

Economy Watch

Monitoring India's
macro-fiscal performance

July 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.

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Highlights

1. **CPI inflation reached a five-month high of 5.0% in June 2018 driven by rising fuel prices. Core CPI inflation reached 6.3%, a 47-month high.**
2. **WPI inflation increased to a 54-month high of 5.8% while core WPI inflation reached a 63-month high of 4.8% in June 2018.**
3. **IIP growth moderated to a seven-month low of 3.2% in May 2018.**
4. **Centre's fiscal deficit during April-May FY19 stood at 55.3% of the annual budgeted target while the corresponding number for revenue deficit was 68%.**
5. **Given continued inflationary pressures, the RBI may consider another hike in the repo rate in its August 2018 monetary policy review over the 25 basis points hike undertaken in June 2018.**
6. **While FDI inflows have remained positive, these have been overtaken by significant levels of net FPI outflows, turning overall FII flows negative in June 2018.**
7. **In June 2018, merchandise exports grew at 17.6% but merchandise imports grew at an even higher rate of 21.3%, leading to a widening of the trade deficit to a 43-month high.**
8. **The Indian Rupee depreciated to a 17-month low of INR67.8/US\$ in June 2018.**
9. **The IMF has, in its recent Update of World Economic Outlook, trimmed India's growth projection to 7.3% for 2018-19 and 7.5% in 2019-20.**



Foreword

Continuing inflationary pressures: Policy rate hike may be round-the-corner

CPI inflation rose to a five-month high of 5.0% in June 2018 from 4.9% in May 2018 driven mainly by rising global crude prices. This is transmitted to the CPI through fuel and light inflation, which hardened to a five-month high of 7.1% in June from 5.8% in May 2018, and inflation in transportation and communication services which reached a four-year high of 6.2% in June from 5.3% in May 2018, reflecting the movement in retail prices of diesel and petrol. Housing inflation remained elevated at 8.4% in June 2018. Policy makers may be particularly concerned with the core CPI inflation which increased to a 47-month high of 6.3% in June 2018. These inflationary pressures are further confirmed by WPI inflation, which rose to a 54-month high of 5.8% in June 2018 primarily on account of the rising fuel prices accompanied by the rising vegetables prices. WPI core inflation has also increased to a 63-month high of 4.8% in June 2018. In view of these inflationary pressures, a hike of 25 basis points in the repo rate appears an imminent possibility, perhaps as early as in the forthcoming August 2018 review of monetary policy by the RBI.

News from the output side of the economy shows a slip in the IIP-based growth. The IIP has slipped to a seven-month low of 3.2% in May 2018. It was mainly due to sluggish performance of manufacturing and power sectors coupled with poor offtake of fast moving consumer goods (FMCG). The manufacturing sector grew by just 2.8%, growth in power generation decelerated to 4.2% from 8.3% last year and growth in output of FMCG sector fell to 2.6% from 9.7% last year.

India's external sector is under pressure both on the current and capital accounts. The rising global crude prices as well as the aggressive trade policies followed by the US may keep India's trade account under sustained pressure. Although merchandise exports have shown a high growth at 17.6% in June 2018, imports have grown at an even higher rate of 21.3%. India runs a small trade surplus with the US and a large trade deficit with China. As the US moves to reduce India's trade surplus, India should move to expand the volume of trade with China while attempting to reduce its trade deficit. As the US is attracting more and more inbound investment and inflow of dollars with its aggressive tax concessions that were announced earlier as also its protectionist stance, India's exchange rate has also been depreciating. In fact, because of these dollar outflows, all the emerging market economies have come under pressure. In relative terms, India may fare somewhat better than the other emerging market economies.

Owing to a tightening of monetary policy and rising crude prices, the IMF, in its latest World Economic Outlook Update, released on 16 July 2018, has trimmed India's growth projection to 7.3% for 2018-19 and 7.5% for 2019-20, reducing its earlier forecasts for these years by margins of 0.1% and 0.3% points, respectively. Even with these revisions, India would remain the fastest-growing economy among large nations in 2018-19 and 2019-20.

With the likelihood of both a hardening monetary policy and a weakening external sector, the temptation for this government would be strong to loosen fiscal policy to sustain growth. This may be further strengthened by the forthcoming general elections. It may turn out to be a tight rope walk for the government as the FY18 fiscal deficit target has already been missed. As per the CGA data, fiscal deficit to GDP ratio turned out to be 3.53% in FY18, thereby exceeding both the FRBMA target of 3% and the budget estimate of 3.2%.

D.K. Srivastava

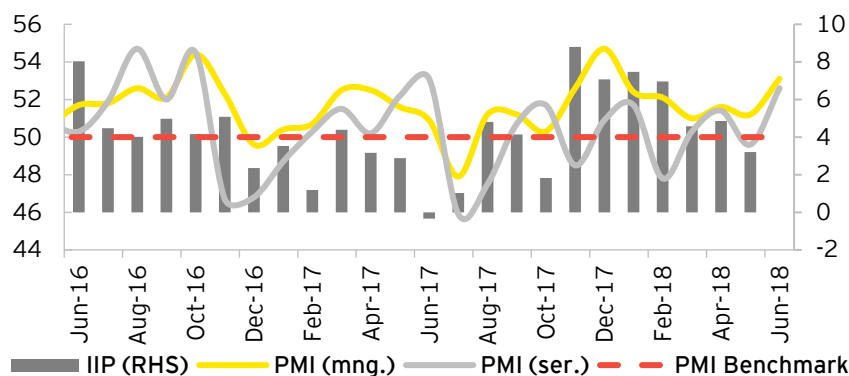
Chief Policy Advisor, EY India

1. Growth: IIP growth slips to a seven-month low in May 2018

A. IIP growth: Fell to 3.2% in May 2018 from 4.8% in April 2018

- ▶ IIP growth moderated to a seven-month low of 3.2% (y-o-y) in May 2018 from 4.8% (revised) in April 2018 largely due to unfavorable base effect (Chart 1).
- ▶ Growth in the manufacturing sector output (accounting for 77.6% of overall IIP) slowed to 2.8% in May 2018 from 5.3% in April 2018. But the output of both mining and electricity grew to 5.7% and 4.2% respectively in May 2018 (Table A1).
- ▶ Output growth of capital goods industry, a proxy for investment demand in the economy, slowed to 7.6% in May 2018 from 11.9% (revised) in April 2018. Growth in the output of consumer durables fell marginally to 4.3% (4.5% in April 2018) while that of consumer non-durables was negative at (-) 2.6% (7.9% in April 2018) in May 2018. Growth in the infrastructure/construction sector slowed for the third consecutive month to 4.9% in May 2018 from 7.0% in April, it's lowest in the last eight months.
- ▶ Growth in the output of eight core infrastructure industries fell to a 10-month low of 3.6% (y-o-y) in May 2018 from 4.6% (revised) in April 2018. Output of two sub industries namely, crude oil [(-) 2.9%] and natural gas [(-) 1.4%] contracted while that of cement (5.2%) and steel (0.5%) showed a sharp moderation in growth during the month.

Chart 1: IIP and PMI



IIP growth moderated to a seven-month low of 3.2% in May 2018 from 4.8% in April 2018 mainly on account of unfavourable base effect.

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

B. PMI: Signaled a sharp improvement in both manufacturing and services in June 2018

- ▶ Headline manufacturing PMI (seasonally adjusted (sa)) increased to 53.1 in June 2018, the strongest pace of improvement since December 2017 supported by the sharpest gains in new orders and output in 2018 so far (Chart 1). PMI manufacturing has expanded for 11 months in a row indicating a sustained recovery.
- ▶ Following a marginal contraction in May 2018, headline services PMI (sa) increased to 52.6 in June 2018. This was the sharpest rate of expansion since June 2017.
- ▶ Reflecting robust output growth in both manufacturing and services sectors, composite PMI Output Index (sa) increased to 53.3 in June 2018 from 50.4 in May 2018. The June 2018 reading was the strongest since October 2016 and is indicative of a strong recovery.

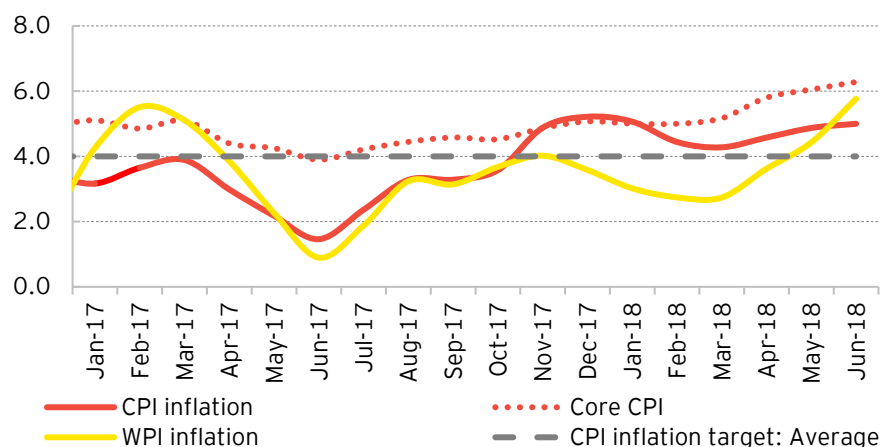
In June 2018, manufacturing PMI continued to expand for the eleventh consecutive month with the rate of expansion being the highest in 2018 so far. Services PMI also showed the sharpest increase since June 2017.

2. Inflation: CPI inflation increased to a five-month high of 5.0% in June 2018

CPI inflation reached a five-month high of 5.0% in June 2018 from 4.9% in May 2018 (Chart 2) driven by rising fuel prices.

- ▶ Inflation in fuel and light hardened to a five-month high of 7.1% in June 2018 from 5.8% in May 2018 primarily on account of rising LPG prices.
- ▶ Due to rising petrol prices, inflation in transportation and communication services reached a four-year high of 6.2% in June 2018 from 5.3% in May 2018. Inflation in transportation and communication services has steadily risen from a six-month low of 2.0% in January 2018.
- ▶ Inflation in food and beverages eased to 3.2% in June 2018 from 3.4% in May 2018, which was also reflected in moderation in inflation in consumer food price-based index to 2.9% from 3.1% over the same period. Inflation in fruits eased to 10.1% in June 2018 from a 43-month high of 12.3% in May 2018.
- ▶ Housing inflation remained elevated at 8.4% in June 2018, the same level seen in May 2018.
- ▶ Core CPI inflation reached a 47-month high level of 6.3% in June from 6.1% in May 2018 due to an increase in inflation in education services to a 25-month high of 5.8% in June 2018 from 5.4% in May 2018, besides the uptick in inflation in transportation and communication services.

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



Core CPI inflation reached a 47-month high of 6.3% mainly on account of rising inflation in transportation and communication services while core WPI inflation reached a 63-month high of 4.8% primarily on account of rising prices of basic metals.

Source: MOSPI, Office of the Economic Advisor, GoI

WPI inflation increased to a 54-month high of 5.8% in June 2018 from 4.4% in May 2018 primarily on account of rising fuel and vegetables prices (Chart 2).

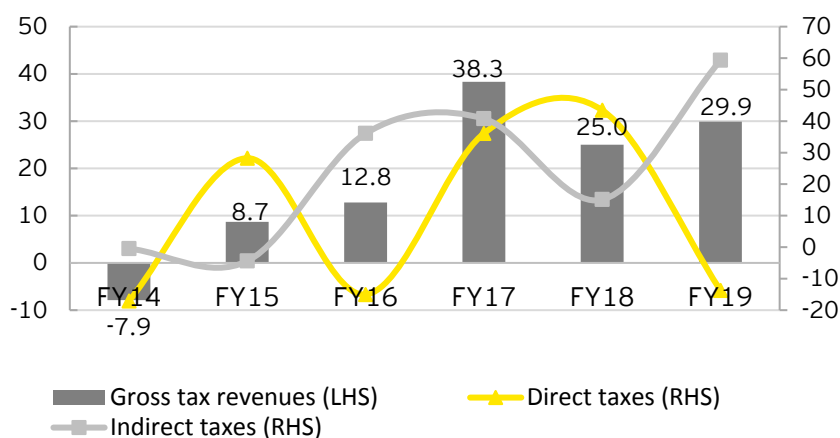
- ▶ WPI fuel and power-based inflation increased to a 14-month high of 16.2% in June 2018 from 11.2% in May 2018 on account of rise in inflation in mineral oils to 25.4% from 18.3% over the same period. All types of mineral oils including petrol, diesel and LPG witnessed a significant rise in prices.
- ▶ The rise in fuel prices was driven by inflation in crude petroleum and natural gas reaching an all-time high of 48.8% in June 2018 from 26.9% in May 2018. It has steadily risen from 3.7% in December 2017 feeding into the inflation in primary articles.
- ▶ Inflation in primary articles increased to 5.3% in June 2018 from 3.2% in May 2018 partly on account of a pickup in inflation in vegetables to a four-month high of 8.1% in June 2018 from 2.5% in May 2018.
- ▶ Inflation in manufactured products climbed further to a 4-year high of 4.2% in June 2018 from 3.7% in May 2018 mainly due to an uptick in inflation of manufactured basic metals to 17.3% in June, an all-time high in 2011-12 series, from 15.8% in May 2018.
- ▶ As a result, WPI core inflation increased further to a 63-month high of 4.8% in June 2018 from 4.4% in May 2018.

3. Fiscal performance: Fiscal deficit during April-May 2018 stood at 55% of the annual budgeted target

A. Tax and non-tax revenues

- ▶ According to CGA, gross central taxes grew by 29.9% during the first two months of FY19, higher than 25% in the corresponding period of the previous year (Chart 3).
- ▶ During April-May 2018, gross taxes stood at 9.4% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 7.6% during April-May as a percentage of annual actuals.
- ▶ Direct tax contracted by (-) 13.7% during April-May FY19 as compared to a growth of 43.5% in the corresponding period of FY18. This largely reflects the impact of a high negative growth in corporation tax on account of refunds in May 2018.
- ▶ Corporate income tax showed a negative growth of the order of (-) 82.7% during April-May 2018 due to negative revenues in May 2018, indicating refunds. It has usually been the case in recent years that there are corporate tax refunds in the first two months of the fiscal year due to which extreme growth numbers are observed.
- ▶ Growth in personal income tax was at 4.8% during April-May FY19, compared to 11.4% in the corresponding period of FY18.
- ▶ Indirect taxes (comprising union excise duties, service tax, customs duty, CGST, UTGST, IGST and GST compensation cess) grew by 59.3% during April-May FY19 as compared to 15.1% in the corresponding period of FY18.
- ▶ The Centre's GST collection (CGST, UTGST, IGST and GST compensation cess) during April-May FY19 stood at INR1,12,984 crore which was 15.2% of the FY19 Budget Estimate (BE).

Chart 3: Growth in cumulated central tax revenues up to May 2018



As per CGA, centre's gross tax revenues grew by 29.9% during the first two months of FY19 compared to 25% in the corresponding period of FY18.

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 onwards

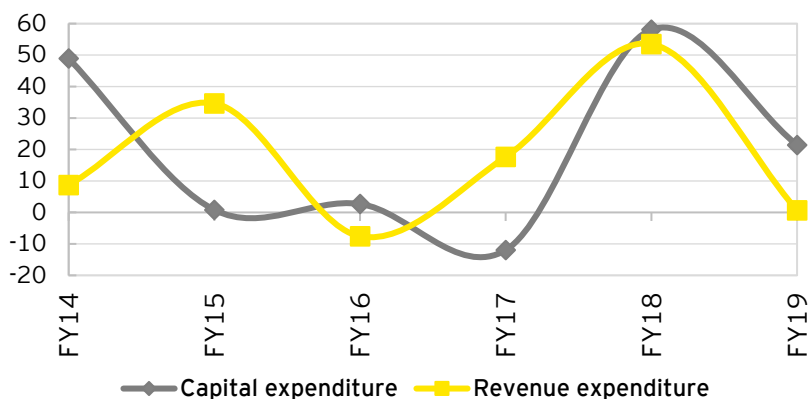
- ▶ The centre's non-tax revenues grew by 56.7% during April-May FY19 as compared to a contraction of (-) 4.1% in the corresponding period of FY18. Non-tax revenues during April-May 2018 stood at 9.8% of the annual budgeted target as compared to the three-year average (FY16 to FY18) of 8.9% in April-May as percentage of annual actuals.
- ▶ According to the Department of Disinvestment, the disinvestment proceeds up to 5 July 2018 stood at INR9,219.91 which was 11.5% of the FY19 annual budgeted target.



B. Expenditures: Revenue and capital

- ▶ Center's total expenditure during April-May FY19 grew by 3.0% as compared to 54% in the corresponding period of FY18 (Chart 4). During April-May 2018, total expenditure stood at 19.4% of the FY19 annual budgeted target, compared to the three-year average (FY16 to FY18) of 17.1% during April-May as a percentage of annual actuals.
- ▶ Growth in revenue expenditure was negligible at 0.7% during April-May FY19 as compared to 53.5% in the corresponding period of FY18. Revenue expenditure during April-May 2018 stood at 19.1% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 17.3% during April-May as a percentage of annual actuals.
- ▶ Center's capital expenditure grew by 21.4% during April-May FY19 as compared to 58.1% in the corresponding period of FY18. Capital expenditure during the first two months of FY19 stood at 21.2% of the FY19 annual budgeted target as compared to the three year average (FY16 to FY18) of 15.8% during April-May as a percentage of annual actuals.

Chart 4: Growth in cumulated central government expenditure up to May 2018



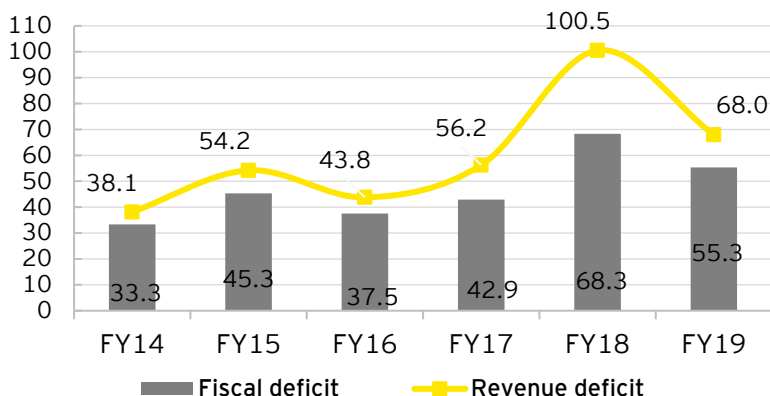
Center's total expenditure grew by 3.0% during the first two months of FY19, in contrast with the trend of the previous fiscal year where expenditures were frontloaded

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

C. Fiscal imbalance

- ▶ The centre's fiscal deficit during April-May 2018 stood at 55.3% of the FY19 annual budgeted target as compared to 68% in the corresponding period of FY18 (Chart 5).
- ▶ The centre's revenue deficit stood at 68% of the FY19 annual budgeted target during April-May FY19 as compared to 100.5% in the corresponding period of FY18, which was historically the highest.

Chart 5: Cumulated fiscal and revenue deficit up to May 2018 as percentage of annual budgeted target



Center's fiscal deficit during April-May 2018 was 55.3% of its FY19 annual budgeted target. The corresponding number for revenue deficit was 68%.

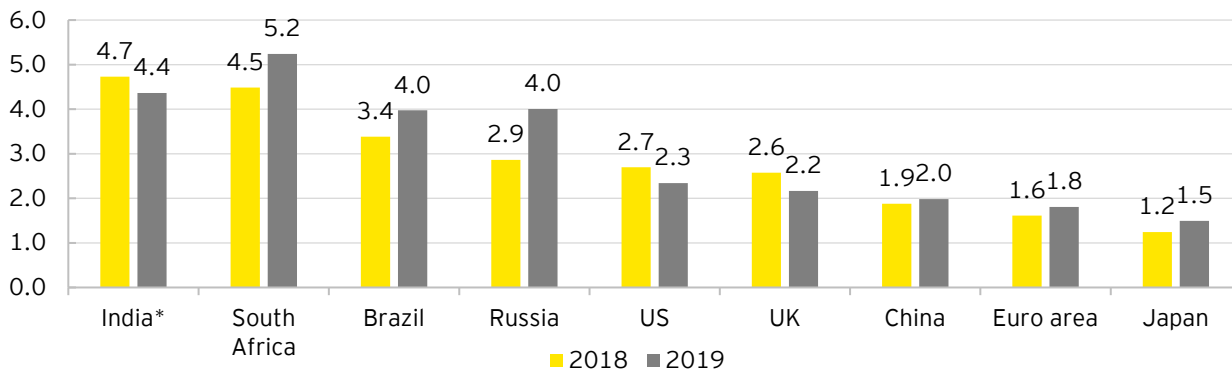
Source: Monthly Accounts, Controller General of Accounts, Government of India, Medium-term Fiscal Policy Statement, Union Budget FY19 and CSO

4. India in a comparative perspective: Status and prospects

CPI inflation: India is projected to have the highest inflation in 2018 amongst selected major countries

- ▶ Higher commodity prices have generally pushed up inflation in both advanced and emerging market economies (EMEs). According to OECD Economic Outlook (June 2018), historically, large changes in inflation rates have been driven by big changes in energy and food prices. In this backdrop, an upside risk to inflation stems from larger increases in commodity prices, particularly oil.
- ▶ Among the advanced economies, higher inflation expectations by companies together with higher oil prices and slightly higher labor costs are expected to boost inflation to just above the target level in the US but leave it below the respective targets in both the Euro area and Japan in the projection period during 2018 and 2019.
- ▶ CPI inflation is projected to remain modest in some of the large EMDEs including the BRICS economies. India is forecasted to see the highest inflation rate at 4.7% amongst these countries in 2018 (FY19).

Chart 6: Projections for Consumer Price Indices (% change) - Major economies



Source (Basic Data): OECD Economic Outlook, June 2018; *Data is based on fiscal year (FY19 and FY20, respectively)

Real total gross fixed capital formation: India is expected to continue leading the selected economies in terms of growth in real investment till 2019

- ▶ India has led the selected OECD countries in terms of growth in real investment since 2015. Growth in investment is expected to pick up to 8.5% in 2018 and further to 8.8% in 2019 from 7.8% in 2017.
- ▶ Among the EMDEs, Brazil is projected to recover from the current trend of contraction in gross fixed capital formation, from (-) 1.9% in 2017 to 4.8% in 2018.
- ▶ Investment growth in the US is expected to strengthen to 4.7% in 2019 from 3.4% in 2017 largely on account of projected robust growth in business investment helped by favorable financial conditions and the impact of US tax reforms.
- ▶ Potential obstacles to a sustained investment recovery include diminished long-term growth expectations, a lack of business dynamism in some economies, and uncertainty, including about global trade policy.

Table 1: Growth in real total gross fixed capital formation - Major economies

Country	2015	2016	2017	2018	2019
India*	5.2	10.1	7.8	8.5	8.8
US	3.5	0.6	3.4	4.9	4.7
Brazil	-13.9	-10.4	-1.9	4.8	3.8
South Africa	3.4	-4.1	0.4	4.6	4.7
Euro area	3.0	4.5	3.2	4.2	4.1
Russia	-10.4	1.7	4.3	3.6	2.0
UK	2.8	1.8	4.0	2.8	0.7
Japan	1.7	1.1	2.5	1.2	0.6

Source (Basic data): OECD Economic Outlook, June 2018; *Data is based on fiscal year; Note: Projections start from 2018 onward.



Exports of goods and services: India is projected to lead global export growth among major economies surpassing China in 2019

- ▶ Growth in volume of exports of goods and services in India is expected to pick up to 5.4% in 2018 from 4.5% in 2017. It has fallen sharply from a peak level of 24.5% achieved during the pre-crisis period of 2004-06. Since then, growth in India's exports has averaged below that of China.
- ▶ However, in 2019 growth in India's exports is expected to strengthen to 6.5% surpassing China's projected export growth at 5.6%.
- ▶ Growth in overall OECD exports is expected to ease from 4.6% in 2017 to 4.4% in 2019, but remain broad-based on the assumption that trade tensions do not further worsen significantly.
- ▶ Growth rates in exports of all major economies of the OECD have been eroded since the global financial crisis. Growth peaked in 2011 partly due to base effect but has slid downwards thereafter.
- ▶ In the UK, export growth is expected to fall to 1.4% in 2018 from 5.7% in 2017 before recovering to 3.3% in 2019. In the US, it is expected to rise to 4.8% in 2018 from 3.4% in 2017 before moderating to 4.4% in 2019.

Table 2: Volume of exports of goods and services: 2004 to 2019 (% change, annual)

Country	2004-06	2007-09	2010-12	2013-16	2017	2018	2019
China	24.3	6.4	15.1	3.2	11.1	6.5	5.6
India*	24.5	5.3	14.0	2.2	4.5	5.4	6.5
Germany	10.0	-1.1	8.7	3.4	5.3	4.5	4.5
Japan	10.6	-4.4	8.2	3.7	6.7	5.0	4.5
United Kingdom	8.7	-3.2	4.1	2.7	5.7	1.4	3.3
United States	8.3	2.1	7.4	2.0	3.4	4.8	4.4
Total OECD	7.8	-0.8	6.8	3.5	4.6	4.5	4.4

Source (Basic data): OECD Economic Outlook, June 2018;*Data is based on fiscal year; Note: Projections start from 2018 onward. Note: Simple averages have been taken for the years 2004-06, 2007-09, 2010-12, and 2013-16.

Imports of goods and services: India is projected to remain above 6% till 2019 with respect to growth in volume of imports, the highest amongst selected countries

- ▶ Growth in volume of imports of goods and services in India is expected to moderate to 6.2% in 2018 and improve slightly to 6.4% in 2019 from a six-year high of 10.8% in 2017. Earlier it had peaked during the pre-crisis period averaging 25.4% in 2004-06. Growth levels have substantially fallen since, although they recently rose in 2017.
- ▶ As per the OECD, growth in China's volume of imports is projected to fall from 6.9% in 2017 to 5.5% in 2018 and remain stable thereafter till 2019.
- ▶ In the US, growth in the volume of goods and services imports is expected to pick up to 5.3% in 2018 from 4% in 2017. Risks to growth include protectionist measures such as tariff and other barriers to trade adopted by the US recently.
- ▶ Growth of imports in OECD countries as a whole is expected to marginally increase to 4.7% in 2018 from 4.5% in 2017 before falling back to 4.5% in 2019.

Table 3: Volume of imports of goods and services: 2004 to 2019 (% change, annual)

Country	2004-06	2007-09	2010-2011	2012-2016	2017	2018	2019
China	17.7	7.8	17.0	7.0	6.9	5.5	5.5
India*	25.4	10.3	18.3	-0.6	10.8	6.2	6.4
Germany	8.2	-0.4	9.9	3.2	5.6	4.3	5.1
Japan	6.3	-4.3	8.5	3.2	3.4	3.3	2.3
United Kingdom	8.1	-4.2	4.7	4.1	3.2	1.0	1.5
United States	8.0	-4.6	9.1	2.8	4.0	5.3	5.3
Total OECD	7.8	-2.0	8.5	3.1	4.5	4.7	4.5

Source (Basic Data): OECD Economic Outlook, June 2018;*Data is based on fiscal year; Note: Projections start from 2018 onward. Note: Simple averages have been taken for the years 2004-06, 2007-09, 2010-11, and 2012-16.

5. In focus: Government expenditures on education and health: Profiling inter-state disparities

Introduction

Education and health are known to be two critical merit goods, that is, private goods with large associated positive externalities, the provision of which has been considered a key responsibility of the governments. In these sectors, expenditures are incurred both by the private and public sectors, on the demand as well as on the supply sides. The users of these services incur a significant portion of the costs from their own pockets for both of these services. At the same time, governments also provide these services at highly subsidized prices. These subsidies whether explicit or implicit, are justified on grounds of externalities since the benefit to the society is more than the sum of the benefits to the individual users of these services. Governments tend to often directly participate in the supply of these services by running educational institutions as well as hospitals and other health-related institutions. Among the three tiers of governments in India's federal framework, the key intervention comes from the state governments. While education is in the concurrent list of the Seventh Schedule of the Constitution, public health and sanitation remains in the state list. The central government incurs a large portion of its expenditures on these services through the state governments by channeling resources under various centrally sponsored schemes.

In the public finance literature, from the viewpoint of both equity and efficiency, it is considered desirable that the standards of health and education services be equalized across the country. It serves the objective of equity since a large segment of the needy population with respect to these services namely, the young population and the old population, is relatively immobile and requires these services wherever they reside in the country. It serves the purpose of efficiency since differences in the standards of these services should not become a reason for migration. The relatively mobile population is the population in the working age group of 15 to 64 years of age which may move in search of productive opportunities rather than incur costs for accessing better health and education services.

Per-capita expenditure of states on education: Growth and inter-state disparity

Per-capita expenditure on education, both at constant and current prices, has increased on an average for the two groups of states namely, medium and large states and hilly and small states. The former covers all the states in the group of states known as the 'general category states', leaving Goa and including Assam. The second group consists of hilly and small states, which is similar to the states until recently called 'special category states' but this group includes Goa and excludes Assam.

Chart 7: Per-capita education expenditure (nominal)

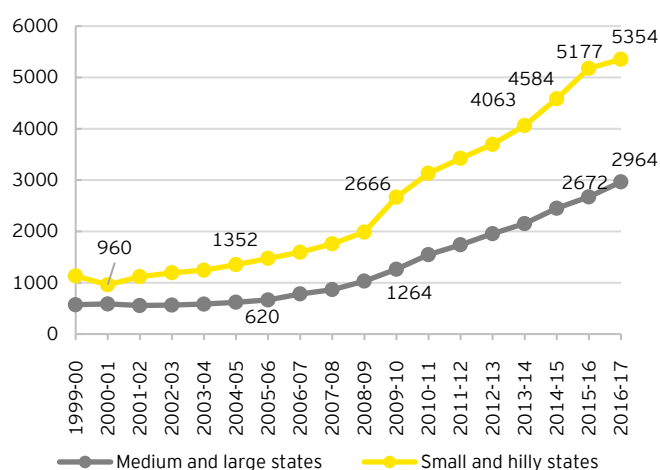
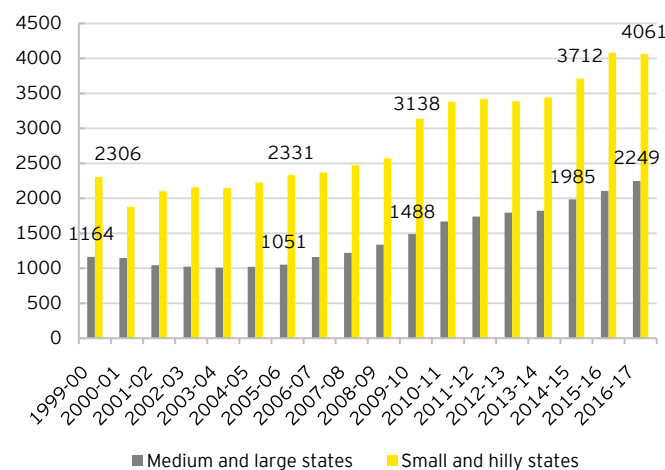


Chart 8: Per-capita education expenditure (real)



Source (Basic data): RBI, MOSPI

Since government expenditure numbers are available at current prices, these are deflated by the implicit price deflator of government final consumption expenditure (GFCE) using the 2011-12 base series. The relevant deflator values for earlier years were obtained by splicing the 2004-05 series. In real terms, population weighted per-capita education expenditure of the medium and large states increased from INR1,164 in 1999-2000 to INR2,249 in 2016-17. In the case of small and hilly states, the increase is from INR2,306 to INR4,061 during the same period. Thus, for medium and large states, per-capita education expenditure almost doubled during

this period, while in the case of small and hilly states, average per-capita expenditure on education increased by almost 76% in the same period.

The level of per-capita expenditures incurred by the state governments on education for the periods covered by the 11th to 14th Finance Commissions (FCs) that is, from 2000-2001 to 2016-17 have been examined in Table 4. For the purpose of this analysis, the commission's period averages have been taken. In Table 4, the per-capita education expenditures of individual states as well as simple and population weighted averages are given. The population weighted average is lower than the simple average as states with larger populations spend relatively less compared to the states with smaller populations. Furthermore, within the two categories of states, both simple and population weighted averages are higher for small and hilly states as compared to those for medium and large states. The relevant average is the population weighted average. The average per-capita expenditure of the states in the respective categories have been compared to the respective population weighted category averages for the 13th and 14th FC period.

Table 4: State-wise per-capita expenditure on education over 11th to 14th FC period

#	State	Per-capita expenditure on education (INR)				Per-capita expenditure relative to group average/group average relative to all-states average	
		FC 11	FC 12	FC 13	FC 14	FC13	FC14
Medium and large states							
1	Andhra Pradesh	535	817	2,110	3,309	107.2	117.4
2	Assam	781	1,069	2,405	3,505	122.1	124.4
3	Bihar	396	627	1,184	1,674	60.1	59.4
4	Chhattisgarh	348	834	2,325	4,218	118.1	149.7
5	Gujarat	700	994	2,164	2,827	109.9	100.3
6	Haryana	683	1,329	2,759	3,850	140.1	136.6
7	Jharkhand	544	884	1,321	2,177	67.1	77.3
8	Karnataka	691	1,198	2,317	3,006	117.7	106.6
9	Kerala	893	1,416	3,044	4,553	154.6	161.5
10	Madhya Pradesh	388	549	1,579	2,559	80.2	90.8
11	Maharashtra	953	1,398	2,938	3,696	149.2	131.1
12	Orissa	492	897	1,807	2,587	91.8	91.8
13	Punjab	794	1,014	2,090	2,929	106.1	103.9
14	Rajasthan	601	989	1,974	3,090	100.2	109.7
15	Tamil Nadu	683	1,133	2,527	3,486	128.3	123.7
16	Telangana	NA	NA	1,851	3,003	94.0	106.6
17	Uttar Pradesh	370	636	1,379	2,166	70.0	76.9
18	West Bengal	562	893	1,875	2,311	95.2	82.0
	Weighted average*	582	922	1,969	2,818	96.6	96.8
	Simple average	613	981	2,092	3,053	-	-
Small and hilly states							
1	Arunachal Pradesh	1,359	2,744	4,988	8,764	132.0	166.4
2	Goa	1,912	3,008	7,012	9,974	185.5	189.4
3	Himachal Pradesh	1,501	2,362	4,849	6,316	128.3	120.0
4	Jammu and Kashmir	866	1,317	2,678	4,113	70.9	78.1
5	Manipur	1,228	1,567	2,695	3,481	71.3	66.1
6	Meghalaya	1,087	1,498	3,341	4,368	88.4	83.0
7	Mizoram	2,259	3,405	7,328	9,525	193.9	180.9
8	Nagaland	1,086	2,002	4,268	6,820	112.9	129.5
9	Sikkim	2,425	4,550	9,479	11,981	250.8	227.6

10	Tripura	1,392	1,649	2,868	4,480	75.9	85.1
11	Uttarakhand	916	1,900	3,721	4,768	98.4	90.6
	Weighted average*	1,174	1,896	3,780	5,265	185.4	180.8
	Simple average	1,457	2,364	4,839	6,781	-	-
	All states weighted average*	605	959	2,038	2,913	100.0	100.0
	All states - Simple average	944	1,524	3,134	4,467	-	-

Source (Basic data), RBI and MOSPI, CAG; *Weighted by respective population

Extensive disparities are seen within each group. In the group of medium and large states, in per-capita terms, Bihar has been able to spend only about 60% of the population weighted average of the group. Other states which have been able to spend less than the group average are Jharkhand, Uttar Pradesh, Madhya Pradesh, West Bengal, Telangana and Odisha. These are low average per-capita Gross State Domestic Product (GSDP) states with large populations. In the group of small and hilly states, Jammu and Kashmir, and Manipur happen to be the lowest education expenditure states relative to the group average. Other states that are below the group average are Tripura, Meghalaya and Uttarakhand. Comparing the group averages with the all-state population weighted average, the all-state average is heavily dominated by the average of medium and large states. This is because these account for nearly 97% of the all-state per-capita education expenditure even though the simple group averages for the 14th FC period at INR3,053 for medium and large states is less than half of that for small and hilly states at INR6,781.

Per-capita expenditure of states on health: Growth and inter-state disparity

In real terms, population-weighted per-capita health expenditure of the medium and large states has increased from INR283 in 1999-2000 to INR646 in 2016-17. In case of small and hilly states, the increase is from INR586 to INR1,379 during the same period. For both the groups, per-capita health expenditure more than doubled during this period.

Chart 9: Per-capita health expenditure (nominal)

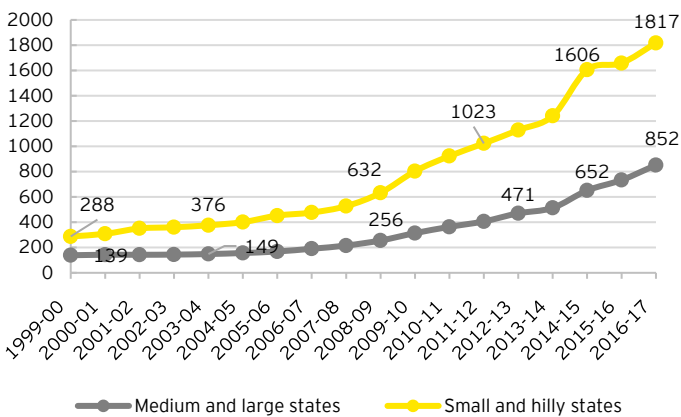
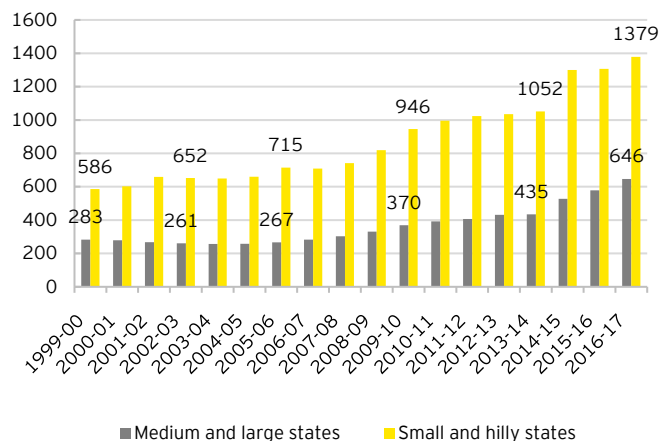


Chart 10: Per-capita health expenditure (real)



Source (Basic data): RBI, MOSPI

Table 5 shows per-capita expenditures on health by individual states as well as simple and population weighted averages of the two groups of medium and large states and hilly and small states. In general, per-capita health expenditures are significantly lower than the per-capita expenditures on education across all states. As in the case of education, here also, within the two categories of states, both simple and population weighted averages are higher for small and hilly states as compared to those for medium and large states. Examining the per-capita health expenditure of the states in a similar way as in the case of education, it is seen that in the group of medium and large states, Bihar has been able to spend on an average, only about 45% of the population weighted average of the group in the 14th FC. Other states which have been able to spend less than the group average are Jharkhand, Uttar Pradesh, Madhya Pradesh, West Bengal and Odisha. In the group of small and hilly states, Tripura, Uttarakhand, Manipur, Jammu and Kashmir, and Meghalaya in this order have been the states with the lowest health-expenditure states relative to the group average. Again, comparing the group weighted averages with the all-state population weighted average, the all-state average is dominated by the average of medium and large states.

Table 5: State-wise per-capita expenditure on health over 11th to 14th Finance Commission period

#	State	Per-capita expenditure on health (INR)				Per-capita expenditure relative to group average/group average relative to all-states average	
		FC 11	FC 12	FC 13	FC 14	FC13	FC14
Medium and Large States							
1	Andhra Pradesh	178	293	667	1,092	138.6	137.7
2	Assam	130	266	499	903	103.8	113.9
3	Bihar	88	120	198	359	41.2	45.3
4	Chhattisgarh	102	188	482	1,102	100.2	138.9
5	Gujarat	164	242	531	887	110.4	111.9
6	Haryana	153	264	594	971	123.5	122.5
7	Jharkhand	131	272	287	576	59.6	72.6
8	Karnataka	179	262	580	863	120.6	108.9
9	Kerala	241	393	914	1,501	189.9	189.3
10	Madhya Pradesh	124	150	413	713	85.8	90.0
11	Maharashtra	175	258	535	816	111.1	102.9
12	Orissa	128	190	413	816	85.8	102.9
13	Punjab	245	287	614	923	127.6	116.4
14	Rajasthan	165	253	564	1,012	117.3	127.6
15	Tamil Nadu	191	302	706	1,063	146.7	134.0
16	Telangana	NA	NA	674	1,104	140.1	139.2
17	Uttar Pradesh	94	179	358	567	74.4	71.5
18	West Bengal	165	229	445	679	92.5	85.6
	Weighted average*	147	229	481	793	94.7	95.6
	Simple average	156	244	526	886	-	-
Small and hilly states							
1	Arunachal Pradesh	563	1,002	2,173	3,851	183.4	221.6
2	Goa	668	1,134	2,712	4,240	229.0	244.0
3	Himachal Pradesh	449	690	1,364	1,949	115.2	112.2
4	Jammu and Kashmir	405	582	1,097	1,411	92.6	81.2
5	Manipur	272	355	966	1,361	81.6	78.3
6	Meghalaya	337	469	1,124	1,688	94.9	97.1
7	Mizoram	724	1,271	2,020	3,070	170.5	176.6
8	Nagaland	395	683	1,382	2,495	116.7	143.5
9	Sikkim	725	1,291	2,404	3,135	203.0	180.4
10	Tripura	264	387	799	1,324	67.5	76.2
11	Uttarakhand	160	367	826	1,257	69.7	72.3
	Weighted average*	359	578	1,185	1,738	233.1	209.6
	Simple average	451	748	1,533	2,344	-	-
	All-states - Weighted average*	155	242	508	829	100.0	100.0
	All-states - Simple average	272	442	908	1,439	-	-

Source (Basic data): RBI, MOSPI and CAG; *Weighted by respective population

Differences in per-capita expenditures by the states on education/health may arise due to a number of reasons. The per-capita expenditures may be lower than the corresponding averages due to (a) Lower per-capita GSDP or lower per-capita fiscal capacity, (b) Lower preference for the respective service, (c) Higher user disability and (d) Higher cost disability. All factors may be considered in per-capita terms. User disability may arise because of the demographic structure such as the large share of tribal or backward population. Cost disability may arise due to

higher unit cost of providing these services resulting from the nature of terrain such as hilly areas and remote districts. In order to ensure equalization in the level of per-capita expenditures of these critical services, policymakers may focus on states with below-average expenditure and attempt to neutralize their fiscal capacity deficiency or their user or cost disability.

Chart 11: Per-capita education expenditure (medium and large states) during FY16-17

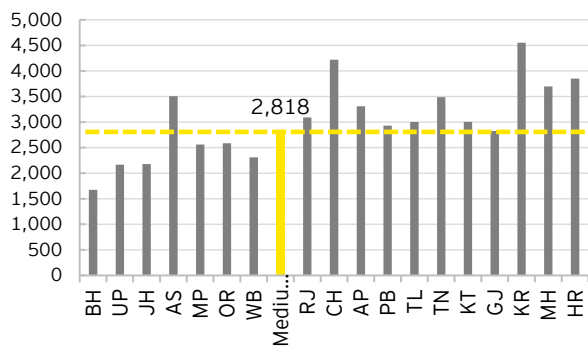
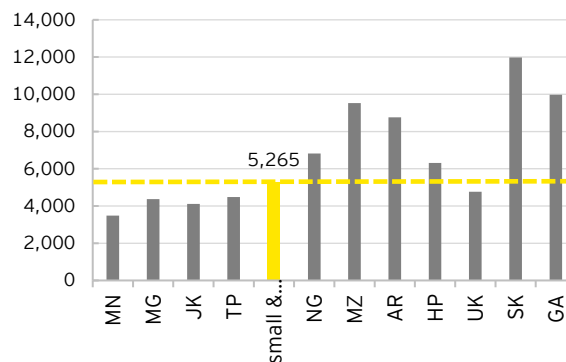


Chart 12: Per-capita education expenditure (hilly and small states) during FY16-17



Source (Basic data): RBI, MOSPI and CAG; Note: Scales are different for the two charts

Chart 13: Per-capita health expenditure (medium and large states) during FY16-17

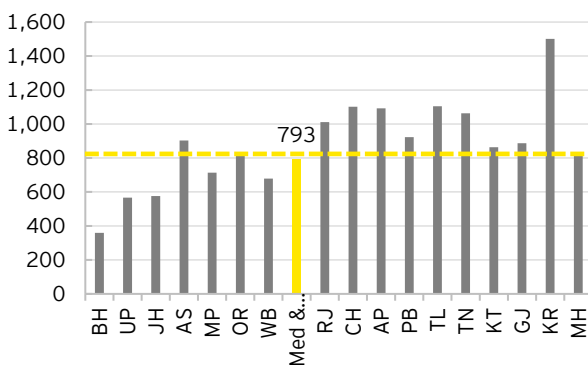
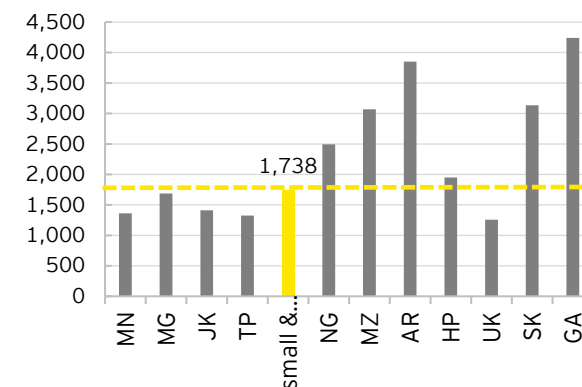


Chart 14: Per-capita health expenditure (hilly and small states) during FY16-17



Source (Basic data): RBI, MOSPI and CAG; Note: Scales are different for the two charts

In Charts 11, 12, 13 and 14, states in their respective groups are arranged in increasing order of their per-capita GSDP during the 14th FC period. It can be broadly inferred that states with relatively lower per-capita GSDP have lower per-capita health and education expenditures.

A key task before the 15th FC is to design a scheme of fiscal transfers that would uplift the state expenditures on education and health in states like Bihar, Uttar Pradesh, Jharkhand, Madhya Pradesh, West Bengal and Odisha in the case of medium and large states. The corresponding states for the group of small and hilly states are Manipur, Meghalaya, Jammu and Kashmir and Tripura.

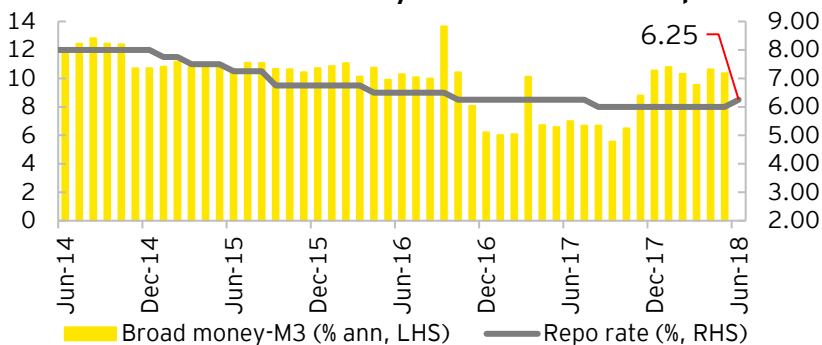
6. Money and finance: Continued pressure on CPI inflation may prompt the RBI to go for another rate hike

A. Monetary sector

Monetary policy

- ▶ The RBI, in its monetary policy review in June 2018, had announced its first rate hike in 54 months by 25 bps to 6.25%. Both domestic and global factors such as inflation, asset quality of banks, crude oil prices, US Fed rate hike cycle, etc. had influenced this decision of the Monetary Policy Committee (MPC) which had unanimously voted for a rate hike.
- ▶ In RBI's assessment, domestic economic recovery may face headwinds on account of geo-political risks, global financial market volatility and the threat of trade protectionism. On the inflation outlook, higher crude prices continue to pose upside risks. Further, a possible slippage in the fiscal deficit targets by both central and state governments may add to the pressure.

Chart 15: Growth in broad money and movements in repo rate



Given continued inflationary pressures, the RBI may consider another hike in the repo rate in its August 2018 monetary policy review over the 25 basis points hike undertaken in June 2018.

Source: Source: Database on Indian Economy, RBI.

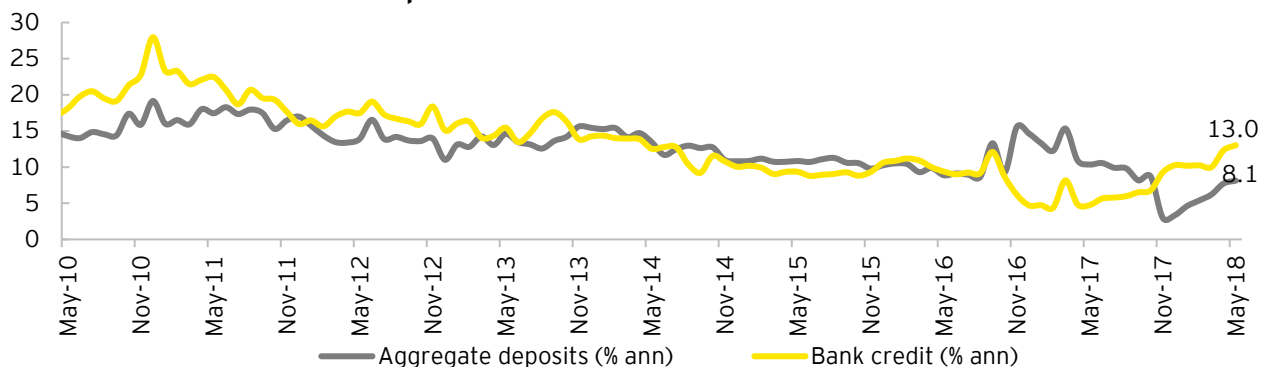
Money stock

- ▶ Growth in broad money stock (M3) marginally fell to 10.4% (y-o-y) in May 2018 from 10.6% in April 2018 (Chart 15). Time deposits, which accounts for over 76% of the broad money stock, grew by 7.7% in May 2018, similar to the growth seen in April 2018.
- ▶ Growth in narrow money (M1) was at 20.7% in May 2018 owing to a favorable base effect. Narrow money growth, however, has been gradually falling since December 2017. Eventually, once the base effect wanes and the currency in circulation returns to its trend growth, growth in narrow money is likely to stabilize around its 10-year average growth of 12%.

Aggregate credit and deposits

- ▶ Showing signs of revival, growth in scheduled commercial bank credit improved for the second consecutive month to a 49-month high of 13.0% in May 2018 from 12.3% (revised) in April 2018 (Chart 16). Credit growth is likely to improve further due to a pick-up in investment demand, higher budgeted government spending on infrastructure and improved demand for working capital.

Chart 16: Growth in credit and deposits



Source: Database on Indian Economy, RBI.



- ▶ Non-food credit grew further to 11.1% in May 2018 (y-o-y) from 10.7% in April 2018 led by higher credit growth in services sector and housing credit. Growth in credit to the services sector remained elevated at 21.9% in May 2018 as compared to 20.7% in April 2018 while credit to industries remained low at about 1.4% in May 2018.
- ▶ Although the growth momentum of personal loans continued, growth was marginally lower at 18.6% in May 2018 as compared to 19.1% in April 2018. Credit growth to housing sector increased by 15.5% while that of consumer durables rose to a 14-month high of 17.0% in May 2018 after having contracted for 12 successive months.
- ▶ Growth in aggregate bank deposits marginally improved to 8.1% (y-o-y) in May 2018 from a revised growth of 7.7% in April 2018. Aggregate deposit growth continued to average well below its 10-year average growth of 14%.

B. Financial sector

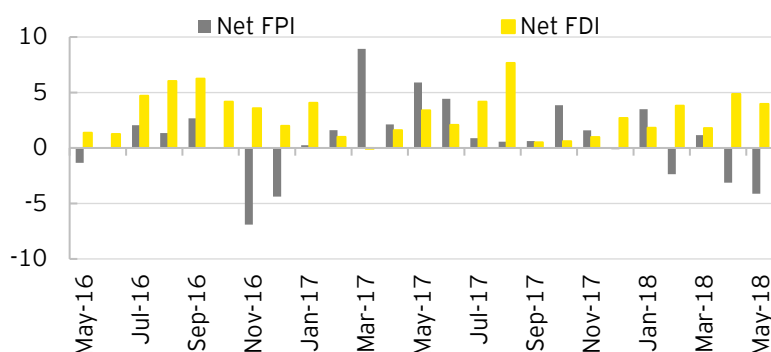
Interest rates

- ▶ As per the data released by RBI, interest rates offered by banks on term deposits with a maturity of more than one year was increased by an average of 10 basis points to 6.60% (average) in June 2018 from 6.50% in May 2018.
- ▶ Following the upward revision of the repo rate, banks have increased their marginal cost of fund-based lending rate (MCLR) to average around 7.93% in June 2018 from 7.88% during May 2018. Further hike in repo rate may prompt banks to revise the MCLR upwards in the coming months, thereby pushing up the borrowing costs.
- ▶ The average yield on 10-year government securities, an indicator of investor sentiment in domestic fixed income market, increased to a 42-month high of 7.94% in June 2018 from 7.83% in May 2018. Benchmark yields have witnessed its steepest increase in June 2018 in the last three years, amidst concerns over higher inflation and worsening fiscal and current account deficit position. If these macro imbalances persist, the benchmark yields are likely to harden further in the coming months.

FDI and FPI

- ▶ As per the provisional data released by the RBI, overall foreign investment inflows turned negative for the first time in 17 months registering an outflow of US\$0.1 billion. Net FPI outflows have more than offset the net FDI inflows during the month.

Chart 17: Net FDI and FPI inflows



Net FPI outflows touched a 17-month high of US\$4.1 billion in May 2018. Sustained foreign investment outflows along with rising crude prices may pose significant risks to the rupee in the months ahead.

Source: Source: Database on Indian Economy, RBI.

- ▶ Though net FDI inflows remained strong at US\$4.0 billion in May 2018, they were lower than US\$4.8 billion registered in April 2018 (Chart 17). Gross FDI inflows amounted to US\$6.2 billion in May 2018, moderating from US\$6.6 billion in April 2018.
- ▶ In response to both domestic and global factors including widening fiscal and current account deficit and rising crude oil prices, net FPI outflows increased further for the second consecutive month to US\$4.1 billion in May 2018 from US\$3.1 billion in April 2018.

7. Trade and CAB: Merchandise trade balance reached a 65-month high in June 2018

A. CAB: Current Account Deficit (CAD) remained elevated at 1.9% of GDP in 4QFY18

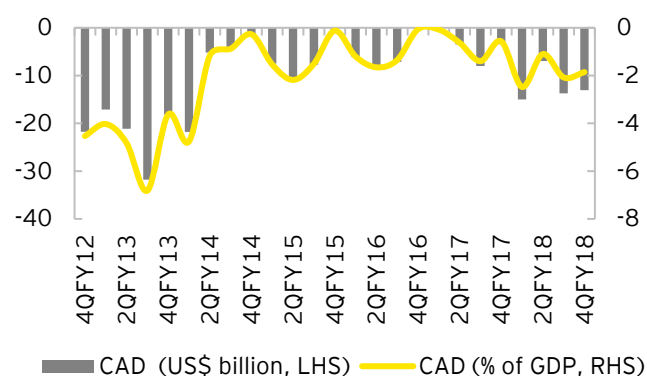
- CAD in 4QFY18 remained elevated due to the combined effect of a high net merchandise trade deficit at US\$41.6 billion and lower net invisible receipts at US\$28.6 billion. On an annual basis, CAB in FY18 deteriorated significantly to (-) 1.9% GDP from (-) 0.7% of GDP in FY17 on account of a higher net merchandise trade deficit driven by the impact of rising global oil prices on the Oil Import Bill (Table 6). Higher oil prices and a widening trade deficit are expected to keep CAD elevated in Q1FY19 as well.

Table 6: 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 18: CAD



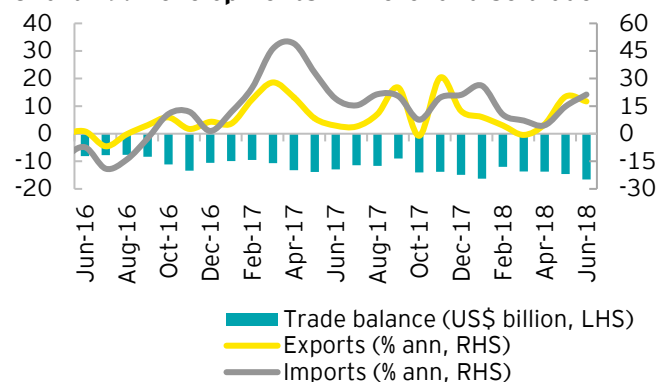
Source: Database on Indian Economy, RBI.

B. Merchandise trade and exchange rate

In June 2018, merchandise exports grew at 17.6% but merchandise imports grew at an even higher rate of 21.3%, leading to a widening trade deficit.

- Merchandise export growth remained elevated at 17.6% in June 2018 as compared to 20.2% in May 2018 (Chart 19) driven by high growth in exports of oil and engineering goods.

Chart 19: Developments in merchandise trade



Source: Ministry of Commerce and Industry, GoI

- Oil exports grew at a high rate of 52.5% in June 2018 as compared to an all-time high rate of 104.5% in May 2018 as oil prices remained elevated.

- Growth in engineering goods remained in double digits for the third consecutive month at 14.2%. Growth in gems and jewelry exports turned positive at 2.7% after four successive months of contraction.

- Imports growth reached a five-month high of 21.3% in June 2018 from 14.9% in May 2018 driven by stronger growth in oil imports accompanied by a slowdown in the pace of contraction in gold imports.

- Growth in oil imports fastened to a 15-month high of 56.6% in June 2018 from 49.5% in May 2018.

- Gold imports contracted for the sixth successive month by (-) 2.8% in June 2018, although at the slowest pace over the last six months, as compared to (-) 29.8% in May 2018.

- Growth in non-oil and non-jewelry exports picked up to 15.1% in June 2018 from 13.8% in May 2018. Growth in non-oil and non-jewelry imports however moderated marginally to 16.9% in June 2018 from 18.1% in May 2018.

- The Indian rupee depreciated to a 17-month low of INR67.8 per US dollar in June 2018 from INR67.5 per US dollar in May 2018 partly on account of sustained foreign portfolio investments outflows.

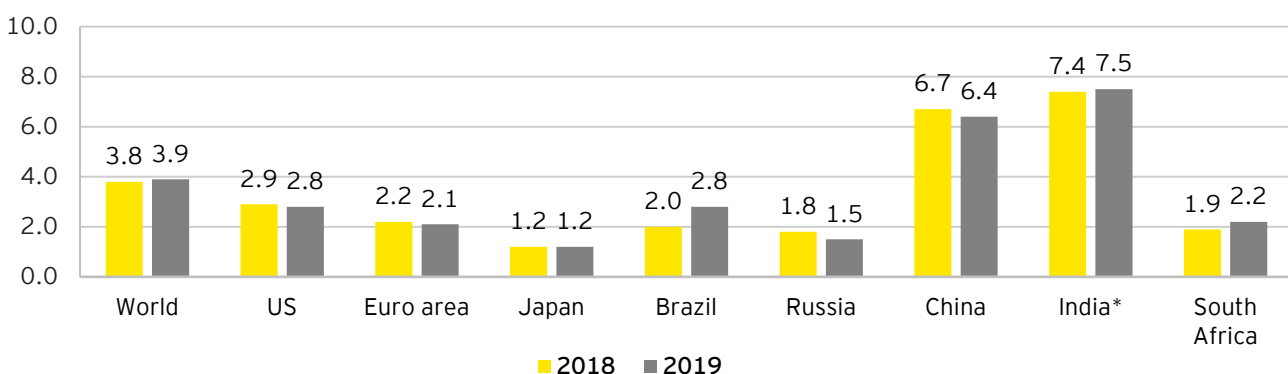
8. Global growth: OECD projected global growth to recover to the pre-crisis levels in 2018 and 2019

A. Global growth outlook

- ▶ The OECD (Economic Outlook, June 2018) has estimated the global GDP growth at 3.8% in 2018 and 3.9% in 2019, indicating a return to the average growth rates in the pre-crisis period (Chart 20). However, a significant difference is that the current recovery is largely driven by highly accommodative monetary and fiscal policies.
- ▶ Growth in advanced economies is projected at an average of 2.5% in 2018 and 2019 led by supportive macroeconomic policies, strong job growth and a recovery in investment.
- ▶ In the US, GDP growth is projected at 2.9% in 2018, moderating marginally to 2.8% in 2019. Fiscal easing in the US is projected to support investment and output growth in 2018-19, but fiscal tightening is expected from 2020 and higher government debt levels would add to medium-term challenges.
- ▶ Growth in the euro area is forecasted to remain robust and broad-based at 2.2% in 2018 and 2.1% in 2019, with additional fiscal easing projected in many European countries, including Germany, adding to the boost provided by accommodative monetary policy and improving labor markets.
- ▶ Growth prospects in EMEs are projected to be robust in 2018-19. However, this masks diverging developments across countries.
- ▶ Growth in China is forecasted at 6.7% in 2018 moderating to 6.4% in 2019. Macroeconomic and regulatory policies are gradually becoming more restrictive as fiscal policy is currently broadly neutral and credit conditions are less expansionary.
- ▶ In India, growth is forecasted at 7.4% in 2018 (FY19) and 7.5% in 2019 (FY20) supported by robust domestic demand growth. It is expected that past reforms would enable a strong rebound in private investment growth.

The OECD projected the global growth to pick up to around 4% in 2018 and 2019, returning to the average growth rates in the pre-crisis period. The current expansion is supported by accommodative monetary policy in the advanced economies and fiscal policy easing.

Chart 20: Global growth projections



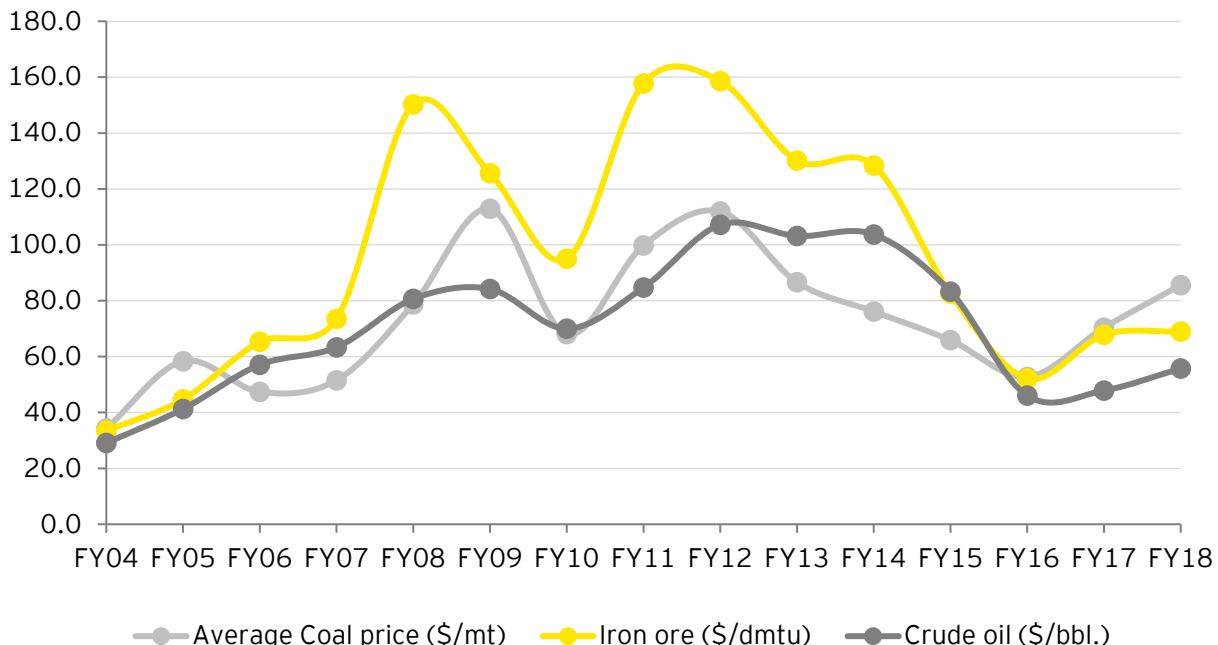
Source: OECD Economic Outlook, June 2018
*growth rates pertain to FY19 and FY20

B. Global energy and metal prices

Average global crude prices averaged US\$55.7/bbl. in FY18, up from US\$47.8/bbl. in FY17. More recently, these prices increased to US\$73.4/bbl. in May 2018 due to strong consumption and supply disruptions in Iran and Venezuela.

- ▶ On an annual basis, average global crude price¹ had fallen to a low of US\$46.0/bbl. in FY16 (Chart 21) from its high levels of more than US\$100/bbl. during FY12 to FY14. Prices began to recover in FY17 and FY18. In 4QFY18, prices averaged US\$64.6/bbl., up from US\$58.7/bbl. in 3QFY18 on account of strong consumption demand and curtailed supply. As a result of the US sanctions imposed on Iran in May 2018, Iran's crude exports in June 2018 fell by about 230 kb/d, from a relatively high level in May 2018, as European purchases dropped by nearly 50%. However, any increase in the production from Saudi Arabia, Russia or the US could partly neutralize the current supply shortages putting a downward pressure on prices (Oil Market Report, IEA, June 2018).
- ▶ Average global coal price² had also dipped to US\$52.7/mt. in FY16 from its peak of US\$111.9/mt. in FY12. Prices recovered in FY17 and FY18 mainly due to strong consumption in China spurred by cold weather, low inventories and production constraints. However, coal consumption faces long-term structural declines in several consuming regions for both economic and policy reasons. The World Bank projected the global coal prices to average US\$85/mt. in 2018, down slightly from 2017.
- ▶ Among the metals, iron ore price had fallen sharply to US\$52.2/dmtu in FY16. It recovered to US\$67.8/dmtu in FY17 and US\$69.0/dmtu in FY18 but remained much below the historic peak reached in FY08 and more recently in FY12. For 2018, the World Bank has projected its price to decline by 11% largely due to an oversupply led by China.

Chart 21: Global energy and metal prices (growth in %, annual)



Source (Basic Data): Pink Sheets, World Bank

¹ Simple average of three spot prices, namely, Dated Brent, West Texas Intermediate and Dubai Fateh.

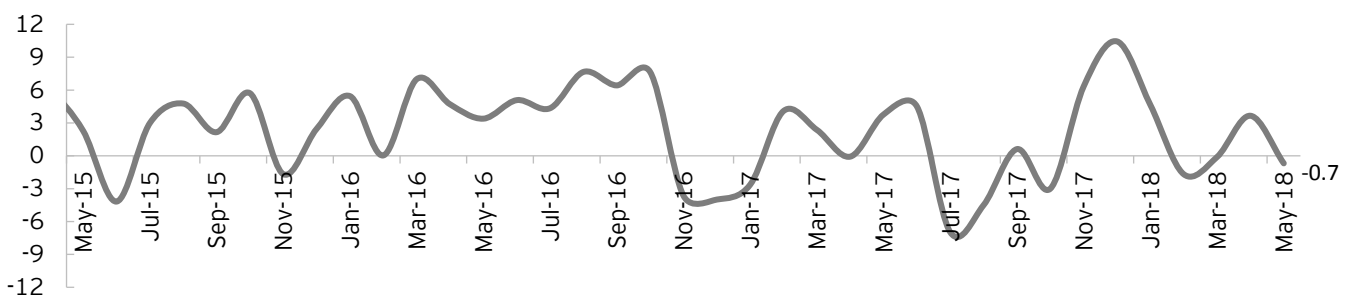
² Simple average of Australian, Columbian and South African coal prices

9. Index of Aggregate Demand (IAD): Pointed towards weakening demand conditions

Reflecting subdued demand conditions in the services and industrial sector, IAD contracted to (-) 0.7% in May 2018 as compared to a growth of 3.7% in April 2018.

- ▶ An IAD has been developed to reflect the combined demand conditions in the agriculture, manufacturing and services sectors on a monthly basis. It takes into account movements in PMI for manufacturing and services, both measured in non-seasonally adjusted terms, tracing the demand conditions in these sectors. Demand conditions in the agricultural sector have been captured by movements in monthly agricultural credit off-take.
- ▶ The sectoral weights in constructing the IAD are based on their respective shares in nominal GVA in the base year (2011–12): Agriculture **(18.4)**, industry **(33.1)** and services **(48.5)**.
- ▶ The y-o-y growth in index of aggregate demand contracted to (-) 0.7% in May 2018 following a growth of 3.7% in April 2018 (Chart 22).
- ▶ This was largely on account of a weakening demand conditions in the services and manufacturing sectors. The demand conditions in service sector contracted while that in industrial sector moderated in May 2018. In agricultural sector, however, they improved during the month (Table 7).

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



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

Table 7: IAD

Month	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
IAD	122.9	122.5	117.2	123.9	121.7	119.0	124.1	125.2	122.2
Growth (% y-o-y)	0.6	-3.0	6.3	10.4	4.6	-1.7	-0.1	3.7	-0.7
Growth in agr. credit	5.8	5.5	8.4	9.5	9.4	9.0	3.8	5.9	6.4
Mfg. PMI**	1.6	0.5	3.1	4.5	0.0	2.0	1.6	2.2	1.7
Ser. PMI**	1.9	2.9	-4.6	0.9	1.4	-3.2	1.8	2.7	-0.1

**Values here indicate deviation from benchmark value of 50. A positive value indicates expansion while a negative value implies contraction in demand.

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

10. 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
Q1FY18	1.9	1.1	1.6	5.3	2.5	Q2FY18	50.1	48.0
Q2FY18	3.3	7.1	2.5	6.1	4.0	Q3FY18	52.5	50.4
Q3FY18	5.9	0.8	7.0	3.8	5.2	Q4FY18	51.8	49.9
Q4FY18	6.3	1.1	7.2	6.1	5.3	Q1FY19	52.0	51.2
Feb-18	6.9	-0.4	8.4	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	4.8	4.0	5.3	2.1	4.6	May-18	51.2	49.6
May-18	3.2	5.7	2.8	4.2	3.6	Jun-18	53.1	52.6

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
Q2FY18	3.0	0.8	5.1	4.4	2.8	2.9	2.5	8.2	2.6
Q3FY18	4.6	3.7	7.5	4.8	3.8	3.5	2.7	9.1	3.1
Q4FY18	4.6	3.6	6.8	5.1	2.8	0.6	3.1	4.7	3.8
Q1FY19	4.8	2.9	6.0	6.0	4.6	1.2	3.7	11.8	4.3
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	3.6	0.8	3.3	8.0	3.8
May-18	4.9	3.1	5.8	6.1	4.4	1.1	3.7	11.2	4.4
Jun-18	5.0	2.9	7.1	6.3	5.8	1.6	4.2	16.2	4.8

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
	Cumulated growth (% , y-o-y)					% of budgeted target	
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	113.6	139.5
Jan-18	17.0	19.0	17.5	18.4	15.6	113.7	109.4
Feb-18	15.8	19.7	17.7	18.8	13.0	120.3	119.5
Mar-18	11.8	17.8	19.9	18.6	6.0	99.5	101.1
Apr-18	58.7	24.0	2.5	5.9	130.3	24.3	25.5
May-18	29.9	-82.7	4.8	-13.7	59.3	55.3	68.0

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. For the months from January 2018 to March 2018 fiscal deficit and revenue deficit values are estimated as percentage of revised estimates.

Fiscal year/ Month	CGST	UTGST	IGST	GST compensation cess	Total GST (Centre)
	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)				
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
Apr-18	32,089	90	19,996	8,503	60,678
May-18	28,119	54	16,932	7,201	52,306

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

Note: IGST revenues are subject to final settlement.

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

Fiscal year/ Month	Repo rate (end of period)	Fiscal year/Quarter/Month	M1	M3	Bank credit	Agg. deposits	10 yr. Govt. B Yield	Net FDI	Net FPI	FX reserves
	%		% change y-o-y				%	US\$ billion	US\$ billion	US\$ billion
Aug-17	6.00	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	341.6
Sep-17	6.00	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	355.6
Oct-17	6.00	FY17	3.1	10.1	7.9	11.6	7.0	35.6	7.6	370.0
Nov-17	6.00	FY18	22.1	9.5	7.5	7.5	7.0	30.3	22.1	424.4
Dec-17	6.00	Q1FY18	1.3	7.0	5.1	10.6	7.0	7.1	12.5	399.7
Jan-18	6.00	Q2FY18	1.6	5.6	6.1	9.3	6.6	12.4	2.1	409.4
Feb-18	6.00	Q3FY18	45.8	10.6	8.8	4.9	7.1	4.3	5.3	424.4
Mar-18	6.00	Q4FY18	22.1	9.5	10.1	5.4	7.5	6.4	2.3	406.1
Apr-18	6.00	Feb-18	32.2	10.3	10.2	5.4	7.6	2.7	-2.4	424.4
May-18	6.00	Mar-18	22.1	9.5	10.0	6.2	7.6	2.1	1.2	420.4
Jun-18	6.25	Apr-18	22.0	10.6	12.3	7.7	7.5	4.8	-3.1	412.8
Jul-18	6.25	May-18	20.7	10.4	13.0	8.1	7.8	4.0	-4.1	406.1

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
Q2FY18	13.4	19.1	-32.1	64.3	50.2	85.9	2016	3.2	1.7	4.4
Q3FY18	13.1	16.1	-42.7	64.7	58.7	90.0	2017	3.8	2.3	4.8
Q4FY18	3.9	13.9	-42.0	64.3	64.6	91.2	2018*	3.9	2.5	4.9
Q1FY19	14.2	13.5	-44.9	67.0	47.4	61.2	2019*	3.9	2.2	5.1
Mar-18	-0.7	7.1	-13.7	65.0	64.2	86.1	2020*	3.8	1.7	5.1
Apr-18	5.2	4.6	-13.7	65.6	68.8	87.6	2021*	3.8	1.7	5.1
May-18	20.2	14.9	-14.6	67.5	73.4	95.9	2022*	3.7	1.5	5.0
Jun-18	17.6	21.3	-16.6	67.8	NA	NA	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
Q4FY16	8.7	1.0	12.3	14.2	7.6	4.6	13.1	8.8	6.1	2.6
Q1FY17	8.3	4.3	10.5	9.9	12.4	3.0	8.9	10.5	7.7	1.2
Q2FY17	7.2	5.5	9.1	7.7	7.1	3.8	7.2	8.3	8.0	2.3
Q3FY17	6.9	7.5	12.1	8.1	9.5	2.8	7.5	2.8	10.6	2.8
Q4FY17	6.0	7.1	18.8	6.1	8.1	-3.9	5.5	1.0	16.4	5.1
Q1FY18	5.6	3.0	1.7	-1.8	7.1	1.8	8.4	8.4	13.5	2.3
Q2FY18	6.1	2.6	6.9	7.1	7.7	3.1	8.5	6.1	6.1	2.9
Q3FY18	6.6	3.1	1.4	8.5	6.1	6.6	8.5	6.9	7.7	3.8
Q4FY18	7.6	4.5	2.7	9.1	7.7	11.5	6.8	5.0	13.3	2.9
	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			
Q4FY16	9.0	11.8	2.4	3.9	-1.6	-3.7	1.6			
Q1FY17	8.1	8.3	8.3	15.9	3.6	0.1	2.7			
Q2FY17	7.6	7.5	8.2	10.5	2.4	-0.4	2.9			
Q3FY17	6.8	9.3	12.3	8.7	6.7	10.1	3.8			
Q4FY17	6.1	3.4	23.6	4.2	6.6	6.6	4.5			
Q1FY18	5.6	6.9	17.6	0.8	5.9	18.5	2.6			
Q2FY18	6.3	6.8	3.8	6.1	6.8	10.0	3.0			
Q3FY18	7.0	5.9	6.8	9.1	6.2	10.5	3.8			
Q4FY18	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	BE	Budget Estimate
6	CAB	Current account balance
7	CGA	Comptroller General of Accounts
8	CGST	Central Goods and Services Tax
9	Cons.	Construction
10	CPI	Consumer Price Index
11	CSO	Central Statistical Organization
12	Disc.	Discrepancies
13	dmtu	Dry metric ton unit
14	Elec.	Electricity, gas, water supply and other utility services
15	EMDEs	Emerging market and developing economies
16	EXP	Exports
17	FC	Finance Commission
18	FII	Foreign investment inflows
19	Fin.	Financial, real estate and professional services
20	FMCG	Fast moving consumer goods
21	FPI	Foreign portfolio investment
22	FY	Fiscal year (April–March)
23	GDP	Gross Domestic Product
24	GFCE	Government final consumption expenditure
25	GFCF	Gross fixed capital formation
26	GoI	Government of India
27	GST	Goods and Services Tax
28	GVA	Gross value added
29	IAD	Index of Aggregate Demand
30	IEA	International Energy Agency
31	IGST	Integrated Goods and Services Tax
32	IIP	Index of Industrial Production
33	IMI	Index of Macro Imbalance
34	IMP	Imports
35	IPD	Implicit price deflator
36	LAF	Liquidity adjustment facility
37	MCLR	Marginal cost of funds based lending rate
38	Ming.	Mining and quarrying
39	Mfg.	Manufacturing
40	m-o-m	Month-on-month
41	mt	Metric ton
42	MPC	Monetary Policy Committee
43	NDU	Non-departmental undertaking
44	NEXP	Net exports (exports minus imports of goods and services)
45	PFCE	Private final consumption expenditure
46	PMI	Purchasing Managers' Index (reference value = 50)
47	RE	Revised estimate
48	ToR	Terms of Reference
49	Trans.	Trade, hotels, transport, communication and services related to broadcasting
50	UTGST	Union territory goods and services tax
51	WPI	Wholesale Price Index
52	y-o-y	Year on year

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EYIN1807-017

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