

# Economy Watch

Monitoring India's  
macro-fiscal performance

June 2018

The EY logo is positioned in the bottom right corner of the page. It consists of the letters 'EY' in a bold, white, sans-serif font. The background of the entire page is a blurred photograph of Indian currency, including several coins and banknotes, resting on a dark wooden surface. A yellow graphic element, a triangle pointing downwards, is located behind the EY logo.

Building a better  
working world

# Contents



<b>Foreword</b>	<b>3</b>
1. Growth: GDP growth recovery largely driven by domestic impulses	4
2. Inflation: CPI inflation increased to a four month high of 4.9% in May 2018	6
3. Fiscal performance: Fiscal deficit to GDP ratio exceeded 3.5% in FY18	7
4. India in a comparative perspective: Status and prospects	9
5. In focus: Tracking co-movement of exports and imports	11
6. Money and finance: RBI increased the repo rate to 6.25% in June 2018	15
7. Trade and CAB: CAD in FY18 reached a five year high of (-) 1.9%	17
8. Global growth: World Bank projected global growth to remain robust at 3.1% in 2018	18
9. Index of macro imbalance (IMI): Continued deterioration in 4QFY18	20
10. Index of Aggregate Demand (IAD): Signaled recovery in demand conditions	20
11. Capturing macro-fiscal trends: Data appendix	21

**Prepared by Macro-fiscal Unit, Policy Advisory Group, EY India**

D. K. Srivastava, Chief Policy Advisor, EY: [dk.srivastava@in.ey.com](mailto:dk.srivastava@in.ey.com)

Muralikrishna Bhardwaj, Manager, EY: [muralikrishna.b@in.ey.com](mailto:muralikrishna.b@in.ey.com)

Tarrung Kapur, Manager, EY: [tarrung.kapur@in.ey.com](mailto:tarrung.kapur@in.ey.com)

Ragini Trehan, Senior Consultant, EY: [ragini.trehan@in.ey.com](mailto:ragini.trehan@in.ey.com)

# Highlights

1. Driven largely by domestic demand factors, **real GDP growth in 4QFY18 rose to 7.7%.**
2. **In May 2018, manufacturing PMI continued to expand, although at a slower pace while services PMI witnessed a marginal contraction.**
3. **Overall CPI-based inflation reached a four month high of 4.9% in May 2018 from 4.6% in April 2018 led by rising prices of fruits and fuel.**
4. **Given the GST related transitional issues, the lower indirect tax buoyancy during FY18 at 0.6 was compensated by a buoyancy of 1.9 in the direct taxes providing a buoyancy of 1.2 in the aggregate central taxes.**
5. **Center's revenue expenditure grew by 11.5% while capital expenditure contracted by (-) 9.2% in FY18.**
6. **Center's fiscal deficit stood at 3.5% of GDP for FY18 as compared to the budgeted target of 3.2%.**
7. **As per the IMF, India's volume of goods and services exports is projected to average around 8% during 2018 to 2023.**
8. **In its June 2018 Monetary Policy Review, the RBI increased the repo rate to 6.25% given the upward pressure on inflation.**
9. **CAD as a percentage of GDP was (-) 1.9% in 4QFY18.**



## Foreword

### Rising sharply, quarterly growth shows a V-shaped recovery

The RBI raised the repo rate to 6.25% in its June 2018 Monetary Policy Review, reflecting the RBI's concern about the increasing inflation trends both of CPI and WPI for the month of May 2018. CPI inflation has clocked close to 5%, while WPI inflation is reported at 4.4% in May 2018. The main structural driver for the pressure on inflation is the global crude price, that has touched US\$80/bbl. In addition, there is the seasonal influence of rising vegetable prices.

On the growth side, however, India's prospect appear to be brighter. The Indian economy has shown a strong V-shaped recovery driven largely by domestic growth impulses. Considering nine consecutive quarters since 4QFY16, GDP growth fell quarter after quarter from a peak of 9% in 4QFY16 to a trough of 5.6% in 1QFY18. As widely recognized, this fall was due to demonetization and the transitory adverse effects of GST implementation. These effects eventually subsided and for the last three quarters, growth steadily recovered to 6.3%, 7.0% and 7.7% in 2Q, 3Q and 4Q of FY18 respectively. This sharp recovery is based entirely on domestic factors as the contribution of net exports to GDP growth has been zero or negative since the 3QFY17. From the demand side, two segments which have supported growth, particularly in 4QFY18, are government consumption demand and the overall investment demand. The growth in gross fixed capital formation was as high as 14.4% in the 4QFY18.

The real investment rate has also increased to 34.6% in the 4QFY18 although paradoxically, the nominal investment rate during this period remained below 31%. This difference may be explained by relatively lower implicit price deflator of investment goods compared to that for consumption goods.

The current account deficit for FY18 was 1.9% of GDP which has reached a peak in recent years. This represents a significant deterioration compared to the current account deficit in FY17 at 0.7% of GDP. This change is driven largely by the weak performance of exports. While import growth has also fallen, this fall is not to the same extent as that of exports. Furthermore, continued pressure on global oil prices may lead to a further deterioration in the current account deficit-GDP ratio.

The annual CGA data for FY18 shows a fiscal deficit-GDP ratio of the central government at more than 3.5% which constitutes a tangible slippage from the FRBM target of 3% and from the budget target of 3.2%. With the 2019 elections round the corner, an improvement in the level of fiscal deficit relative to GDP may not be forthcoming. This will persuade the RBI to expect continued inflationary pressures and it might undertake a further upward revision of the policy rate in the current fiscal year. The US Fed on 13 June 2018 raised the fed rate by another 25 basis points and argued in favor of four increments in the US Fed rate during the course of the year. This might put further pressure on the rupee.

**D.K. Srivastava**

Chief Policy Advisor, EY India

# 1. Growth: GDP growth recovery largely driven by domestic impulses

## A. GDP growth: Strong recovery in 4QFY18

- ▶ From a low of 5.6% in 1QFY18, overall GDP growth steadily recovered to 7.7% in 4QFY18, thereby showing a strong "V" shaped recovery. As per the provisional estimates, the real GDP growth for FY18 turned out to be 6.7% and the RBI's June 2018 monetary policy statement forecasts the GDP growth to improve to 7.4% in FY19.
- ▶ A sharp recovery in the last three quarters of FY18 is based entirely on domestic factors as the contribution of net exports to GDP growth has been zero or negative since the third quarter of FY17.
- ▶ Two components which supported growth from the demand side, particularly in 4QFY18, are government consumption and investment demand which grew by 16.8% and 14.4% respectively in 4QFY18 (Table 1).
- ▶ Growth in private consumption expenditure contributing nearly 55% to overall GDP growth also improved to 6.7% in 4QFY18 from 5.9% in 3QFY18.

**Table 1: Real GDP growth (%)**

Aggregate demand (AD) component	FY16	FY17	FY18**	1Q FY17	2Q FY17	3Q FY17	4Q FY17	1Q FY18	2Q FY18	3Q FY18	4Q FY18
PFCE	7.4	7.3	6.6	8.3	7.5	9.3	3.4	6.9	6.8	5.9	6.7
GCE	6.8	12.2	10.9	8.3	8.2	12.3	23.6	17.6	3.8	6.8	16.8
GFCF	5.2	10.1	7.6	15.9	10.5	8.7	4.2	0.8	6.1	9.1	14.4
EXP	-5.6	5.0	5.6	3.6	2.4	6.7	6.6	5.9	6.8	6.2	3.6
IMP	-5.9	4.0	12.4	0.1	-0.4	10.1	6.6	18.5	10.0	10.5	10.9
GDP	8.2	7.1	6.7	8.1	7.6	6.8	6.1	5.6	6.3	7.0	7.7

Source (Basic Data): MOSPI., \*\*Provisional Estimates

- ▶ On the output side, GVA growth gained momentum as it gradually increased from a low of 5.6% in 1QFY18 to 7.6% in 4QFY18.
- ▶ GVA growth in 4QFY18 was driven by robust growth in three sectors namely, manufacturing (9.1%), construction (11.5%) and public administration and defense (13.3%) (Table 2).
- ▶ However, growth in major services including financial and real estate services and trade, hotels and transportation services decelerated to 5.0% and 6.8% respectively in 4QFY18.
- ▶ Growth in agricultural and allied sectors gradually improved to 4.5% in 4QFY18 from a recent low of 3.0% in 1QFY18 (table 2). The Indian Metrological Department's forecast of a normal monsoon during FY19 may augur well for the agricultural sector.
- ▶ The provisional estimates suggest that the overall GVA growth for FY18 turned out to be lower at 6.5% in FY18 as compared to 7.1% in FY17.

**Table 2: Sectoral real GVA growth (%)**

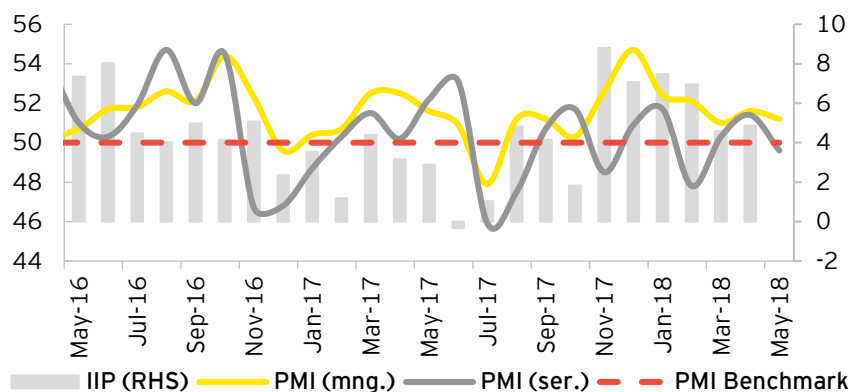
Sector	FY16	FY17	FY18**	1Q FY17	2Q FY17	3Q FY17	4Q FY17	1Q FY18	2Q FY18	3Q FY18	4Q FY18 <sup>s</sup>
Agr.	0.6	6.3	3.4	4.3	5.5	7.5	7.1	3.0	2.6	3.1	4.5
Ming.	13.8	13.0	2.9	10.5	9.1	12.1	18.8	1.7	6.9	1.4	2.7
Mfg.	12.8	7.9	5.7	9.9	7.7	8.1	6.1	-1.8	7.1	8.5	9.1
Elec.	4.7	9.2	7.2	12.4	7.1	9.5	8.1	7.1	7.7	6.1	7.7
Cons.	3.7	1.3	5.7	3.0	3.8	2.8	-3.9	1.8	3.1	6.6	11.5
Trans.	10.3	7.2	8.0	8.9	7.2	7.5	5.5	8.4	8.5	8.5	6.8
Fin.	10.9	6.0	6.6	10.5	8.3	2.8	1.0	8.4	6.1	6.9	5.0
Publ.	6.1	10.7	10.0	7.7	8.0	10.6	16.4	13.5	6.1	7.7	13.3
GVA	8.1	7.1	6.5	8.3	7.2	6.9	6.0	5.6	6.1	6.6	7.6

Source (Basic Data): MOSPI., \*\*Provisional Estimates

## B. IIP growth: Improved to 4.9% in April 2018

- ▶ Reversing its falling trend, IIP growth improved to 4.9% (y-o-y) in April 2018 as compared to 4.6% (revised) in March 2018 led by higher growth in manufacturing and mining output (Chart 1).
- ▶ Growth in the manufacturing sector output (accounting for 77.6% of overall IIP) increased to 5.2% in April 2018 from 4.7% in March 2018. Growth in the output of the mining sector rose to a seven month high of 5.1% in April 2018 from 3.1% in March 2018 (Table A1).
- ▶ Output growth of capital goods industry increased to 13.0% in April 2018 as compared to a contraction of (-) 5.7% (revised) in March 2018. Growth in the output of consumer durables recovered marginally to 4.3% in April 2018 from 4.1% in March 2018 while that of consumer non-durables moderated to 7.0% from 12.7% (revised) during the same period. Growth in the infrastructure/construction sector slowed further to 7.5% in April 2018 from 8.9% (revised) in March 2018.
- ▶ Growth in the output of eight core infrastructure industries marginally recovered to 4.7% (y-o-y) in April 2018 from 4.4% (revised) in March 2018. Among the key sub-industries, growth in coal (16.0%), cement (16.6%), natural gas (7.4%) and petroleum refinery products (2.7%) improved during April 2018, while that in electricity (2.2%) and steel (3.5%) moderated.

**Chart 1: IIP and PMI**



Having reached a low of 4.6% in March 2018, growth in IIP recovered to 4.9% in April 2018 led by higher growth in manufacturing and mining output.

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, IHS Markit PMI, Markit Economics.

## B. PMI: Signaled slower expansion in manufacturing and marginal contraction in services in May 2018

- ▶ Headline manufacturing PMI (seasonally adjusted (sa)) remained above the threshold of 50 for the tenth consecutive month in May 2018. However, at 51.2 in May 2018, the rate of increase slowed as compared to April 2018 when the manufacturing PMI was at 51.6 (Chart 1). Greater production in consumption and intermediate goods continued to outweigh a decline in investment goods.
- ▶ Following a two month period of growth, headline services PMI (sa) fell to 49.6 in May 2018 from 51.4 in April 2018, indicating marginal contraction. The slowdown in the service sector output was reflected in the employment index which moderated in May 2018 from its seven year high in April 2018.
- ▶ Composite PMI Output Index (sa) fell to 50.4 in May 2018 from 51.9 in April 2018 due to slower pace of expansion in manufacturing and marginal contraction in services sector.

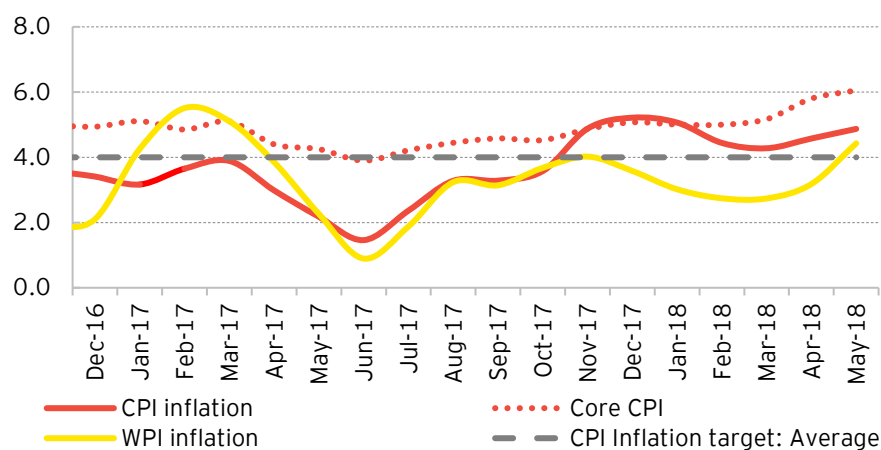
In May 2018, manufacturing PMI continued to expand although at a slower pace while services PMI showed a marginal contraction.

## 2. Inflation: CPI inflation increased to a four month high of 4.9% in May 2018

Overall CPI-based inflation reached a four month high of 4.9% in May 2018 from 4.6% in April 2018 (Chart 2) led by rising prices of fruits and fuel.

- ▶ Inflation in fruits accelerated to a 43-month high of 12.3% in May 2018 from 9.7% in the previous month primarily due to an increase in prices of apples. It was accompanied by inflation in vegetables which rose to 8.0% in May 2018 from 7.5% in April 2018 mainly on account of rising potato prices. As a result consumer food price based inflation rose to a four month high of 3.1% in May 2018 from 2.8% in April 2018.
- ▶ Fuel and light based inflation climbed to 5.8% in May 2018 from 5.2% in April 2018, reversing a six month declining trend, as inflation in LPG reversed from a six month declining trend and strengthened to 7.0% in May 2018 from 4.2% in April 2018.
- ▶ Inflation in transportation and communication services strengthened to 5.3% in May from 4.5% in April 2018 led by inflation in petrol used for transportation which increased to a nine month high of 10.3% in May 2018 from 8.0% in April. It was accompanied by a rise in inflation in diesel to 16.5% in May from 12.3% in April 2018.
- ▶ Housing inflation remained nearly stable at an elevated level of 8.4% in May 2018 as compared to 8.5% in April.
- ▶ Core CPI-based inflation strengthened to a 45 month high of 6.1% in May 2018 from 5.8% in April 2018 due to rising inflation in transport services.

**Chart 2: Inflation (y-o-y, %)**



Both core CPI-based and core WPI-based inflation reached near four year highs of 6.1% and 4.4% on account of increase in inflation in transport services and manufactured basic metals respectively.

Source: MOSPI, Office of the Economic Advisor, GoI

WPI-based inflation accelerated to a 14 month high of 4.4% in May 2018 from 3.2% in April 2018 primarily on account of rising fuel prices accompanied by rising vegetables and cereals prices (Chart 2).

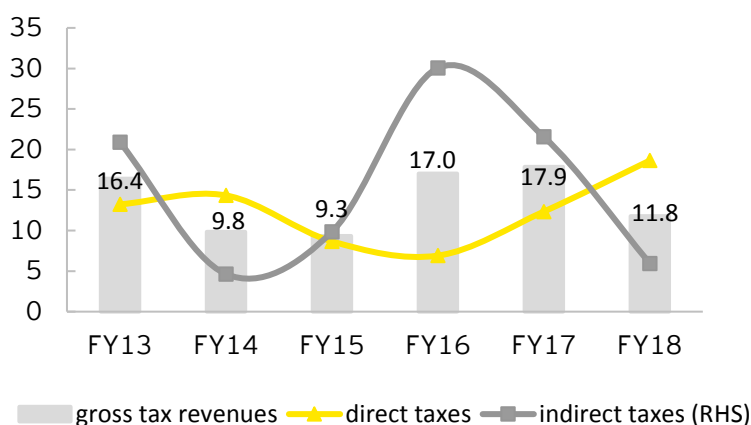
- ▶ WPI fuel and power based inflation increased to 11.2% in May 2018 from 7.9% in April 2018 on account of rise in inflation in mineral oils to 18.3% in May from 12.0% in April 2018. All types of mineral oils including petrol and diesel witnessed a significant rise in prices while the pace of contraction in LPG prices substantially slowed down.
- ▶ The rise in fuel prices was driven by higher inflation in crude petroleum, which nearly doubled to 30.5% in May 2018 from 15.8% in April 2018.
- ▶ Inflation in primary articles rose marginally to 1.6% in May from 0.9% in April 2018 on account of an increase in inflation in cereals and vegetables. Vegetable prices rose by 2.5% in May 2018 after contracting for two successive months and reaching (-) 0.9% in April 2018.
- ▶ Inflation in manufactured products increased to 3.7% in May 2018 from 3.1% in April 2018 mainly due to an uptick in inflation of manufactured basic metals to 15.8% in May 2018 from 13.0% in April 2018.
- ▶ WPI core inflation reached a nearly 4-year high of 4.4% in May 2018 from 3.6% in April 2018.

### 3. Fiscal performance: Fiscal deficit to GDP ratio exceeded 3.5% in FY18

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

- ▶ According to CGA, gross central taxes grew by 11.8% in FY18, lower than 17.9% in the previous year (Chart 3).
- ▶ In April 2018, gross taxes stood at 5% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 3.1% in April as a percentage of annual actuals.
- ▶ Growth in direct tax was at 18.6% in FY18 as compared to 12.3% in FY17. Buoyancy of direct taxes stood at 1.9 in FY18, higher than 1.1 in FY17.
- ▶ Among direct taxes, corporate income tax grew by 17.8% in FY18 as compared to just 6.7% in FY17. Growth in personal income tax was at 19.9% in FY18, slightly lower than 21.5% in FY17. These imply annual buoyancies of 1.8 and 1.9 respectively.
- ▶ During FY18, indirect taxes (comprising union excise duties, service tax, customs duty, CGST, UTGST, IGST and GST compensation cess) grew by 6% as compared to 21.6% in FY17.
- ▶ Indirect tax buoyancy stood at 0.6 in FY18 as compared to 2 in FY17.
- ▶ The GST collection (CGST, UTGST, IGST and GST compensation cess) during July-March FY18 stood at INR4,36,229 crore which was 98.1% of the FY18 RE. In April 2018, GST collection amounted to INR60,678 crore.

**Chart 3: Central tax revenues (annual growth, %)**



As per CGA, during FY18, Center's gross tax revenues grew by 11.8% while non tax revenues contracted by (-) 29.8%.

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

Note: Direct taxes include personal income tax and corporation tax, and indirect taxes include union excise duties, service tax, customs duty and CGST, UTGST, IGST and GST compensation cess from July 2017 onward

- ▶ The Center's non-tax revenues contracted by (-) 29.8% during FY18 as compared to a growth of 9.3% in FY17. Non-tax revenues in April 2018 stood at 5.4% of the annual budgeted target as compared to the three year average (FY16 to FY18) of 7% in April as percentage of annual actuals.
- ▶ The revised estimate of total receipts from disinvestment for FY18 stood at INR1,00,000 crore, higher than the budgeted target of INR72,500 crore. According to the Department of Disinvestment, the disinvestment proceeds at INR1,00,056.91 in FY18 confirms that the FY18 RE for disinvestment has been met. Proceeds from disinvestment in April FY19 stood at INR434.14 crore.

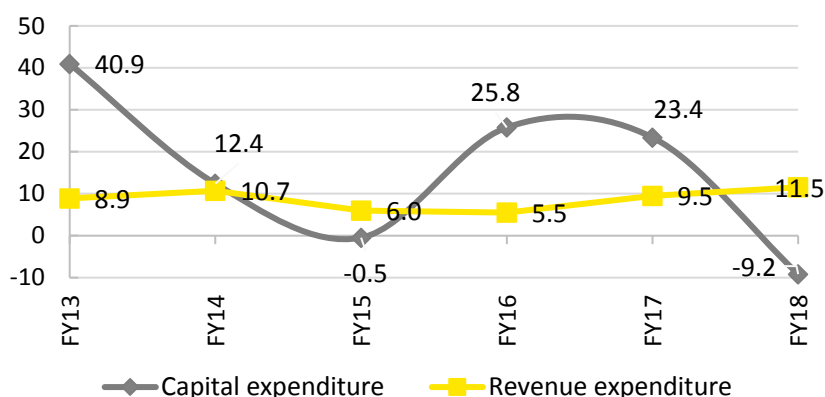
#### B. Expenditures: Revenue and capital

- ▶ Center's total expenditure in FY18 grew by 8.5% as compared to 11.4% in FY17 (Chart 4). In April 2018, total expenditure stood at 9.1% of the FY19 annual budgeted target, close to the three-year average (FY16 to FY18) of 9.4% in April as a percentage of annual actuals.



- ▶ Growth in revenue expenditure increased to 11.5% in FY18 as compared to 9.5% in FY17. Revenue expenditure in April 2018 stood at 8.3% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 9.4% in April as a percentage of annual actuals.
- ▶ Center's capital expenditure contracted by (-) 9.2% in FY18 as compared to a strong growth of 23.4% in FY17. Capital expenditure in the first month of FY19 stood at 15.5% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 9.7% in April as a percentage of annual actuals.

**Chart 4: Central government expenditure (growth, % annual)**



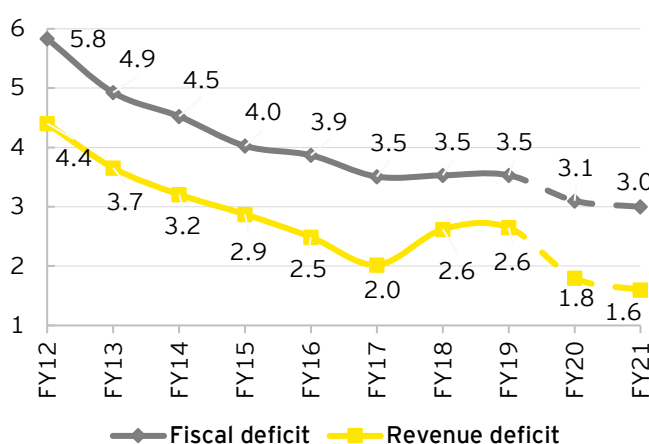
Center's revenue expenditure grew by 11.5% while capital expenditure contracted by (-) 9.2% in FY18.

Source (basic data): Monthly Accounts, Controller General of Accounts (CGA), Government of India

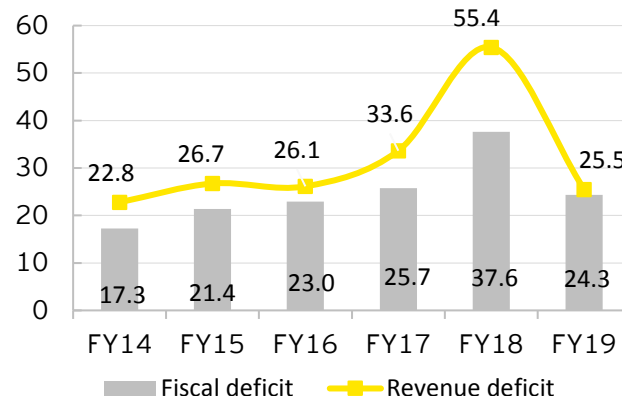
### C. Fiscal imbalance

- ▶ Center's fiscal deficit stood at 3.53% of GDP for FY18 if Provisional Estimates for FY18 nominal GDP released by the CSO are taken into account (Chart 5). As per the Medium Term Fiscal Policy Statement of the FY19 Budget, achieving the fiscal deficit target of 3% of GDP has been shifted to 2021. Fiscal deficit in April 2018 stood at 24.3% of the annual budgeted target as compared to 37.6% in FY18, which was the highest since FY01 (Chart 6).
- ▶ The Center's revenue deficit stood at 2.65% of GDP in FY18. In April 2018, revenue deficit was at 25.5% of the annual budgeted target as compared to 55.4% in FY18, which was historically the highest.

**Chart 5: Fiscal and revenue deficit as percentage of GDP**



**Chart 6: Fiscal and revenue deficit in April as percentage of annual budgeted target**



Source: Monthly Accounts, Controller General of Accounts, Government of India, Medium term fiscal policy statement, Union Budget FY19 and CSO

## 4. India in a comparative perspective: Status and prospects

### Real GDP growth: India is projected to lead global growth during 2018 to 2020

- ▶ World GDP growth is estimated to have recovered to 3.1% in 2017 from 2.4% in 2016. Growth is projected to remain robust but ease to 2.9% by 2020 due to a moderation in growth in the advanced economies on account of slowing growth in trade and investment.
- ▶ Growth in the US is expected to pick up sharply in 2018 but decelerate thereafter as monetary policy normalizes and the effects of US fiscal stimulus wane.
- ▶ Among EMDEs, growth in India is projected to increase to 7.3% in 2018 and reach 7.5% by 2020 while that in China is forecasted to slow down to 6.5% in 2018 and further to 6.2% in 2020.

**Table 3: Real GDP growth (% annual)**

Country	2017 (e)	2018 (f)	2019 (f)	2020 (f)
World	3.1	3.1	3.0	2.9
Advanced economies	2.3	2.2	2.0	1.7
US	2.3	2.7	2.5	2.0
Euro area	2.4	2.1	1.7	1.5
EMDEs	4.3	4.5	4.7	4.7
Brazil	1.0	2.4	2.5	2.4
China	6.9	6.5	6.3	6.2
India*	6.7	7.3	7.5	7.5
Russia	1.5	1.5	1.8	1.8
South Africa	1.3	1.4	1.8	1.9

Source (Basic Data): Global Economic Prospects, World Bank, June 2018;\*Data is based on fiscal year; (e) stands for estimate and (f) stands for forecast.

### General government net lending/borrowing as percentage of GDP: In India, general government fiscal deficit-GDP ratio is projected to remain above 6% until 2021

- ▶ In advanced economies, fiscal deficit-GDP ratio is projected to increase to 2.8% by 2019 largely due to an expansionary fiscal stance in the US where fiscal deficit to GDP ratio is projected to increase to 5.9% by 2019.
- ▶ Among the EMDEs, fiscal deficit-GDP ratio in China was estimated at 4% in 2017 and is projected to increase slightly to 4.3% by 2023.
- ▶ In India general government deficit-GDP ratio was estimated at 6.9% in 2017 (FY18) as there was a significant deviation from the recommended fiscal consolidation path. Deficit-GDP ratio is projected to remain more than 6% until 2021.
- ▶ Fiscal deficit in Russia fell to 1.5% of GDP in 2017 mainly because of nominal spending freeze and temporary revenue measures, supported by recovering global crude prices. This is expected to continue and bring the overall deficit to balance by 2018 post which a fiscal surplus has been projected.

**Table 4: General government net lending/ borrowing as % of GDP - Major economies**

Country	2017	2018	2019	2020	2021	2022	2023
Advanced economies	-2.6	-2.6	-2.8	-2.4	-2.3	-2.2	-2.0
US	-4.6	-5.3	-5.9	-5.5	-5.5	-5.4	-5.0
Euro area	-0.9	-0.6	-0.5	-0.2	-0.1	0.0	0.1
EMDEs	-4.4	-4.1	-4.0	-3.9	-3.9	-3.8	-3.8
Brazil	-7.8	-8.3	-8.3	-7.9	-7.6	-7.0	-6.6
China	-4.0	-4.1	-4.3	-4.3	-4.3	-4.4	-4.3
India*	-6.9	-6.5	-6.5	-6.4	-6.2	-6.0	-5.9
Russia	-1.5	0.0	0.1	0.3	0.5	0.5	0.5
South Africa	-4.5	-4.2	-4.1	-4.1	-4.0	-4.1	-4.1

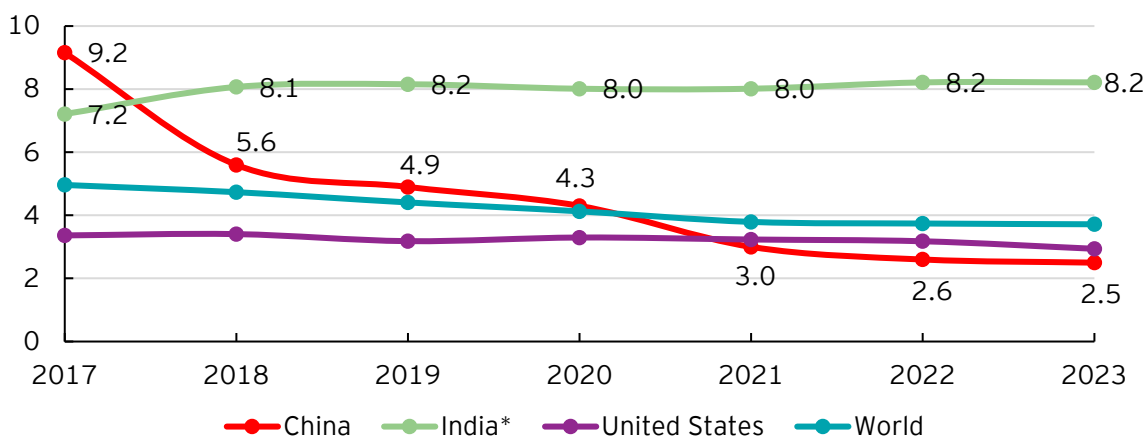
Source (Basic Data): IMF World Economic Outlook, April 2018;\*Data is based on fiscal year; Note: Projections start from 2018 onward. Note: -ve indicates a fiscal deficit and +ve indicates a fiscal surplus



### Exports of goods and services: *India's volume of goods and services exports is projected to average around 8% during 2018 to 2023*

- ▶ According to the IMF, global export growth in volume terms is estimated to have recovered to 5% in 2017. Among advanced economies, the recovery was led by the large exporters such as the US, Japan and Germany. Among EMDEs, rebound in exports was particularly pronounced in China.
- ▶ In the forecast period from 2018 to 2023, global export growth as also the export growth in selected major economies of the US and China is projected to moderate.
- ▶ In India, export growth is projected in the narrow range of 8% to 8.2% in the forecast period from 2018 to 2023.

**Chart 7: Volume of exports of goods and services (% change, annual)**

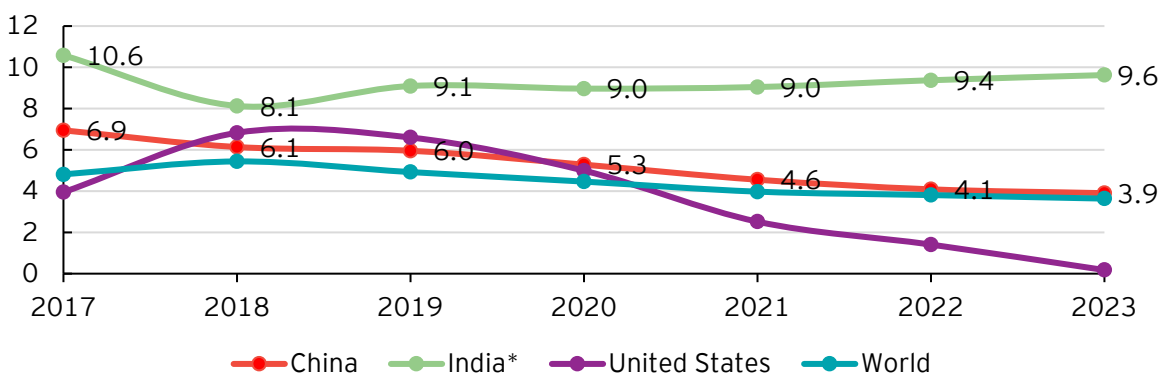


Source (Basic Data): IMF World Economic Outlook, April 2018;\*Data is based on fiscal year; Note: Projections start from 2018 onward.

### Imports of goods and services: *India's volume of goods and services imports is projected to average 9% during 2018 to 2023*

- ▶ After almost two years of weakness, global goods and services import growth, in volume terms, is estimated to have recovered to 4.8% in 2017. As with export growth, import growth is also projected to moderate after 2018.
- ▶ In the US, growth in the volume of goods and services imports is expected to pick up to 6.8% in 2018 from 4% in 2017. However, growth is projected to fall to 0.2% by 2023 possibly due to the protectionist measures including tariff and other barriers to trade adopted by the US recently.
- ▶ Among EMDEs, during the forecast period from 2018 to 2023, import growth in China is projected to average 5% while that in India is expected to average 9%.

**Chart 8: Volume of imports of goods and services (% change, annual)**



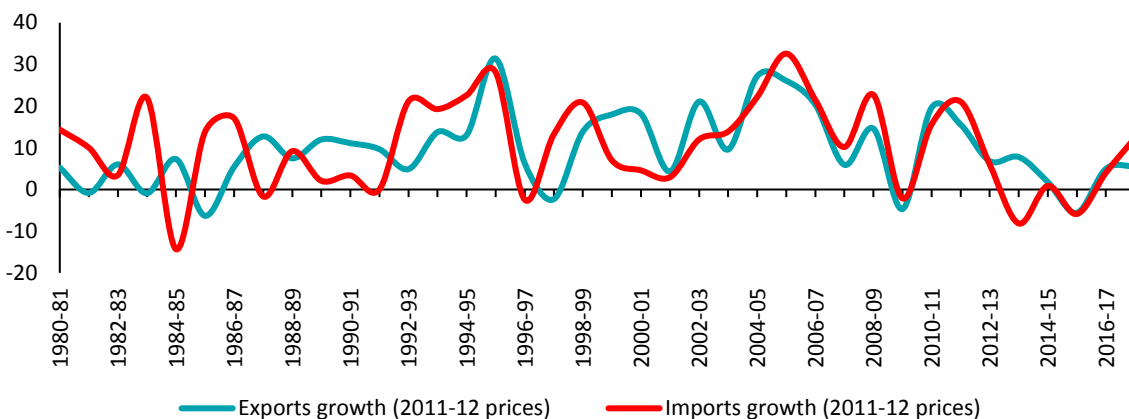
Source (Basic Data): IMF World Economic Outlook, April 2018;\*Data is based on fiscal year; Note: Projections start from 2018 onward.

## 5. In focus: Tracking co-movement of exports and imports

### India's exports and imports: Co-movement and its implications

Exports and imports of goods and services are part of the aggregate GDP in the National Income Accounts. Considered together, their relative growth reflects the contribution of net exports, that is, exports minus imports to GDP growth. Viewed over a long period of time, growth in exports and imports have a tendency to move together. In years in which export growth reaches a peak, import growth also shows a surge and vice versa. The result of this co-movement is that the contribution of net exports to India's overall GDP growth has remained minimal over time. In this write-up we track the record of co-movement of export and import growth in India over a long period of time, covering in detail the recent past. The former analysis is based on annual data covering the period 1980-81 to 2017-18 reflecting export and import growth measured at constant 2011-12 prices. Although, the GDP series was recently revised, changing the 2004-05 base to 2011-12 base, it is possible to splice the series so as to construct the earlier years with the 2011-12 base series. There are problems of comparability and methodological issues in the earlier series vis-à-vis the 2011-12 series of national income. These problems are however more prominent on the output side rather than on the demand side of the national income accounts.

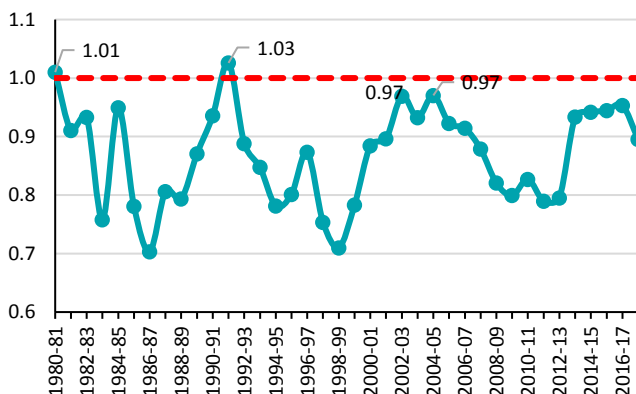
**Chart 9: Co-movement of real export and imports growth**



Source (Basic data): MOSPI

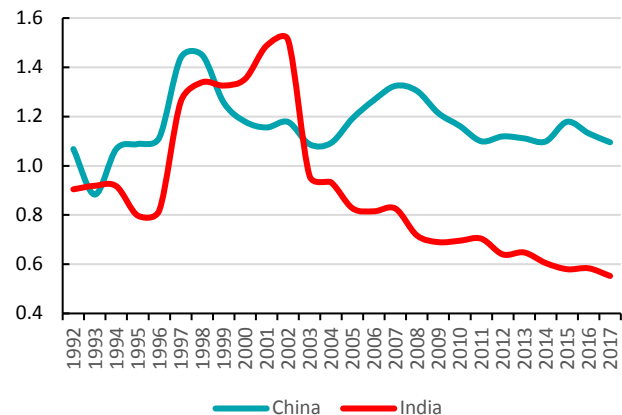
Chart 9 shows the co-movement of export growth and import growth in India since 1980-81. It is notable how over this long period the export and import growth have moved together peaking at similar times and reaching troughs also at comparable times. When we compare levels of imports and exports, also measured at constant prices, in general the value of exports is lower than the value of imports. In fact, if we calculate the ratio of exports to imports at constant prices, this ratio in India's case is generally less than one (Chart 10).

**Chart 10: Ratio of exports to imports of goods and services (2011-12 prices): India**



Source (Basic data): MOSPI

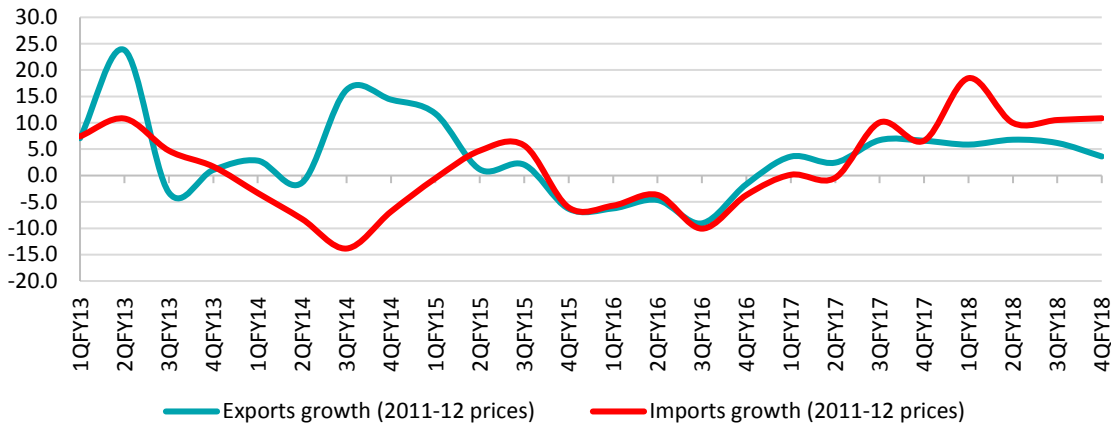
**Chart 11: Ratio of exports to imports of goods and services: India and China**



Source (Basic data): International Financial Statistics, IMF

With the exception of two years namely, 1980-81 and 1991-92, the value of export to import ratio has always been less than one. This implies a negative balance of trade for goods and services. In contrast for example in the case of China, the exports to imports ratio has generally been more than one indicating china's historical record of maintaining a trade surplus in its global trade balance since the 90s (Chart 11).

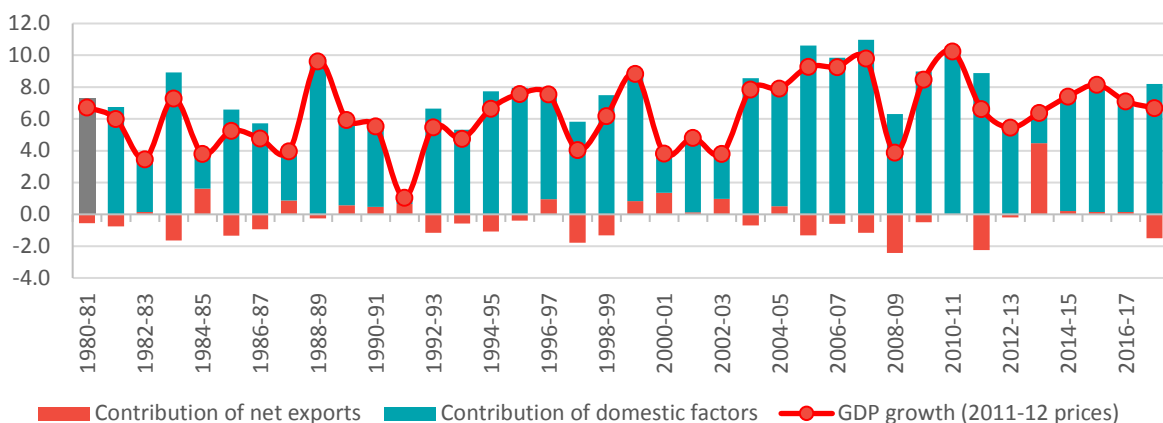
**Chart 12: Co-movement of exports and imports growth: quarterly comparison**



Source (Basic data): MOSPI

Chart 12 shows the co-movement of exports and imports growth on quarterly basis. From 3QFY15, the two growth curves have moved very closely together. Chart 13 shows overall GDP growth and its decomposition into two parts: contribution of net exports and contributions of domestic growth factors covering private and government final consumption expenditure and gross capital formation. As the chart shows, in very few years the contribution of net exports is positive and even when positive it is mostly quite small relative to the overall growth. There are only two exceptions to this general observation in years 1984-85 and 2013-14. In the years in which the contribution of net exports is negative the domestic factors add to overall growth so as to make up for the negative contribution of net exports. Surprisingly, even in high growth years such as the period from 2005-06 to 2007-08 when real growth averaged close to 9%, the contribution of net exports averaged at a negative value of (-)1.0% points. The general impression that high growth of exports is a necessary condition for high overall growth is therefore not borne out in this long-term review.

**Chart 13: Contribution to GDP growth: net exports and domestic factors**



Source (Basic data): MOSPI

**Do exports cause imports or vice versa?**

Co-movement of export and import growth does not necessarily imply causality. There are however econometric tests of exogeneity, which can indicate whether there is a causality that runs from exports to imports or imports to exports or whether is a bi-directional causality. A number of studies have examined this issue in the Indian context. Table 5 provides a summary of the conclusions of a selected set of these studies.

**Table 5: Overview of literature: Indian context**

#	Authors	Periods	Econometrics techniques	Keys Findings
1	Jawaid and Raza (2013)	1980 - 2010	Autoregressive distributed lag (ARDL)	T => GDP: Long Run
			Granger Causality Tests	T <=> GDP: Short Run
2	Sharma and Kaur (2013)*	1976 - 2011	Granger Causality Tests	X <=> M
3	Chatterji et al (2014)	1970 - 2010	Vector auto regression (VAR)	X => GDP
			Granger Causality Tests	M => GDP
4	Murthy et al (2014)	1971 - 2012	Cointegration Analysis	T <= GDP: Long Run
			Vector error correction model (VECM)	
			Granger Causality Tests	
5	Hussaini et al (2015)	1980 - 2013	Cointegration Analysis	X <=> GDP
			VECM	M <=> GDP
			Granger Causality Tests	X => M
6	Hye and Lau (2015)	1971 - 2009	ARDL	T => GDP: Long Run (negative effect)
				T <= GDP: Short Run
7	Rai and Jhala (2015)	2000 - 2013	Cointegration Analysis	X <=> GDP
			Granger Causality Tests	M <=> GDP
			Ordinary least square (OLS)	M => X
8	Bal et al (2016)	1970 - 2012	ARDL	T => GDP: Long Run
			Error correction model (ECM)	
9	Mohapatra et al (2016)	1970 - 2014	Cointegration Analysis	T => GDP: Long Run
			VECM	T => GDP: Short Run
			Granger Causality Tests	

Source: Bakari, S. (2017, August). The Three-Way Linkages between Export, Import and Economic Growth: New Evidence from Tunisia. Munich Personal RePEc Archive, 41. Retrieved from <https://mpra.ub.uni-muenchen.de/81080/>

Notes: X represents exports; M represents imports; T indicates terms of trade in a few studies (e.g. Jawaid and Raza (2013)) and trade openness in most others. Trade openness in measured as the ratio of imports and exports to GDP. GDP is gross domestic product.

'=>', '<=' and '<=>' represents the direction of causality

\*This study covers India and China.

The studies quoted above relate to India. Most of these are recent studies. The results are mixed. The estimated relationships explore direction of causality among exports, imports or trade and GDP. One of the studies [Sharma and Kaur (2013)] shows a bidirectional causality between exports and imports. Only one result says that exports causes imports [Hussaini et al (2015)]. Similarly only one result shows that imports cause exports [Rai and Jhala (2015)]. The maximum number of results, i.e., seven results, indicate that exports or imports or trade cause GDP growth. Further, five results substantiate bidirectional causality between one or more dimensions of trade and GDP growth. There are only two cases where the direction of relationship runs only from the side of GDP growth to trade. Thus, there is some tangible evidence to indicate a positive relationship emanating from growth in trade to a growth in GDP.

### Sectoral linkages in merchandise exports and imports

In order to derive further insights into the nature of linkages, we have examined the structure of exports and imports. We examine the top eight commodities in terms of their share in total value of exports and their share in total value of imports respectively (Table 6). There are five common items in the two lists. The top two items on the exports side pertaining to 2-digit HS Code relate to Code 71 (pearls, precious stones, jewelry, etc.) and

Code 27 (mineral fuels, etc.). Their exports clearly depend on corresponding imports. Together they account for a little less than 30% of total exports and just a little above 40% of total imports. Clearly, there is value added economic activity in which India has specialized whereby processing and refining of corresponding imported raw materials is done. As the demand for exports increase, the demand for imports is also pushed up so as to meet the increased demand for exports. The next three items in terms of relative importance which appear commonly in the two lists relate to Code 84 (nuclear reactors, boilers, machinery, etc.), Code 29 (organic chemicals) and Code 72 (iron and steel). In these cases, we do have processing capacity which may be used to process and refine domestically produced raw materials as well as imported raw materials or semi-finished products. Textiles and related products are spread out in terms of 15 two digit HS Codes including cotton textiles (Code 52), made-ups (Code 63), man-made textiles (Code 54, 55), silk (Code 50), wool (Code 51), apparel and clothing accessories (Code 60, 61). Together, these accounted for about 12% of total exports in FY18. There are no corresponding imports of any large magnitude in these categories. As such, the textile sector is not an important source for export import co-movement.

**Table 6: Top 8 export and import commodities in the value of exports and imports**

HS code	Commodity name	Share in value of exports, period average			
		FY06 to FY09	FY10 to FY12	FY13 to FY15	FY16 to FY18
71	Natural or cultured pearls, precious or semiprecious stones, jewelry, coin etc.	13.4	16.4	13.7	14.9
27	Mineral fuels, mineral oils and products of their distillation, bituminous substances, mineral waxes	16.0	17.4	19.9	12.1
84	Nuclear reactors, boilers, machinery and mechanical appliances, parts thereof	4.2	3.7	4.0	5.4
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	3.0	3.6	4.3	5.5
29	Organic chemicals	4.3	3.9	3.9	4.5
30	Pharmaceutical products	2.6	2.8	3.5	4.7
72	Iron and steel	4.2	2.7	2.8	3.0
85	Electrical machinery and equipment, etc.	3.9	4.0	3.2	3.0
HS code	Commodity name	Share in value of imports*, period average			
27	Mineral fuels, mineral oils and products of their distillation, bituminous substances, mineral waxes	33.9	33.4	37.4	26.9
71	Natural or cultured pearls, precious or semiprecious stones, jewelry, coin, etc.	12.4	18.5	14.7	15.0
85	Electrical machinery and equipment, etc.	8.0	7.2	6.7	9.9
84	Nuclear reactors, boilers, machinery and mechanical appliances, parts thereof	9.6	7.9	7.0	8.4
29	Organic chemicals	3.1	3.2	3.6	4.1
39	Plastic and articles thereof	1.6	1.9	2.3	3.0
15	Animal or vegetable fats and oils and their cleavage products, edible fats, animal or vegetable waxes	1.2	1.9	2.3	2.7
72	Iron and steel	3.4	2.9	2.5	2.4

Source (Basic data): Export Import Bank database; \*value calculated in USD terms

## Conclusions

Growth in exports and imports in India show a strong tendency for co-movement. When exports rise, imports also rise and vice-versa. This leaves a minimal impact on trade balance although it is quite volatile. This is one reason why a review of sectoral growth over a long period of time indicates a relatively low contribution of net exports to overall GDP growth. In India's case, we have been generally running a deficit on our trade account implying that exports have been less than imports, i.e., export to import ratio has been less than one. This stands in contrast with the experience of China where since the early 1990s, this ratio has been higher than one. The linkage between exports and imports is strongest in two sectors namely, processed pearls and jewelry and refined mineral fuels.

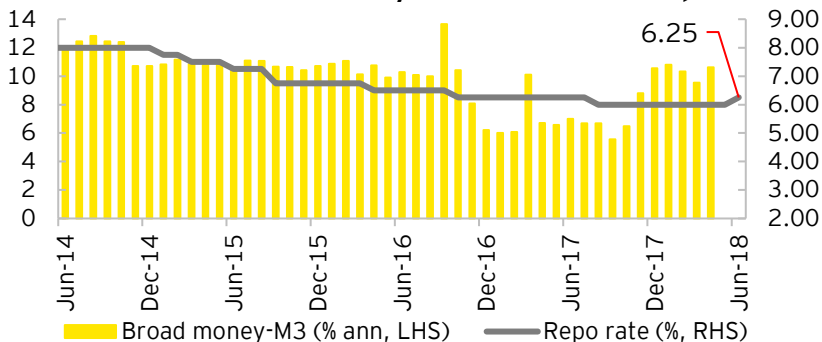
## 6. Money and finance: RBI increased the repo rate to 6.25% in June 2018

### A. Monetary sector

#### Monetary policy

- ▶ The RBI hiked its repo rate by 25 basis points from 6.0% to 6.25% in its June 2018 monetary policy review as risks to inflation increased. Consequently, the reverse repo rate now stands at 6.0%. The RBI has increased its policy rates for the first time since January 2014.
- ▶ In the RBI's assessment, outlook for headline CPI inflation is likely to be influenced by two counterbalancing factors, namely: (i) Surge in the price of Indian crude basket and other global commodity prices which has resulted in further firming up of input costs, and (ii) Low or muted food inflation in the past few months and delay in its usual seasonal pickup.
- ▶ Considering both these factors, the RBI has projected CPI inflation to average around 4.8% in FY19.

**Chart 14: Growth in broad money and movements in repo rate**



Source: Source: Database on Indian Economy, RBI.

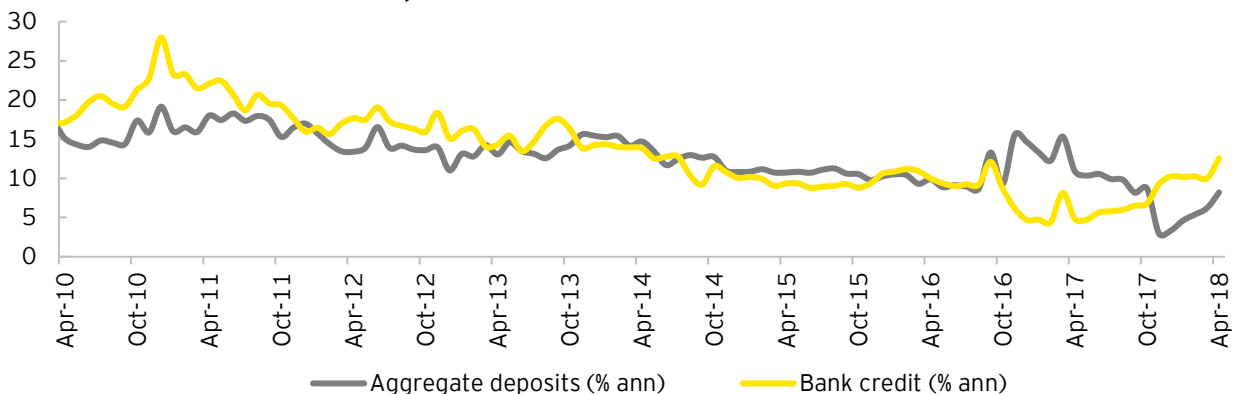
#### Money stock

- ▶ Growth in broad money stock (M3) recovered to 10.6% (y-o-y) in April 2018 after having moderated to 9.5% in March 2018 (Chart 14). Time deposits (accounting for over 76% of the broad money stock) grew to an eight month peak of 7.7% in April 2018 from 6.2% in March 2018.
- ▶ Narrow money (M1) continued to post a double-digit growth in April 2018 at 22.0% (y-o-y) similar to the growth seen in March 2018 led by favorable base effect. Total currency in circulation (CIC) was at INR19.3 trillion by 1 June 2018 and CIC excluding non-demonetized currency as a percentage of the total demonetized currency (indicating the extent of re-monetization) was slightly above 109%.

#### Aggregate credit and deposits

- ▶ Growth in scheduled commercial bank credit rose to a 45 month high of 12.6% in April 2018 from 10.0% in March 2018 supported by favorable base effect (Chart 15).

**Chart 15: Growth in credit and deposits**



Source: Source: Database on Indian Economy, RBI.





- ▶ Non-food credit grew to 10.7% (y-o-y) in April 2018 from 8.4% in March 2018 led by a sharp increase in the credit offtake in services sector. Growth in credit to the services sector, rose to 20.7% in April 2018 from 13.8% in March led by favorable base effect while credit growth to industries remained low at about 1.0% in April 2018.
- ▶ Growth in personal loans rose to 19.1% in April 2018 from 17.8% in March 2018 due to a pickup in housing loans. However, credit for consumer-durables contracted by (-) 4.3% in April 2018, the twelfth successive month of contraction.
- ▶ Growth in aggregate bank deposits marginally improved to 8.2% (y-o-y) in April 2018 from 6.2% in March 2018. Deposit growth averaged around 7.5% in FY18 as compared to 11.6% in FY17.

## B. Financial sector

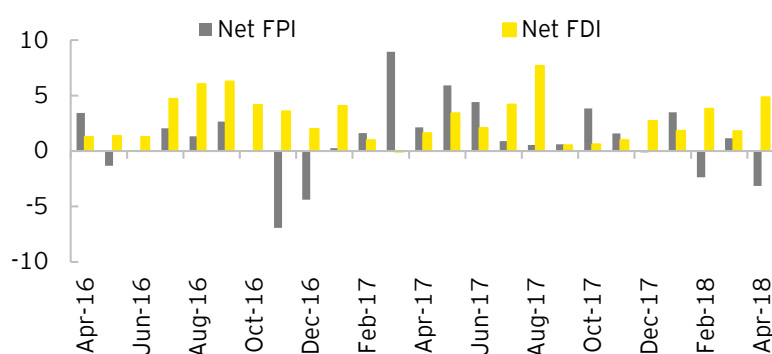
### Interest rates

- ▶ As per the data released by RBI, interest rates offered by banks on term deposits with a maturity of more than one year were maintained within the range of 6.25% and 6.75% during April and May 2018 respectively.
- ▶ The marginal cost of fund-based lending rate (MCLR) averaged around 7.88% during April and May 2018 as compared to 7.86% in March 2018. Banks may increase their lending rates in June 2018 in response to a hike in the repo rate.
- ▶ An empirical study by RBI<sup>1</sup> stated that lending rates adjusted relatively faster in the case of a hike in policy rate while a reduction in policy rate did not generally lead to a similar downward adjustment in lending rates. On the contrary, deposit rates were not found to adjust upwards to a policy rate hike, but they adjusted downwards rather quickly when policy rate was lowered.
- ▶ The average yield on 10-year government securities, an indicator of the direction of long-term interest rates in the economy, increased to 7.83% in May 2018 as compared to 7.55% in April 2018 due to pressure on inflation. Benchmark yields are likely to increase further in the coming months, unless risks to inflation ease.

### FDI and FPI

- ▶ As per the provisional data released by the RBI, overall foreign investment inflows were lower at US\$1.7 billion in April 2018 as compared to US\$3.0 billion in March 2018 as large outflows on account of FPIs nearly outweighed a significantly higher FDI inflows during the month.

**Chart 16: Net FDI and FPI inflows**



Net FDI inflows opened the year FY19 on a positive note with net inflows reaching a seven month high of US\$4.9 billion in April 2018

Source: Source: Database on Indian Economy, RBI.

- ▶ Net FDI inflows opened FY19 on a positive note with net inflows reaching a seven month high of US\$4.9 billion in April 2018 as compared to US\$1.8 billion inflows in March 2018 (Chart 16). In fact, gross FDI inflows amounted to US\$6.1 billion in April 2018, increasing from US\$3.0 billion in March 2018.
- ▶ Net FPI outflows were significantly higher at US\$3.1 billion in April 2018 as compared to a net inflow of US\$1.2 billion (revised) in March 2018.

<sup>1</sup> Banerjee S, Behera H, Bordoloi S and Kumar R (2018), Role of Financial Frictions in Monetary Policy Transmission in India, DRG Study No. 44, RBI.

## 7. Trade and CAB: CAD in FY18 reached a five year high of (-) 1.9%

### A. CAB: Current account deficit (CAD) remained elevated at 1.9% in 4QFY18

CAD as a percentage of GDP remained elevated at (-) 1.9% in 4QFY18 as compared to (-) 2.1% in 3QFY18 and (-) 0.6% in 4QFY17 (Chart 17).

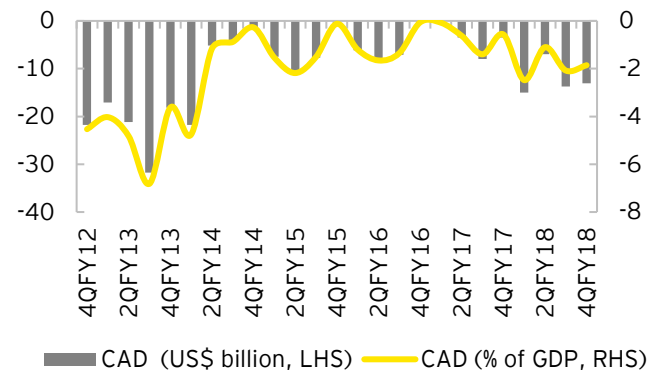
CAD in 4QFY18 remained elevated due to the combined effect of a high net merchandise trade deficit at US\$41.6 billion and lower net invisible receipts at US\$28.6 billion as compared to US\$ 44.0 billion and US\$30.3 billion respectively in 3QFY18. On an annual basis, CAB in FY18 deteriorated significantly to (-) 1.9% from (-) 0.7% in FY17 on account of a higher net merchandise trade deficit driven by the impact of rising global oil prices on the oil import bill (Table 7). Higher oil prices are expected to keep CAD elevated in 1QFY19 as well.

**Table 7: Components of CAB in US\$ billion**

	CAB (-deficit/+surplus)	CAB as a % of nominal GDP	Goods account net	Services account net
FY15	-26.8	-1.3	-144.9	76.6
FY16	-22.2	-1.0	-130.1	69.7
FY17	-15.3	-0.7	-112.4	67.5
FY18	-48.7	-1.9	-160.0	77.6
1QFY18	-15.0	-2.5	-41.9	18.3
2QFY18	-7.0	-1.1	-32.5	18.4
3QFY18	-13.7	-2.1	-44.0	20.7
4QFY18	-13.1	-1.9	-41.6	20.2

Source: Database on Indian Economy, RBI.

**Chart 17: CAD**

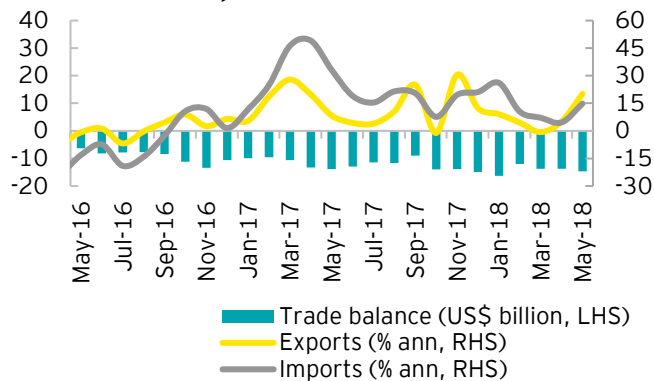


Source: Database on Indian Economy, RBI.

### B. Merchandise trade and exchange rate

- ▶ Merchandise export growth rose for the second successive month reaching 20.2% in May 2018 from 5.2% in April. It had been falling since November 2017 from its 6-year peak of 30.5% (Chart 18) until March 2018.

**Chart 18: Developments in merchandise trade**



Source: Ministry of Commerce and Industry, GoI

- ▶ Growth in overall exports was driven by oil exports which grew at an all-time high rate of 104.5% in May 2018, partly due to low base effect, as compared to a contraction of (-) 4.5% in April 2018.
- ▶ Imports growth reached a four month high of 14.9% in May 2018 from 4.6% in April 2018 driven by stronger growth in imports of electronic goods and petroleum products accompanied by a slowdown in the pace of contraction in pearls and stones.
- ▶ Gold imports contracted for the fifth successive month by (-) 29.8% in May 2018 as compared to (-) 33.1% in April 2018.

- ▶ Growth in non-oil, non-jewelry exports increased to 13.8% in May from 11.7% in April 2018 while their import growth trebled to 18.1% in May 2018 from 5.7% in April 2018.
- ▶ Merchandise trade deficit expanded to US\$ (-) 14.6 billion in May 2018 from US\$ (-) 13.7 billion in April 2018. Services surplus remained stable at a 28 month high of US\$6.6 billion in April 2018.
- ▶ The Indian rupee depreciated substantially to a 16 month low of INR67.5 per US\$ in May 2018 from INR65.6 per US\$ in April 2018 largely on account of higher global crude prices and an expected rise in the US Federal Funds Rate.

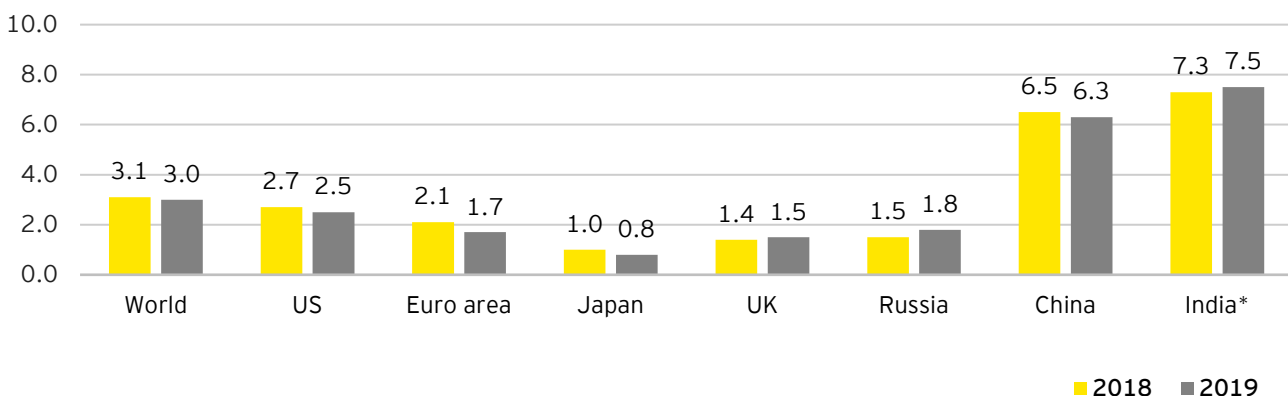
## 8. Global growth: World Bank projected global growth to remain robust at 3.1% in 2018

### A. Global growth outlook

- ▶ The World Bank (Global Economic Prospects, June 2018) has estimated the global GDP growth at 3.1% in 2018, same as that in 2017. Growth is expected to moderate to 3% in 2019 as a result of moderation in trade and investment and possible tightening of financial conditions due to faster-than-expected normalization of monetary policy in advanced economies particularly in the US (Chart 19).
- ▶ Growth in advanced economies is projected at 2.2% and 2% in 2018 and 2019 as the monetary policy is normalized and the effects of the US fiscal stimulus wanes. In EMDEs, growth is projected to be robust at 4.5% in 2018 and 4.7% in 2019.
- ▶ In the US, GDP growth is forecasted to increase to 2.7% in 2018, moderating to 2.5% in 2019. The Bipartisan Budget Act passed in early February 2018 is expected to boost government expenditure in the short term. Further, tax cuts and Jobs Act enacted in 2017 are also expected to stimulate growth. The US Fed has indicated a faster normalization of monetary policy as inflation has been moving towards the target of 2%. As fiscal and monetary stimulus wane, growth is expected to slow down in the medium term.
- ▶ Growth in the Euro area is projected at 2.1% in 2018 due to continued monetary policy stimulus. It is forecasted to moderate to 1.7% in 2019 due to the gradual waning of the monetary accommodation and slowdown in consumption due to higher oil prices. Net exports are also expected to become a drag on near-term growth as the earlier strengthening of the Euro and improving domestic demand may lead to a narrowing of the current account surplus.
- ▶ Among the emerging economies, growth in China is expected to fall to 6.5% in 2018 and further to 6.3% in 2019 as compared to 6.9% in 2017 on account of moderation in export growth and waning policy accommodation. Financial sector vulnerabilities (high stock of outstanding debt) and intensification of trade tensions pose downside risks to the growth outlook.
- ▶ In India, growth is forecasted to increase to 7.3% in 2018 (FY19) and further to 7.5% in 2019 (FY20) on account of strengthening private consumption and improving investment.

The World Bank has projected the global growth to be robust at 3.1% in 2018. Growth is expected to be moderate in 2019 and 2020 on account of the possibility of financial market stress, escalating trade protectionism and heightened geopolitical tensions. Financial market stress could emerge due to concerns about the creditworthiness of some EMDEs and faster-than-expected normalization of monetary policy in advanced economies

**Chart 19: Global growth projections**



Source: Global Economic Prospects, World Bank, June 2018

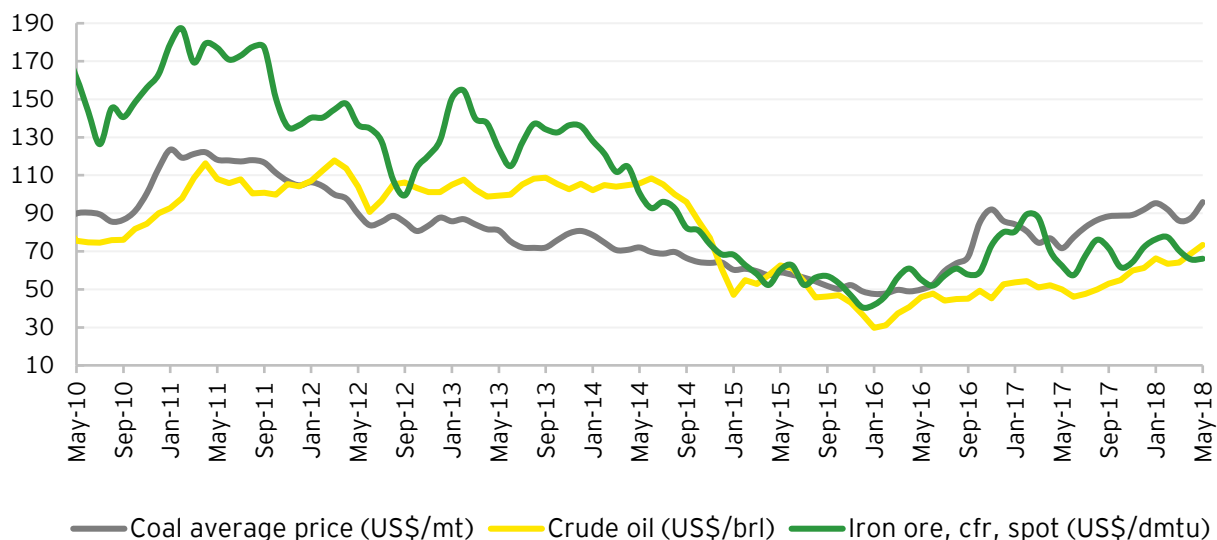
\*growth rates pertain to FY19 and FY20

## B. Global energy and metal prices

At US\$73.4/bbl., average global crude price in May 2018 increased to its highest level since November 2014. Average global coal price also peaked at US\$95.9/mt. in May 2018, although it is expected to stabilize at US\$85/mt. as per the World Bank in 2018 owing to sluggish demand.

- ▶ Average global crude price<sup>2</sup> further increased to US\$73.4/bbl. in May 2018, its highest level since November 2014 (Chart 20). Global crude oil price has increased by almost 59% from its recent trough of US\$46.2/bbl. in June 2017. As per the IEA, in 2018 consumption demand is expected to remain strong particularly led by China, India and Latin America. Global supply shocks may arise because of the US sanctions on Iranian oil exports and disruptions in Venezuela. However, increased supplies by the US may partially absorb these supply shocks.
- ▶ At US\$95.9/mt. in May 2018, average global coal price<sup>3</sup> also increased to its highest level since April 2012. However, according to BP's Energy Outlook 2018, coal consumption in 2018 is expected to slow down, largely driven by China and OECD countries due to environmental policies. In the US, low cost natural gas is expected to substitute coal consumption. The World Bank had projected the global coal prices to average US\$85/mt. in 2018, down slightly from 2017.
- ▶ Among the metals, iron ore price, after peaking in February 2018, fell to US\$70.4/dmtu in March 2018 and further to US\$65.8/dmtu in April 2018. At US\$66.1/dmtu, there was a marginal increase in iron ore price in May 2018. For 2018, the World Bank has projected the iron ore price to decline by 11% largely due to oversupply led by China.

**Chart 20: Global energy and metal prices**



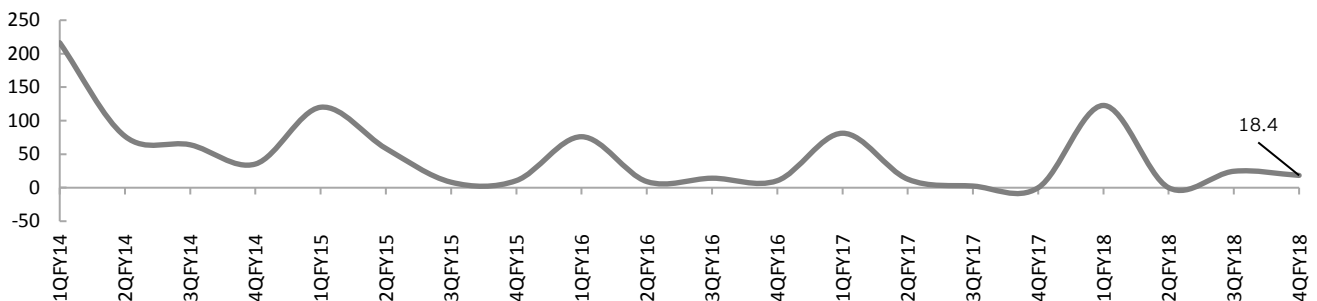
<sup>2</sup> Simple average of three spot prices, namely, Dated Brent, West Texas Intermediate and Dubai Fateh.

<sup>3</sup> Simple average of Australian, Columbian and South African coal prices

## 9. Index of macro imbalance (IMI): Continued deterioration in 4QFY18

- ▶ The IMI is obtained by adding the percentage deviation of inflation rate (based on new CPI 2011–12=100), fiscal deficit (as a percentage of GDP) and current account deficit (as a percentage of GDP) from their respective benchmarks of 4% of GDP, 3% of GDP and 1.3% of GDP<sup>4</sup>. All three components of IMI have been given equal weightage (33.33%). The state of “balance” is judged by a value of “0.”
- ▶ An index value greater than 0 indicates the presence of an imbalance in the economy. In considering the percentage deviation of each of the indicators from its selected norm, only the positive deviations are taken. Negative deviations are equated to zero to ensure that the negative and positive deviations across indices are not canceled out.
- ▶ Depicting continued deterioration in the macro balance of the economy, the IMI was at 18.4 in 4QFY18, lower as compared to 24.5 in 3QFY18 (Chart 21). Two out of three components of IMI, namely, CPI inflation (4.6%) and CAD (2.0% of GDP) remained above their respective benchmarks during 4QFY18 leading to the imbalance.

**Chart 21: IMI (Quarterly)**



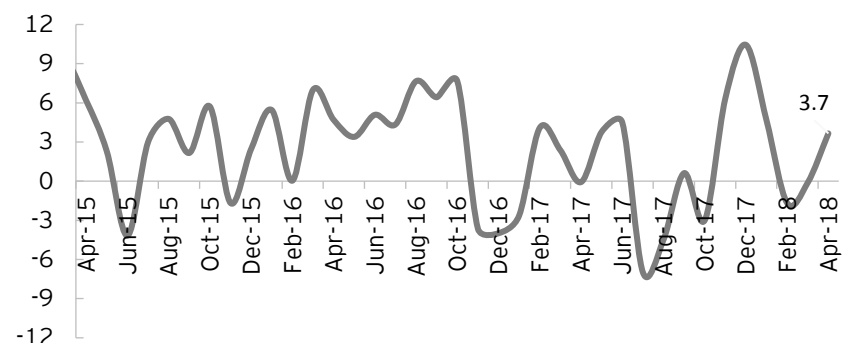
Source (Basic data): RBI, MOSPI and EY estimate

## 10. Index of Aggregate Demand (IAD): Signaled recovery in demand conditions

### Following two consecutive months of contraction, growth in IAD recovered to 3.7% in April 2018

- ▶ The y-o-y growth in index of aggregate demand recovered to 3.7% in April 2018 as compared to a contraction of (-) 0.1% in May 2018 (Chart 22).
- ▶ This recovery was on account of a broad based improvement in the demand conditions amongst all the key sectors of the economy.

**Chart 22: Growth in IAD (y-o-y)**



Source (Basic data): IHS Markit PMI, RBI and EY estimates

<sup>4</sup> Rangarajan, C (2016): “Can India grow at 8 to 9 per cent?” The Hindu, <http://www.thehindu.com/opinion/lead/can-india-grow-at-8-to-9-per-cent/article8596824.ece>, Accessed on 17 May 2016.

## 11. Capturing macro-fiscal trends: Data appendix

**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							
FY 15	4.0	-1.3	3.8	14.8	4.9	FY15	52.2	51.7
FY 16	3.3	4.3	2.9	5.7	3.0	FY16	51.3	51.7
FY 17	4.6	5.3	4.3	5.8	4.8	FY17	51.6	51.0
FY 18	4.4	2.3	4.6	5.3	4.3	FY18	51.5	50.0
1QFY18	1.9	1.1	1.6	5.3	2.5	1QFY18	51.7	51.8
2QFY18	3.3	7.1	2.5	6.1	4.0	2QFY18	50.1	48.0
3QFY18	5.9	0.8	7.0	3.8	5.2	3QFY18	52.5	50.4
4QFY18	6.3	1.1	7.2	6.1	5.3	4QFY18	51.8	49.9
Jan-18	7.5	0.3	8.7	7.6	6.2	Feb-18	52.1	47.8
Feb-18	7.0	-0.4	8.5	4.5	5.4	Mar-18	51.0	50.3
Mar-18	4.6	3.1	4.7	5.9	4.4	Apr-18	51.6	51.4
Apr-18	4.9	5.1	5.2	2.1	4.7	May-18	51.2	49.6

Source: Office of the Economic Adviser- Ministry of Commerce and Industry and IHS 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 light	Core CPI	WPI	Food Price Index	Mfg. products	Fuel and power	Core WPI
	% change y-o-y				% change y-o-y				
FY15	5.9	6.4	4.2	5.8	1.3	4.3	2.6	-6.1	2.7
FY16	4.9	4.9	5.3	4.9	-3.7	1.2	-1.8	-19.7	-1.8
FY17	4.5	4.2	3.3	4.9	1.7	5.9	1.3	-0.3	-0.1
FY18	3.6	1.8	6.2	4.6	2.9	1.9	2.7	8.2	3.0
1QFY18	2.2	-0.9	5.3	4.2	2.3	0.5	2.7	11.2	2.3
2QFY18	3.0	0.8	5.1	4.4	2.8	2.9	2.5	8.2	2.6
3QFY18	4.6	3.7	7.5	4.8	3.8	3.5	2.7	9.1	3.1
4QFY18	4.6	3.6	6.8	5.1	2.8	0.6	3.1	4.7	3.8
Feb-18	4.4	3.3	6.9	5.0	2.7	0.2	3.3	4.6	4.2
Mar-18	4.3	2.8	5.7	5.2	2.7	0.0	3.1	4.7	3.6
Apr-18	4.6	2.8	5.2	5.8	3.2	0.7	3.1	7.9	3.6
May-18	4.9	3.1	5.8	6.1	4.4	1.1	3.7	11.2	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	Direct taxes*	Indirect taxes**	Fiscal deficit	Revenue deficit
						% of GDP	% of GDP
FY15	9.3	8.7	8.7	8.7	9.8	4.0	2.9
FY16	17.0	6.0	8.5	6.9	30.1	3.9	2.5
FY17	17.9	6.7	21.5	12.3	21.6	3.5	2.1
FY18 (RE over Budget Actuals FY17)	13.4	16.3	21.0	18.3	8.6	3.5	2.6
<b>Cumulated growth (% , y-o-y)</b>						<b>% of budgeted target</b>	
Sep-17	19.5	8.1	26.3	13.5	23.0	93.5	107.2
Oct-17	13.3	16.6	15.0	13.8	21.1	98.4	113.3
Nov-17	-0.4	20.4	6.3	13.7	18.3	114.6	138.4
Dec-17	21.1	27.8	25.5	17.1	17.3	116.3	126.8
Jan-18	13.0	105.8	22.7	18.4	15.6	126.7	135.6
Feb-18	2.1	33.7	19.7	18.8	13.0	134.1	148.1
Mar-18	-3.2	13.1	28.0	18.6	6.0	110.8	125.4
<b>Apr-18</b>	<b>58.7</b>	<b>24.0</b>	<b>2.5</b>	<b>5.9</b>	<b>130.3</b>	<b>27.8</b>	<b>33.0</b>

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

\*Includes corporation tax and income tax \*\*includes customs duty, excise duty, service tax, CGST, UTGST, IGST and GST compensation cess.

Fiscal year/ Month	CGST	UTGST	IGST	GST compensation cess	Total GST
	INR crore				
FY18 (RE)	2, 21, 400	-	1, 61, 900	61, 331	4, 44, 631
FY19 (BE)	6, 03, 900	-	50, 000	90, 000	7, 43, 900
<b>Monthly tax collection (INR crore)</b>					
Sep-17	15,135	-	30,395	8,024	53,554
Oct-17	31,187	21	18,370	8,031	57,609
Nov-17	23,839	75	18,627	7,103	49,644
Dec-17	24,215	216	17,142	7,899	49,472
Jan-18	23,133	193	19,402	8,024	50,752
Feb-18	43,091	89	-19,725	8,197	31,652
Mar-18	27,399	973	13,651	7,569	49,592
<b>Apr-18</b>	<b>32,089</b>	<b>90</b>	<b>19,996</b>	<b>8,503</b>	<b>60,678</b>

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
Jul-17	6.25	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	341.6
Aug-17	6.00	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	355.6
Sep-17	6.00	FY17	3.1	10.1	7.9	11.6	7.0	35.6	7.6	370.0
Oct-17	6.00	FY18	22.1	9.5	7.5	7.5	7.0	31.1	22.1	424.4
Nov-17	6.00	1QFY18	1.3	7.0	5.1	10.6	7.0	7.1	12.5	386.5
Dec-17	6.00	2QFY18	1.6	5.6	6.1	9.3	6.6	12.4	2.1	399.7
Jan-18	6.00	3QFY18	45.8	10.6	8.8	4.9	7.1	4.3	5.3	409.4
Feb-18	6.00	4QFY18	22.1	9.5	10.1	5.4	7.5	7.4	2.3	424.4
Mar-18	6.00	Jan-18	39.3	10.8	10.2	4.6	7.2	1.8	3.5	420.6
Apr-18	6.00	Feb-18	32.2	10.3	10.2	5.4	7.6	3.8	-2.4	424.4
May-18	6.00	Mar-18	22.1	9.5	10.0	6.2	7.6	1.8	1.2	420.4
June-18	6.25	Apr-18	22.0	10.6	12.6	8.2	7.5	4.9	-3.1	412.8

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)						Calendar year	Global growth (annual)		
	Exports	Imports	Trade balance	Ex. rate (avg.)	Crude prices (avg.)	Coal prices (avg.)		World GDP	Adv. econ.	Emer. econ.
	% change y-o-y		US\$ billion	INR/US\$	US\$/bbl	US\$/mt		% change y-o-y		
FY15	-1.3	-0.5	-137.7	61.1	83.2	65.9	2012	3.5	1.2	5.3
FY16	-15.6	-15.2	-117.7	65.5	46.0	52.7	2013	3.3	1.2	5.0
FY17	5.1	0.9	-108.2	67.1	47.9	70.4	2014	3.4	1.9	4.6
FY18	10.0	19.9	-156.8	64.5	55.7	85.6	2015	3.4	2.1	4.3
1QFY18	10.6	32.8	-40.1	64.5	49.4	75.3	2016	3.2	1.7	4.4
2QFY18	13.4	19.1	-32.1	64.3	50.2	85.9	2017	3.8	2.3	4.8
3QFY18	13.1	16.1	-42.7	64.7	58.7	90.0	2018*	3.9	2.5	4.9
4QFY18	3.9	13.9	-42.0	64.3	64.6	91.2	2019*	3.9	2.2	5.1
Feb-18	4.5	10.4	-12.0	64.4	63.5	92.1	2020*	3.8	1.7	5.1
Mar-18	-0.7	7.1	-13.7	65.0	64.2	86.1	2021*	3.8	1.7	5.1
Apr-18	5.2	4.6	-13.7	65.6	68.8	87.6	2022*	3.7	1.5	5.0
May-18	20.2	14.9	-14.6	67.5	73.4	95.9	2023*	3.7	1.5	5.0

Source: Database on Indian Economy- RBI, Pink Sheet-World Bank and IMF World Economic Outlook April 2018; \* indicates projections



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

Fiscal year/Quarter	Output: Major sectors									IPD inflation
Fiscal year/Quarter	GVA	Agr.	Ming.	Mfg.	Elec.	Cons.	Trans.	Fin.	Publ.	GVA
FY15	7.2	-0.2	9.7	7.9	7.2	4.3	9.4	11.0	8.3	3.6
FY16	8.1	0.6	13.8	12.8	4.7	3.7	10.3	10.9	6.1	1.0
FY17 (1st RE)	7.1	6.3	13.0	7.9	9.2	1.3	7.2	6.0	10.7	2.9
FY18 (PE)	6.5	3.4	2.9	5.7	7.2	5.7	8.0	6.6	10.0	3.0
4QFY16	8.7	1.0	12.3	14.2	7.6	4.6	13.1	8.8	6.1	2.6
1QFY17	8.3	4.3	10.5	9.9	12.4	3.0	8.9	10.5	7.7	1.2
2QFY17	7.2	5.5	9.1	7.7	7.1	3.8	7.2	8.3	8.0	2.3
3QFY17	6.9	7.5	12.1	8.1	9.5	2.8	7.5	2.8	10.6	2.8
4QFY17	6.0	7.1	18.8	6.1	8.1	-3.9	5.5	1.0	16.4	5.1
1QFY18	5.6	3.0	1.7	-1.8	7.1	1.8	8.4	8.4	13.5	2.3
2QFY18	6.1	2.6	6.9	7.1	7.7	3.1	8.5	6.1	6.1	2.9
3QFY18	6.6	3.1	1.4	8.5	6.1	6.6	8.5	6.9	7.7	3.8
4QFY18	7.6	4.5	2.7	9.1	7.7	11.5	6.8	5.0	13.3	2.9

Fiscal year/Quarter	Expenditure components						IPD inflation
Fiscal year/Quarter	GDP	PFCE	GFCE	GFCF	EX	IM	GDP
FY15	7.4	6.4	7.6	2.6	1.8	0.9	3.3
FY16	8.2	7.4	6.8	5.2	-5.6	-5.9	2.1
FY17 (1st RE)	7.1	7.3	12.2	10.1	5.0	4.0	3.5
FY18 (PE)	6.7	6.1	10.9	7.6	4.4	9.9	3.0
4QFY16	9.0	11.8	2.4	3.9	-1.6	-3.7	1.6
1QFY17	8.1	8.3	8.3	15.9	3.6	0.1	2.7
2QFY17	7.6	7.5	8.2	10.5	2.4	-0.4	2.9
3QFY17	6.8	9.3	12.3	8.7	6.7	10.1	3.8
4QFY17	6.1	3.4	23.6	4.2	6.6	6.6	4.5
1QFY18	5.6	6.9	17.6	0.8	5.9	18.5	2.6
2QFY18	6.3	6.8	3.8	6.1	6.8	10.0	3.0
3QFY18	7.0	5.9	6.8	9.1	6.2	10.5	3.8
4QFY18	7.7	6.7	16.8	14.4	3.6	10.9	2.9

Source: National Accounts Statistics, MOSPI.

## List of abbreviations

Sr. no.	Abbreviations	Description
1	AD	Aggregate demand
2	ADB	Asian Development Bank
3	Agr.	Agriculture, forestry and fishing
4	bbl.	Barrel
5	CAB	Current account balance
6	CGA	Comptroller General of Accounts
7	CGST	Central Goods and Services Tax
8	Cons.	Construction
9	CPI	Consumer Price Index
10	CSO	Central Statistical Organization
11	Disc.	Discrepancies
12	dm tu	Dry metric tonne unit
13	Elec.	Electricity, gas, water supply and other utility services
14	EMDEs	Emerging market and developing economies
15	EXP	Exports
16	FC	Finance Commission
17	FII	Foreign investment inflows
18	Fin.	Financial, real estate and professional services
19	FPI	Foreign portfolio investment
20	FY	Fiscal year (April–March)
21	GDP	Gross domestic product
22	GFCE	Government final consumption expenditure
23	GFCF	Gross fixed capital formation
24	GoI	Government of India
25	GST	Goods and Services Tax
26	GVA	Gross value added
27	IAD	Index of Aggregate Demand
28	IEA	International Energy Agency
29	IGST	Integrated Goods and Services Tax
30	IIP	Index of Industrial Production
31	IMI	Index of Macro Imbalance
32	IMP	Imports
33	IPD	Implicit price deflator
34	LAF	Liquidity adjustment facility
35	MCLR	Marginal cost of funds based lending rate
36	Ming.	Mining and quarrying
37	Mfg.	Manufacturing
38	m-o-m	Month-on-month
39	mt	Metric tonne
40	MPC	Monetary Policy Committee
41	NDU	Non-departmental undertaking
42	NEXP	Net exports (exports minus imports of goods and services)
43	PFCE	Private final consumption expenditure
44	PMI	Purchasing Managers' Index (reference value = 50)
45	RE	Revised estimate
46	ToR	Terms of Reference
47	Trans.	Trade, hotels, transport, communication and services related to broadcasting
48	UTGST	Union territory goods and services tax
49	WPI	Wholesale Price Index
50	y-o-y	Year on year

# Our offices

## Ahmedabad

2nd floor, Shivalik Ishaan  
Near C.N. Vidhyalaya  
Ambawadi  
Ahmedabad - 380 015  
Tel: + 91 79 6608 3800  
Fax: + 91 79 6608 3900

## Bengaluru

6th, 12th & 13th floor  
"UB City," Canberra Block  
No. 24 Vittal Mallya Road  
Bengaluru - 560 001  
Tel: + 91 80 4027 5000  
+ 91 80 6727 5000  
+ 91 80 2224 0696  
Fax: + 91 80 2210 6000

Ground Floor, 'A' wing  
Divyasree Chambers  
# 11, O'Shaughnessy Road  
Langford Gardens  
Bengaluru - 560 025  
Tel: +91 80 6727 5000  
Fax: +91 80 2222 9914

## Chandigarh

1st Floor, SCO: 166-167  
Sector 9-C, Madhya Marg  
Chandigarh - 160 009  
Tel: +91 172 331 7800  
Fax: +91 172 331 7888

## Chennai

Tidel Park, 6th & 7th Floor  
A Block, No. 4, Rajiv Gandhi Salai  
Taramani, Chennai - 600 113  
Tel: + 91 44 6654 8100  
Fax: + 91 44 2254 0120

## Delhi NCR

Golf View Corporate Tower B  
Sector 42, Sector Road  
Gurgaon - 122 002  
Tel: + 91 124 464 4000  
Fax: + 91 124 464 4050

3rd & 6th Floor, Worldmark-1  
IGI Airport Hospitality District  
Aerocity, New Delhi - 110 037  
Tel: + 91 11 6671 8000  
Fax: + 91 11 6671 9999

4th & 5th Floor, Plot No 2B  
Tower 2, Sector 126  
NOIDA - 201 304  
Gautam Budh Nagar, U.P.  
Tel: + 91 120 671 7000  
Fax: + 91 120 671 7171

## Hyderabad

Oval Office, 18, iLabs Centre  
HITECH City, Madhapur  
Hyderabad - 500 081  
Tel: + 91 40 6736 2000  
Fax: + 91 40 6736 2200

## Jamshedpur

1st Floor, Shantiniketan Building  
Holding No. 1, SB Shop Area  
Bistupur, Jamshedpur - 831 001  
Tel: +91 657 663 1000  
BSNL: +91 657 223 0441

## Kochi

9th Floor, ABAD Nucleus  
NH-49, Maradu PO  
Kochi - 682 304  
Tel: + 91 484 304 4000  
Fax: + 91 484 270 5393

## Kolkata

22 Camac Street  
3rd Floor, Block 'C'  
Kolkata - 700 016  
Tel: + 91 33 6615 3400  
Fax: + 91 33 2281 7750

## Mumbai

14th Floor, The Ruby  
29 Senapati Bapat Marg  
Dadar (W), Mumbai - 400 028  
Tel: + 91 22 6192 0000  
Fax: + 91 22 6192 1000

5th Floor, Block B-2  
Nirlon Knowledge Park  
Off. Western Express Highway  
Goregaon (E)  
Mumbai - 400 063  
Tel: + 91 22 6192 0000  
Fax: + 91 22 6192 3000

## Pune

C-401, 4th floor  
Panchshil Tech Park  
Yerwada  
(Near Don Bosco School)  
Pune - 411 006  
Tel: + 91 20 6603 6000  
Fax: + 91 20 6601 5900

## Ernst & Young LLP

EY | Assurance | Tax | Transactions | Advisory

### About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit [ey.com](http://ey.com).

Ernst & Young LLP is one of the Indian client serving member firms of EYGM Limited. For more information about our organization, please visit [www.ey.com/in](http://www.ey.com/in).

Ernst & Young LLP is a Limited Liability Partnership, registered under the Limited Liability Partnership Act, 2008 in India, having its registered office at 22 Camac Street, 3rd Floor, Block C, Kolkata - 700016

© 2018 Ernst & Young LLP. Published in India.

All Rights Reserved.

EYIN1806-014

ED None

This publication contains information in summary form and is therefore intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. Neither Ernst & Young LLP nor any other member of the global Ernst & Young organization can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. On any specific matter, reference should be made to the appropriate advisor.

PJ

[ey.com/in](http://ey.com/in)



@EY\_India



EY|LinkedIn



YouTube

EY India



EY India careers



ey\_indiacareers