

Economy Watch

Monitoring India's
macro-fiscal performance

March 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. A yellow triangle is located behind the 'Y', pointing towards the top right. The background of the entire page is a blurred photograph of Indian currency, including several coins and banknotes resting on a dark, reflective surface.

Building a better
working world

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Prepared by Macro-fiscal Unit, Policy Advisory Group, EY India
D. K. Srivastava, Chief Policy Advisor, EY: dk.srivastava@in.ey.com
Muralikrishna Bhardwaj, Manager, EY: muralikrishna.b@in.ey.com
Tarrung Kapur, Manager, EY: tarrung.kapur@in.ey.com
Ragini Trehan, Senior Consultant, EY: ragini.trehan@in.ey.com

Highlights

1. The Second Advance Estimates of National Income indicate a further **strengthening of GDP growth in 3QFY18** led by sustained pick-up in investment and government spending.
2. The World Bank projects **India's growth** at 6.7% in 2017-18 and expects it to **accelerate to 7.3% in 2018-19 and 7.5% in 2019-20**.
3. By posting **above 7% growth for the third straight month**, overall IIP growth pointed to a sustained growth momentum in the industrial sector.
4. **Overall CPI inflation declined to 4.4% in February** from 5.1% in January due to a fall in food and fuel based inflation.
5. **WPI-based inflation declined to a seven-month low of 2.5% in February** from 2.8% in January 2018 on account of easing of inflation in vegetables and fuel and power.
6. As per CGA data, **gross central tax revenues grew by 17% during April-January FY18**, while non-tax revenues contracted sharply by (-) 36% during this period.
7. **Fiscal deficit during April-January FY18 stood at 113.7% of the annual revised estimate**, while the revenue deficit was at 109.4% of the annual revised estimate.
8. **Credit by scheduled commercial banks grew by 10.2% (y-o-y) in January 2018**. Non-food credit growth also remained close to 10% in January 2018.
9. **Growth in merchandise exports fell to a four-month low of 4.5% in February 2018** from 9.1% in January – the third successive month of decline from a six-year high of 30.5% in November 2017.
10. **CAB as a percentage of GDP reached (-) 2.0% in 3QFY18** from (-) 1.2% in 2QFY18.



Foreword

Growth prospects brighten but declining export growth casts a shadow

As per the Second Advance Estimates, a robust growth recovery seems on its way with the 3QFY18 GDP growth estimated at a 7.2%. It is heartening that private investment has shown sustained recovery, with the growth rate of gross fixed capital formation at 12% in this quarter. Other complementary growth signals also appear positive, with IIP showing a healthy growth rate while the global crude prices appear to be moderating. Credit growth has also remained close to 10%. Inflation rates, both CPI- and WPI-based, have moderated. With the core CPI- and WPI-based inflation rates remaining high and the global interest rates firming up, the possibility of an interest rate increase in India in the near future may not be ruled out.

Only the trade data is somewhat of a dampener in this brightening narrative. Recent trade data shows a slowing down of India's export growth. A high positive export growth is considered essential for sustaining a high level of overall growth. A study of India's growth profile indicates, however, that the contribution of "net exports" to growth has been negative even when export growth was relatively higher since in these years import growth was also higher. But high levels of export sector activities also uplift domestic production activities and employment. Thus, we may have to pay attention to the adverse effects of the recent wave of increased protectionism in the world led by the US, which may eventually slow down growth of world trade.

While the US trade with China is at the forefront, trade with India has also come on the US radar. The US President in his Annual Trade Report to the Congress on 28 February 2018 said the US would use "all available tools" to prevent China's state-driven economic model from undermining global competition. The US President on 8 March signed an order to impose special tariffs of 25% on imports of foreign steel and 10% on import of aluminum into the US. Other major import items from China are aluminum foils, on which a tariff of 106% has been imposed. These tariff impositions are the product of a sweeping investigation initiated under Section 232 of the Trade Expansion Act of 1962 to determine whether Chinese and other countries' imports threaten US national security.

India is also on the receiving end. Recently, India's tariff levy on the high-end Harley Davidson motorcycles was in the news. More seriously, the US has challenged a number of India's export subsidies. It has filed a complaint at the WTO to this effect relating to the Export Oriented Units Scheme and sector-specific schemes, including the Electronics Hardware Technology Parks Scheme, special economic zones, Export Promotion Capital Goods Scheme and a duty-free imports for exporters program. It is being argued that these export subsidy programs harm the American workers by creating an uneven playing field for them. India's exemption under the WTO's special and differential provisions for developing countries expired in 2015. India introduced the Merchandise Exports from India Scheme in 2015, which has rapidly expanded to include more than 8,000 eligible products, nearly double the number of products covered at its inception.

The US Fed rate was increased by 25 basis points in its Monetary Policy Review on 21 March 2018. In the Fed's assessment, the US growth outlook is positive with an expected real growth of 2.4% in 2019 and 2% in 2020. Inflation is projected to be 1.9% in 2018, 2% in 2019 and 2.1% in 2020. With inflation inching up to the target of 2%, the possibility of incrementally increasing the federal funds rate in the remaining part of 2018 and 2019 seems positive.

In the context of the domestic economy, we take note of the fact that as per recent RBI data, currency in circulation has reached its pre-demonetization levels. However, the currency-to-GDP ratio, which had dipped to 8.8% by the end of FY17, is still lower at 10.7% as compared to the pre-demonetization level of 12.1%.

D.K. Srivastava
Chief Policy Advisor, EY India

1. Growth: Real GDP growth increased to 7.2% in 3QFY18

A. GDP growth: Real GDP growth showed sustained recovery in 3QFY18

The Second Advance Estimates of National Income released by the CSO indicate a further strengthening of GDP growth in 3QFY18 led by a sustained pick-up in investment and government spending.

- As per the Second Advance Estimates of National Income, real GDP growth for FY18 has been marginally revised upward to 6.6% (6.5% as per earlier estimates) as compared to 7.1% in FY17. Growth strengthened further to 7.2% in 3QFY18 from 6.5% in 2QFY18.
- On the demand side, growth in gross fixed capital formation (GFCF) accelerated to 12.0%, a 12-quarter high, and that in government consumption expenditure (GCE) increased to 6.1% in 3QFY18 (Table 1). However, private consumption expenditure (PFCE), with a share of nearly 56% in overall GDP, grew by 5.6% in 3QFY18, its slowest pace since 2QFY16. From a recent peak of 9.3% in 3QFY17, growth in PFCE has been falling in each successive quarter.
- Export growth fell to a five-quarter low of 2.5%, while import growth increased to 8.7%, leading to a negative contribution of net exports in overall growth to the magnitude of (-)1.4 percentage points during 3QFY18.
- Even though the implied estimates point to a sharp deceleration in the growth of PFCE in 4QFY18, the overall GDP growth momentum is expected to be sustained by continued acceleration in the growth of GFCF and GCE during 4QFY18.

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	6.1	8.3	7.5	9.3	7.3	6.6	6.6	5.6	1.7
GCE	6.8	12.2	10.9	8.3	8.2	12.3	31.9	17.1	2.9	6.1	12.1
GFCF	5.2	10.1	7.6	15.9	10.5	8.7	-2.1	1.6	6.9	12.0	16.9
EXP	-5.6	5.0	4.4	3.6	2.4	6.7	10.3	5.9	6.5	2.5	-0.4
IMP	-5.9	4.0	9.9	0.1	-0.4	10.1	11.9	16.0	5.4	8.7	4.8
GDP	8.2	7.1	6.6	8.1	7.6	6.8	6.1	5.7	6.5	7.2	7.1

Source (Basic Data): MOSPL., *Second Advance Estimates, ** Derived based on second annual advance estimates

- On the output side, despite a subdued start in 1QFY18, GVA growth, which in 2QFY18 reversed its falling trend, gained further momentum and improved to 6.7% in 3QFY18. It is estimated to increase further and reach 7.5% in 4QFY18.
- Growth in the output of the manufacturing sector increased to 8.1% while that in construction improved sharply to 6.8% in 3QFY18 as compared to the growth seen in 2QFY18 (Table 2).
- Similarly, among services, growth in financial services and public administration and defense services increased to 6.7% and 7.2% respectively in 3QFY18.

Growth in the output of the agricultural sector, having remained subdued during the first two quarters, increased to 4.1% in 3QFY18. This may provide much-needed support to the rural sector while reducing some pressure on CPI inflation.

Table 2: Sectorial real GVA growth (%)

Sector	FY16	FY17	FY18*	1Q FY17	2Q FY17	3Q FY17	4Q FY17	1Q FY18	2Q FY18	3Q FY18	4Q FY18**
Agr.	0.6	6.3	3.0	4.3	5.5	7.5	5.2	2.7	2.7	4.1	3.3
Ming.	13.8	13.0	3.0	10.5	9.1	12.1	6.4	1.8	7.1	-0.1	17.9
Mfg.	12.8	7.9	5.1	9.9	7.7	8.1	5.3	-1.8	6.9	8.1	9.6
Elec.	4.7	9.2	7.3	12.4	7.1	9.5	6.1	7.1	7.7	6.1	10.4
Cons.	3.7	1.3	4.3	3.0	3.8	2.8	-3.7	1.5	2.8	6.8	4.5
Trans.	10.3	7.2	8.3	8.9	7.2	7.5	6.5	8.4	9.3	9.0	6.0
Fin.	10.9	6.0	7.2	10.5	8.3	2.8	2.2	8.9	6.4	6.7	5.2
Publ.	6.1	10.7	10.1	7.7	8.0	10.6	17.0	13.2	5.6	7.2	13.7
GVA	8.1	7.1	6.4	8.3	7.2	6.9	5.6	5.6	6.2	6.7	7.5

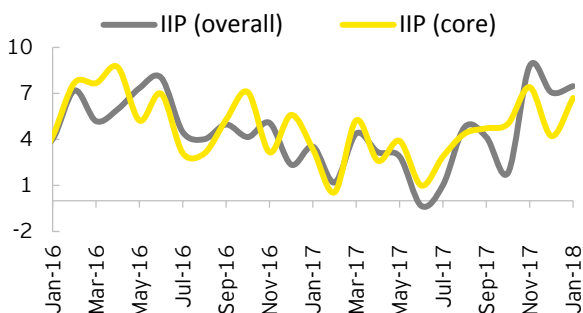
Source (Basic Data): MOSPL., *Second Advance Estimates, ** Derived based on second annual advance estimates

B. Industry growth: Overall IIP and core IIP growth strengthened in January 2018

By posting above 7% growth for the third straight month, overall IIP growth pointed toward a sustained growth momentum in the output of the industrial sector.

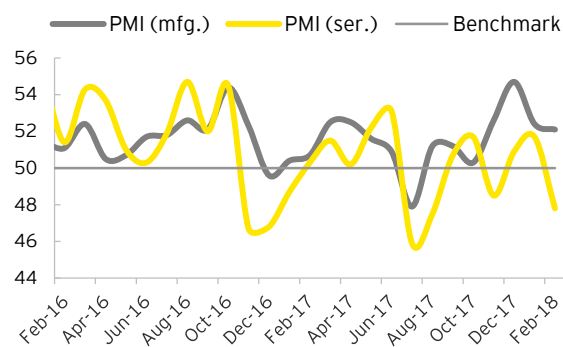
- ▶ Growth in IIP increased to 7.5% in January 2018 from 7.1% (y-o-y) in December 2017 (Chart 1) driven by higher growth in both manufacturing and electricity output.
- ▶ The manufacturing sector output (accounting for 77.6% of overall IIP) grew by 8.7% in January 2018 increasing from 8.5% in December 2017. Growth in the output of electricity accelerated to 7.6% in January 2018 from 4.4% in December 2017.
- ▶ Growth in the output of the capital goods industry (a proxy for investment demand) marginally increased to 14.6% in January 2018 from 14.4% (revised) in December 2017. Growth in consumer non-durables slowed to 10.5% in January 2018 from 16.6% in December 2017, while that in consumer durables increased to 8.0% as compared to 1.5% in December 2017. Growth in the infrastructure/construction sector increased marginally to 6.8% in January 2018 from 6.6% in December 2017.
- ▶ Growth in the output of eight core infrastructure industries increased to 6.7% (y-o-y) in January 2018 from 4.2% in December 2017. This was led by higher growth in the output of cement (20.7%), petroleum refinery products (11.0%), electricity (8.2%), steel (3.7%) and coal (3.0%).

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



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

Chart 2: IHS Markit PMI



Source: IHS Markit PMI, Markit Economics.

C. PMI: Signaled slower expansion in manufacturing and a contraction in services

Manufacturing PMI fell marginally to 52.1 in February 2018 from 52.4 in January 2018. Although it continued to expand for the seventh consecutive month, it remained lower than the recent peak in December 2017. On the other hand, services PMI contracted sharply during the month.

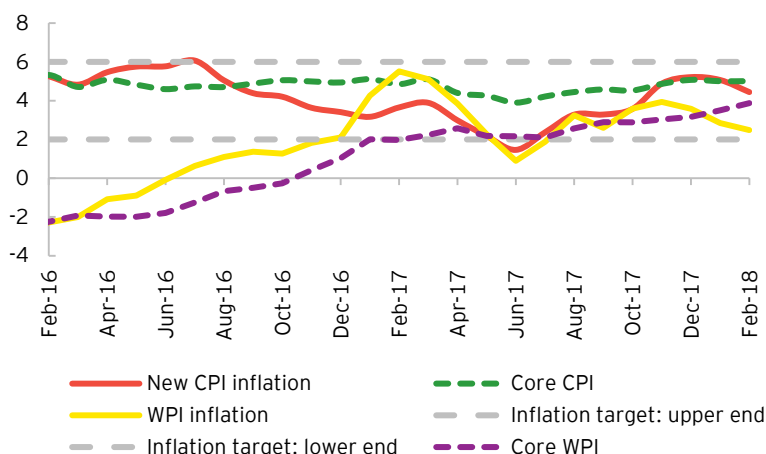
- ▶ In February 2018, headline manufacturing PMI (sa) remained above the threshold of 50 for the seventh consecutive month. However, it fell to 52.1 in February from 52.4 in January 2018 (Chart 2). Output and new orders increased but at a slower pace during the month.
- ▶ Headline services PMI (sa) fell from 51.7 in January 2017 to 47.8 in February, its lowest level since August 2017. New orders and output declined for the first time since November 2017, with rates of contraction the fastest since August 2017.
- ▶ Composite PMI Output Index (sa) fell from 52.5 in January 2018 to 49.7 in February 2018, as the fall in service sector activity outweighed an upturn in manufacturing production.

2. Inflation: CPI inflation eased to a four-month low of 4.4% from 5.1% in January

Overall CPI inflation declined to 4.4% in February from 5.1% in January due to a fall in food and fuel based inflation. Core inflation remained stable at an elevated level of 5.0%.

- ▶ Growth in vegetable prices declined to a four-month low of 17.6% from 27.0% in January, accounting for nearly 85% of the 0.7% point decline in overall CPI growth. It had earlier reached a four-year high of 29.1% (y-o-y) in December. The decline was led by inflation in tomatoes easing to an eight-month low of 14.1% (51.4% in January) and that in onions to 112.6% (153.3% in January) in February.
- ▶ As a result, the Consumer Food Price Index based inflation moderated to 3.3% from 4.7% in January 2017.
- ▶ Fuel and light-based inflation eased to 6.8% in February from 7.7% in January as inflation in LPG moderated to 15.8% from 19.7% in January. This was primarily due to base effect.
- ▶ Core CPI inflation (excluding food and fuel and light) remained high and stable at 5.0% in February, the same level seen in January, due to persistently high levels of housing-based inflation at 8.3% and an uptick in inflation in transportation and communication services to 2.4% from 2.0% in the previous month.
- ▶ Inflation in transportation was driven by an increase in the price of petrol used for vehicles and of bus and tram fare services.

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



Although overall CPI inflation fell to 4.4%, core CPI continued to remain high at 5.0% due to persistence in housing and transportation-based inflation.

Source: MOSPI.

WPI-based inflation declined to a seven-month low of 2.5% in February from 2.8% in January 2018 on account of easing of inflation in vegetables and fuel and power.

- ▶ Inflation in vegetables declined to an eight-month low of 15.3% in February from 40.8% in January led by a fall in inflation in onion and tomato prices. Inflation in tomatoes turned negative at (-) 13.3% after seven successive months of high positive growth ending at 31% in January 2018, partly due to base effect. Inflation in onions moderated considerably to 119.0% in February from 193.9% in January.
- ▶ As a result, inflation based on the newly constructed WPI Food Price Index declined for the fourth consecutive month to an eight-month low of 0.1% in February from 1.6% in January 2018.
- ▶ Fuel and power based inflation moderated further to a seven-month low of 3.8% in February from 4.1% in the previous month as inflation in coal, LPG and naphtha eased considerably to 5.8%, 8.5% and 6.4% from 6.7%, 19.9% and 14.1% respectively in the previous month.
- ▶ WPI core inflation, however, increased to a 43-month high of 3.9% from 3.5% in January as inflation in the manufacture of basic metals reached 15.2% from 12.9% in January.

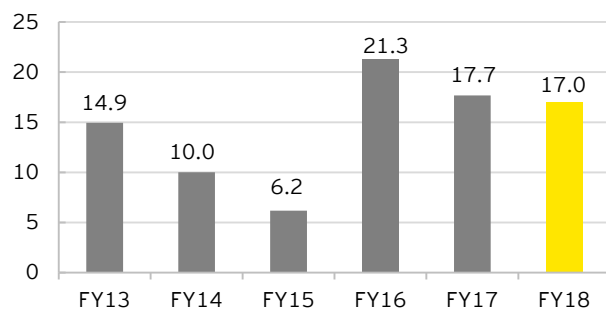
3. Fiscal performance: Fiscal deficit was at 114% of the annual revised target during April-January FY18

A. Tax and non-tax revenues

As per CGA data, gross central tax revenues grew by 17% during April-January FY18, while non-tax revenues contracted sharply by (-) 36% during this period.

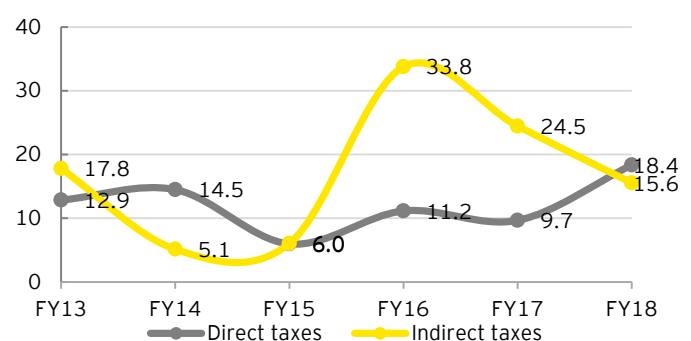
- ▶ Gross central taxes grew by 17.0% during April-January FY18, slightly lower than 17.7% in the corresponding period of the previous year (Chart 4).
- ▶ However, gross central taxes up to January 2018 stood at 74.8% of the FY18 revised estimates as compared to the three-year average of 71.7% achieved up to January as a percentage of the annual actuals.
- ▶ Growth in direct taxes (comprising personal income tax and corporation tax) during April-January FY18 was higher at 18.4% as compared to 9.7% in the same period of FY17 (Chart 5).
- ▶ Among the direct taxes, growth in personal income tax during April-January FY18 was at 17.5% as compared to 19.7% in the corresponding period of the previous fiscal year. Corporation tax revenues grew sharply by 19% during this period as compared to just 3.2% in the corresponding period of FY17.
- ▶ Growth in indirect taxes (comprising union excise duties, service tax, customs duty, CGST, UTGST, Center's share of IGST and GST compensation cess) was at 15.6% during April-January FY18, lower than the corresponding value of 24.5% in FY17.
- ▶ Cumulated tax collection on account of GST (CGST, Center's share of IGST and GST compensation cess) up to January FY18 amounted to INR354,985 crore, which was 79.8% of the annual revised estimates.

Chart 4: Growth in cumulated gross tax revenues up to January 2018



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

Chart 5: Growth in cumulated tax revenues up to January 2018



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

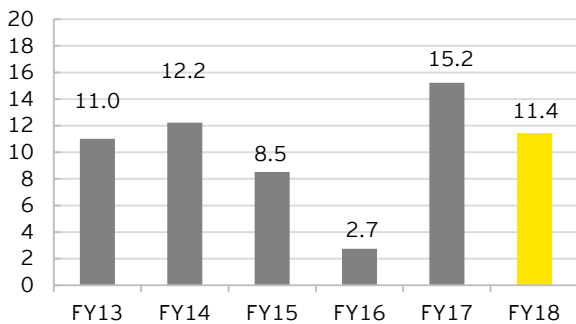
- ▶ The Center's non-tax revenues contracted by (-) 35.6% during April-January FY18 as compared to a contraction of (-) 4.6% in the same period of FY17. This was largely due to a fall in the Center's dividends and profits.
- ▶ The Center's non-tax revenues up to January 2018 stood at 52.7% of the FY18 revised estimates, which was lower than the budgeted target. This was lower than the three-year average of 77.1% achieved up to January as a percentage of the annual actuals.
- ▶ The revised estimate of total receipts from disinvestment for FY18 stood at INR100,000 crore, overachieving the budgeted target of INR72,500 crore. According to the Department of Disinvestment, disinvestment proceeds as on 8 March 2018 stood at INR92,744.6, which was close to 93% of the annual revised estimate.

B. Expenditures: Revenue and capital

- ▶ Total expenditure grew by 13.7% during April-January FY18 as compared to the corresponding value of 12.6% in FY17.
- ▶ Growth in revenue expenditure fell to 11.4% up to January 2018 from 15.2% in the same period of FY17 (Chart 6). Revenue expenditure up to January 2018 stood at 81% of the FY18 revised estimates, close to the three-year average of 81.9% achieved up to January as a percentage of the annual actuals.
- ▶ Growth in the Center’s capital expenditure was at 29.9% during April-January FY18 as compared to a contraction of (-) 2.7% in the corresponding period of FY17 (Chart 7). Capital expenditure up to January 2018 stood at 96.6% of the FY18 revised estimate (annual revised estimate was lower than the budgeted estimate) as compared to the three-year average of 78.6% achieved up to January as a percentage of the annual actuals.
- ▶ The Center’s total major subsidies (food, nutrient-based fertilizer, urea and petroleum subsidy) grew by 1.1% during April-January FY18. Total subsidies up to January 2018 stood at 90.9% of the FY18 annual budgeted target.

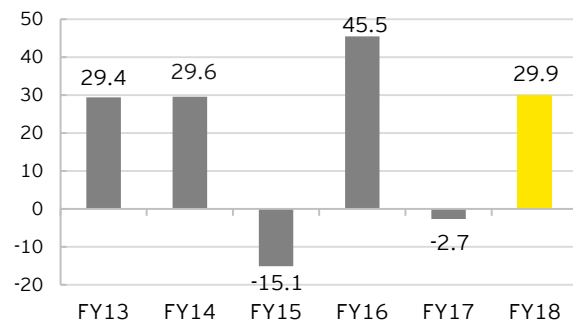
The Center’s total expenditure up to January 2018 stood at 83% of the FY18 (RE) (which was higher than the BE), close to the three-year average of 81.9% achieved up to January as a percentage of the annual actuals.

Chart 6: Growth in cumulated revenue expenditure up to January 2018 (% , y-o-y)



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

Chart 7: Growth in cumulated capital expenditure up to January 2018 (% , y-o-y)

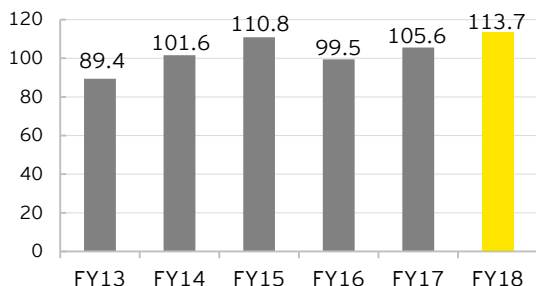


C. Fiscal imbalance

- ▶ Fiscal deficit during April-January FY18 stood at 113.7% of the annual revised estimate as compared to 105.6% in the corresponding period of FY17 (Chart 8).
- ▶ The Center’s revenue deficit up to January 2018 stood at 109.4% of the annual revised estimate as compared to 130.2% during the corresponding period of FY17 (Chart 9).

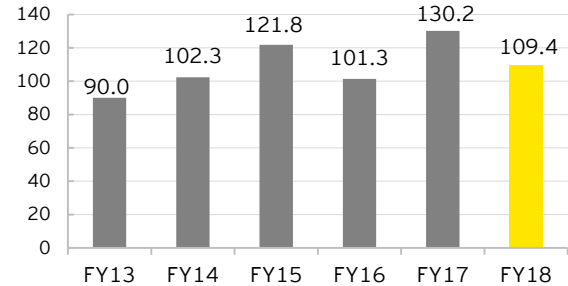
The Center’s FY18 fiscal deficit estimate was revised upward to 3.5% of GDP. The fiscal deficit target of 3% of GDP as recommended by the FRBM Review Committee has been shifted to end-March 2021. The revenue deficit estimate was also revised upward from 1.6% to 2.6% of GDP.

Chart 8: Fiscal deficit up to January 2018 as a % of annual budgeted estimate for FY18



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

Chart 9: Revenue deficit up to January 2018 as a % of annual budgeted estimate for FY18



4. India in a comparative perspective: Status and prospects

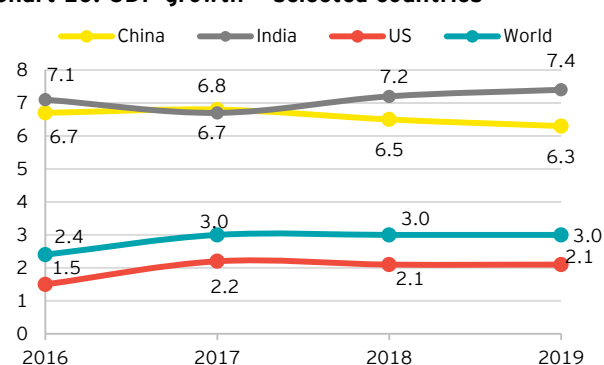
GDP growth: India's growth outlook is projected to be strong during 2018-19

- As per the UN, global GDP growth is expected to strengthen from 2.4% in 2016 to 3% in 2017 and beyond. The recovery in growth is projected to be led by developing economies, which as a group is forecasted to grow by 4.6% and 4.7% in 2018 and 2019 respectively.
- GDP growth in India is expected to be the highest among the major developed and developing economies in 2018 and 2019 respectively at 7.2% and 7.4%.
- China's growth is estimated at 6.8% in 2017 but is expected to fall to 6.5% and 6.3% in 2018 and 2019 respectively as the impact of the policy stimulus witnessed in 2017 wanes.
- In selected developed economies, growth is projected to slow down during 2018 and 2019 relative to 2017.

Table 3: GDP growth (%)

Country	2016	2017 (e)	2018 (f)	2019 (f)
Developed economies of which	1.6	2.2	2.0	1.9
US	1.5	2.2	2.1	2.1
EU	1.9	2.2	2.1	1.9
Russia	-0.2	1.8	1.9	1.9
Japan	1.0	1.7	1.2	1.0
UK	1.8	1.7	1.4	1.4
Developing economies of which	3.8	4.3	4.6	4.7
China	6.7	6.8	6.5	6.3
India*	7.1	6.7	7.2	7.4
Brazil	-3.6	0.7	2.0	2.5
South Africa	0.3	0.6	1.8	2.1
World	2.4	3.0	3.0	3.0

Chart 10: GDP growth – selected countries



Source (Basic Data): UN World Economic Situation and Prospects 2018; *Data is based on fiscal year, (e) indicates an estimate and (f) indicates forecast.

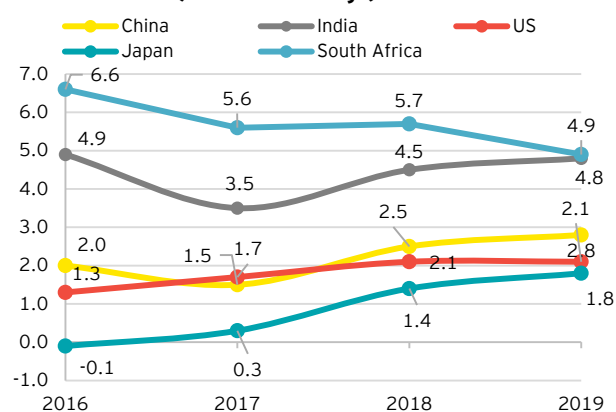
Inflation: CPI-based inflation in India is projected to be the highest among BRICS countries excluding South Africa

- In developed economies, a recovery in GDP growth has been associated with an easing of deflationary pressures. CPI-based inflation is expected to increase from 0.7% in 2016 to 1.5% in 2017 and further to 2.1% in 2019.
- In the US, inflation is projected to be closer to the central bank's long-term target of 2% during 2018 and 2019, contingent on the acceleration in wage growth.
- Considering developing economies as a group, CPI inflation is expected to ease during the period from 2017 to 2019.
- In India, after falling to 3.5% in 2017, inflation is expected to rise to 4.5% and 4.8% in 2018 and 2019 respectively, the highest among BRICS countries excluding South Africa.

Table 4: CPI (annual % change)

Country	2016	2017 (e)	2018 (f)	2019 (f)
Developed economies of which	0.7	1.5	1.9	2.1
Russia	7.1	3.9	4.4	3.9
UK	0.7	2.8	2.7	2.9
US	1.3	1.7	2.1	2.1
EU	0.3	1.6	1.8	2.1
Japan	-0.1	0.3	1.4	1.8
Developing economies of which	5.2	4.4	4.3	4.2
South Africa	6.6	5.6	5.7	4.9
India*	4.9	3.5	4.5	4.8
Brazil	8.7	3.4	3.7	4.1
China	2.0	1.5	2.5	2.8

Chart 11: CPI (annual % change) – selected countries



Source (Basic Data): UN World Economic Situation and Prospects 2018; *Data is based on fiscal year, (e) indicates an estimate and (f) indicates forecast.
Economy Watch: March 2018

State of global happiness: India ranked behind most nations in the World Happiness Index 2018

- ▶ The World Happiness Report is a survey of the state of global happiness. The World Happiness Report 2018 has ranked 156 countries by their happiness levels based upon six key variables that have been found to support well-being, namely, income, healthy life expectancy, social support, freedom, trust and generosity.
- ▶ Finland has the highest rank with a happiness score of 7.63 (Table 5).
- ▶ India was ranked 133 among the 156 countries.
- ▶ The Report also analyzed the change in the level of happiness from 2008-10 to 2015-17. The happiness score has increased for Finland, Germany, Russia and China, with the strongest improvement witnessed in China.
- ▶ The level of happiness in the US, the UK, Japan, South Africa and India has fallen from 2008-2010 to 2015-2017.

Table 5: Ranking of happiness – selected countries

Country	Happiness score	Change in happiness score	Rank in 156 countries
Finland	7.63	0.10	1
Germany	6.96	0.37	15
US	6.89	-0.31	18
UK	6.81	-0.16	19
Japan	6.42	-0.01	28
Brazil	5.91	-0.42	54
Russia	5.81	0.42	59
China	5.25	0.59	86
South Africa	4.72	-0.35	105
India	4.19	-0.70	133

Source: World Happiness Report, 2018

Immunization, DTP: India crossed the average level for middle income economies in 2016

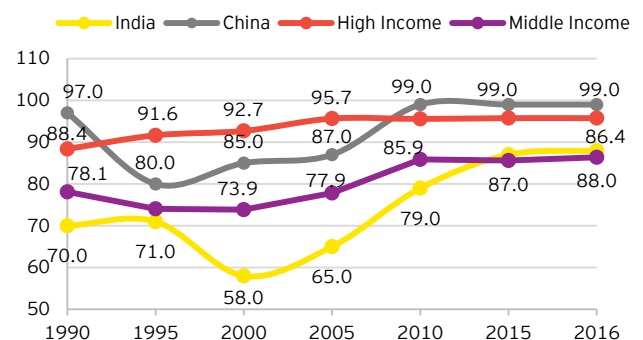
- ▶ Three doses of diphtheria-tetanus-pertussis (DTP3) vaccine is taken as a proxy by WHO for full immunization.
- ▶ The immunization level of children in India improved significantly from 70% in 1990 to 88% in 2016 (Table 5). Although it is higher than in Brazil and South Africa, it is significantly lower than the level achieved by China, which is at 99%, the highest among selected EMEs and advanced economies.
- ▶ The immunization level in India reached at par with the average for middle-income economies only in 2015 and exceeded it in 2016.
- ▶ At 95.8%, the average immunization level of children in high-income economies in 2015 was much higher than that in middle income economies at 86.4%.

Table 6: Immunization, DTP (% of children aged 12-23 months) - selected countries

Country	1990	2000	2010	2016
South Africa	72.0	73.0	72.0	66.0
Brazil	66.0	98.0	99.0	86.0
India	70.0	58.0	79.0	88.0
UK	84.0	91.0	94.0	94.0
US	90.0	94.0	95.0	95.0
Russian Federation	NA	96.0	97.0	97.0
China	97.0	85.0	99.0	99.0
World	76.8	72.8	85.0	85.8
High income	88.4	92.7	95.6	95.8
Middle income	78.1	73.9	85.9	86.4

Source (Basic Data): World Health Organization

Chart 12: Immunization, DTP (% of children aged 12-23 months) - selected countries



Ease of Doing Business: India has shown considerable improvement in Ease of Doing Business

- ▶ The Ease of Doing Business is a measure released by the World Bank to assess the conduciveness of the regulatory environment to start and operate a business within a particular country. Countries are ranked on 11 parameters, including ease of obtaining construction permits, access to electricity, registering property and obtaining credit.
- ▶ The 2018 release ranks all countries based on a revised methodology. A higher rank signifies greater ease of doing business.
- ▶ As per Table 7, India's performance has been exceptional during 2016-18 as its rank has improved from 129 to 100 over the period. It is one of the 10 economies that have shown the maximum improvement in the areas measured by the Survey.
- ▶ Despite the substantial improvement, India still lags behind other BRICS economies in the ranking except Brazil. Among BRICS, Russia has the highest ranking of 35.
- ▶ Fourteen of the top 20 ranked economies are OECD high-income economies. New Zealand has consistently ranked the highest among all economies in terms of Ease of Doing Business.

Table 7: Ease of Doing Business: Ranking as per 2017-18 methodology

Country	2016	2017	2018	Change (2018-16)
New Zealand	1	1	1	0
US	6	6	6	0
UK	7	8	7	0
Germany	16	19	20	4
Russia	36	35	35	-1
China	75	74	78	3
South Africa	70	73	82	12
India	129	123	100	-29
Brazil	117	122	125	8

Source: Ease of Doing Business 2018, World Bank

5. In focus: On the health of India's health sector

Introduction

In India's federal set-up, health is very largely a responsibility of the state governments with public health and sanitation and hospitals and dispensaries being part of the State List. In the Union List, most of the responsibilities relate to research and teaching in institutions of higher learning and setting up of standards. It is well known that for a low-income country like India, the Government will have to play a key role in providing health services, which are merit services since they are associated with large positive externalities. The provision of health services in India is highly unsatisfactory, mainly due to supply-side deficiencies reflected in the inadequacies of availability of hospitals, beds and doctors especially in the government sector. These shortages are particularly sharp for rural areas. While the incidence of diseases is high across the country, the supply-side deficiencies result in highly undesirable outcomes. First, the inadequacy of publically provided services drive people to costly private hospitals and doctors. Second, a strong migration from rural to urban areas is triggered around incidences of a family member falling ill. Often in these cases, the financing of health expenses is done based on borrowing, which leads to a vicious cycle.

In the Union Budget of FY19, a strong emphasis on health services has been provided with an umbrella scheme under the name of Ayushman Bharat, which envisages setting up of a large number of Wellness Centres and extending coverage to more than 10 crore poor and vulnerable families for providing up to INR5 lakh per family per year for secondary and tertiary care hospitalization. In addition, there is a considerable supply-side thrust with plans for opening 24 new government medical colleges and hospitals. These initiatives are meant to supplement some of the earlier schemes of the present Government such as Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Atal Pension Yojana (APY).

In this write-up, we look at the (a) allocation of government resources for the health sector in the light of international norms, (b) status of health-related facilities, (c) progress in terms of achieving the health-related Sustainable Development Goals (SDGs) and (d) health sector prospects.

Budgetary resources for health sector in India

As a percentage of GDP, the Center's expenditure is estimated to fall from 0.46% in FY11 to 0.12% in FY19 (BE). The average expenditure level since FY15 has been much lower as compared to the average level that prevailed in the 90s. As far as states are concerned, their expenditures on health was close to 1% during FY11 to FY14. They are estimated to increase to just above 1.3% in FY15 and FY16. In terms of combined expenditure, it has ranged from 1.27 to 1.42 over the period from FY11 to FY16 (BE).

Chart 13: Center's health expenditure as a % of GDP

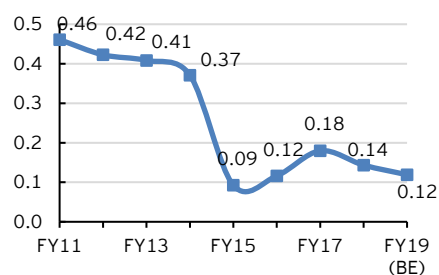


Chart 14: All states' health expenditure as a % of GDP

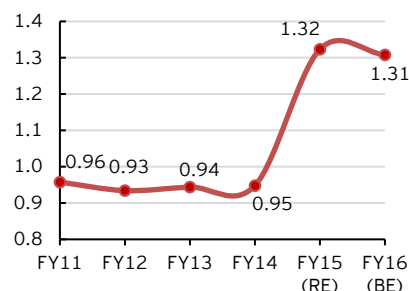
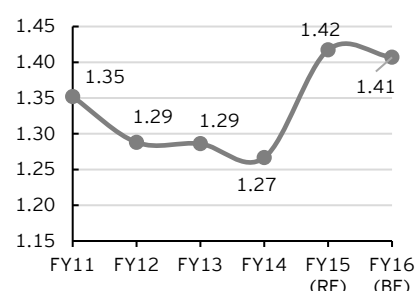
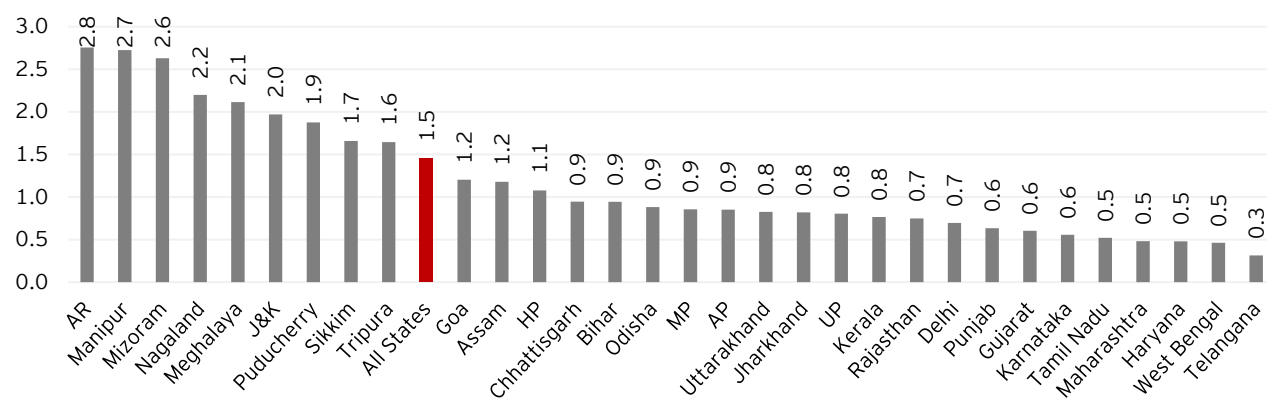


Chart 15: Combined health expenditure as a % of GDP



Source: Indian Public Finance Statistics, Union Budget, various years

Chart 16 shows inter-state variations in state government health-related expenditure relative to GDP. It indicates that some of the smaller states, particularly the north-eastern states, show a relatively larger share of health expenditures in their GSDP whereas some of the larger states like Bihar and Uttar Pradesh show the lowest expenditure shares of 0.9% and 0.8% respectively in their respective GSDP. Some of the higher income states devote an even lower share of their GSDP toward health expenditure. States with a share of less than 0.7% of GSDP are Punjab, Gujarat, Karnataka, Tamil Nadu, Maharashtra, Haryana, West Bengal and Telangana.

Chart 16: State government's expenditure on medical and public health as a % of respective GSDP

Source (Basic Data): RBI, MOSPI

Note: State government's health expenditure as % of GSDP is the average over the period from FY15 to FY17

Table 8: Private and public expenditure on health – cross-country comparison

Country	Domestic private health expenditure				Domestic government health expenditure incl. capital expenditure				Total health expenditure			
	2000	2005	2010	2015	2000	2005	2010	2015	2000	2005	2010	2015
Brazil	4.8	4.7	4.4	5.0	3.5	3.3	3.6	3.8	8.3	8.0	7.9	8.8
China	3.5	2.9	2.1	2.1	1.1	1.7	2.8	3.7	4.6	4.6	4.9	5.9
Indonesia	1.4	1.9	2.4	2.0	0.6	1.0	1.2	1.5	2.0	2.9	3.5	3.5
South Africa	4.6	3.9	3.3	3.6	2.9	2.9	4.2	4.6	7.4	6.8	7.4	8.2
EME average (selected countries)	3.6	3.4	3.1	3.2	2.0	2.2	3.0	3.4	5.6	5.6	5.9	6.6
Canada	2.2	2.4	2.9	2.8	6.4	7.1	8.3	8.1	8.6	9.5	11.2	10.9
Germany	2.0	2.4	1.8	1.7	7.8	7.8	9.2	9.4	9.8	10.3	11.0	11.2
UK*	1.1	1.2	1.3	1.9	5.2	6.4	7.6	8.3	6.3	7.6	8.9	10.2
USA	7.0	7.9	8.4	8.4	6.1	7.2	8.6	9.1	13.1	15.2	17.0	17.4
Average-selected advanced countries	3.1	3.5	3.6	3.7	6.4	7.1	8.4	8.7	9.5	10.7	12.0	12.4

Source (Basic Data): World health Organization

*includes Northern Ireland

Note: Capital expenditure is assumed to be undertaken by the Government and as such clubbed with it

Table 8 gives estimates of private and government health expenditure relative to GDP for selected emerging market and advanced economies. Two patterns are clear. First, advanced economies spend a relatively larger share of their GDP on health compared to EMEs. Second, most of this difference is due to government expenditure on health. Thus, as far as private expenditures are concerned, the average health expenditure for EMEs was 3.2% of GDP in 2015 while in advanced economies it was only slightly higher at 3.7% of GDP. In the case of government expenditure, the EME average was 3.4% of GDP in 2015 while that of the advanced economies was much higher at 8.7%. In India's case, government health expenditure at about 1.5% of GDP is lower by at least 2 percentage points from the comparable EME average.

Status of key health indicators in India

Deficiency of finances as well as the size and age structure of population constrained further by limited access to health services of reasonable quality in the rural areas has led to this situation where on various critical parameters, India is still tangibly behind international norms. For this purpose, we look at the following indicators: Infant mortality rate (IMR), life expectancy, number of physicians and number of hospital beds per 1,000 population.

Table 9: IMR (per 1,000 live births) - selected countries

Country	1990	2000	2010	2016
India	88.4	66.6	45.5	34.6
South Africa	44.6	46.3	37.3	34.2
Brazil	53.4	31.3	17.7	13.5
China	42.2	30.1	13.5	8.5
Russia	18.4	16.6	8.6	6.6
US	9.4	7.1	6.2	5.6
UK	7.9	5.5	4.4	3.7
World	64.8	53.9	37.4	30.5
High income	10.3	6.5	5.1	4.5
Middle income	65.2	52.8	36	29.1

Source (Basic data): World Bank

Table 10: Life expectancy, total (years) - selected countries

Country	1990	2000	2010	2016
India	57.9	62.6	66.6	68.3
South Africa	62.1	56.4	55.9	61.9
Brazil	65.3	70	73.8	75.2
China	69.3	72	75.3	76.1
Russia	68.9	65.5	68.8	70.9
US	75.2	76.6	78.5	78.7
UK	75.9	77.7	80.4	81.6
World	65.4	67.7	70.7	71.9
High income	75.4	77.6	79.8	80.7
Middle income	64.2	66.8	69.9	71.1

With respect to IMR, in comparison to the world average at 30.5 in 2016, India's 34.6 is still higher. However, time-series data indicate that India has been improving fast and may soon catch up with the world average. High-income countries show a low IMR at 4.5 only. China among the EMEs shows a performance that is only slightly lower than that of advanced economies. With respect to life expectancy, India has improved considerably over time to 68.3 in 2016 compared to 57.9 in 1990. In this case also, it has come close to the world average of 71.9 years. In advanced countries, life expectancy tends to be higher by nearly 9 years compared to the world average.

These differences are partly due to supply-side constraints. We look at some of the supply-side indicators as reflected in Charts 17 and 18. In terms of availability of physicians per 1,000 population, India is shown to have a relatively disadvantaged position with only 0.7 physicians per 1,000 population (2012-14) as compared to 2.9 for high-income countries and 1.5 for the world. Similarly, in case of hospital beds per 1,000 population, India has 0.7 beds (2005-16). This compares quite unfavorably in relation to the world average at 2.9 and 4.2 for high-income countries.

Chart 17: Number of physicians per 1,000 population - 2012-14

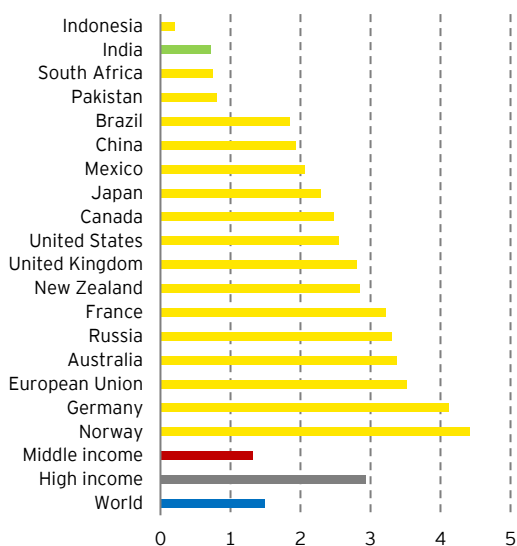
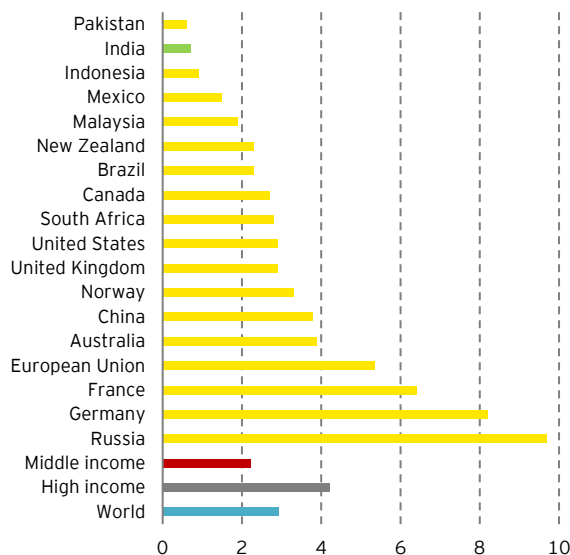


Chart 18: Number of hospital beds per 1,000 population - 2005-16



Source (Basic data): World Bank

SDGs: India's progress

India is making steady progress toward achieving the health-related SDGs. Table 11 indicates the SDG list under Goal 3 covering health-related targets vis-à-vis an overview of the current status as per the Civil Society Report, 2017 (Sustainable Development Goals: Agenda 2030).

Table 11: Health targets under SDG Goal 3 and current status

#	SDG target	Current status ¹
1.	Reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030	Maternal mortality ratio has declined from 254 (2004-06) to 167(2011-13) per 100,000 live births; however, there are large inequities and variations between and within states, and across social and economic groups.
2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	The current rate of under-five mortality in India is 48 per 1,000 live births, IMR is 39 per 1000 live births and neonatal mortality is 28 per 1,000 live births. Infant mortality accounts for over 80% of under-five mortality; and neonatal mortality accounts for over 71% of IMR.
3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	1. India had 1.96 lakh new cases of HIV infection in 2015. 2. Incidence of malaria in India in 2014 was 0.89 per 1,000 population at risk per year. It also states that the total malaria cases decreased by 42% since 2004. 3. Tuberculosis incidence per lakh population decreased from 216 in 1990 to 167 in 2014. India has framed its TB strategic plan in alignment with the WHO's End TB Strategy, which promotes improvement of TB reporting, engaging private sector and also reducing the MDR regimen.
4	By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Data from poor parts of the country clearly states that the predominant diseases of poor are not confined to ischemic heart diseases, cancer and diabetes but also encompass diseases such as rheumatoid disorders, sickle cell anemia and epilepsy.
5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	----
6	By 2020, halve the number of global deaths and injuries from road traffic accidents	1. In 2015, 146,133 deaths due to road traffic accidents were reported, an increase of 53% since 2005. This represents more than half of the total injury mortality burden in India. 2. Studies show that these figures are underreported, with the WHO estimating nearly 111% underreporting.
7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	1. Although abortion is legal in India, safe abortion continues to be inaccessible to a large number of women. It is believed that unsafe abortions contribute to 9%-13% of the maternal mortality in India and as much as 50% of the maternal mortality in some of the districts. 2. There is a gross dearth of safe abortion facilities, which is a major reason why women resort to informal untrained providers.
8	Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective quality and affordable essential medicines and vaccines for all	In India, the Government bears less than a fourth of health spending – among the lowest in the world – while households spend two-thirds. The Union Government is continuously cutting back the health budget – what has been allocated for 2017-18 is less than the expenditure for the year 2011-12, when adjusted for inflation. Though the government-sponsored insurance schemes continue to remain popular among policy makers and politicians, evidence suggests that their impact on financial protection has been minimal.
9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Air pollution is a major health concern in India. Mortality due air pollution (indoor and outdoor) is high: Estimated at over 2.3 million deaths in the year 2015 (out of a total of 9.57 million deaths in India), constituting a staggering 24% of all deaths in India, making it a top risk factor. Of the 15 most polluted cities worldwide, 7 are located in India. Water pollution of surface and ground water is rampant, with over 50% of rivers declared polluted, mainly due to sewage. Diarrheal diseases cause approximately 1.2 lakh deaths of under-five children each year.

¹ Sustainable Development Goals: Agenda 2030 - India (2017), Civil Society Report

6. Money and finance: Credit growth remained close to 10% in January 2018

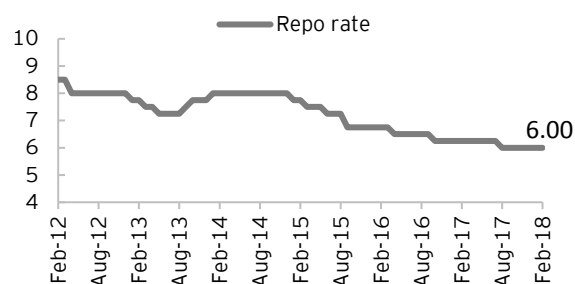
A. Monetary sector

With continued upside risks to CPI inflation, the RBI is expected to maintain its policy repo rate at 6.0% during its next policy review to be held in April 2018.

Monetary policy

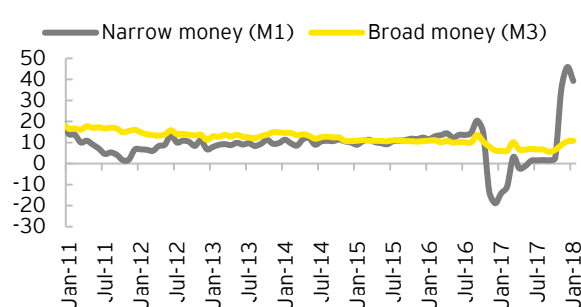
- ▶ Given elevated core CPI inflation, the RBI may retain a neutral stance during its upcoming policy review to be held in April 2018, although the headline CPI inflation moderated in February 2018, (Chart 19). In the policy review held on 7 February 2018, five out of the six members of the monetary policy committee voted in favor of retaining the repo rate at 6.0%, while one member voted for increasing the repo rate by 25 basis points.
- ▶ The RBI forecasted CPI inflation to surge further and be in the 5.1%–5.6% range in 1HFY19 and 4.5%–4.6% in 2HFY19. Upside risks to inflation may emerge on account of (i) higher international crude prices, (ii) fiscal slippage, and (iii) an upward revision to minimum support prices for Kharif crops, but the magnitude of its impact on inflation is less known at the moment.

Chart 19: Movements in repo rate



Source: Database on Indian Economy, RBI.

Chart 20: Growth in narrow and broad money



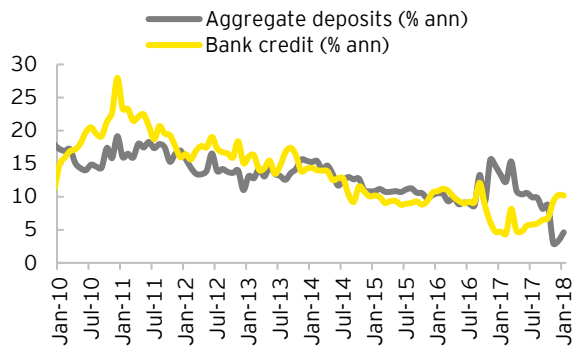
Money stock

- ▶ Growth in broad money stock (M3) marginally increased to 10.8% (y-o-y) in January 2018 from 10.4% in December 2017 (Chart 20). Time deposits (accounting for over 76% of the broad money stock) rose to 4.8% in January 2018 as compared to 3.5% in December 2017 but remained well below its 10-year average growth of around 15.0%.
- ▶ Driven by a favorable base effect, narrow money (M1) growth continued to post a double-digit growth of 39.3% (y-o-y) in January 2018, although falling from 45.8% (y-o-y) in December 2017. Currency in circulation (excluding non-demonetized currency) as a percentage of the total demonetized currency (indicating the extent of re-monetization) was at 100.5% by 2 March 2018, indicating that the re-monetization process was completed in nearly 15 months. Currency intensity, measured as the currency-to-GDP ratio, rose to 10.7% by 2 March 2018. Due to demonetization, it had earlier fallen to 8.8% by the end of FY18 from a four-year high of 12.1% by end of FY16.

Aggregate credit and deposits

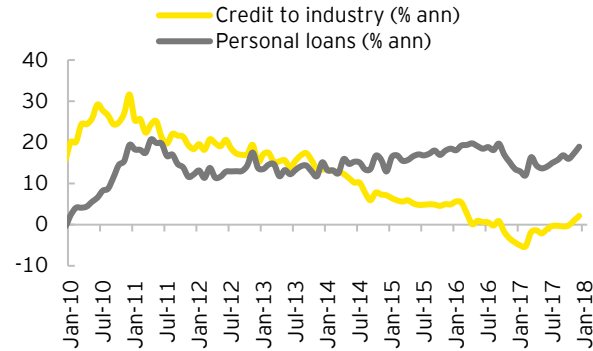
- ▶ Credit by scheduled commercial banks grew by 10.2% (y-o-y) in January 2018 but was marginally lower than 10.3% growth seen in December 2017 (Chart 21).
- ▶ Non-food credit growth moderated to 9.5% in January 2018 from 10.0% in December 2017 owing to a moderation in the credit offtake in services and industrial sector. Growth in credit to the services sector and industries fell to 13.2% and 1.1% respectively in January 2018 from 14.7% and 2.1% in December 2017.
- ▶ Personal loans, a key driver of retail sector credit, grew to a seven-year peak of 20.0% in January 2018 from 18.9% in December 2017 led by a surge in the demand for housing loans (Chart 22).
- ▶ Growth in aggregate bank deposits improved marginally to 4.6% (y-o-y) in January 2018 from 3.4% in December 2017, but continued to remain subdued owing to unfavorable base effect.

Chart 21: Growth in credit and deposits



Source: Database on Indian Economy, RBI.

Chart 22: Growth in industrial and personal loans



Source: Database on Indian Economy, RBI.

B. Financial sector

Net FPI inflows increased to a seven-month high of US\$3.5 billion, while net FDI inflows were lower at US\$1.9 billion in January 2018.

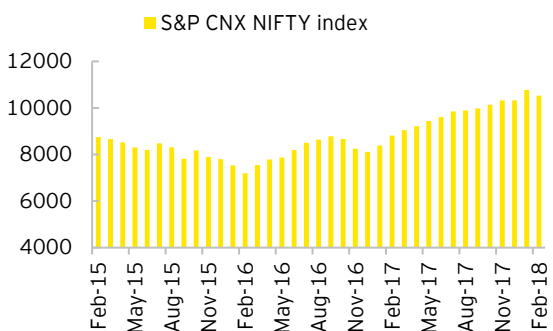
Interest rates

- ▶ Banks maintained the interest rates offered on term deposits, with a maturity of more than one year, between 6% and 6.75%, with an average rate of 6.375% since November 2017.
- ▶ The marginal cost of fund-based lending rate (MCLR) was modified to range between 7.65% and 7.86% in February 2018, marginally lower than that in January 2018. The average MCLR fell to 7.76% in February from 7.85% in January 2018.
- ▶ The average yield on 10-year government securities rose further to a 23-month high of 7.55% (weekly average) in February 2018 as compared to 7.22% in January 2018 due an uptick in global crude prices, increased expectations of a rate hike in the near future owing to a surge in CPI inflation and the inflationary impact of a fiscal slippage.

FPI and stock market

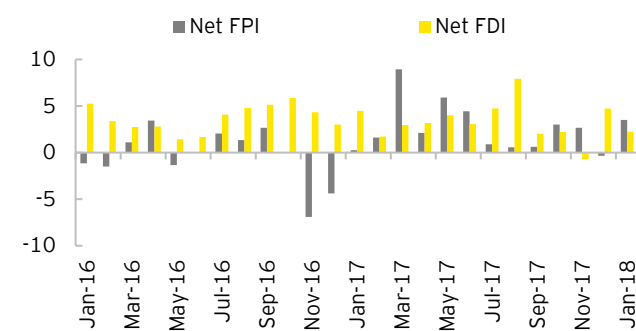
- ▶ The benchmark S&P NIFTY index fell by 238 points to 10,522 in February 2018 from 10,771 points (average) in January 2018 (Chart 23). Market sentiments were influenced by the Government’s proposal to levy 10% long-term capital gains tax on equity investments and the news on the widening of the trade deficit in January 2018. The market sentiments worsened further with the announcement of a suspected fraud in a public-sector bank.
- ▶ As per provisional data, overall foreign investment inflows further increased to US\$ 5.4 billion in January from US\$4.0 billion in December 2017 led by a sharp increase in FPI inflows.
- ▶ Net FDI inflows were lower at US\$1.9 billion in January 2018 as compared to a four-month high of US\$4.3 billion in December 2017 (Chart 24). Gross FDI inflows reached US\$52.0 billion during April-January FY18, marginally falling short of the US\$53.4 billion inflows during the corresponding period of previous fiscal year.

Chart 23: Stock market movement



Source: Database on Indian Economy, RBI.

Chart 24: Net FDI and FPI inflows



Source: Database on Indian Economy, RBI.

- ▶ Net FPIs inflows reached a seven-month high of US\$3.5 billion in January 2018 as compared to a net outflow of US\$0.4 billion in December 2017.

7. Trade and CAB: CAD rose to 2% in 3QFY18 even as exports growth eased further to 4.5% in February

A. CAB: Sharp deterioration over 2QFY18

CAB as a percentage of GDP reached (-) 2.0% in 3QFY18 from (-) 1.2% in 2QFY18 as merchandise trade deficit increased to an 18-quarter high of US\$44.1 billion from US\$32.8 billion in 2QFY18.

The decline in CAB over 2QFY18 was due to the combined effect of a slowdown in merchandise exports and a pickup in merchandise imports (Table 12). Merchandise imports rose to an 18-quarter high driven by the impact of rising oil prices on the oil import bill. Net service exports rose to an all-time high of US\$20.9 billion. Accompanied by rising net private transfer receipts and slowing net primary income payments, net invisibles receipts climbed to an 11-quarter high of US\$30.6 billion.

Table 12: CAB

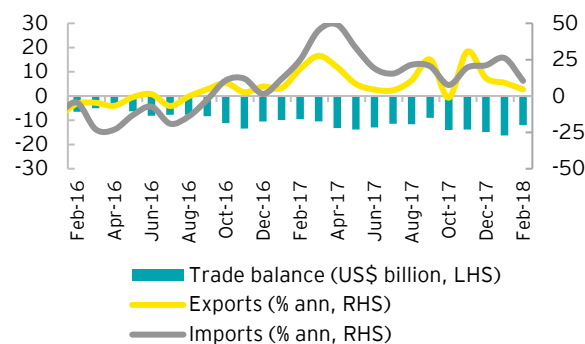
	CAB (- deficit/ +surplus) (US\$ billion)	CAB as a % of nominal GDP	Goods account net (US\$ billion)	Services account net (US\$ billion)	Income account net (US\$ billion)	Transfers net (US\$ billion)
FY14	-32.4	-1.7	-147.6	73.0	-23.0	65.3
FY15	-26.8	-1.3	-144.9	76.6	-24.1	65.7
FY16	-22.2	-1.0	-130.1	69.7	-24.4	62.6
FY17	-15.3	-0.7	-112.4	67.5	-26.3	56.0
4QFY17	-3.5	-0.6	-29.7	17.6	-5.6	14.2
1QFY18	-15.0	-2.5	-42.0	18.3	-5.8	14.5
2QFY18	-7.2	-1.1	-32.8	18.4	-8.5	15.6
3QFY18	-13.5	-2.0	-44.1	20.9	-6.4	16.1

Source: Database on Indian Economy, RBI.

B. Merchandise trade and exchange rate

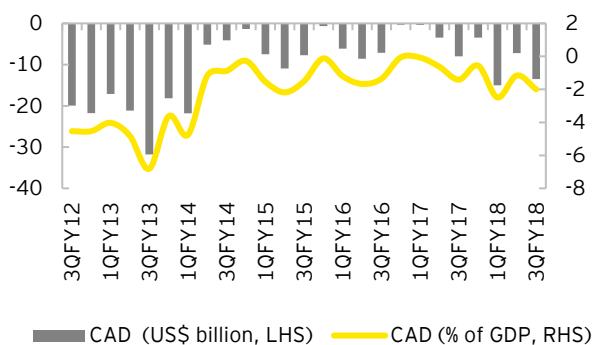
- ▶ Growth in merchandise exports eased to a four-month low of 4.5% in February 2018 from 9.1% in January – the third successive month of decline from a six-year high of 30.5% in November 2017 (Chart 25).
- ▶ The slowdown was driven by a contraction in exports of engineering goods at (-) 1.9% and gems and jewelry at (-) 5.1% from 15.8% and 0.9% respectively in January besides the easing of growth in oil exports to 27.9% from 39.5% in January.
- ▶ Import growth, too, eased to a four-month low of 10.4% from an eight-month high of 26.1% in January partly due to base effect. Most of the major import items, especially oil and transport equipment, recorded a fall in growth in February.
- ▶ Growth in oil imports moderated to 32.1% in February from a 10-month high of 42.6% in January. Imports of transport equipment contracted by (-) 49.1%, the sharpest fall in over two years, as compared to a growth of 4.0% in January.
- ▶ Trade deficit eased to a four-month low of US\$12.0 billion from a 56-month high of US\$16.3 billion in January. Despite services surplus climbing to US\$6.5 billion in January, combined goods and services trade deficit rose to 38-month high of US\$9.8 billion in the same month.
- ▶ The Indian rupee depreciated to INR64.3 per US dollar from INR63.6 per US dollar in January partly due to FPI outflows.

Chart 25: Developments in merchandise trade



Source: Ministry of Commerce and Industry.

Chart 26: CAD



Source: Database on Indian Economy, RBI.

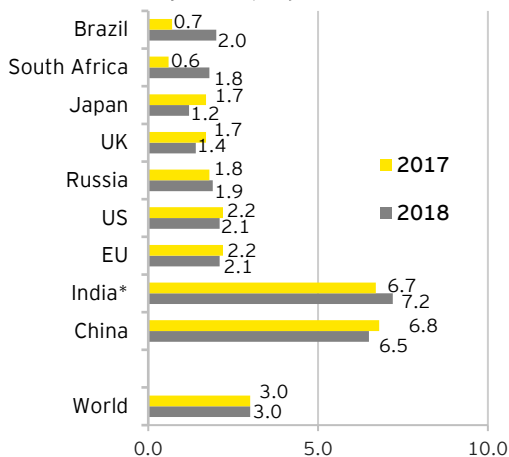
8. Global growth: UN estimates a strengthening of global growth driven by an investment recovery

A. Global growth outlook

- ▶ As per the UN (World Economic Situation and Prospects, WESP 2018), global growth is estimated at 3.0% in 2017, driven by a strengthening growth in major developed countries and a few emerging economies (Chart 27). In their assessment, a steady global growth is anticipated in 2018-19, led largely by developing economies.
- ▶ For the US, GDP growth is estimated at 2.2% in 2017 and 2.1% in 2018 largely supported by an improvement in business investment and to a lesser extent, by net trade. There has been a sustained growth in household expenditure but it has led to a fall in the real disposable income due to a fall in savings. This has resulted in a fall in the personal savings ratio, which in December 2017 was at its lowest level since 2005.
- ▶ For the EU, growth has been estimated at 2.2% in 2017 and 2.1% in 2018 driven by improvement in private consumption. Within the region, Spain and Ireland are expected to lead the growth performance while Italy and the UK are projected to witness slower growth rates.
- ▶ In the UK, growth is projected at 1.7% in 2017 and 1.4% in 2018. Weaker pound sterling has led to a rise in import cost pressures and subdued domestic demand. Further, business investment has been suffering from the uncertainty regarding the future framework for economic relations of the UK with the EU and the rest of the world.
- ▶ GDP growth in Japan is estimated to be robust at 1.7% in 2017 driven by a continuous accommodative macroeconomic policy stance, led by a significant expansion in domestic demand. Steady external demand growth from Asia and North America has also contributed to the growth. However, GDP growth is projected to slow down in 2018 and 2019 as the impact of the fiscal stimulus measures ease.
- ▶ Among the emerging economies, growth in China is estimated at 6.8% in 2017, moderating to 6.5% in 2018. The stronger-than-expected growth in 2017 was attributed to the implementation of policy stimulus measures, including higher infrastructure spending. Private consumption is expected to continue to remain the main driver of growth supported by rising wage growth and steady job creation.
- ▶ In India, despite the growth slowdown witnessed in 2017, the outlook remains positive. Growth is estimated at 6.7% in 2017 and is forecasted to pick up to 7.2% in 2018. The World Bank (India Development Update, released on 14 March 2018) also projects India's growth at 6.7% in 2017-18 and expects it to accelerate to 7.3% in 2018-19 and 7.5% in 2019-20.

The UN, in its 2018 issue of the WESP, has projected global growth to strengthen to 3.0% in 2017 and 2018 driven by a revival in investment. However, the recovery remains moderate and limited to a narrow set of countries, and a firmer and more broad-based investment rebound will depend on the extent to which the available financing can be channelled into productive investment, rather than financial assets.

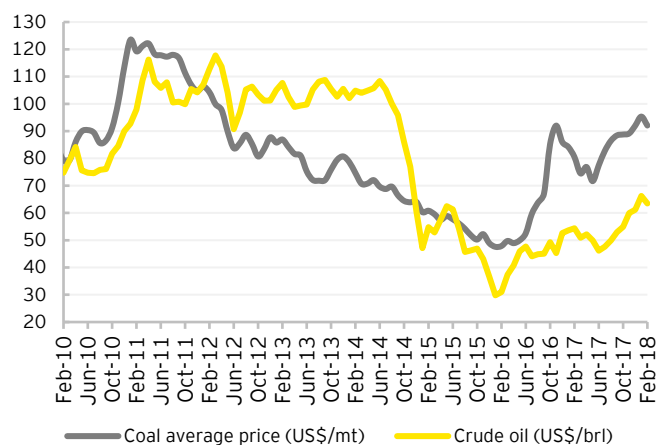
Chart 25: Global growth projections



Source: World Economic Situation and Prospects, 2018, United Nations

*Forecast pertains to fiscal year FY18 and FY19 accordingly.

Chart 26: Global crude and coal prices

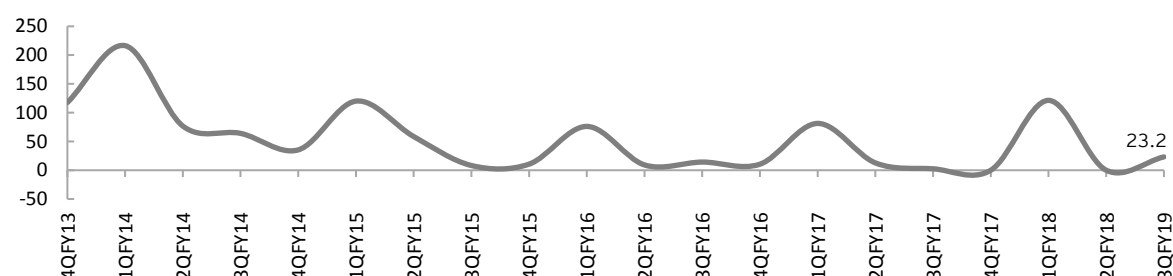


Source: World Bank, Pinksheet.

9. Index of macro imbalance (IMI): Macro balance deteriorated in 3QFY18

- ▶ 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 GDP⁵. 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 > 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.
- ▶ IMI rose sharply in 3QFY18 from a near-full balance in 2QFY17, indicating a deterioration in the macro balance of the economy (Chart 29). Two out of three components of IMI, namely, CPI inflation (4.6%) and CAD (2.0% of GDP) crossed their respective benchmarks during 3QFY18, thereby increasing the imbalance in the economy.

Chart 27: IMI (Quarterly)



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

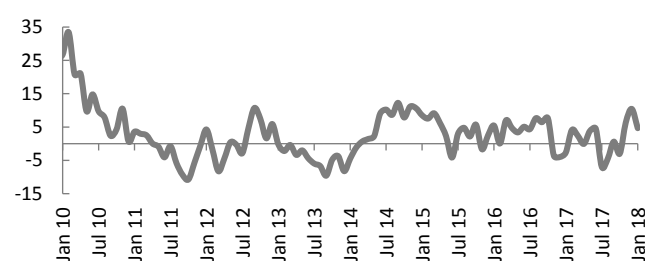
With CPI inflation and CAD crossing their respective benchmark values, the IMI increased to 23.2 in 3QFY18 as compared to a near full balance in 2QFY17. Imbalance is expected to continue on account of higher CPI inflation and CAD in the coming quarter.

10. Index of aggregate demand (IAD): Aggregate demand weakened in January 2018

From a three-year high in December 2017, growth in the IAD fell to 4.6% in January 2018 due to unfavorable base effect and a sharp moderation in the demand conditions in manufacturing sector.

- ▶ The y-o-y growth in IAD fell to 4.6% in January 2018 from a three year high of 10.4% in December 2017 (Chart 30). Unfavorable base effect coupled with lower demand conditions in the manufacturing has more than offset the recovery in demand conditions in the services and agricultural sector.

Chart 28: Growth in the IAD (y-o-y)



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

⁵ 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. Special feature: Expansionary potential of the Center's FY19 Budget – Sectoral impact

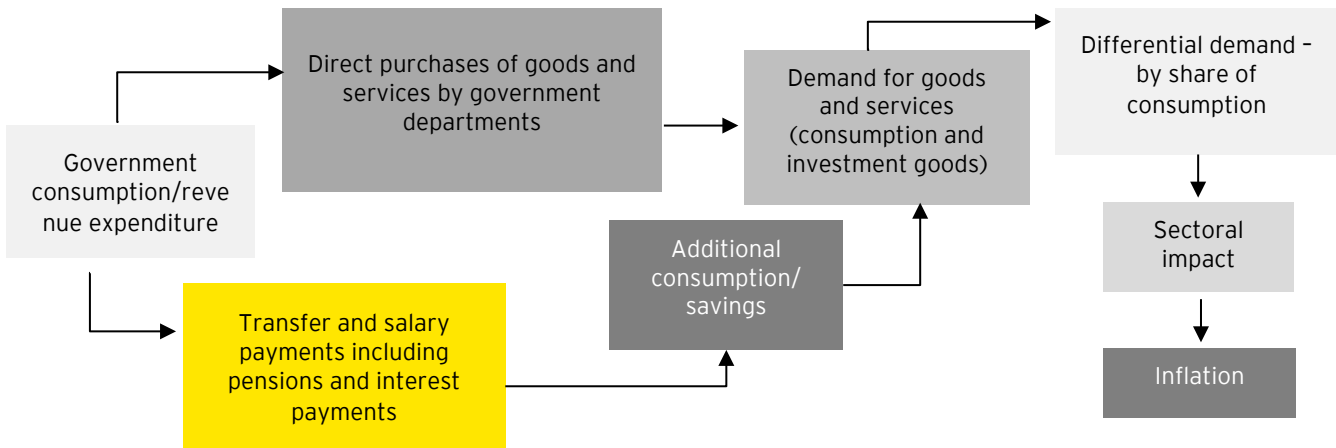
Introduction

Expansionary policies are generally analyzed in terms of their impact on macro indicators such as the growth rate or inflation, rate but their effects spread out to individual sectors affecting different sectors differently. In this write-up, we undertake an analysis of the sectoral impact of the expansionary thrust of the Union Budget FY19.

Sectoral transmission channels

Increase in government expenditures either directly results in additional purchases of goods and services or is paid out as additional incomes in the form of payments to the private sector as pensions, salaries or interest payments. These incomes result in additional consumption or savings that are converted into demand for investment goods. When the entire circuit is tracked, there is an increase in final demand, which leads to further increases in economic activities through a multiplier process. Charts 29 and 32 depict the channels of impact for an expansionary fiscal policy separately for revenue and capital expenditures.

Chart 29: Expansionary fiscal policy – case of revenue expenditure



In the Union Budget of FY19, the Government has proposed an ambitious spending program, which is to be financed by both budgetary and extra-budgetary resources. The total outlays for three focus areas of the Government – namely (a) agriculture and rural livelihoods, (b) infrastructure and education and (c) health and social sectors – amount to 11.6% of GDP. The details are given in Annexures 1, 2 and 3 of the Finance Minister's speech. Budgetary resources constitute only 16.4 % of this total outlay. The balance of 83.6% is to be raised as extra-budgetary resources by the concerned public sector enterprises, special purpose vehicles and other similar institutions. Thus, the extra budgetary resources are meant to contribute nearly 9.7% of GDP to finance the stipulated outlays (Table 13). The strategy is to leverage budgetary resources to induce much larger expenditures by supplementing these by extra-budgetary resources.

Chart 30: Case of capital expenditure – transmission to sectors

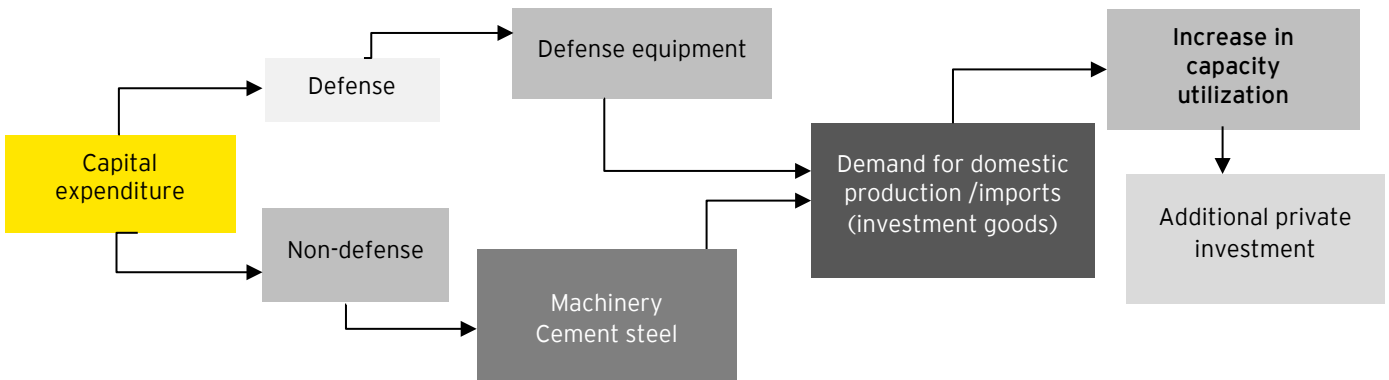


Table 13: Role of budgetary and extra-budgetary resources

Sl. no	Sector/heads	GBS (INR crore)	EBR (INR crore)	Total outlay (INR crore)	Total outlay as a % of GDP
1	Agriculture and rural livelihood program	236,127	1,198,190	1,434,317	7.7
2	% of total outlay	16.5	83.5	100	
3	Capital outlay on infrastructure	157,208	439,935	597,143	3.2
4	% of total outlay	26.3	73.7	100	
5	Schematic outlays for education, health and social protection sectors	NA	NA	137,981	0.7
6	Total outlay			2,169,441	11.6

Source: Annexure I, Annexure II, and Annexure III, Budget speech of Union Finance Minister 2018-19

Table 14 examines the broad structure of central budget. We note that it can be broadly divided into transfer payments, salaries to government employees and direct purchase of goods and services by the ministries and departments. Transfer payments consist of interest payments, pensions and transfers to states and other entities. Of these three elements, the Government's direct purchase of goods and services adds directly to demand, while transfer payments and salaries add to incomes of different economic agents, which will eventually translate into purchase of goods and services for consumption or savings. These savings would eventually be used for the purchase of investment goods. It is notable that the Government's direct purchase of goods and services is limited to only 27.2% of its share in total expenditure, whereas transfer payments add to about 52%. Salaries paid to government employees account for 8.5%.

Table 14: Structure of government expenditure and its impact on total expenditures

	Central Government's revenue expenditure	INR crore		Increments (INR crore)		Share in total expenditure (FY19 BE)
		2017-18 (RE)	2018-19 (BE)	FY18 over FY17	FY19 over FY18	
1	Total revenue expenditure (Budgetary)	1,944,305	2,141,772	253,721	197,467	87.7
2	Interest payments	530,843	575,795	50,129	44,952	23.6
3	Pensions	135,170	155,283	14,219	20,113	6.4
4	Defense	95,000	108,853	7,174	13,853	4.5
5	Non-defense	40,170	46,430	7,045	6,260	1.9
6	Transfers to states and other entities	469,544	538,366	96,395	68,822	22.0
7	Expenditure net of interest, pensions and transfers	808,748	872,328	92,978	63,579	35.7
8	Salaries to government employees	195,989	207,576	14,726	11,587	8.5
9	Purchase of goods and services	612,759	664,752	78,252	51,992	27.2
Income generation and purchase of G&S						
10	Additions to income (2+3+8)	862,002	938,654	79,073	76,653	38.4
11	Direct purchase of goods and services (9)	612,759	664,752	78,252	51,992	27.2
12	Transfers to states and other entities (6) <i>of which:</i>	469,544	538,366	96,395	68,822	22.0
13	salary component	167,673	192,249	34,422	24,576	7.9
14	purchase of goods and services	301,872	346,118	61,973	44,246	14.2
15	Total additions to income (10+13)	1,029,674	1,130,903	113,496	101,229	46.3
16	Total purchase of goods and services (11+14)	914,631	1,010,869	140,225	96,238	41.4

Source: Union Budget, MOSPI and EY estimates

In Table 15, we have aggregated additions to income by adding interest payments, pensions and salaries to government employees. The remaining component of transfer relates to states and other entities, which can also be divided into salaries and purchase of goods and services. Re-aggregating again, we have the total purchase of goods and services in this first round of impact estimated at 41.4% of the Central Government's total expenditure, while addition to income at this stage is estimated at 46.3%. We further examine the impact of this increment in income on consumption and investment demand.

After payment of taxes, disposable incomes are divided into savings or consumption of the private sector on the basis of payments made by the Government to it. The share of consumption based on increase in private incomes due to government

payments is close to 30.0% of the Government's capital expenditure. Thus, adding the Government's direct purchase of goods and services and the private sector income-based purchase of goods and services, it amounts to nearly 71% of the Center's total expenditure that is converted for purchase of goods and services. The structure of this demand is different for government purchases vis-à-vis private purchases. Furthermore, the balance of income after excluding taxes paid by the private sector, amounting to nearly 13.5% of the Government's total expenditure, would be converted into savings and eventually purchase of investment goods by the private sector. Thus, even the Government's revenue expenditure results in some additional demand for capital goods.

Table 15: Consumption demand from income generated out of central budget

	Generation of demand	INR crore		Increments (INR crore)		Shares in total expenditure (FY19 BE)
		2017-18 (RE)	2018-19 (BE)	FY18 over FY17	FY19 over FY18	
1	Total private sector income	1,029,674	1,130,903	113,496	101,229	46.3
2	Less taxes on income	62,774	68,946	6,919	6,171	2.8
3	Disposable income of private sector	966,900	1,061,957	106,576	95,057	43.5
4	Savings	301,267	330,885	33,207	29,618	13.5
5	Consumption	665,633	731,072	73,369	65,439	29.9

Source: Union Budget, MOSPI and EY estimates

Next, we consider the size and structure of the Government's capital expenditure, which can be divided into defense and non-defense categories. Non-defense capital expenditure is further divided into loans and other capital expenditure. Assuming that a large portion of the loans given by the Central Government on the capital account would also be spent on purchase of investment goods, we can consider the entire capital expenditure budget as being spent on investment goods, although the structure of demand for investment goods may be quite different for defense and non-defense categories. Adding together purchase of investment goods through increase in private incomes and direct purchase of investment goods by the Central Government (defense and non-defense), we have a share of about 26% in total expenditure while the balance 71.3% excluding taxes accounts for the purchase of consumption goods.

Table 16: Final demand generated out of central budget

	Central Government's revenue expenditure	INR crore		Increments (INR crore)		Shares in total expenditure (FY19 BE)
		2017-18 (RE)	2018-19 (BE)	FY18 over FY17	FY19 over FY18	
1	Total consumption demand	1,580,264	1,741,942	213,595	161,677	71.3
2	Total purchase of goods and services	914,631	1,010,869	140,225	96,238	41.4
3	Consumption	665,633	731,072	73,369	65,439	29.9
4	Total investment demand	574,712	631,326	22,042	56,614	12.3
5	Government's investment demand	273,445	300,441	-11,165	26,997	12.3
6	Defense	91,461	99,564	-21	8,102	4.1
7	Non-defense	181,983	200,877	-11,143	18,894	8.2
8	Final demand	1,853,709	2,042,383	202,430	188,674	83.6

Source: Union Budget, MOSPI and EY estimates

In order to analyze the incremental impact of the Government's budget on purchase of different consumption and investment goods, we have taken the increase in budgeted FY19 expenditures compared to revised estimates of FY18 expenditures. This increase can be divided into increases in total demand for consumption goods and investment goods. Further analysis can be done (i) for certain aggregate categories of consumption goods based on increase in government direct purchases and (ii) purchases by the private sector based on increase in incomes resulting from the budget. In the case of capital goods, purchases can be disaggregated into certain broad categories.

The relevant results for consumption goods are summarized in Table 17, which shows the main categories of private final consumption expenditure based on National Income Accounts data. We have estimated the sector-wise impact of the increase in government demand on private final consumption expenditure by using the relative shares of segment-wise consumption in total consumption as per national accounts data 2016-17. It can be seen that a relatively large share of increment in demand is for the category of (i) food and non-alcoholic beverages, followed by (ii) housing, water, electricity, gas and other fuels, (iii) miscellaneous goods and services and (iv) transport.

The additional income that the private sector gets on the basis of additional government expenditure results partly in increased consumption as analyzed earlier and partly in increased savings. These savings are kept in two forms: physical and financial. Since financial savings represent the surplus savings of the household (HH) sector, they are used by the Government or the private corporate sector for financing their deficits. We consider that most of it is taken up by the Government for financing its fiscal deficit. Of the total government expenditure, these financial savings amount to 5.6%, which is close to 1% of GDP. The savings in physical form are converted into physical investment, adding to the demand for capital goods. These initial additions to demand result in much larger increases in final demand through a multiplier process as discussed in the next section.

Table 17: Consumption demand and savings from income generated out of central budget

C	Consumption demand	INR crore		Increments (INR crore)		Shares in total expenditure
		2017-18 (RE)	2018-19 (BE)	FY18 over FY17	FY19 over FY18	
1	Consumption	665,633	731,072	73,369	65,439	29.9
2	Food and non-alcoholic beverages	200,060	219,728	22,052	19,668	9.0
3	Alcoholic beverages, tobacco and narcotics	16,225	17,820	1,788	1,595	0.7
4	Clothing and footwear	44,428	48,796	4,897	4,368	2.0
5	Housing, water, electricity, gas and other fuels	100,240	110,095	11,049	9,855	4.5
6	Furnishings, HHs equipment and maintenance	20,417	22,424	2,250	2,007	0.9
7	Health	28,654	31,471	3,158	2,817	1.3
8	Transport	96,547	106,039	10,642	9,492	4.3
9	Communication	16,342	17,949	1,801	1,607	0.7
10	Recreation and culture	5,659	6,215	624	556	0.3
11	Education	26,277	28,860	2,896	2,583	1.2
12	Restaurants and hotels	13,352	14,664	1,472	1,313	0.6
13	Miscellaneous goods and services	97,433	107,012	10,740	9,579	4.4
Savings and investment						
14	Savings private sector	301,267	330,885	33,207	29,618	13.5
15	Physical (including valuables)	176,959	194,356	19,505	17,397	8.0
16	Financial savings	124,308	136,529	13,702	12,221	5.6

Source: Union Budget, MOSPI and EY estimates

Review of estimates of fiscal multipliers – selected literature

A number of studies have estimated the fiscal multipliers for the Indian economy. In Table 18, we summarize the results of two recent studies: Bose and Bhanumurthy (2013) and Goyal and Sharma (2015).

Table 18: Fiscal multiplier estimates selected literature

Policy variables	Bose and Bhanumurthy ⁶ (2013)	Goyal and Sharma ⁷ (2015) - cumulative multiplier estimates in the presence of			
		Short-term restrictions	Supply shocks	Monetary response	Supply shocks plus endogenous monetary response
Capital expenditure	2.45	2.36	2.35	3.06	4.02
Revenue expenditure	---	0.70	0.62	0.47	1.69
Transfer Payments	0.98	---	---	---	---
Other revenue expenditure*	0.99	---	---	---	---
Total expenditure	---	0.23	---	---	---

* Other revenue expenditure of the government is the revenue expenditure after netting out the transfer payment

In the case of Bose and Bhanumurthy, a macroeconomic model was used with a detailed fiscal sector to obtain the value of the fiscal multipliers. These are obtained by estimating fiscal multipliers under two scenarios: (i) when there is no restriction on fiscal deficit and (ii) when there is a restriction on fiscal deficit as suggested by the 13th Finance Commission. At the aggregate level, our analysis has estimated revenue expenditure multiplier at close to 2 and capital expenditure multiplier at

⁶ Bose.S and N R Bhanumurthy, 2013. "Fiscal Multipliers for India", NIPFP Working Paper No.125.

⁷ Goyal A, Sharma B (2015) Government expenditure in India: composition, cyclicity and multipliers. IGDR Working Paper No. 32. IGDR, Mumbai

2.9, thereby confirming the results of some of the earlier studies. These studies highlight that capital expenditure multipliers are higher than those for revenue expenditures.

We have utilized an input-output framework for deriving the multipliers. This serves two purposes: First, it can provide a more detailed disaggregation of purchase of consumption or capital goods and, second, it can be used to generate the sector-wise long-term multiplier effects of an increase in the Government's budgetary outlay. Table 19 shows sectoral fiscal multipliers, which indicate the sector-wise responsiveness of the incremental government expenditure measured at 2011-12 prices. A high multiplier value indicates the presence of large indirect effects resulting from induced demands given the initial stimulus. The overall fiscal multiplier is 2.1, which is in line with the results given in some of the macro studies that were discussed earlier. The sectors showing high level of real impact include construction, which has the highest impact in terms of the magnitude measured at constant prices. It also has a high multiplier at 2.5. Leaving defence, which shows only direct impact with a multiplier of 1.0, the next important sector is transport, which has a multiplier of 9.0.

Table 19: Sectoral fiscal multipliers

Sl. No	Sector	Initial change in domestic demand (INR crore)	Final change in domestic demand including indirect effects (INR crore)	Sectoral fiscal multipliers (Final change over initial change)
1	Agriculture and allied activities	890,504	3,124,797	3.5
2	Manufacturing of food items	723,440	1,322,785	1.8
3	Clothing and footwear	353,428	577,016	1.6
4	Manufacturing of electronic and electrical equipment	356,634	1,238,215	3.5
5	Manufacturing of transport equipment	603,061	758,368	1.3
6	Pharma and other cosmetics	69,487	697,892	10.0
7	Manufacturing of paper, wood and furniture	172,272	953,589	5.5
8	Manufacturing of jewelry and other products	642,533	2,785,768	4.3
9	Construction (including iron and steel and cement, paints)	2,278,373	5,735,723	2.5
10	Electricity, gas and water supply	157,047	1,062,630	6.8
11	Transport including crude petroleum and petroleum products	396,060	3,555,983	9.0
12	Trade, hotels and communications	284,216	677,447	2.4
13	Financial, insurance and real estate	757,991	1,584,187	2.1
14	Professional services including education and health	2,186,279	2,542,870	1.2
15	Community, social and personal services	611,025	623,886	1.0
16	Public administration and defense	4,634,134	4,634,134	1.0
	Total	1,5116,483	31,875,289	2.1

The Central Government's expenditure priorities, focusing on agriculture, construction and transport, are well justified as these sectors are characterized by relatively high multipliers at 3.5, 2.5 and 9 respectively.

Conclusion

Our analysis of the Center's FY19 Budget highlights the following:

- Given the constraints on budgetary resources, including the need to limit the slippage of fiscal deficit relative to the target, the Central Government has relied heavily on the use of extra-budgetary resources to finance outlays on selected priority sectors.
- This Budget has the potential of stimulating the economy through the increase of these extra-budgetary resources and by the choices made for sectoral emphasis. In particular, sectors such as agriculture, construction and transport are characterized by high fiscal multipliers.
- Earlier macro studies as well as our sectorally disaggregated study indicate that in the Indian context, the Government's capital expenditure multiplier is higher than that of revenue expenditure. In this sense, the move toward reducing the relative share of capital expenditure in total expenditure is required to be reversed in the future so as to optimize the stimulating effect of the Government budget.

12. 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							
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
4QFY17	3.1	7.9	2.2	4.3	3.1	4QFY17	51.2	50.2
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	0.7	7.0	3.8	5.4	3QFY18	52.5	50.4
Oct-17	1.8	-0.2	2.0	3.2	5.0	Nov-17	52.6	48.5
Nov-17	8.8	1.1	10.7	3.9	7.4	Dec-17	54.7	50.9
Dec-17	7.1	1.2	8.5	4.4	4.0	Jan-18	52.4	51.7
Jan-18	7.5	0.1	8.7	7.6	6.7	Feb-18	52.1	47.8

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				
FY14	9.4	12.1	7.7	8.9	5.2	9.6	3.0	7.1	2.7
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
4QFY17	3.6	1.5	4.2	5.0	5.0	4.7	3.3	21.3	2.1
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	2.6	9.5	3.1
Nov-17	4.9	4.4	8.2	4.9	3.7	3.2	2.6	10.9	2.9
Dec-17	5.2	5.0	7.9	5.1	4.0	4.4	2.7	8.4	3.1
Jan-18	5.1	4.7	7.7	5.0	3.6	3.0	2.6	9.2	3.2
Feb-18	4.4	3.3	6.8	5.0	2.8	1.6	2.8	4.1	3.5

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)	13.4	16.3	21.0	18.3	8.6	3.5	2.6
Cumulated growth (% , y-o-y)						% of budgeted target	
Jul-17	17.1	24.2	18.8	21.1	13.9	92.4	131.5
Aug-17	20.0	15.5	13.3	14.2	23.6	96.1	133.9
Sep-17	19.9	11.3	16.4	13.5	23.0	91.3	118
Oct-17	18.9	11.8	16.2	13.8	21.1	96.1	124.7
Nov-17	16.5	12.4	15.3	13.7	18.3	112.0	152.2
Dec-17	17.3	17.1	17.0	17.1	17.3	104.4 (RE)	102.2 (RE)
Jan-18	17.0	19.0	17.5	18.4	15.6	113.7 (RE)	109.4 (RE)

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
Monthly tax collection (INR crore)					
Jul-17	-	-	34	-	34
Aug-17	15, 253	-	70,918	7,749	93,920
Sep-17	15, 135	-	30, 395	8024	53, 554
Oct-17	31, 187	21	18, 370	8031	57, 609
Nov-17	23, 839	75	18, 627	7103	49, 644
Dec-17	24, 215	216	17, 142	7899	49, 472
Jan-18	23, 133	193	19, 402	8024	50, 752

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
Apr-17	6.25	FY14	8.5	13.4	14.9	14.2	8.3	21.6	4.8	304.2
May-17	6.25	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	341.6
Jun-17	6.25	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	355.6
Jul-17	6.25	FY17	3.1	10.1	7.9	11.6	7.0	35.6	7.6	370.0
Aug-17	6.00	4QFY17	3.1	10.1	5.8	13.6	7.0	5.0	10.8	370.0
Sep-17	6.00	1QFY18	1.3	7.0	5.1	10.6	7.0	7.2	12.5	386.5
Oct-17	6.00	2QFY18	1.6	5.6	6.1	9.3	6.6	12.4	2.1	399.7
Nov-17	6.00	3QFY18	45.8	10.6	9.0	5.3	7.1	4.6	5.3	409.4
Dec-17	6.00	Oct-17	2.7	6.5	6.8	8.7	6.9	1.6	3.0	398.8
Jan-18	6.00	Nov-17	35.0	8.8	9.3	3.0	7.1	-1.3	2.7	400.7
Feb-18	6.00	Dec-17	45.8	10.6	10.6	4.0	7.4	4.3	-0.4	409.4
Mar-18	6.00	Jan-18	39.3	10.8	10.2	4.6	7.2	1.9	3.5	417.8

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		
FY14	4.7	-8.3	-135.8	60.5	103.7	76.1	2011	4.2	1.7	6.3
FY15	-1.3	-0.5	-137.7	61.1	83.2	65.9	2012	3.5	1.2	5.3
FY16	-15.5	-15.0	-117.7	65.5	46.0	52.7	2013	3.3	1.2	5.0
FY17	5.0	0.0	-105.6	67.1	47.9	70.4	2014	3.4	1.9	4.6
4QFY17	16.8	25.6	-29.2	67.0	52.9	79.8	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	4.3
2QFY18	13.4	19.1	-32.1	64.3	50.2	85.9	2017**	3.7	2.3	4.7
3QFY18	13.1	16.1	-42.7	64.7	58.7	90.0	2018**	3.9	2.3	4.9
Nov-17	30.5	19.6	-13.8	64.9	59.9	89.1	2019**	3.9	2.2	5.0
Dec-17	12.4	21.1	-14.9	64.2	61.2	92.0	2020*	3.7	1.7	5.0
Jan-18	9.1	26.1	-16.3	63.6	66.2	95.3	2021*	3.8	1.7	5.1
Feb-18	4.5	10.4	-12.0	64.3	63.5	92.1	2022*	3.8	1.7	5.0

Source: Database on Indian Economy- RBI, Pink Sheet-World Bank and IMF World Economic Outlook October 2017, IMF World Economic Outlook Update January 2018; *forecasted data as according to October 2017 issue of WEO, **forecasted data as according to January 2018 update of WEO.

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 (2nd AE)	6.4	3.0	3.0	5.1	7.3	4.3	8.3	7.2	10.1	3.0
3QFY16	7.3	-2.3	12.0	14.8	3.9	4.3	10.4	10.2	6.9	1.8
4QFY16	8.7	1.5	10.5	12.7	7.6	6.0	12.8	9.0	6.7	1.6
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	5.6	5.2	6.4	5.3	6.1	-3.7	6.5	2.2	17.0	5.4
1QFY18	5.6	2.7	1.8	-1.8	7.1	1.5	8.4	8.9	13.2	2.3
2QFY18	6.2	2.7	7.1	6.9	7.7	2.8	9.3	6.4	5.6	2.8
3QFY18	6.7	4.1	-0.1	8.1	6.1	6.8	9.0	6.7	7.2	3.8
Fiscal year/quarter	Expenditure components								IPD inflation	
Fiscal year/quarter	GDP	PCE	GCE	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 (2nd AE)	6.6	6.1	10.9	7.6	4.4	9.9			3.0	
3QFY16	7.3	9.9	6.4	4.9	-9.1	-10.1			2.2	
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	7.3	31.9	-2.1	10.3	11.9			6.0	
1QFY18	5.7	6.6	17.1	1.6	5.9	16.0			3.3	
2QFY18	6.5	6.6	2.9	6.9	6.5	5.4			3.4	
3QFY18	7.2	5.6	6.1	12.0	2.5	8.7			4.4	

Source: National Accounts Statistics, MOSPI.

List of abbreviations

Sr. no.	Abbreviations	Description
1	AD	Aggregate demand
2	bbl.	Barrel
3	CAB	Current account balance
4	CGA	Comptroller General of Accounts
5	CGST	Central Goods and Services Tax
6	CPI	Consumer Price Index
7	CSO	Central Statistical Organization
8	Disc.	Discrepancies
9	EMDEs	Emerging market and developing economies
10	EXP	Exports
11	FII	Foreign investment inflows
12	FPI	Foreign portfolio investment
13	FY	Fiscal year (April–March)
14	GDP	Gross domestic product
15	GFCE	Government final consumption expenditure
16	GFCF	Gross fixed capital formation
17	GoI	Government of India
18	GST	Goods and Services Tax
19	GVA	Gross value added
20	IAD	Index of Aggregate Demand
21	IEA	International Energy Agency
22	IGST	Integrated Goods and Services Tax
23	IIP	Index of Industrial Production
24	IMI	Index of Macro Imbalance
25	IMP	Imports
26	IPD	Implicit price deflator
27	LAF	Liquidity adjustment facility
28	MCLR	Marginal cost of funds based lending rate
29	m-o-m	Month-on-month
30	mt	Metric tonne
31	MPC	Monetary Policy Committee
32	NDU	Non-departmental undertaking
33	NEXP	Net exports (exports minus imports of goods and services)
34	PFCE	Private final consumption expenditure
35	PMI	Purchasing Managers' Index (reference value = 50)
36	PSU	Public sector undertaking
37	RE	Revised estimate
38	SDGs	Sustainable Development Goals
39	UTGST	Union territory goods and services tax
40	WEO	World Economic Outlook
41	WPI	Wholesale Price Index
42	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

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