	2018 (f)
India*	6.8	7.3	7.2	7.7	8.2
Australia	2.8	2.7	2.7	2.6	2.9
US	2.9	3.2	2.7	2.4	2.4
UK	2.2	2.4	2.8	2.0	1.1
Euro area	0.8	1.8	1.9	1.4	1.4
Germany	1.0	1.9	1.9	1.3	1.4
Russia	2.0	-9.7	-4.5	1.2	2.7
Japan	-0.9	-0.4	0.4	0.9	0.6
South Africa	0.7	1.7	0.8	0.8	1.5
Brazil	2.3	-3.9	-4.3	-0.6	1.5

**Chart 10: Real private consumption expenditure (% y-o-y) – selected countries**



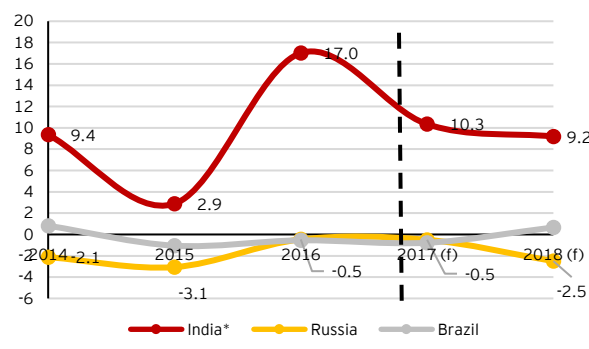
Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast

- ▶ Growth in real public consumption expenditure is also projected to be the highest in India in 2017 and 2018.
- ▶ Elsewhere, public consumption growth is projected to be largely subdued in 2017 with some pick-up projected in 2018 for selected countries such as the US, Germany and Australia.
- ▶ In Russia and Brazil, public consumption expenditure is forecasted to continue to contract.

**Table 2: Real public consumption expenditure (% y-o-y)**

Country	2014	2015	2016	2017 (f)	2018 (f)
India*	9.4	2.9	17.0	10.3	9.2
Australia	0.9	3.5	3.9	1.9	2.0
Germany	1.2	2.8	4.0	1.7	2.3
UK	2.3	1.3	0.8	1.4	1.1
Euro area	0.6	1.3	1.8	1.2	1.3
South Africa	1.1	0.5	2.0	0.8	0.8
US	-0.7	1.6	0.8	0.5	2.4
Japan	0.5	1.7	1.5	0.3	0.1
Russia	-2.1	-3.1	-0.5	-0.5	-2.5
Brazil	0.8	-1.1	-0.5	-0.8	0.7

**Chart 11: Real public consumption expenditure (% y-o-y) – selected countries**



Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast



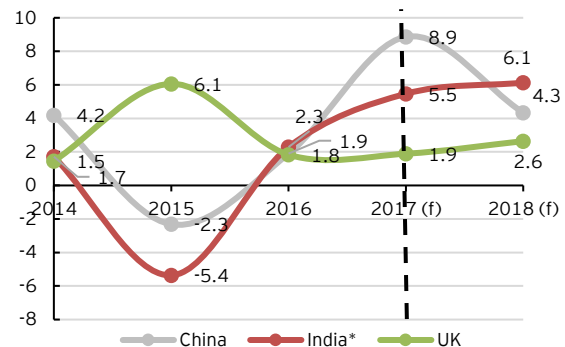


**Table 3: Export volumes of goods and services (% y-o-y)**

Country	2014	2015	2016	2017 (f)	2018 (f)
China	4.2	-2.3	1.9	8.9	4.3
Australia	6.9	5.8	7.6	6.7	7.2
Japan	9.3	2.9	1.2	6.4	3.4
India*	1.7	-5.4	2.3	5.5	6.1
Brazil	-1.0	6.2	1.8	4.7	4.6
South Africa	3.2	3.9	-0.1	4.3	4.5
Germany	4.0	4.6	2.5	4.2	3.7
Russia	0.6	3.6	3.1	3.4	3.0
US	4.3	0.1	0.4	2.9	3.0
UK	1.5	6.1	1.8	1.9	2.6

Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast

**Chart 12: Export volumes of goods and services (% y-o-y) – selected countries**



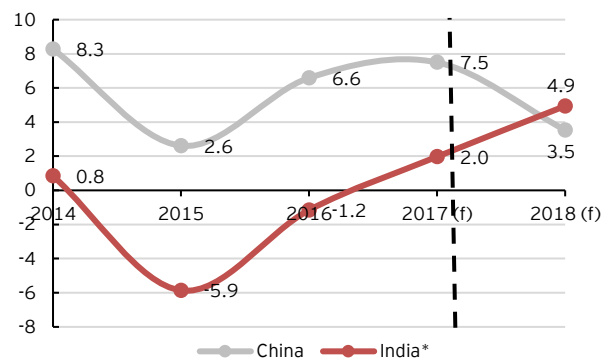
- ▶ Growth in goods and services export volumes for key developing and developed economies is projected to rebound from the slowdown witnessed in 2016.
- ▶ In 2017, China is expected to witness the highest export growth, followed by Australia, Japan and India.
- ▶ In the UK, export growth is projected to be subdued in 2017 mainly because of the implications of Brexit.

**Table 4: Import volumes of goods and services (% y-o-y)**

Country	2014	2015	2016	2017 (f)	2018 (f)
China	8.3	2.6	6.6	7.5	3.5
Brazil	-1.9	-13.9	-10.3	5.2	2.7
Russia	-7.1	-26.0	-4.0	5.0	2.2
US	4.4	4.6	1.1	4.7	5.1
Germany	4.0	5.0	3.7	4.1	3.9
UK	2.5	5.5	2.8	3.8	1.3
Australia	-1.1	1.8	0.4	3.5	3.7
Japan	8.3	0.8	-2.3	3.2	1.9
South Africa	-0.5	5.4	-3.7	2.9	5.9
India*	0.8	-5.9	-1.2	2.0	4.9

Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast

**Chart 13: Import volumes of goods and services (% y-o-y) – Selected countries**



- ▶ China is projected to have the highest import growth in 2017, followed by Brazil and Russia.
- ▶ In case of India, import growth is expected to recover from the contraction observed in 2015 and 2016 but will remain muted in 2017.
- ▶ In 2018, however, India's import growth is likely to exceed that of China's.



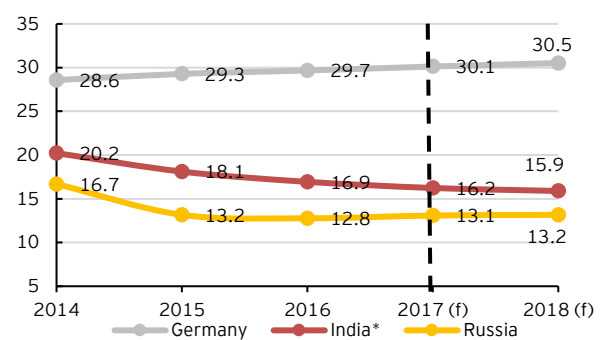
- ▶ Import penetration is defined as goods and services import volume (expressed in 2010 US\$ prices) as a percentage of total final expenditure (expressed in 2010 US\$ prices).
- ▶ This ratio has been fairly constant across years for each of the selected countries.
- ▶ Germany, followed by the UK, had the highest import penetration among major developing and developed economies during 2014 to 2016. This trend is expected to continue in 2017 and 2018.

Table 5: Import penetration (% , y-o-y)

Country	2014	2015	2016	2017 (f)	2018 (f)
Germany	28.6	29.3	29.7	30.1	30.5
UK	24.2	24.8	25.1	25.5	25.6
South Africa	23.3	24.0	23.3	23.6	24.5
China	23.8	23.1	23.1	23.2	22.7
Australia	17.4	17.3	17.0	17.1	17.1
India*	20.2	18.1	16.9	16.2	15.9
Japan	14.9	14.9	14.5	14.7	14.8
Brazil	16.6	15.0	14.1	14.7	14.8
US	13.7	14.0	13.9	14.2	14.5
Russia	16.7	13.2	12.8	13.1	13.2

Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast

Chart 14: Import penetration (% , y-o-y) – selected countries



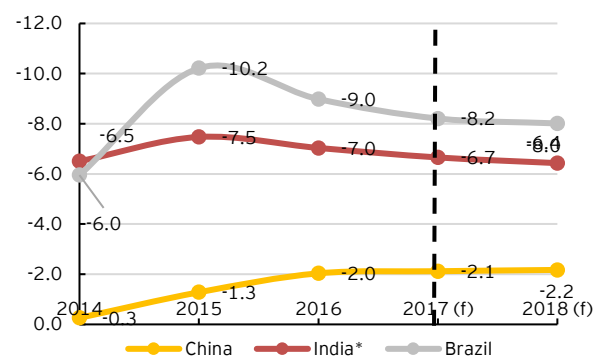
- ▶ Among major developing and developed nations, Germany is the only country that posted a fiscal surplus for the general government during 2014 to 2016. This trend is expected to continue in 2017 and 2018.
- ▶ India is forecasted to post a high general government fiscal deficit in 2017 and 2018 due to the high public consumption expenditure growth projected during these two years.

Table 6: General government financial balance (surplus (+) or deficit (-) as a % of nominal GDP)

Country	2014	2015	2016	2017 (f)	2018 (f)
Germany	0.3	0.7	0.8	0.7	0.6
Euro area	-2.6	-2.1	-1.6	-1.2	-0.9
Australia	-2.1	-1.5	-2.0	-1.6	-1.2
China	-0.3	-1.3	-2.0	-2.1	-2.2
UK	-5.6	-4.3	-3.3	-3.1	-2.4
Russia	-1.0	-3.4	-3.7	-3.3	-2.7
South Africa	-4.1	-3.9	-3.5	-3.3	-3.0
US	-5.0	-4.4	-5.0	-4.7	-5.2
Japan	-5.4	-3.5	-4.6	-5.0	-4.4
India*	-6.5	-7.5	-7.0	-6.7	-6.4
Brazil	-6.0	-10.2	-9.0	-8.2	-6.6

Source (Basic Data): OECD Economic Outlook, June 2017  
 \*Data pertains to fiscal year, (f) indicates forecast

Chart 15: General government financial balance – selected countries





## 5 In focus: Measuring economic complexity of countries and products – India shows significant potential

In recent contributions, Hausmann and Hidalgo et.al (2014, 2011) propose an Index of Economic Complexity and postulate that a country’s growth prospects improve with increase in its Index of Economic Complexity. Traditional analysis in economics focuses on factors of production such as land, labor and capital. In the analytical framework proposed by Hausmann and Hidalgo et al., the key factor of production is knowledge. Modern economies are characterized by products that have become progressively more complex, dependent as they are on a variety of sub-products and processes that largely derive from growth in human knowledge, which depends more and more on exchange of ideas across people, countries and generations using modern methods of storing and communicating knowledge through networking and other similar technologies. Hausmann and Hidalgo et.al distinguish between complexity of products and complexity of countries, which in turn is based on complexity of products. They distinguish between two kinds of knowledge: explicit and tacit. Explicit knowledge is transferable by text, conversation, and other means of communication. Tacit knowledge is difficult to transfer as it depends on individual skills and inherited knowledge. Thus, products that require greater use of tacit knowledge constrain the process of growth and development as their transferability is limited. This transferability is individual or company-specific and specific to groups of firms or specialists etc. who in turn may be specific to groups of countries – for example, technologies relating to liquid fuels used in long-distance rockets as also in specialized advanced jet engines etc. Sometimes shareability of knowledge is constrained by specific policies followed by governments, which give them a monopoly advantage in the development and export of certain products. Tacit knowledge is dependent on specialization. Just as individuals specialize, organizations also specialize and represent collective capabilities.

The complexity of an economy is related to the multiplicity of useful knowledge embedded in it covering design, marketing, finance, technology and human resource management, operations and institutional frameworks. In these dimensions, different countries have different capabilities. Economic complexity is therefore the composition of a country’s productive output, which reflects the structures and the knowledge combinations that make their production possible. Hausmann and Hidalgo et.al assert that “economic complexity is necessary for a society to be able to hold and use a larger amount of productive knowledge” and it can be measured from the mix of products that a county is able to make. The higher the economic complexity of a country, the higher the capacity of that country to produce a more diverse set of products. This is why all products are not produced in all countries. Products that demand large volumes of knowledge are feasible only in few countries. Thus, we can consider a product in terms of its two characteristics: ubiquity and diversity. Ubiquitous products require a lower degree of complexity and can be produced across most countries. Diversity requires specialized knowledge. The more complex the knowledge requirement associated with products, the higher the diversity dimension of that product. Generally, countries with higher measures of economic complexity would be able to produce a more diverse range of products. Hausmann and Hidalgo et.al define an Index of Economic Complexity as well as product complexity index. The former depends on the latter.

To make international comparisons possible, Hausmann and Hidalgo et.al utilize product export data and differentiate between products that are high on product complexity index. Countries with a larger share of export of products with high product complexity index would have a higher ranking in their economic complexity index. To illustrate the point, Singapore and Pakistan, which export roughly 133 products each, are compared. Although the number of products exported is comparable between two countries, the mix of products in terms of high and low product complexity indices is very different. Singapore has a much larger basket of products with high product complexity rankings. This gives Singapore a much higher economic complexity ranking as compared to Pakistan. Their GDP at market prices are, however, similar. However, Singapore is 38 time richer than Pakistan in per-capita terms because of its higher economic complexity ranking.

The top five and bottom five products by complexity and their product groups are shown in Table 7. The top 5 products by complexity are mostly machinery and appliances. The bottom 5 products are mostly primary commodities including minerals in their raw form.

**Table 7: Products by complexity**

Top 5 products			Bottom 5 products		
#	Product	Index	#	Product	Index
1	Machines and appliances for specialized particular industries	2.27	1	Crude oil	-3.00
2	Instrument and appliances for physical or chemical analysis	2.21	2	Tin ores and concentrates	-2.63
3	Appliances based on the use of X-rays or radiation	2.16	3	Cotton, not carded or combed	-2.63



4	Lubricating petrol oils and other heavy petrol oils	2.10
5	Other machine tools for working metal or metal carbide	2.05

4	Cocoa beans	-2.61
5	Sesame seeds	-2.58

Source: Hausmann and Hidalgo et.al (2016)

Using this framework and international trade data, Hausmann and Hidalgo et.al rank 128 countries. The top 5 countries are Japan, Germany, Switzerland, Sweden and Austria. Except Japan, the last four are in Western Europe. The bottom 5 countries are Papua New Guinea, Republic of Congo, Sudan, Angola and Mauritania. Except Papua New Guinea, which is in the East Asia and the Pacific, the last four belong to sub-Saharan Africa. The US has the 13th rank, China the 29th rank and India the 51st rank.

**Table 8: Country wise economic complexity index: selected countries**

#	Country	Rank	#	Country	Rank
1	Japan	1	11	Mexico	20
2	Germany	2	12	The Netherlands	23
3	Switzerland	3	13	Hong Kong	24
4	Sweden	4	14	China	29
5	Austria	5	15	India	51
6	UK	9	16	Brazil	52
7	France	11	17	Greece	53
8	South Korea	12	18	Argentina	57
9	US	13	19	Australia	79
10	Israel	19	20	Bangladesh	103

Source: Hausmann and Hidalgo et.al (2016)

Japan and Germany are the two countries with the highest levels of economic complexity. If a good cannot be produced in Japan or Germany, the likely list of countries where such a good can be produced would be very small. On the other hand, if a product cannot be made in the low complexity countries, the list of countries where it can be made is likely to be very large. Some countries that are rich in natural resources, such as Qatar, Kuwait, Oman, Venezuela and Chile, are rich because they possess large volumes of natural resources and not because of their capacity to produce complex goods. If a product cannot be produced in these mineral-rich states, it is likely to be produced in many other countries. Hausmann and Hidalgo et.al show that the gap between a country's economic complexity and the level of per-capita income is an important determinant of future growth. Countries tend to converge to the level of income that can be supported by the knowhow that is embedded in their economy reflected by Index of Economic Complexity.

#### India's growth as related to the complexity index: Achievement and potential

In terms of the Index of Economic Complexity, India has the 51st rank. Hausmann and Hidalgo et.al have used their analysis to estimate the growth in per-capita GDP up to 2020 and have also estimated the expected GDP growth until 2020 based on the Index of Economic Complexity. In this context, we compare India and China. In terms of expected growth in per-capita income up to 2020, China and India are ranked first and second respectively. The relevant estimated values are given in table below.

**Table 9: Estimated GDP and per-capita GDP growth based on economic complexity**

Overall GDP								
Country	Rank	Expected growth (2009–20)	Growth (1999–08)	Rank income 2009 (US\$)	Income 2009 (US\$)	Rank income 2020(US\$)	Income 2020 (US\$)	Expected population growth
China	20	4.66%	9.4%	81	3,744	70	5,962	0.34%
India	8	5.51%	5.4%	99	1,192	97	1,886	1.25%
Per-capita GDP								
	Rank	Expected growth (2009–20)	Growth (1999–09)	Rank Income 2009 (US\$)	Income 2009 (US\$)	Rank Income 2020 (US\$)	Income 2020 (US\$)	
China	1	4.32%	9.6%	81	3,744	70	5,962	
India	2	4.26%	5.6%	99	1,192	97	1,886	

Source: Hausmann and Hidalgo et.al (2016)

Hausmann and Hidalgo et.al also rank countries in terms of their expected contributions to world GDP growth in the period up to 2020. Here, China and India have the 2nd and 4th ranks respectively. The US and Japan have the 1st and 3rd ranks respectively. This contribution obviously depends on the size of the economy and its economic complexity. The following





table lists the countries with the first five ranks. India's contribution is the highest in the South Asian region, where it has the first rank.

**Table 10: Expected contributions to world GDP growth based on economic complexity**

Rank	Country	Contribution to world GDP growth	Region
1	United States	22.41%	North America
2	China	14.21%	East Asia and Pacific
3	Japan	7.11%	East Asia and Pacific
4	India	4.89%	South Asia
5	Germany	3.88%	Western Europe

Source: Hausmann and Hidalgo et.al (2016)

### **Critique of the Economic Complexity Atlas:**

In the literature on this subject, it has generally been recognized that measuring economic complexity, which reflects an economy's latent value of the underlying knowledge and capabilities used in the production of products, is a new and valuable way of looking at differences in relative growth and prosperity across countries. It has also been subjected to some critique, many of which relate not to the basic concept of capabilities resulting in complexity of the product mix attained by a country but to the way it has been measured.

The use of trade data rather than production data and the use of only goods rather than also services have been indicated to be important omissions in measuring economic complexity. It does underestimate the level of complexity for countries that are heavily reliant on non-tradables. Furthermore, many countries, including India, are service-based economies where the share of services in GDP is relatively high. This implies that India's growth achievement and potential might have been underestimated in this framework. Another shortcoming of the measurement framework used by Hausmann and Hidalgo et al. (2014, 2011) is that their focus is on domestic production capacity and processes. It does not give enough importance to capacities and processes that are partitioned in different countries across the globe in the products where material and hardware may be produced in one place and software in other countries. Stojkoski et al (2016) found that complexity indices for services are on average higher than those of goods and argue that diversification and sophistication of services exports can provide growth for economies. The future of the world economy, ageing as it is at a fast rate, will depend heavily on exports of services such as health exports. Furthermore, large population economies like India will provide complex education services, which may largely be domestically produced and consumed. Inclusion of services and expansion of the product space to cover not only exports but the entire range of production might improve India's rankings in the economic complexity measures.

This entire analysis also offers an additional way of giving new direction and interpretation to the Make in India campaign, where emphasis may be placed not so much on increasing the size of manufacturing but the complexity of goods and services featuring in India's production basket. Thus, the focus should be on expanding production both of goods and services that require relatively more complex products, technologies and processes.



## 6 Money and finance: RBI reduced the repo rate by 25 basis points in its August 2017 review

### A. Monetary sector

#### i. Monetary policy

- ▶ In the monetary policy review held on 2 August 2017, the MPC recommended by a majority of 4 to 2 the reduction of the policy repo rate by 25 basis points to 6.0% (Chart 16). Consequently, the reverse repo rate stands adjusted at 5.75%.
- ▶ In RBI's assessment, upside risks to inflation that were perceived earlier have either abated or not materialized, thereby opening some space for monetary accommodation. However, the MPC expects inflation to increase from the current low levels and has therefore decided to retain a neutral policy stance.
- ▶ The increase in July 2017 CPI and WPI inflation rates confirms RBI's apprehensions.

Chart 16: Movements in repo rate

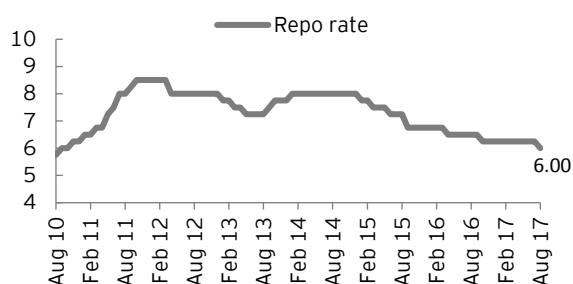
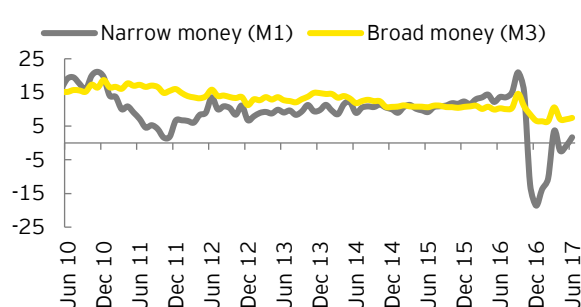


Chart 17: Growth in narrow and broad money



Source: Database on Indian Economy, RBI

Given the persistence of the downward trend in CPI inflation, both core and overall, the Monetary Policy Committee decided to support growth through a rate reduction. However, the transmission of this rate reduction is likely to be limited due to the existence of excess liquidity and lack of private investment demand.

#### ii. Money stock

- ▶ Growth in broad money stock ( $M_3$ ) marginally improved to 7.4% in June 2017 from 7.0% in May 2017. Growth in time deposits (accounting for over 76% of the broad money stock) fell further to 9.1% in June from 9.3% in May 2017, while demand deposits grew by 25.5% in June 2017 from 22.4% in May 2017.
- ▶ Growth in narrow money ( $M_1$ ) turned positive for the second time since November 2016, growing by 1.7% in June 2017 as compared to a contraction of (-) 0.9% in May 2017 (Chart 17). Currency in circulation (excluding non-demonetized currency) had fallen to 84.0% of the total demonetized currency by 23 July 2017 from 84.5% on 14 July 2017, indicating the beginning of a slowdown in the rate of re-monetization.

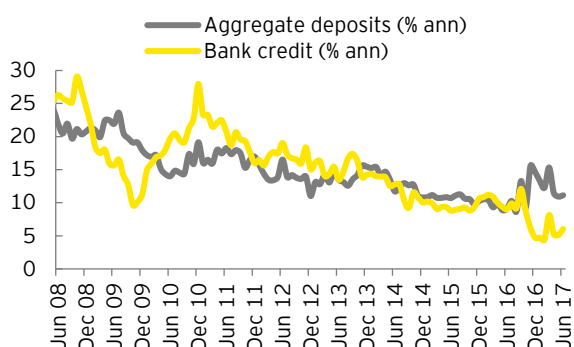
#### iii. Aggregate credit and deposits

- ▶ Credit by scheduled commercial banks continued to grow at a meager pace of 6.0% (y-o-y) in June 2017, although it marginally improved from 5.1% in May 2017 (Chart 18). During 1QFY18, average growth in bank credit fell to its historic low levels of 5.5% from 6.6% in 4QFY17, pointing toward slackness in demand conditions.
- ▶ Growth in non-food credit increased to 4.8% in June 2017 from 4.1% in May 2017 led by recovery in the growth of credit to the services sector as well as of personal loans. Growth in personal loans, a major component of retail sector credit, increased to 14.1% in June (13.7% in May 2017), while growth in services sector credit improved to 4.7% in June from 4.0% in May 2017.



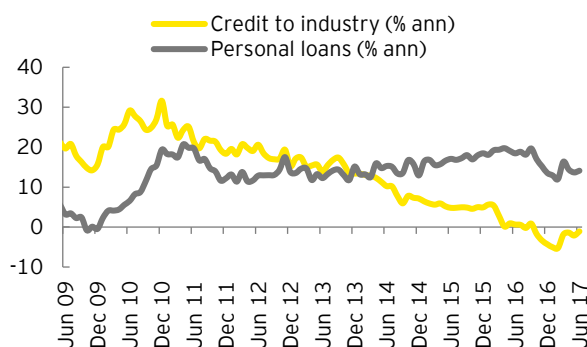
- ▶ Credit growth to industries declined for the ninth straight month although at a relatively slower pace of (-) 1.1% in June 2017 as compared to (-) 2.1% in May 2017. (Chart 19).
- ▶ Aggregate bank deposits marginally grew by 11.1% in June 2017 as compared to 10.9% (y-o-y) in May 2017. With banks slashing interest rate paid on deposits, we expect bank deposits to become relatively less attractive, thereby leading to a fall in deposit growth.

**Chart 18: Growth in credit and deposits**



Source: Database on Indian Economy, RBI

**Chart 19: Growth in industrial and personal loans**



Source: Database on Indian Economy, RBI

## B. Financial sector

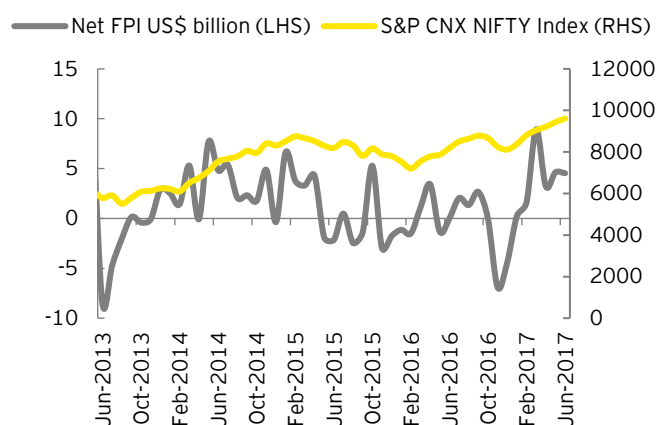
### i. Interest rates

- ▶ Interest rate paid by banks on term deposits with more than one-year maturity was in the range of 6.31% to 6.95% in May and June 2017 as compared to 6.50% to 7.00% in April 2017.
- ▶ On 31 July 2017, the State Bank of India (SBI), for the first time since 2011, lowered the interest rate on savings accounts (with balances up to INR1 crore) by 50 basis points to 3.5%. The intention behind such a move might have been to increase the bank's net interest margin, given subdued demand for credit. It is expected that other banks may soon follow SBI in lowering the interest rate.
- ▶ The average yield on 10-year government securities broadly averaged around 6.6% in June and July 2017, falling from 7.1% in May 2017. Bond yields were influenced by a sharp fall in the CPI inflation in June 2017 to levels below the lower end of RBI's target range of 2% to 6% and by the news of reduction in current account deficit during the 4QFY18.

### ii. FPI and stock market

- ▶ The benchmark S&P NIFTY continued its positive trend for the sixth consecutive month to reach 9,607 points (average), increasing by 170 points in June 2017 from 9,437 points in May 2017 (Chart 20). Although the trends remained positive during the month, investor sentiments were partly dented by uncertainties regarding the transition to GST, Fed's decision to increase the interest rates and RBI's directives to banks to increase the provisioning for bad loans.
- ▶ As per provisional data, overall FIIs decreased to US\$7.1 billion in June 2017 from US\$8.4 billion (revised) in May 2017 because of a decrease in FDI inflows during the month.
- ▶ Net FDI inflows decreased to US\$2.5 billion in June 2017 from US\$3.8 billion in May 2017, while FPI inflows were marginally lower at US\$4.5 billion in June 2017 as compared to US\$4.6 billion in May 2017.

**Chart 20: Stock market movement**



Source: Database on Indian Economy, RBI



## 7 Merchandise exports: Growth slows down further

### A. Current account balance (CAB)

CAB as a percentage of GDP improved to (-) 0.6% in 4QFY17 (Table 11, Chart 22) from (-) 1.4% in the previous quarter, taking the deficit for FY17 to a 12-year low of (-) 0.7% as compared to (-) 1.0% in FY16. Merchandise trade balance improved marginally to (-) US\$29.7 billion in 4QFY17 as compared to (-) US\$33.3 billion in 2QFY17. Services balance declined marginally to US\$17.6 billion from US\$17.8 billion in the previous quarter. Current account deficit is likely to be slightly more than 1% in FY18.

**Table 11: Current account balance**

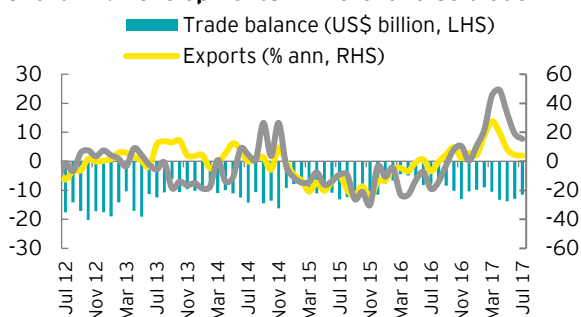
	CAB (- deficit/+surplus) (US\$ billion)	CAB as a % of nominal GDP	Goods account net (US\$ billion)	Services account net (US\$ billion)	Income account net (US\$ billion)	Transfers net (US\$ billion)
FY14	-32.4	-1.7	-147.6	73.0	-23.0	65.3
FY15	-26.8	-1.3	-144.9	76.6	-24.1	65.7
FY16	-22.2	-1.0	-130.1	69.7	-24.4	63.0
FY17	-15.3	-0.7	-112.4	67.5	-26.3	56.6
1QFY17	-0.4	-0.1	-23.8	15.7	-6.3	14.2
2QFY17	-3.5	-0.6	-25.6	16.3	-8.1	14.0
3QFY17	-8.0	-1.4	-33.3	17.8	-6.4	14.0
4QFY17	-3.5	-0.6	-29.7	17.6	-5.6	14.4

Source: Database on Indian Economy, RBI

### B. Merchandise trade and exchange rate

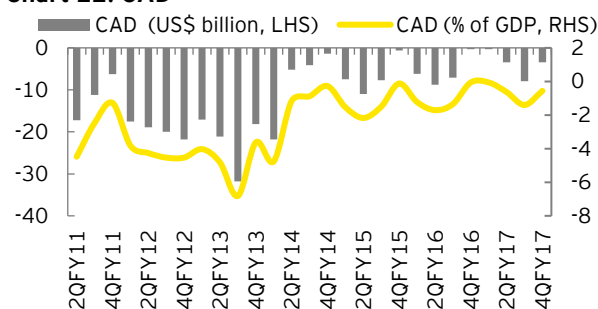
- ▶ Growth in merchandise exports slowed further to 3.9% in July 2017 from 4.4% in June 2017. It has continuously slid from a little over a 5-year peak of 27.6% (Chart 21) in March 2017.
- ▶ Growth in oil exports increased to 20.3% in July 2017 from 3.6% in June 2017 because of stable crude prices. The pace of contraction in exports of gems and jewelry increased to (-) 22.7% in July 2017 as compared to (-) 2.7% in June 2017. The decline in non-oil exports may be attributed to the lagged effect of rupee appreciation as well as some disruption due to GST.
- ▶ Growth (y-o-y) in overall imports eased to 15.4% in July 2017 from 19.0% in June 2017. It has significantly declined from a near six-year high of 49.1% in April 2017. Growth in imports of pearls and precious and semi-precious stones declined sharply to 6.9% from 86.3% in June 2017. Growth in oil imports increased to 15.0% from 12.0% in the previous month.
- ▶ Due to the decline in the growth rate of imports, India's merchandise trade deficit declined to a four-month low of US\$11.4 billion from US\$13.0 billion in June 2017.
- ▶ The Indian rupee remained stable at INR64.5 per US dollar in July 2017 as compared to INR64.4 per US dollar in June 2017.

**Chart 21: Developments in merchandise trade**



Source: Ministry of Commerce and Industry

**Chart 22: CAD**



Source: Database on Indian Economy, RBI





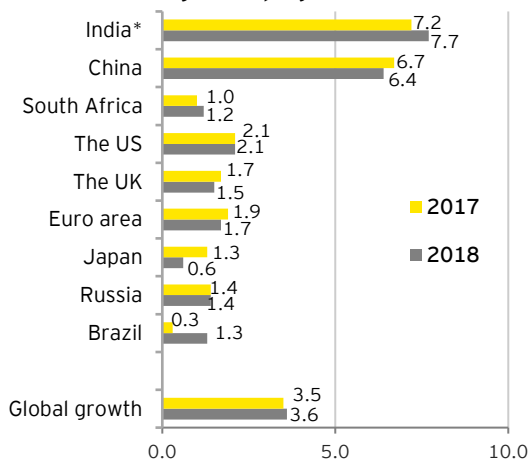
## 8 Global economy: Pick-up in global growth anticipated by the IMF in April remains on track

### A. Global growth outlook

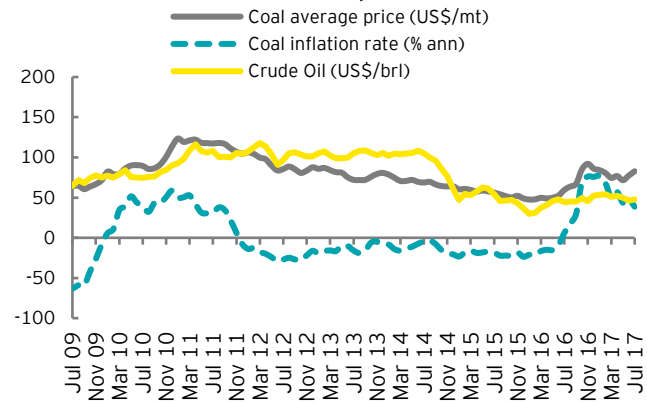
- ▶ The IMF (WEO Update, July 2017) has projected global growth at 3.5% in 2017 and 3.6% in 2018, unchanged from the April WEO projections. However, the projections mask different growth performance at the country level (Chart 23).
- ▶ Growth in advanced economies is forecasted at 2% in 2017 and it has been revised down to 1.9% in 2018. This is due to the downward revision of growth projections in the US and the UK.
- ▶ In the US, GDP growth is now projected at 2.1% in 2017 and 2018 (from 2.3% and 2.5% respectively). This is due to the weak growth outturn in 1Q17 and the assumption that fiscal policy would be less expansionary going forward than previously anticipated.
- ▶ Growth forecast has also been revised down by 0.3% point for the UK at 1.7% in 2017 due to weaker than expected activity in 1Q17.
- ▶ In contrast, growth projections for 2017 have been revised up for many Euro area countries, including France, Germany, Italy and Spain. For the Euro area as a whole, growth has been revised up to 1.9% in 2017 and 1.7% in 2018.
- ▶ Growth forecast for 2017 has also been revised up for Canada and marginally for Japan. In Japan, growth in the first quarter of 2017 was supported by private consumption, investment and exports.
- ▶ Growth in EMDEs is projected at 4.6% in 2017 and 4.8% in 2018. The forecast for 2017 reflects an upward revision of 0.1% point relative to April 2017.
- ▶ In China, GDP growth is projected at 6.7% in 2017, same as in 2016, and projected to decline to 6.4% in 2018. The forecast for 2017 has been revised up by 0.1% point, reflecting stronger than expected growth in 1Q17. For 2018, an upward revision of 0.2% point reflects the expectation of a delay in the fiscal adjustment to meet the country's target of doubling 2010 real GDP by 2020. However, this delay comes at the cost of a large increase in debt.
- ▶ In both Brazil and Russia, GDP growth is projected to recover gradually in 2017 and 2018. Growth in South Africa in 2017 has undergone a slight upward revision, reflecting a bumper crop due to better rainfall and increase in mining output prompted by a moderate rebound in commodity prices. However, the growth forecast for 2018 is lower because of political uncertainty and weak consumer and business confidence.
- ▶ Growth in world trade volume of goods and services<sup>1</sup> has been revised upwards to 4% in 2017 and 3.9% in 2018.

**The IMF has projected global growth at 3.5% in 2017 and 3.6% in 2018, unchanged from the April WEO projections. However, the growth performance varies by country.**

**Chart 23: Global growth projections**



**Chart 24: Global crude and coal prices**



Source: World Bank, Pinksheet

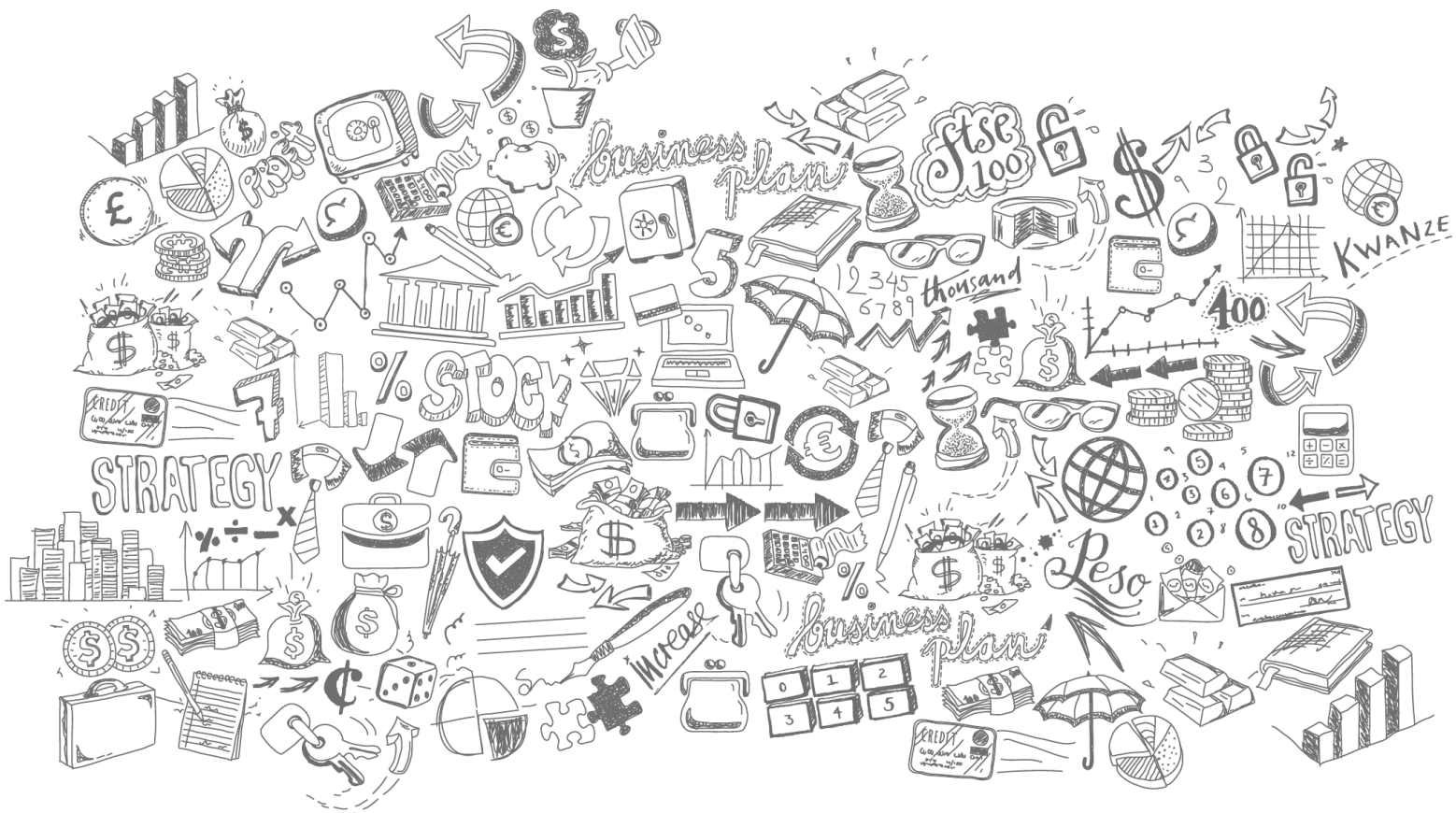
Source: IMF World Economic Outlook Update, July 2017, \* Forecast pertains to the fiscal year.

<sup>1</sup> Simple average of growth rates for export and import volumes (goods and services).



## B. Global energy prices

- ▶ Global crude prices increased marginally to US\$47.7/bbl. in July 2017 from US\$46.2/bbl. in June 2017 (Chart 24). Oil prices peaked in February 2017 (US\$54.4/bbl.) following the OPEC deal, but the effect was offset by increased shale oil production in the US and output increases by Libya and Nigeria, which are exempt from supply cuts. As per IEA's latest Oil Market Report, OPEC compliance rate has dropped to 78%, the lowest rate this year largely due to continued output increase by Saudi Arabia.
- ▶ Average global coal prices increased to a six-month high of US\$82.7/bbl. in July 2017 from S\$77.4/mt in June 2017. This is still lower than the peak price of US\$92/bbl. in November 2016.



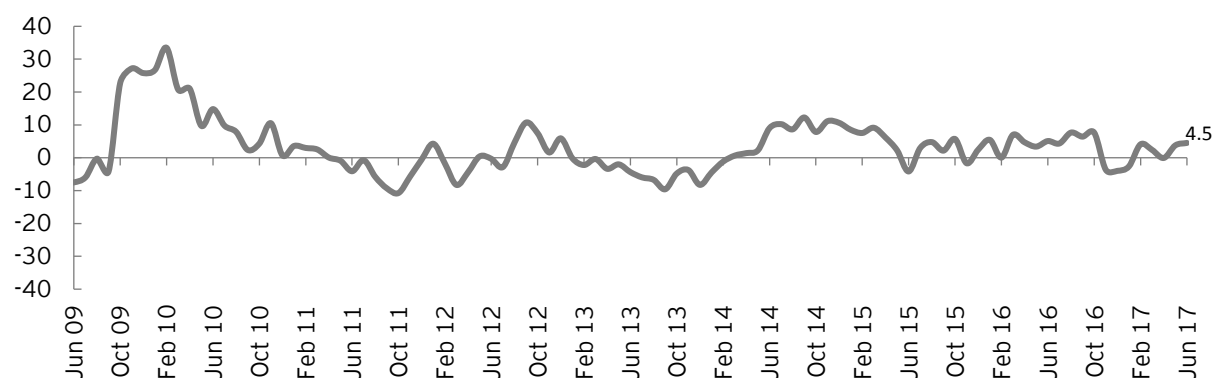


## 9 Index of Aggregate Demand (IAD): Improves further in June 2017

The IAD at 4.5% in June 2017, rising from 3.8% in May 2017, signals continued strengthening of aggregate demand. However, the indications are that the trend was reversed in July 2017.

- ▶ An IAD has been developed to reflect demand conditions in the agriculture, manufacturing and services sectors on a monthly basis. It takes into account movements in PMI for manufacturing and services, which traces the demand conditions in these sectors. Demand conditions in the agricultural sector have been captured by movements in monthly agricultural credit off-take.
- ▶ The sectoral weights in constructing the IAD are based on their respective shares in nominal GVA in the base year (2011–12): agriculture **(18.4)**, industry **(33.1)** and services **(48.5)**.
- ▶ The y-o-y growth in IAD increased for the second straight month to 4.5% in June 2017 from 3.8% in May 2017 (Chart 25). Growth in IAD was supported largely by increased growth in the services as well as the agricultural sector, while growth in the manufacturing sector slowed down.

**Chart 25: Growth in IAD (y-o-y)**



Source (Basic data): NIKKEI PMI - Markit Economics, RBI and EY estimates

**Table 12: IAD**

Month	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
IAD	126.3	110.3	112.2	116.3	121.0	124.2	120.8	123.0	122.9
Growth (% y-o-y)	7.7	-3.6	-4.0	-2.6	4.1	2.4	-0.1	3.8	4.5



## 10 Appendix: Capturing macro-fiscal trends

**Table A1: Industrial growth indicators (annual, quarterly and monthly growth rates, y-o-y)**

Fiscal year/quarter/month	IIP	Mining	Manufacturing	Electricity	Core IIP	Fiscal year/quarter/month	PMI mfg.	PMI ser.
	% change y-o-y							
FY14	3.3	-0.2	3.6	6.0	2.6	FY14	50.5	48.5
FY15	4.0	-1.3	3.8	14.8	4.9	FY15	52.2	51.7
FY16	3.3	4.3	2.9	5.7	3.0	FY16	51.3	51.7
FY17	4.6	5.3	4.3	5.8	4.8	FY17	51.6	51.0
2QFY17	4.5	-1.5	5.5	3.1	3.8	2QFY17	52.2	52.9
3QFY17	3.8	6.7	3.1	6.1	5.3	3QFY17	52.1	49.3
4QFY17	3.1	7.9	2.2	4.3	3.1	4QFY17	51.2	50.2
1QFY18	2.0	1.3	1.8	5.3	2.7	1QFY18	51.7	51.8
Mar-17	4.4	10.1	3.3	6.2	5.2	Apr-17	52.5	50.2
Apr-17	3.4	3.2	3.2	5.4	2.8	May-17	51.6	52.2
May-17	2.8	0.2	2.6	8.3	4.1	June-17	50.9	53.1
Jun-17	-0.1	0.4	-0.4	2.1	0.4	July -17	47.9	45.9

Source: Office of the Economic Adviser- Ministry of Commerce and Industry and NIKKEI PMI-Markit Economics

**Table A2: Inflation indicators (annual, quarterly and monthly growth rates, y-o-y)**

Fiscal year/quarter/month	CPI	Food Price Index	Fuel and lighting	WPI	Food Index	Mfg. products	Fuel and power
	% change y-o-y			% change y-o-y			
FY14	9.4	12.1	7.7	5.2	9.6	3.0	7.1
FY15	5.9	6.4	4.2	1.3	4.3	2.6	-6.1
FY16	4.9	4.9	5.3	-3.7	1.2	-1.8	-19.7
FY17	4.5	4.2	3.3	1.7	5.9	1.3	-0.3
2QFY17	5.2	6.1	2.8	1.0	7.2	0.8	-6.8
3QFY17	3.7	2.2	3.2	1.7	4.8	1.9	1.7
4QFY17	3.6	1.5	4.2	5.0	4.7	3.3	21.3
1QFY18	2.2	-0.9	5.4	2.3	0.4	2.6	11.2
Apr-17	3.0	0.6	6.1	3.9	2.5	3.1	17.1
May-17	2.2	-1.0	5.5	2.2	0.1	2.6	11.7
Jun-17	1.5	-2.1	4.5	0.9	-1.3	2.3	5.3
Jul-17	2.4	-0.3	4.9	1.9	2.1	2.2	4.4

Source: Office of the Economic Adviser, Ministry of Commerce and Industry and MOSPI





**Table A3: Fiscal indicators (annual growth rates, cumulated monthly growth rates, y-o-y)**

Fiscal year/month	Gross tax revenue	Corporate tax	Income tax	Custom duty	Excise duty	Service tax	Fiscal deficit	Revenue deficit
	% change y-o-y						% of GDP	% of GDP
FY15	9.3	8.7	8.7	9.2	11.6	8.6	4.0	2.9
FY16	17.0	6.0	8.5	11.9	51.9	25.8	3.9	2.5
FY17	17.9	6.7	21.5	7.4	32.7	20.4	3.5	2.0
FY18 (BE)	12.2	9.1	24.9	12.9	5.0	11.1	3.2	1.9
	Cumulated growth (% y-o-y)						% of budget target	
Nov-16	21.5	9.0	20.9	6.8	46.0	27.1	85.8	98.4
Dec-16	18.3	4.8	20.5	4.9	43.7	25.0	93.8 (RE)	113.9 (RE)
Jan-17	17.7	3.2	19.7	5.2	42.9	23.3	105.6 (RE)	130.2 (RE)
Feb-17	17.6	3.5	20.9	5.2	40.3	21.3	113.4 (RE)	142.8 (RE)
Mar-17	17.9	6.7	21.5	7.4	32.7	20.4	100.1 (RE)	99.1 (RE)
Apr-17	33.0	322.4	8.0	16.5	429.1	14.3	37.6	55.5
May-17	25.0	2068.2	11.4	17.6	15.9	10.2	68.3	100.7
Jun-17	15.2	24.3	10.6	15.0	7.3	20.4	80.8	119.3

Source: Monthly Accounts, Controller General of Accounts-Government of India, Union Budget Documents

**Table A4: Monetary and financial indicators (annual, quarterly and monthly growth rates, y-o-y)**

Fiscal year/month	Repo rate (end of period)	Fiscal year/quarter/month	M1	M3	Bank credit	Agg. deposits	10 yr. Govt. B Yield	Net FDI	Net FPI	FX reserves
	%		% change y-o-y				%	US\$ billion	US\$ billion	US\$ billion
FY14	8.00	FY14	8.5	13.4	14.9	14.2	8.4	21.6	4.8	304.2
FY15	7.50	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	341.6
FY16	6.75	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	355.6
FY17	6.25	FY17	3.6	10.6	8.0	11.7	7.0	35.6	7.6	370.0
Jan-17	6.25	2Q FY17	21.0	14.6	10.4	10.7	7.0	17.0	6.1	372.0
Feb-17	6.25	3Q FY17	-18.6	6.6	6.5	13.2	6.6	9.7	-11.3	360.3
Mar-17	6.25	4Q FY17	3.6	10.6	5.8	13.6	6.9	5.0	10.8	370.0
Apr-17	6.25	1Q FY18	1.7	7.4	5.5	11.2	7.0	8.0	12.4	386.5
May-17	6.25	Mar-17	3.6	10.6	8.2	15.3	7.0	-0.1	8.9	370.0
Jun-17	6.25	Apr-17	-2.3	7.1	5.2	11.5	7.2	1.7	3.2	372.7
Jul-17	6.25	May-17	-0.9	7.0	5.1	10.9	7.1	3.8	4.6	378.8
Aug-17	6.00	Jun-17	1.7	7.4	6.0	11.1	6.6	2.5	4.5	386.5

Source: Database on Indian Economy-RBI



**Table A5: External trade and global growth**

Fiscal year/quarter/month	External trade indicators (annual, quarterly and monthly growth rates)						Global growth (annual)			
	Exports	Imports	Trade balance	Ex. rate (avg.)	Crude prices (avg.)	Coal prices (avg.)	Calendar year	World GDP	Adv. econ.	Emer. econ.
	% change y-o-y		US\$ billion	INR/US\$	US\$/bbl	US\$/mt		% change y-o-y		
FY14	4.7	-8.3	-135.8	60.5	103.7	76.1	2009	-0.1	-3.4	2.9
FY15	-1.3	-0.5	-137.7	61.1	83.2	65.9	2010	5.4	3.1	7.5
FY16	-15.5	-15.0	-117.7	65.5	46.0	52.7	2011	4.2	1.7	6.3
FY17	5.0	0.0	-105.6	67.1	47.9	70.4	2012	3.5	1.2	5.3
2QFY17	-0.9	-12.2	-23.7	67.0	44.7	63.5	2013	3.3	1.2	5.0
3QFY17	1.0	-1.4	-33.5	67.4	49.1	87.7	2014	3.4	1.9	4.6
4QFY17	19.2	10.4	-29.2	67.0	52.9	79.8	2015	3.4	2.1	4.3
1QFY18	11.2	34.3	-40.1	64.4	49.4	75.3	2016*	3.2	1.7	4.3
Apr-17	19.8	49.1	-13.2	64.5	52.2	76.8	2017**	3.5	2.0	4.6
May-17	8.3	33.1	-13.8	64.4	49.9	71.7	2018**	3.6	1.9	4.8
Jun-17	4.4	19.0	-13.0	64.4	46.2	77.4	2019**	3.7	1.9	4.9
July-17	3.9	15.4	-11.4	64.5	47.7	82.7	2020**	3.7	1.7	4.9

Source: Database on Indian Economy- RBI, Pink Sheet-World Bank and IMF World Economic Outlook April 2017 and IMF World Economic Outlook Update, July 2017; \* estimated data, \*\* forecasted data

**Table A6: Macroeconomic aggregates (annual and quarterly real growth rates, % change y-o-y)**

Fiscal year/quarter	Expenditure components						Output: aggregate and selected sectors			
	GDP	PCE	GCE	GFCF	EX	IM	GVA	Agri.	Ind.	Serv.
FY14	6.5	7.4	0.6	1.8	7.8	-8.1	6.2	5.6	4.2	7.7
FY15	7.3	6.2	9.6	3.2	1.8	0.9	7.0	-0.2	6.8	9.7
FY16	8.0	6.1	3.3	6.5	-5.3	-5.9	7.9	0.7	8.8	9.7
FY17 (PE)	7.1	8.7	20.8	2.4	4.5	2.3	6.6	4.9	5.6	7.7
4QFY15	6.7	6.6	-3.3	5.4	-6.3	-6.1	6.1	-0.1	5.2	9.0
1QFY16	7.6	2.0	0.1	4.7	-6.1	-5.8	7.6	2.4	7.3	9.3
2QFY16	8.4	3.9	4.1	5.0	-4.4	-3.7	8.2	2.3	7.1	10.1
3QFY16	7.4	5.9	5.1	7.0	-8.7	-10.0	7.3	-2.1	10.3	9.6
4QFY16	9.0	11.8	2.4	3.9	-1.6	-3.7	8.7	1.5	10.3	10.0
1QFY17	7.9	8.4	16.6	7.4	2.0	-0.5	7.6	2.5	7.4	9.0
2QFY17	7.5	7.9	16.5	3.0	1.5	-3.8	6.8	4.1	5.9	7.8
3QFY17	7.0	11.1	21.0	1.7	4.0	2.1	6.7	6.9	6.2	6.9
4QFY17	6.1	7.3	31.9	-2.1	10.3	11.9	5.6	5.2	3.1	7.2

Source: National Accounts Statistics, MOSPI



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