Economy Watch

Monitoring India's macro-fiscal performance

September 2018

EY
Building a better working world

Contents

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Highlights

1. **Real GDP grew at a strong pace of 8.2% in 1QFY19**, its fastest growth since 1QFY17.

2. **CPI inflation moderated to 3.7% in August 2018** after remaining above 4% for nine months.

3. **Rupee has depreciated by more than 14% against the US$ since mid-January 2018.**

4. **The US domestic and trade policies have triggered an inward flow of US$, putting pressure on other emerging market currencies** including Turkish Lira, Iranian Rial, Brazilian Real, Russian Rouble and Chinese Yuan.

5. **The RBI may increase the policy rate in its October 2018 monetary policy review to arrest the fall in the rupee** although the **decline in the CPI inflation rate signals no need for a change just yet.**

6. As per CGA, **centre's gross tax revenues grew by 11.7% during April-July FY19** led by higher growth in indirect taxes.

7. **Growth in center's capital expenditure was 17% during April-July FY19 while that in revenue expenditure was 9.1%.**

8. **Center's fiscal deficit during April-July FY19 was 86.5% of its FY19 annual budgeted target.** The corresponding number for revenue deficit was 106.4%.

9. According to the projections by US EIA, **the average annual price of Brent crude is likely to reach US$72.84/bbl. in 2018,** increasing to US$73.68/bbl. in 2019.

10. **Current account deficit reached a four-quarter high of 2.4% of GDP in 1QFY19.**

Foreword

India's growth prospects remain robust while Rupee depreciates

In its annual report of 2017-18, the RBI estimates robust growth prospects for the Indian economy, estimating GDP growth at 7.4% for 2018-19. This is slightly higher than IMF's forecast of 7.3%. The RBI advocates emphasis on infrastructure spending and increased employment intensity as key to achieving and sustaining a high level of growth. It advocates continuation of structural reforms in covering resolution of banking and corporate financial stress, further taxation reforms, liberalization of the economy's external interface and agricultural reforms for achieving sustainable growth. The RBI considers escalation of trade tensions and intensification of geopolitical risks among major headwinds for the Indian economy. The RBI also sees headline inflation as facing upside risks particularly due to rising global commodity prices, including those of crude oil and the staggered impact of HRA revisions by various state governments. Averaging its quarterly estimates for 2018-19, RBI's estimate for annual average inflation is 4.8%. RBI also sees fiscal risks emanating from the forthcoming general elections, increased burden of farm loan waivers and implementation of revisions of pay, pensions and allowances. Furthermore, global headwinds might adversely affect India's external sector particularly due to the elevated crude oil prices.

The Indian Rupee has been under pressure, having recorded a fall of more than 14% since mid-January 2018. This pressure is arising from both the current and capital accounts of the balance of payments. Usually, an increase in current account deficit could be financed by surpluses on the capital account. At the present juncture, merchandise trade deficit on account of oil is increasing because of higher crude prices and the depreciating Rupee. As the trade account and therefore the current account goes into larger deficit, it would become difficult to finance it by capital account surplus at the current exchange rate. Most foreign currency inflows are now headed towards the US because of its domestic as well as trade policies. These include a substantive reduction in the effective corporate tax rate and progressive increase in the interest rate as well as the hike in tariff rates to encourage import substitution. US Fed has also raised the policy rate by another 25 basis points, bringing it now in the range of 2% to 2.25%. With foreign currency inflows being curbed across the EMEs including India, the needed surplus on capital account is getting squeezed and the balance might only be restored by drawing-down the foreign exchange reserves.

The government has come up with a slew of measures aimed at tackling both the merchandise trade account and the capital account. On the trade account, the policy aims at reducing non-essential imports and further incentivizing exports. In order to enhance capital flows into India, the corporates are being allowed some concessions like exemption from withholding tax and relaxation of exposure limits on foreign portfolio investors. Both sides of measures are likely to have positive effects at the margin.

The RBI has to take a call in its October 2018 policy review whether to increase the policy rate to arrest the ongoing depreciation of the Rupee. But the recent fall in CPI inflation gives an opposite signal. CPI inflation fell in August 2018 after a period of continuously remaining above 4% for nine months. This would indicate a policy of holding on to the current repo rate so as to continue to provide support to domestic investment.

The RBI, in its annual report for 2017-18, announced the much-awaited result of counting the returned specified bank notes (SBNs) after demonetization in November 2016. The RBI finally announced that INR15, 310.7 billion worth of SBNs comprising approximately 99.3% of the total demonetized currency has been returned to the RBI. It also noted that the velocity of currency in circulation declined gradually and has converged to its long-term trend. One notable change is that household gross financial saving held in the form of currency has increased to a level of 2.8% of gross national disposable income (GNDI) in FY18 as compared to (-) 2.0% in FY17, the year of demonetization.

The needed long-term structural reforms may include reducing dependence on imported crude. This requires further acceleration of investment into renewable energy and bringing forward the adoption of electronic vehicles in India. Incentivizing use of ethanol and accelerating domestically available oil and shale exploration may form a part of our medium-term strategy.

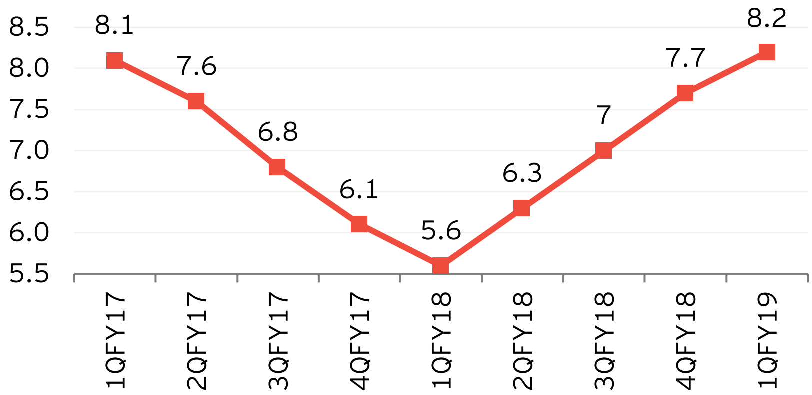
D.K. Srivastava
Chief Policy Advisor, EY India

1. Growth: GDP growth accelerated to 8.2% in 1QFY18

A. GDP growth: Strengthened further supported by domestic factors

- Real GDP grew at a strong pace of 8.2% in 1QFY19, its fastest rate since 1QFY17. After having fallen to a low of 5.6% in 1QFY18 from 8.1% in 1QFY17, the growth gradually picked up in each subsequent quarter thereby showing a V-shaped recovery (Chart 1).

Chart 1: GDP growth (y-o-y, %)



Source: MOSPI, GoI

- GDP growth in 1QFY19 was supported by growth in private final consumption expenditure (PFCE) and exports.
- Growth in PFCE accelerated to 8.6% in 1QFY19 from 6.7% in 4QFY18. PFCE growth in 1QFY19 was the highest in the last six quarters.
- Contribution from net exports although continued to remain negative at (-) 0.4% points in 1QFY19, it was significantly lower than (-) 1.5% points in 4QFY18.
- Growth in both GFCE and GFCF slowed to 7.6% and 10%, respectively in 1QFY19 as compared to 16.8% and 14.4% in 4QFY18 (Table 1).
- On the output side, GVA growth increased to 8.0% in 1QFY19 from 7.6% in 4QFY18. Growth momentum gained further traction led by higher growth in manufacturing, financial and real estate services.
- Growth in the manufacturing sector accelerated to a nine-quarter high of 13.5% in 1QFY19 while that in the financial and real estate services rose to 6.5% in 1QFY19.
- Though the construction sector grew at a strong pace of 8.7% in 1QFY19, it was lower as compared to the growth of 11.5% in 4QFY18. Similarly, the growth in public administration and defense was also lower at 9.9% in 1QFY19 as compared to 13.3% in 4QFY18.
- Growth in agricultural and allied sectors strengthened further to 5.3% in 1QFY19 from 4.5% in 4QFY18. Higher agricultural output is expected to support rural demand in the months ahead.

Table 1: Real GDP and GVA growth (%)

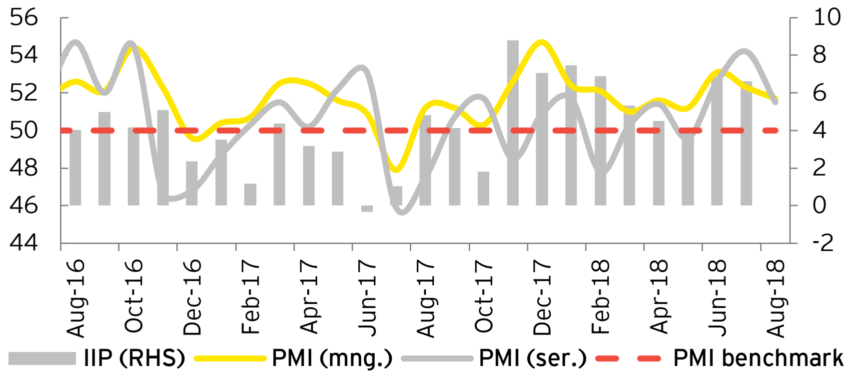
Aggregate demand (AD) component	*1Q FY17*	*2Q FY17*	*3Q FY17*	*4Q FY17*	*1Q FY18*	*2Q FY18*	*3Q FY18*	*4Q FY18*	*1Q FY19*
PFCE	8.3	7.5	9.3	3.4	6.9	6.8	5.9	6.7	8.6
GFCE	8.3	8.2	12.3	23.6	17.6	3.8	6.8	16.8	7.6
GFCF	15.9	10.5	8.7	4.2	0.8	6.1	9.1	14.4	10.0
EXP	3.6	2.4	6.7	6.6	5.9	6.8	6.2	3.6	12.7
IMP	0.1	-0.4	10.1	6.6	18.5	10.0	10.5	10.9	12.5
GDP	**8.1**	**7.6**	**6.8**	**6.1**	**5.6**	**6.3**	**7.0**	**7.7**	**8.2**
Sectoral real GVA growth (%)									
Agr.	4.3	5.5	7.5	7.1	3.0	2.6	3.1	4.5	5.3
Ming.	10.5	9.1	12.1	18.8	1.7	6.9	1.4	2.7	0.1
Mfg.	9.9	7.7	8.1	6.1	-1.8	7.1	8.5	9.1	13.5
Elec.	12.4	7.1	9.5	8.1	7.1	7.7	6.1	7.7	7.3
Cons.	3.0	3.8	2.8	-3.9	1.8	3.1	6.6	11.5	8.7
Trans.	8.9	7.2	7.5	5.5	8.4	8.5	8.5	6.8	6.7
Fin.	10.5	8.3	2.8	1.0	8.4	6.1	6.9	5.0	6.5
Publ.	7.7	8.0	10.6	16.4	13.5	6.1	7.7	13.3	9.9
GVA	**8.3**	**7.2**	**6.9**	**6.0**	**5.6**	**6.1**	**6.6**	**7.6**	**8.0**

Source (Basic Data): MOSPI., **Provisional estimates

B. IIP growth: Moderated to 6.6% in July 2018 due to a sharp slowdown in the growth of capital goods industry.

- IIP growth eased to 6.6% (y-o-y) in July 2018 from 6.9% (revised) in June 2018 (Chart 2) despite a relatively better performance by the manufacturing sector.
- Manufacturing sector output (accounting for 77.6% of overall IIP) grew at a faster pace of 7% in July 2018 as compared to 6.7% (revised) in June 2018. Growth in the output of both electricity and mining slowed to 6.7% and 3.7% respectively in July 2018 (Table A1).
- Output growth of capital goods industry, reflective of the investment demand in the economy, slowed to a four-month low of 3.0% in July 2018 from 9.8% (revised) in June 2018. Growth in the output of consumer durables accelerated further to 14.4% in July 2018. Growth in infrastructure/construction sector also increased to 8.4% in July 2018.
- Growth in the output of eight core infrastructure industries eased to 6.6% (y-o-y) in July 2018 from 7.6% in June 2018. Growth in the output of electricity (4.8%), coal (9.7) and cement (10.8%) slowed while that in crude oil [(-) 5.4%] and natural gas [(-) 5.2%] turned negative in July 2018 as compared to June 2018. However, petroleum refinery products (12.3%) and steel (6.0%) output witnessed relatively strong growth in July 2018.

Chart 2: IIP and PMI



Despite a strong growth in the manufacturing sector output, the overall IIP growth slowed to 6.6% in July 2018 as the output growth of capital goods industry moderated during the month.

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

C. PMI: Signaled a slower growth in both manufacturing and services in August 2018

- Headline manufacturing PMI (seasonally adjusted (sa)) was at 51.7 in August 2018 as compared to 52.3 in July 2018. It remained above the threshold of 50 for the 13th consecutive month but the rate of expansion eased for the 2nd successive month (Chart 2).
- Although the headline services PMI (sa) continued to expand, it fell to 51.5 in August 2018 from its 21-month peak of 54.2 in July 2018.
- Composite PMI Output Index (sa) fell to 51.9 in August 2018 from July's 21-month high of 54.1 driven by weaker growth in both manufacturing and services sectors.

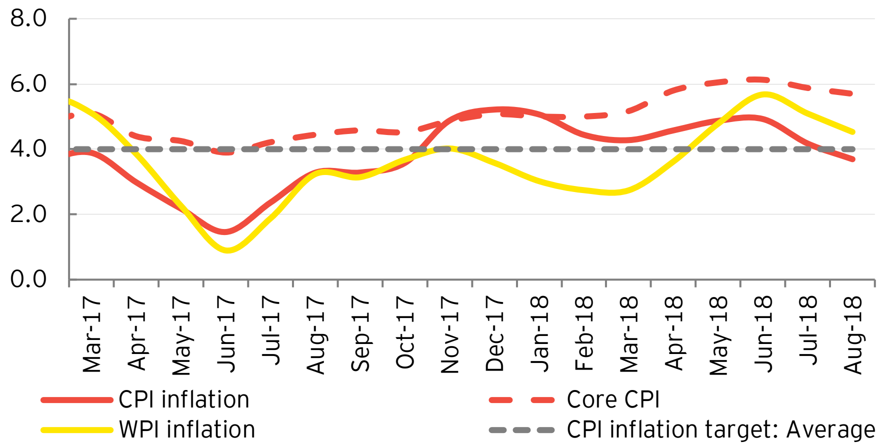
In August 2018, both manufacturing and services PMI remained above the threshold of 50 but the rate of expansion slowed in both cases.

2. Inflation: CPI inflation moderated to a 10-month low of 3.7% in August 2018

CPI inflation fell to a 10-month low of 3.7% (y-o-y) in August 2018 from 4.2% (y-o-y) in July 2018 (Chart 3) led by sharp contraction in vegetable prices.

- Contraction in vegetable prices sharpened to (-) 7.0% in August 2018 from (-) 2.3% in July 2018 as inflation in onion prices turned negative mainly due to base effect and tomato prices continued to contract for the sixth successive month.
- Inflation in transportation and communication services moderated to 6.0% in August 2018 from a 50-month high of 6.6% in July 2018 as inflation in petrol eased marginally on account of base effect.
- Fuel and light-based inflation strengthened to a 63-month high of 8.5% in August 2018 from 8.0% in July 2018 due to pressure from rising LPG prices.
- Housing inflation fell to a nine-month low of 7.6% in August 2018 from 8.3% in July 2018 due mainly to base effect.
- Core CPI inflation[1] eased to a five-month low of 5.7% in August 2018 from 5.9% in July 2018.

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



Source: MOSPI, Office of the Economic Advisor, GoI

Both CPI and WPI fell to 3.7% and 4.5% in August 2018 from 4.2% and 5.1% respectively in July 2018 primarily on account of softening inflation in food, especially vegetables.

WPI inflation eased to a four month low of 4.5% in August 2018 from 5.1% in July 2018 primarily on account of moderation in inflation in vegetables and fruits (Chart 3).

- Vegetables prices contracted at its fastest pace in 14 months by (-) 20.1% in August 2018 as compared to (-) 14.1% in July 2018. The pace of contraction in fruits prices also increased to an all-time (2011-12 series) high of (-) 16.4% in August 2018 from (-) 8.8% in July 2018.
- Prices of food articles contracted by (-) 4.0% in August 2018, the fastest pace in the 2011-12 series, as compared to a contraction of (-) 2.2% in July 2018.
- WPI-based inflation in manufactured products reached a 51-month high of 4.4% in August 2018 from 4.3% in July 2018.
- Fuel and power-based inflation remained elevated at 17.7% in August 2018 as compared to 18.1% in July 2018 on account of high inflation in petrol, diesel and electricity.
- WPI core inflation reached a 65-month high of 5.0% in August 2018 from 4.7% in July 2018 due to rise in prices of fabricated metal products.

[1] Core CPI inflation is measured in different ways by different organizations/agencies. Here, it has been calculated by excluding food and fuel and light from the overall index.

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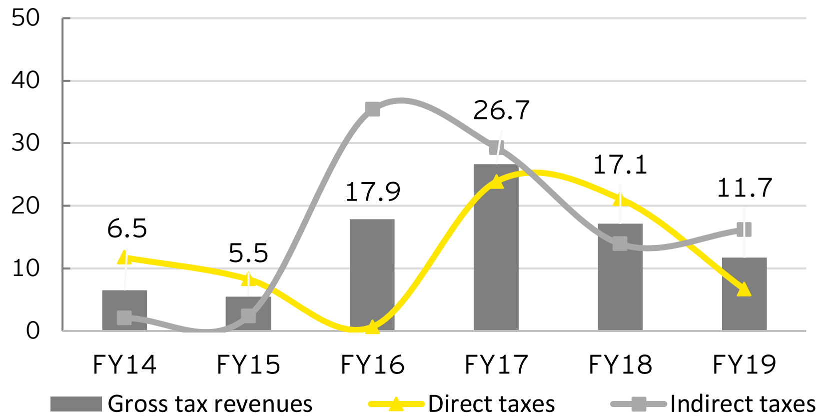
3. Fiscal performance: Revenue deficit up to July 2018 exceeded the FY19 annual budgeted target

A. Tax and non-tax revenues

- As per CGA, gross central taxes grew by 11.7% during April-July FY19, lower than 17.1% during April-July FY18 (Chart 4).
- During April-July FY19, gross taxes stood at 22.3% of the FY19 annual budgeted target, same as the three-year average (FY16 to FY18) during April-July as a percentage of annual actuals.
- Buoyancy of gross taxes for 1QFY19 stood at 1.6. While the direct tax buoyancy remained low at 0.5, indirect tax buoyancy was high at 2.6.
- Growth in corporate income remained subdued at 0.6% during April-July FY19 as compared to a growth of 24.2% during the corresponding period of FY18.
- Growth in personal income tax was also lower at 11.3% during April-July FY19 as compared to 18.8% 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 16.1% during April-July FY19, higher than 13.9% in the corresponding period of FY18.
- The centre's GST collection (CGST, UTGST, IGST* and GST compensation cess) up till July FY19 stood at INR1,88,326 crore which was 25.3% of the FY19 budget estimate (BE).

Chart 4: Growth in cumulated central tax revenues up to July 2018



As per CGA, centre's gross tax revenues grew by 11.7% during April-July FY19 led by higher growth in indirect taxes. Growth in gross taxes was at 17.1% in the corresponding period of FY18

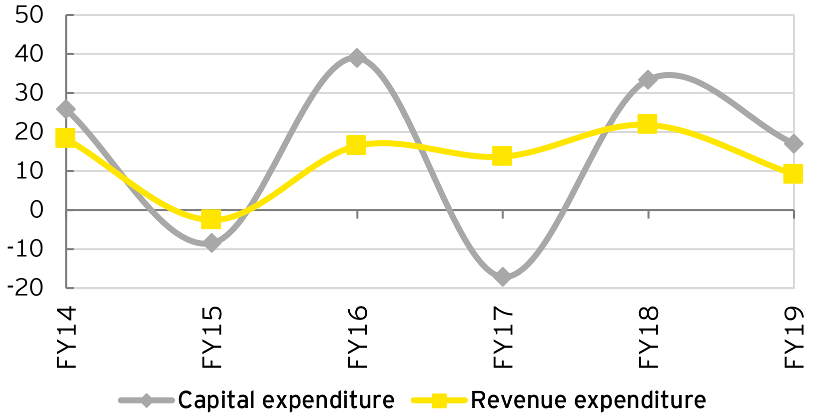
Source: Monthly Accounts, Controller General of Accounts, Government of India
Note: Direct taxes include personal income tax and corporation tax, and indirect taxes include union excise duties, service tax, customs duty, CGST, UTGST, IGST and GST compensation cess from July 2017 onwards; * IGST revenues are subject to final settlement.

- The centre's non-tax revenues grew by 30.1% during April-July FY19 as compared to a contraction of (-) 2.8% in the corresponding period of FY18.
- 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-July FY19 grew by 10.1% as compared to 23.1% in the same period in FY18 (Chart 5). During April-July FY19, total expenditure stood at 36.4% of the FY19 annual budgeted target.
- Growth in revenue expenditure was low at 9.1% during April-July FY19 as compared to 21.8% in the corresponding period of FY18.
- Center's capital expenditure grew by 17% during April-July FY19, lower than 33.5% in the corresponding period of FY18. Growth in cumulated capital expenditure during April-July depicts significant volatility over the years.

Chart 5: Growth in cumulated central government expenditure up to July 2018



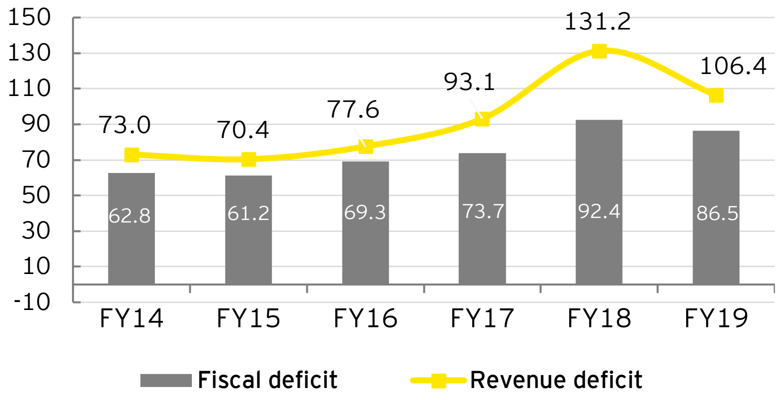
Growth in center's capital expenditure was 17% during April-July FY19 while that in revenue expenditure was 9.1%. These were lower than the respective growth rates in the corresponding period of FY18.

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

C. Fiscal imbalance

- The centre's fiscal deficit during April-July FY19 stood at 86.5% of the FY19 annual budgeted target as compared to 92.4% in the corresponding period of FY18 (Chart 6).
- The centre's revenue deficit during April-July FY19 exceeded the FY19 annual budgeted target. However, at 106.4%, revenue deficit up to July 2018 as percentage of annual budgeted target was still lower than 131.2% in the corresponding period of FY18.

Chart 6: Cumulated fiscal and revenue deficit up to July 2018 as percentage of annual budgeted target



Center's fiscal deficit during April-July FY19 was 86.5% of its FY19 annual budgeted target. The corresponding number for revenue deficit was 106.4%.

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

4. India in a comparative perspective: Status and prospects

Global growth outlook

OPEC projections show divergent growth trends among EMEs in 2018. India is projected to lead the selected set of economies with a growth of 7.6%.

- As per the OPEC Monthly Oil Market Report (September 2018), global economic growth for 2018 is projected at 3.8%, easing marginally to 3.6% in 2019.
- Challenges to growth outlook emanate from rising trade tensions, further potential monetary tightening by G4 central banks as also rising global debt levels.
- There is divergence in growth trends among EMEs. In 2018, India's growth is projected at 7.6%, followed by China at 6.6%. Russia is projected to grow by 1.6% and Brazil by 1.2%.

Table 2: Global growth projections

Country	2018 (f)	2019 (f)
World	3.8	3.6
OECD	2.4	2.1
India	7.6	7.4
China	6.6	6.2
US	2.9	2.5
Euro-zone	2.0	1.9
Russia	1.6	1.7
UK	1.3	1.4
Brazil	1.2	2.0
Japan	1.1	1.1

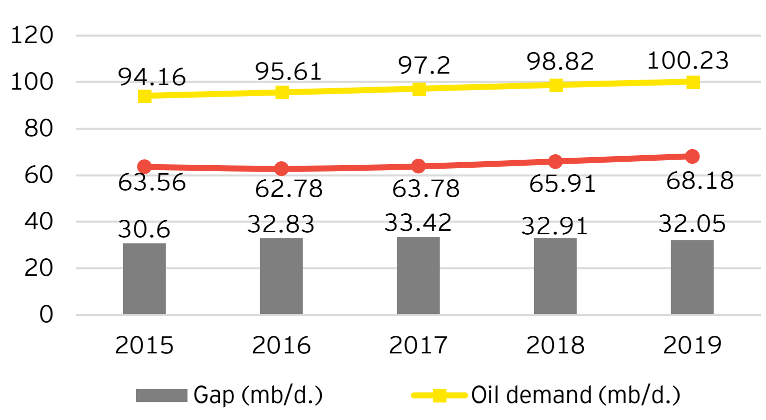
Source (basic data): OPEC Monthly Oil Market Report-September 2018

World oil demand-supply balance and prices

According to the projections by US EIA, the average annual price of Brent crude is likely to reach US$72.84/bbl. in 2018 and then to US$73.68/bbl. in 2019.

- As per the OPEC forecasts, world oil demand is expected to increase to 98.82mb/d. in 2018 from 97.20 mb/d. in 2017.
- For the first time, the world oil demand is likely to cross 100 mb/d. in 2019.
- The September 2018 Oil Market Report by the International Energy Agency stated that the oil demand from the non-OECD countries[2] would remain robust during the rest of 2018. However, risks to the 2019 outlook could emanate from depreciating currencies and the likelihood of further accentuation of the trade disputes.

Chart 7: World oil demand and supply balance [million barrels per day (mb/d.)]



Source (basic data): OPEC Monthly Oil Market Report-September 2018

- On the supply side, total world oil supply is likely to increase to 65.91 mb/d. in 2018 from 63.78 mb/d. With world oil supply likely to be relatively higher than demand, the demand-supply gap is estimated to be marginally lower at 32.91 mb/d. in 2018 as compared to 33.42 mb/d. in 2017.
- In its September 2018 Short-Term Energy Outlook, the US Energy Information Administration projected the Brent Crude price to average around US$72.84/bbl. in 2018 increasing from an average of US$ 54.15 /bbl. in 2017. It is projected to increase further to US$ 73.68/bbl. in 2019.

- These projections take into account the ongoing decline in Venezuelan and Iranian oil production. However, sustained increase in production of Saudi Arabia, Iraq and the US could offset these supply shortages.

[2] Non-OECD countries together accounted for 51.3% of the total world oil demand in 2017.

5. In focus: Managing India's exchange rate

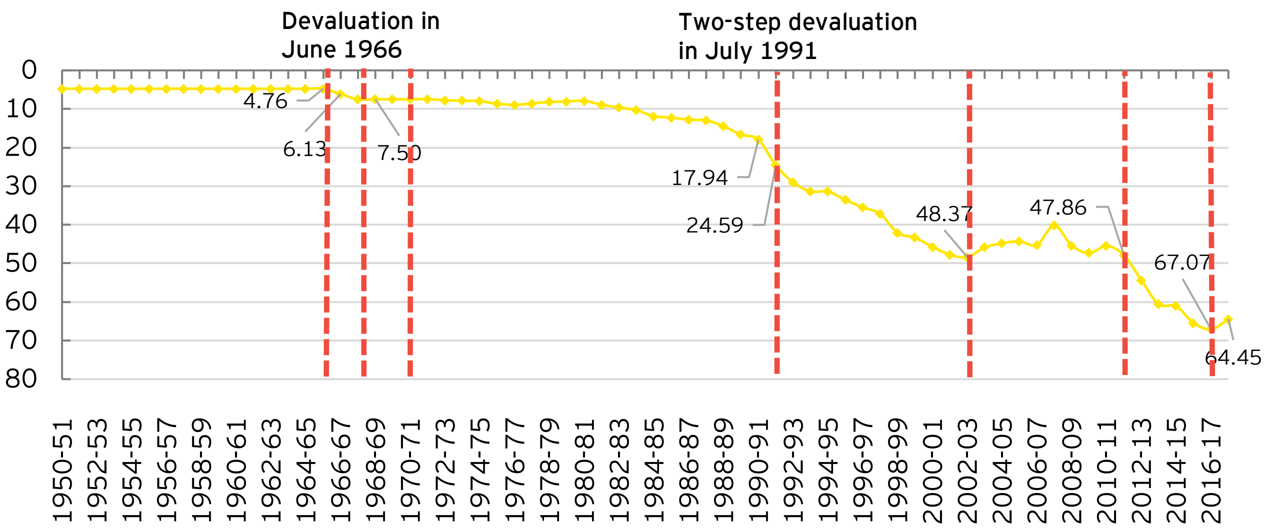
Introduction

The Indian Rupee along with the currencies of other EMEs has been under severe pressure in recent times. The Rupee had remained stable at just above INR68/US$ up till 13 August 2018. Since then, it has been depreciating sharply. By 23 August 2018, Rupee had crossed the level of INR70/US$ and bys 10 September 2018, it crossed INR72/US$. By 18 September 2018, it fell close to INR73/US$. Currencies of other EMEs are also depreciating with many of them being comparatively worse off compared to the Rupee. Most of this pressure is being driven by international configuration of forces that includes the US initiated tariff wars as well as sustained pressure on global crude prices. India is particularly vulnerable to the latter. In this write-up, we review India's policy options in the context of the evolution of its exchange rate policy and its increased integration with the global economy.

Evolution of exchange rate in India: A brief history

India initially followed a fixed exchange rate system. Until the early 70s, the Rupee was linked to Pound Sterling. With the breakdown of the Bretton Woods System in 1971, the Rupee was linked to a basket of currencies, called a basket peg. In the 1970s, it evolved further to a managed float exchange rate system. From September 1975 till the early 1990s, the Rupee remained pegged to a basket of currencies. In March 1992, the Liberalized Exchange Rate Management System (LERMS) was put in place. For some time, it involved a dual exchange rate system. This was replaced by a unified exchange rate system in March 1993 where the exchange rate became market determined based on demand and supply of foreign exchange. The RBI now follows an exchange rate policy which aims at ensuring orderly conditions and containing volatility in the foreign exchange market. It intervenes in the market by buying or selling foreign currencies. These operations are undertaken either directly or through the public sector banks (PSBs).

Chart 8: Annual average exchange rate movements (INR/US$)

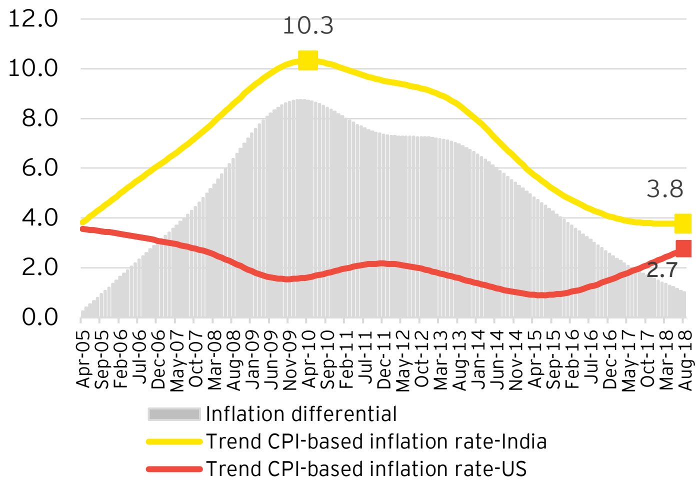


Source (Basic data): External Sector Statistics, RBI

During 1951 to 1991, a major devaluation took place in June 1966 when rupee was devalued from INR4.76/US$ to INR7.5/US$. Rupee was allowed to depreciate in the latter half of the 80s from INR10.3/US$ in 1983-84 to INR14.5/US$ in 1988-89. After that, the two-step devaluation in 1991 which heralded the introduction of major economic reforms in India was undertaken. Rupee steadily depreciated from an average of INR24.6/US$ in 1991-92 to INR48.4/USD in 2002-03. After that, there followed a relative period of stability when Rupee remained at an average of INR45.2/US$ during 2003-04 to 2011-12. This period also saw a major upsurge in India's foreign exchange reserves (Chart 11), which reached a peak amounting to 25.6% of GDP in 2007-08. Subsequently, a period of sharp depreciation followed when the Rupee fell steadily from around INR46/US$ to INR67/US$ up to 2016-17. Subsequently the Rupee actually appreciated and rose to an average of INR64.5/US$ in 2017-18. In 2018, the Rupee started to depreciate sharply.

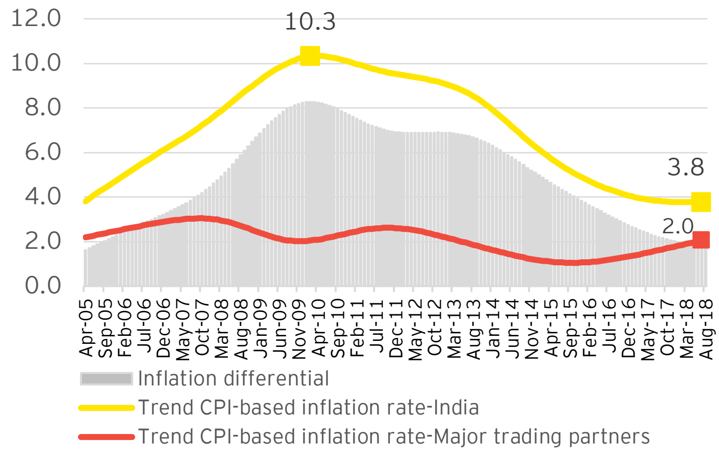
Differential Inflation Rates: India and the major trading partners

Chart 9: Trend inflation differential between India and the US



Source (basic data): IFS, IMF

Chart 10: Trend inflation differential between India and its major trading partners*



Source (basic data): IFS, IMF; * China, EU, Hong Kong, Japan, UK, US

An important determinant of the exchange rate movement is the inflation differential between India and its major trading partners. If the Indian inflation rate is relatively higher than that of its trading partners, the purchasing power of the Rupee within the domestic economy falls faster than the purchasing power of the currencies of the trading partners. In that case, for periods for which this differential remains high, the Rupee is expected to depreciate. Charts 9 and 10 show the trend CPI inflation rate differentials for India vis-à-vis. the US and India vis-à-vis. a weighted average of the CPI inflation rates of selected countries. The weights are in accordance with relative trade weights. There is a long phase during 2005-06 to 2010-11 in which despite the existence of a high differential of the inflation rates, the Rupee did not depreciate. The reason for this was large capital account surpluses. Had the RBI allowed the Rupee to depreciate in those years, it would have necessitated a much larger absorption of foreign exchange reserves.

Managing foreign exchange reserves in India

Foreign exchange management in India has also evolved over time. In the early stages, the focus was on control of foreign exchange by regulating its demand. Exchange control started in India way back in 1939 under the Defence of India Rules. The statutory power for exchange control was provided later in 1947 by the Foreign Exchange Regulation Act (FERA). This Act was subsequently replaced by a more comprehensive Foreign Exchange Regulation Act of 1973, which empowered the RBI to control and regulate dealings in foreign exchange payments outside India, export and import of currency notes and Bullion, transfer of securities between residents and non-residents, acquisition of foreign securities, and acquisition of immovable property in and outside India among other transactions. In the post 1991 liberalization regime, this Act was further amended with a new Foreign Exchange Regulation (Amendment) Act 1993. This Act recognized significant changes in India's external sector including substantial increase in foreign exchange reserves, growth in foreign trade, rationalization of tariffs, current account convertibility, liberalization of India's investments abroad, increased access to external commercial borrowing (ECB) by Indian corporates and participation of Foreign Institutional Investors (FIIs) in the Indian stock market. The Foreign Exchange Management Act (FEMA) was enacted in 1999, which became effective from 1 June 2000.

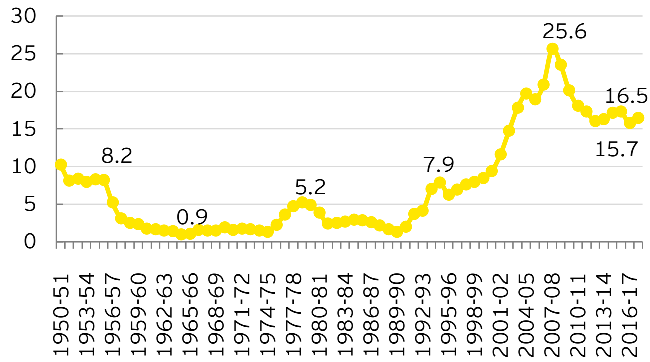
In the post-liberalization regime, the RBI issues licenses to banks and other institutions to act as authorized dealers in the foreign exchange market. The RBI has now provided exchange facility for travel abroad for a variety of purposes including conducting business, attending international conferences, undertaking technical study tours, setting up joint ventures (JVs) abroad, negotiating foreign collaboration, pursuing higher studies and training and medical treatment. Residents can now also open foreign currency accounts in India and credit-specified foreign exchange receipts into these. The RBI has permitted foreign investment in almost all sectors.

In many sectors, no prior approval from GoI or the RBI is required for non-residents investing in India. FIIs are allowed to invest in all equity securities traded in the primary and secondary markets. They have also been permitted to invest in GoI Treasury Bills and dated securities, corporate debt instruments and mutual funds. The non-resident Indians (NRIs) have the flexibility of investing under the options of repatriation and non-repatriation. At the same time, Indian entities can also make investment in an overseas JV or in a wholly-owned subsidiary abroad up to certain limit. Indian companies are allowed to raise ECBs including commercial bank loans, buyer's credit, supplier's credit and securitized instruments. Under the ECB guidelines, foreign currency convertible bonds and foreign currency exchangeable bonds are also governed. The RBI has also permitted resident individuals to freely remit abroad up to a liberal amount per financial year for any permissible purposes.

A variety of instruments have also been developed in the foreign exchange market. These include exchange traded currency futures and a number of different kinds of derivatives such as forward and swap contracts, foreign currency rupee options, cross currency options, interest rate swaps, currency swaps, forward rate agreements and currency futures. Thus, India's foreign exchange market has matured over the years. In a recent article, Dua and Ranjan (2010)[3] observe that the daily average turnover in India's foreign exchange market had increased almost tenfold during the 10-year period from 1997-98 to 2007-08. After the crises of 2008, the volume of turnover has varied substantially from year to year. Dua and Ranjan also note that the foreign exchange market in India has progressively matured and may now be considered as a "deep, liquid, and efficient market".

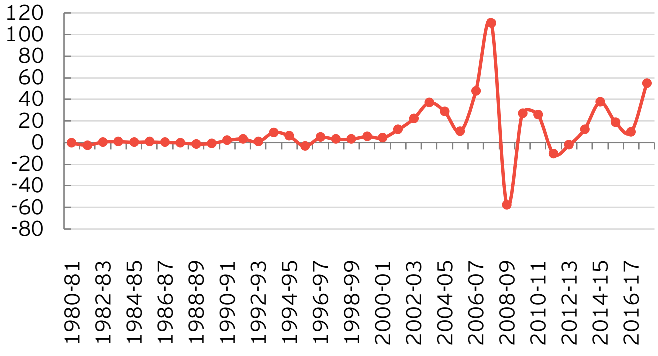
India's foreign currency assets include (1) deposits with other central banks, (2) deposits with the Bank of International Settlements (BIS), (3) balances with foreign branches of commercial banks, (4) investment in foreign treasury Bills and securities and (5) Special Drawing Rights (SDRs). Investments are also made in Special Oil Bonds. The RBI is the custodian of India's foreign exchange reserves and is responsible for managing their investment. RBI's management of foreign exchange reserves is guided by three objectives namely, safety, liquidity and returns. The optimization of returns is part of an embedded strategy subject to the considerations of maintaining safety and required liquidity. The RBI buys and sells foreign exchange in order to check excessive volatility in the exchange rate market. India's foreign exchange reserves consists of foreign currency assets in addition to gold and the Reserve Tranche Position (RTP). The RTP represents India's quota contribution to the IMF in foreign currency. From the foreign currency assets, the RBI is able to earn certain returns. The rate of earnings on foreign assets to the RBI was 1.09% in 2017-18 and 0.80% in 2016-17 (RBI Annual Report, August 2018). These earnings arise mainly from interest income, income from discounting of bills, gains or losses arising from exchange of currency and capital gains or losses on securities.

Chart 11: Foreign exchange reserves as % of GDP



Source (basic data): RBI, MOSPI

Chart 12: Change in FX reserves (USD billion)



Source (basic data): RBI

Chart 11 shows India's foreign exchange reserves (end of fiscal year) as percentage of GDP at current market prices. For a long stretch of time covering the period from 1956-57 to 1992-93, India's foreign exchange reserves averaged only 2.4% of GDP. From 1993-94, the foreign exchange reserves started to rise steadily to reach a peak of close to 25% of GDP by 2007-08. After the global economic and financial crises in 2008, India's foreign exchange reserves fell sharply to 15.7% of GDP by 2016-17. These are currently languishing at 16.5% of GDP in 2017-18.

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Chart 12 shows annual change in foreign exchange reserves in US$ billion. After a relatively long stretch of stability, when these annual changes remained close to the horizontal axis, there is a clear onset of increased

[3] Dua, P., & Ranjan, R. (2012). Exchange rate policy and modelling in India. *OUP Catalogue*.

volatility starting 2007-08. Prior to that, signs of increased volatility had already become visible. Since the 2008 crises, there have been sharp ups and downs in the level of annual change in India's foreign exchange reserves.

Recent pressure on the INR in the context of EMEs

Determination of exchange rate in India depends both on trade volumes and the volume of capital flows. The trade volumes are highly sensitive to the exogenously determined crude oil prices. Periods when crude oil prices show a surge, Indian Rupee relative to the US$ also falls. Capital flows, on the other hand, are also largely exogenous as these are driven by economic and financial policies of the developed world particularly the US. While increasing the US Fed rate is an ongoing policy, the current US government reduced sharply, the corporate tax rate as well as unleashed a tariff war with China and other countries. These policies have induced a significant inflow of US$ into the US. This is putting pressure on the EMEs as well as other developed economies.

The tax reforms bill, considered as the biggest overhaul of the US tax system in more than 30 years, was signed into law on 22 December, 2017. The bill provides an estimated net tax reduction of approx. US$1.5 trn through both corporate income tax (CIT) and personal income tax (PIT) measures over 10 years according to the Joint Committee on Taxation (JCT). The progressive CIT rate structure with a top marginal rate of 35% was brought down to a flat 21% effective 1 Jan 2018. On 9 February 2018, the President also signed a bill suspending the debt ceiling until 1 March 2019. As a result, the limit will be whatever level the debt is on that day. The total stimulus is likely to raise the U.S. Budget deficit to more than 4.5% of GDP according to the IMF. The stimulus is likely to provide a significant boost to the US economy, especially in the medium term.

At the same time, the US has waged aggressive tariff wars with China as well as other countries in order to achieve better balance on their trade account. Some of the significant steps in the unfolding US tariff war with China are summarized below.

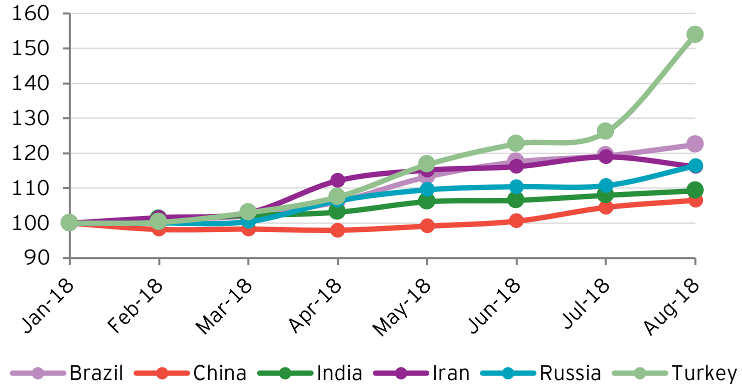
Chart 13: US tariff war with China: actions and reactions

23-Mar	‣ Trump raises import taxes on steel and aluminium by 25% and 10%, respectively exempting selected countries
15-Jun	‣ Trump announces 25% tariffs on US$50b of Chinese goods – US$34b starting 6 July primarily on intermediate inputs
06-Jul	‣ US levies 25% tariffs on US$34b of Chinese imports on mainly intermediate inputs such as water boilers, X-ray machine components, airplane tires and various other industrial parts
06-Jul	‣ China retaliates with equivalent 25% tariff on US$34b worth of US imports, including agricultural goods such as soybeans and pork, and electric vehicles
10-Jul	‣ USTR releases a list of US$200b of imports from China to be subjected to 10% tariffs after public hearings in August. List primarily targets intermediate goods, like computer and auto parts
03-Aug	‣ Chinese government proposes retaliatory tariffs on US$60b worth of US goods, mostly intermediate goods such as machinery and electric equipment at four different rates: 25%, 20%, 10% and 5%
23-Aug	‣ Trump administration imposes 25% tariff on US$16b worth of Chinese imports covering 279 product categories such as semiconductors, plastics, chemicals and railway equipment ‣ China immediately responds with its own revised tariffs on US$16b of US imports covering 333 product categories such as coal, copper scrap, fuel, steel products, buses and medical equipment.
24-Sep	‣ Trump administration imposes additional 10% tariff on US$200b worth of Chinese imports covering 6,000 products, including consumer products such as handbags, rice and textiles. ‣ In response, China imposes additional tariffs on US$60b of US imports including an additional 5% duty on about 1,600 kinds of US products such as computers and textiles and an extra 10% on 3,500+ items, including chemicals, meat, wheat and liquefied natural gas.

Source (basic data): 'Trump's Trade War Timeline: An up-to-date Guide', Chad P. Bown and Melina Kolb, Peterson Institute for International Economics (August 2018); https://www.bloomberg.com/news/articles/2018-09-24/trump-imposes-next-batch-of-china-tariffs-as-trade-war-escalates; https://edition.cnn.com/2018/09/23/politics/trump-trade-war-china/index.html

These developments are similar to the 1997 Asian economic crises. But this time around, it is all the EMEs that appear to be affected. Besides Venezuela, Turkey and Argentina which are at significant risk also due to geopolitical reasons, other EMEs at risk include India, Indonesia, China, Brazil, Malaysia and South Africa, Iran and Bolivia. Chart 14 and Table 3 show the differential rates of depreciation of selected EME currencies. Total EME borrowing has increased from 145% of GDP in 2007 to 210% in 2017 with foreign currency debt doubling to US$9t over the period[4]. Most EMEs also have high general government fiscal deficit to GDP ratios, with Brazil leading at an estimated 8.3% in 2018 followed by India at 6.5%.

Chart 14: Currency movements of selected EMEs



Source (Basic Data): International Financial Statistics, IMF
Notes: Exchange rate vis-à-vis. US$ for each country in January 2018 is indexed to 100. Chart depicts the monthly movements in this index in reverse scale

Table 3: Percentage depreciation in currencies of selected EMEs

Currency	Depreciation from January 2018 (monthly average) to mid-August 2018
Turkish Lira	80%
Chinese Yuan	7%
Brazilian Real	22.7%
Russian Rubble	18.4%
Iranian Rial	15.1%
Indian Rupee	10%

Source: Respective central banks' websites

Recent policy interventions to curb INR depreciation

The Indian government in September 2018, announced a slew of measures[5] as a first step to arrest the continuing fall in the rupee. These measures include the following.

- **Encouraging more capital inflows:** Incentivizing Masala bonds (exempting them from withholding tax and allowing Indian banks to become market-makers) and corporate bonds (removal of the single-exposure limit of 20% on foreign portfolio investors (FPIs) in corporate bonds); facilitating manufacturing firms to raise short-term ECBs.
- **Curbing non-essential imports:** First list includes 19 items.
- **Encouraging exports:** Exact measures to be announced soon.
- **Fiscal consolidation to remain on course:** The central government continues to adhere to the fiscal deficit target of 3.3% of GDP in FY19.

These measures aim at improving the trade balance as also the capital flows.

Conclusion

Analysts warn of a possibility of a contagion developing due to the aggressive postures of both the US and Chinese trade and tariff policies. In the assessment of Christine Lagarde (IMF), the evolving scenario can best be described as a case not of a contagion but fragmented vulnerabilities. Among the most vulnerable countries, one may list Argentina and Turkey followed by South Africa, Indonesia and Brazil. Countries that have domestic macro weaknesses in terms of high fiscal and current account deficits or large debts denominated in US$ are in the forefront of this vulnerability. India is relatively strong because of its comparatively low public and private debt relative to GDP and with its fiscal and current account deficits being close to sustainable levels. The pressure on the Indian Rupee should moderate if the global crude prices stabilize at around US$70/bbl. or fall to lower levels.

[4] https://www.bloomberg.com/view/articles/2018-09-03/we-may-be-facing-a-textbook-emerging-market-crisis;
[5] https://www.bloombergquint.com/business/2018/09/14/finance-minister-arun-jaitley-announces-5-measures-to-control-indias-current-account-deficit#gs.dDOhRAA

6. Money and finance: Conflicting signals for monetary policy from CPI inflation and currency

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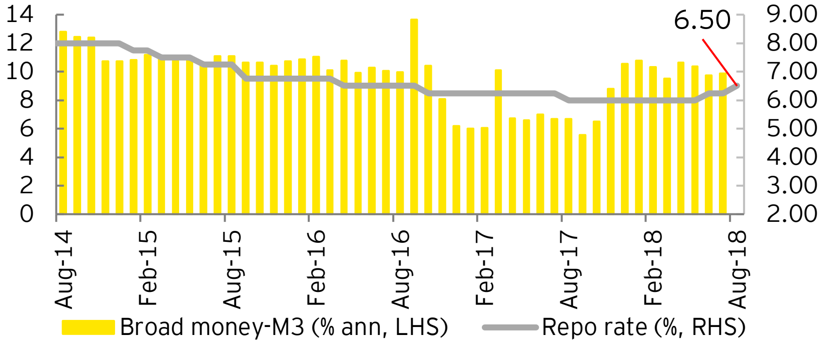
A. Monetary sector

Monetary policy

- With CPI inflation trending downwards while the rupee continues to depreciate, the RBI will have to decide on balance whether the policy rate hike should be undertaken in October 2018 or postponed.
- In its third bi-monthly policy statement, the RBI projected CPI inflation to average 4.6% in 2QFY19 and then increase marginally to 4.7% in 2HFY19 as upside risks are likely to emanate from several factors including rising international crude prices, possibility of fiscal slippage by both central and state governments and sharp increase in the inflation expectations of the households.

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



Source: Database on Indian Economy, RBI.

With CPI inflation trending downwards while the rupee continues to depreciate, the RBI will have to decide on balance whether the policy rate should be increased in its October 2018 monetary policy review or postponed.

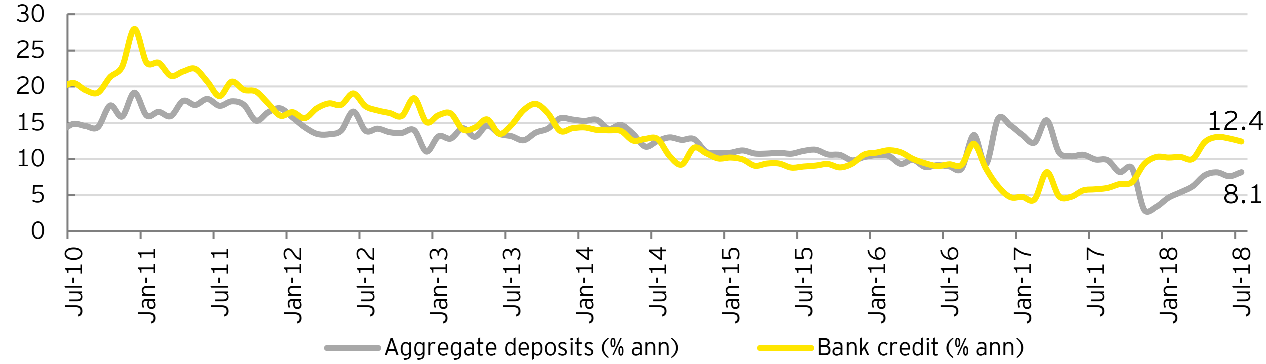
Money stock

- Broad money stock (M3) growth remained stable at around 9.9% (y-o-y) in July 2018 marginally higher than 9.8% in June 2018 (Chart 15). Time deposits, which account for over 76% of the broad money stock, grew by 7.9% in July 2018 as compared to 7.5% in June 2018.
- Growth in narrow money (M1) continued to moderate, falling to 17.4% in July 2018 from 18.1% in June 2018.

Aggregate credit and deposits

- Bank credit growth marginally moderated for the second straight month to 12.4% (y-o-y) in July 2018 from 12.8% in June 2018 (Chart 16). Bank credit grew at a relatively higher average rate of 12.7% during 1QFY19, as compared to 10.1% in 4QFY18.

Chart 16: Growth in credit and deposits



Source: Database on Indian Economy, RBI.

- Growth in non-food credit moderated to a three-month low of 10.6% (y-o-y) in July 2018 as compared to 11.1% in June 2018.

- Among sectoral credit, growth in credit to services continued to remain strong at 23.0% while, growth in credit to agricultural sector increased marginally to 6.6% in July 2018.
- Growth in housing sector credit continued to remain buoyant as it increased to 16.5% in July 2018 from 15.8% in June 2018.
- Growth in aggregate bank deposits improved marginally to 8.1% in July 2018 from 7.6% in June 2018.

B. Financial sector

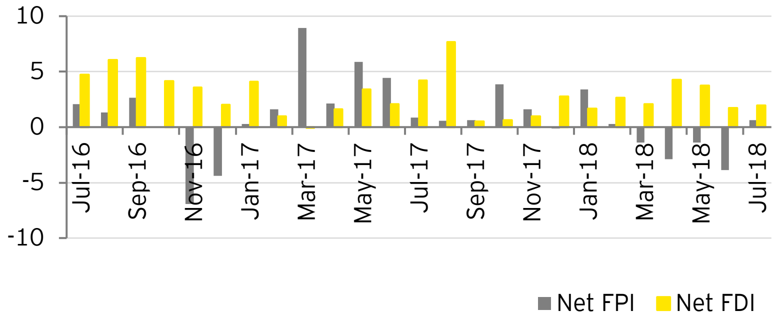
Interest rates

- As per the data released by the RBI, interest rates offered by banks on term deposits with a maturity of more than one year increased to 6.7% (average) in August 2018 as compared to 6.63% in July 2018.
- Post the policy rate hike by the RBI in August 2018, banks have also increased the marginal cost of fund-based lending rate (MCLR) further for the third successive month to average around 7.98% in August 2018 from 7.95% in July 2018.
- The average yield on 10-year government securities increased marginally to 7.83% in August 2018 after averaging around 7.80% in July 2018.

FDI and FPI

- As per the provisional data released by the RBI, the overall foreign investment inflows increased to US$2.6 billion in July 2018 as compared to an outflow of US$2.2 (revised) billion in June 2018 led by higher FDI inflows and a positive Net FPI.

Chart 17: Net FDI and FPI inflows



Net FDI inflows improved to US$2.0 billion in July 2018 while net FPI turned positive for the first time in four-months registering an inflow of US$0.6 billion in July 2018.

Source: Database on Indian Economy, RBI.

- Net FDI inflows increased to US$2.0 billion in July 2018 as compared to US$1.7 billion in June 2018 (Chart 17). Gross FDI inflows were higher at US$4.4 billion in July increasing from US$4.3 billion in June 2018.
- Net FPI's turned positive for the first time since March 2018, registering an inflow of US$0.6 billion in July 2018 as compared to an outflow of US$3.9 billion in June 2018.

7. Trade and CAB: Current account deficit reached a four-quarter high of 2.4% of GDP in 1QFY19

CAB: Current Account Deficit (CAD) increased to 2.4% of GDP in 1QFY19

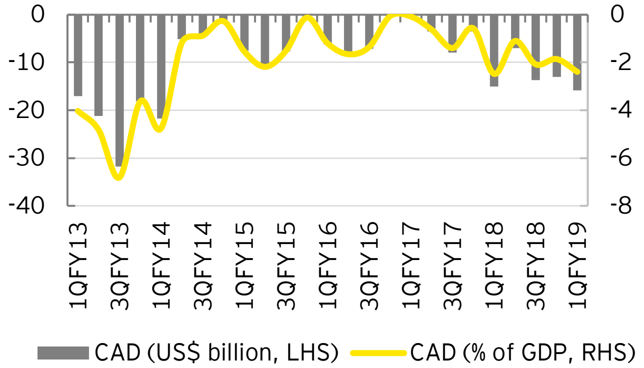
- CAD in 1QFY19 increased to a four-quarter high of 2.4% of GDP as compared to 1.9% of GDP in 4QFY18 (Table 4) driven by higher merchandise trade deficit which rose to a five-year high of US$45.7 billion. Merchandise imports rose to 19.5% of GDP in 1QFY19 from 17.6% in 4QFY18 led by oil imports. A much faster rise in CAD was to some extent contained by rising remittances (transfers) which rose to a two-year high of 2.6% of GDP in 1QFY19. The IMF had earlier projected India's current account deficit at 2.6% of GDP for FY19.

Table 4: 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
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
1QFY19	-15.8	-2.4	-45.7	18.7

Source: Database on Indian Economy, RBI.

Chart 18: CAD



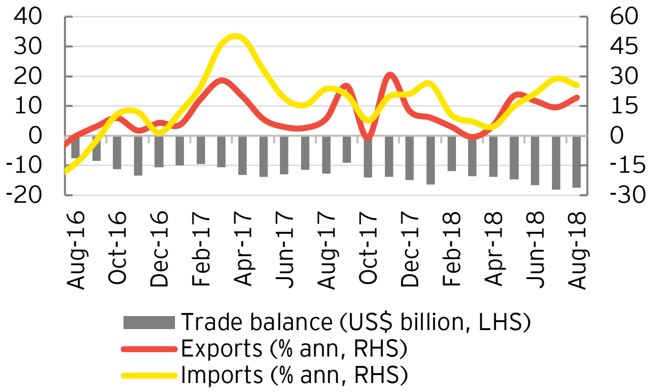
Source: Database on Indian Economy, RBI.

B. Merchandize trade and exchange rate

In August 2018, growth in merchandize exports increased to 19.2% while growth in merchandise imports eased to 25.4% leading to a marginal decrease in trade deficit.

- Merchandize export growth strengthened to 19.2% in August 2018 from 14.3% in July 2018 (Chart 19) driven by growth in exports of engineering goods which rose to a nine-month high of 21.2% from 9.1%.

Chart 19: Developments in merchandize trade



Source: Ministry of Commerce and Industry, GoI

- Growth in oil exports remained elevated at 31.8% in August 2018 as compared to 30.1% in July 2018.
- Growth in gems and jewelry exports also remained high at 23.9% in August 2018, although lower as compared to 24.6% in July 2018.
- Imports growth eased to 25.4% in August 2018 from a 14-month high of 28.8% in July 2018.
- Growth in oil imports moderated to 51.6% in August 2018 from a 16-month high of 57.4% in July 2018.
- Growth in non-oil non-gold exports rose to a nine-month high of 16.4% in August 2018 while growth in their imports declined to 13.7% in August 2018 from 19.1% in July 2018.
- Merchandize trade deficit eased marginally to US$17.4 billion in August 2018 from a five-year high of US$18.0 billion in July 2018.
- The Indian Rupee continued to depreciate, averaging INR69.5 per US$ in August 2018, an all-time low, as compare to INR68.7 per US$ in July 2018.

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8. Global growth: ADB projected Asia to grow by 6% in 2018 despite global uncertainty

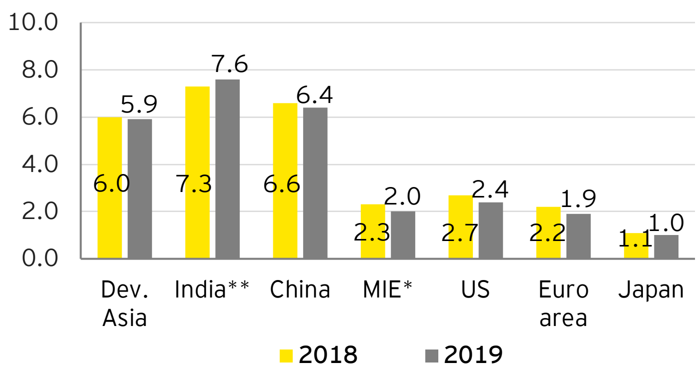
A. Global growth outlook

- According to the ADB [Asian Development Outlook Supplement, July 2018], growth in developing Asia is projected at 6.0% for 2018 and 5.9% in 2019, unchanged from the April 2018 forecasts despite the global uncertainty (Chart 20).
- Combined growth forecast for major industrial economies (US, Euro area and Japan) was at 2.3% in 2018 and 2% in 2019.
- In the US, growth is projected at 2.7% in 2018 driven by private investment. With rising inflation and falling unemployment, the ADB expects the Fed to raise its benchmark rate in every quarter of 2018, bringing the Fed rate up to about 2.1% by the end of the year. GDP growth is expected to slow down to 2.4% in 2019 with an anticipated tightening of monetary policy.

Despite the global uncertainty, the ADB projected the growth in developing Asia at 6% in 2018 and 5.9% in 2019. However, protectionist trade measures from the US and countermeasures from China and other countries pose a downside risk to the growth outlook.

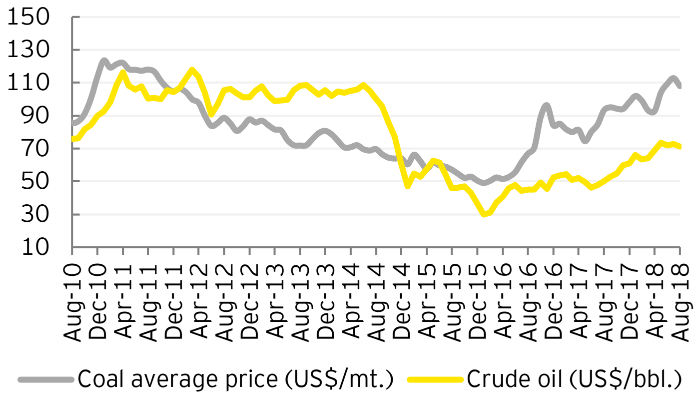
- Growth in the Euro area is projected at 2.2% in 2018, slowing to 1.9% in 2019. In Japan, growth forecast has been revised downwards to 1.1% in 2018 due to a higher than expected GDP contraction in 1Q2018. Growth is expected to slow further to 1% in 2019, partly from an impending consumption tax hike.
- Growth in China is projected at 6.6% in 2018 and 6.4% in 2019. Downside risk to growth outlook emanates from foreign trade and investment conflicts with the US.
- In India, growth is projected at 7.3% in 2018 increasing to 7.6% in 2019. Public consumption is expected to pick up in 2018, partly due to the forthcoming elections. Private consumption and private investment are also expected to pick up. A downside risk to growth emerges from any further increase in global crude prices.

Chart 20: Global growth projections



Source: Asian Development Outlook Supplement, July 2018
*Major industrial economies

Chart 21: Global crude and coal prices



Source (basic data): World Bank, Pink Sheet, September 2018

A. Global Energy Prices: *EIA forecasted Brent spot price to average US$72.8/bbl. in 2018*

- At US$71.1/bbl. in August 2018, average global crude[6] price remained above US$70/bbl. for the fourth consecutive month (Chart 21). The US EIA has forecasted the Brent spot price to average US$72.8/bbl. in 2018 and US$73.7/bbl. in 2019. The WTI crude oil prices are projected to average about US$6/bbl. lower than Brent prices in 2018 and 2019.
- Average global coal price[7] slightly decreased to US$107.9/mt. in August 2018 from US$112.8/mt. in July 2018.

[6] Simple average of three spot prices namely, Dated Brent, West Texas Intermediate and Dubai Fateh
[7] Simple average of Australian, Columbian and South African coal prices

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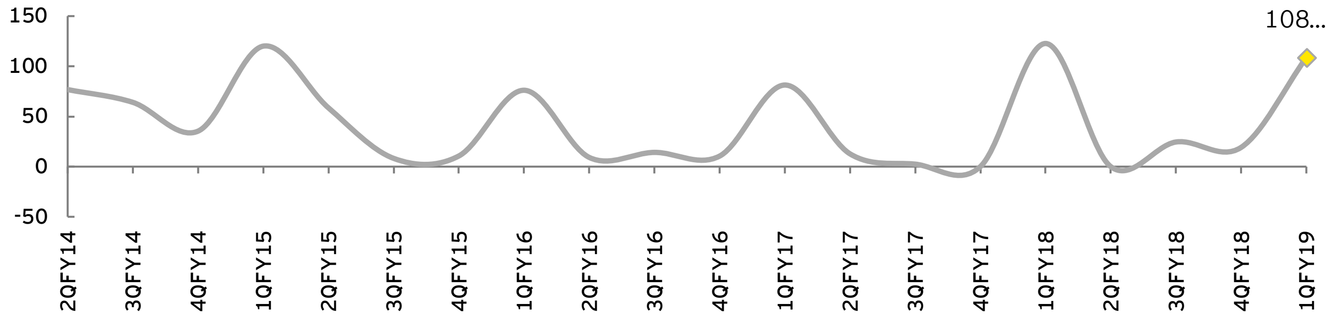
9. Index of macro imbalance (IMI): Sharp deterioration in 1QFY19

- 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%, 3% of GDP and 1.3% of GDP[8]. All three components of IMI have been given equal weightage (33.33%). The state of "balance" is judged by a value of "0".
- An index value greater than zero indicates the presence of an imbalance in the economy. In considering the percentage deviation of each of the indicators from its selected norm, only the positive deviations are taken. Negative deviations are equated to zero to ensure that the negative and positive deviations across indices are not canceled out.
- Depicting a sharp deterioration in the macro balance of the economy, the IMI increased to 108.7 in 1QFY19 as compared to 19.2 in 4QFY18, its worst performance in the last four quarters (Chart 22). All the three components of IMI namely, CPI inflation (4.8%), CAD (2.4% of GDP) and center's fiscal deficit (9.7% of GDP) breached their respective benchmarks during 1QFY19 leading to the overall imbalance.

Chart 22: IMI (Quarterly)



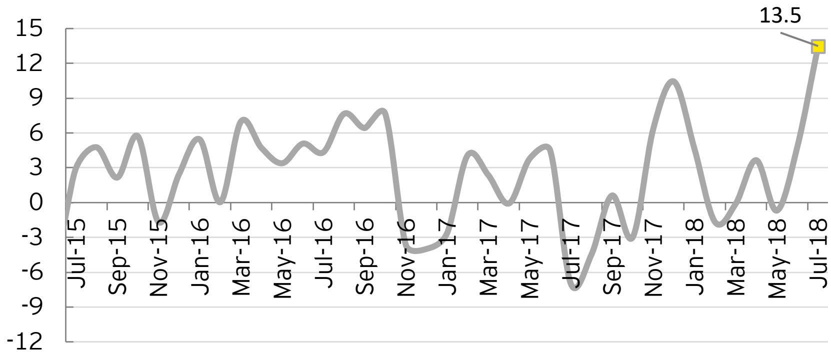
Source (Basic data): RBI, MOSPI and EY estimate

10. Index of Aggregate Demand (IAD): Pointed towards further strengthening of demand conditions

Growth in IAD accelerated further to 13.5% in July 2018

- The y-o-y growth in the index of aggregate demand rose to an eight-year peak of 13.5% in July 2018 from 4.9% in June 2018, partly supported by a favorable base effect (Chart 23).
- Demand conditions in the agricultural sector improved further in July 2018 while that of industry and services eased marginally during the month.

Chart 23: Growth in IAD (y-o-y)



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

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

11.Capturing macro-fiscal trends: Data appendix

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

Fiscal year/quarter/month	IIP	Mining	Manufacturing	Electricity	Core IIP	Fiscal year/quarter/month	PMI mfg.	PMI ser.
	% change y-o-y							
FY 15	4.0	-1.3	3.8	14.8	4.9	FY15	52.2	51.7
FY 16	3.3	4.3	2.9	5.7	3.0	FY16	51.3	51.7
FY 17	4.6	5.3	4.3	5.8	4.8	FY17	51.6	51.0
FY 18	4.4	2.3	4.7	5.3	4.3	FY18	51.5	50.0
2Q FY 18	3.3	7.1	2.5	6.1	4.0	2Q FY18	50.1	48.0
3Q FY 18	5.9	0.8	7.0	3.8	5.2	3Q FY18	52.5	50.4
4Q FY 18	6.5	1.1	7.5	6.1	5.3	4Q FY18	51.8	49.9
1Q FY 19	5.1	5.4	5.1	4.9	5.5	1Q FY19	52.0	51.2
Apr-18	4.5	3.8	4.9	2.1	4.7	May-18	51.2	49.6
May-18	3.9	5.8	3.7	4.2	4.3	Jun-18	53.1	52.6
Jun-18	6.9	6.6	6.7	8.5	7.6	Jul-18	52.3	54.2
Jul-18	6.6	3.7	7.0	6.7	6.6	Aug-18	51.7	51.5

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
2QFY18	3.0	0.8	5.1	4.4	2.8	2.9	2.5	8.2	2.6
3QFY18	4.6	3.7	7.5	4.8	3.8	3.5	2.7	9.1	3.1
4QFY18	4.6	3.6	6.8	5.1	2.8	0.6	3.1	4.7	3.8
1Q FY19	4.8	2.9	6.1	6.0	4.7	1.2	3.8	12.3	4.4
May-18	4.9	3.1	5.8	6.1	4.8	1.2	3.8	12.7	4.5
Jun-18	4.9	2.9	7.2	6.1	5.7	1.6	4.2	16.5	4.8
Jul-18	4.2	1.3	8.0	5.9	5.1	-0.9	4.3	18.1	4.7
Aug-18	3.7	0.3	8.5	5.7	4.5	-2.3	4.4	17.7	5.0

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	
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
Jun-18	22.1	-1.2	12.8	6.2	36.3	68.7	84.8
Jul-18	11.7	0.6	11.3	6.7	16.1	86.5	106.4

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, the 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)			
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
Jun-18	30,936	62	10,212	8,016	49,226
Jul-18	57,893	163	-39,903	7,963	26,116

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. Bond Yield	Net FDI	Net FPI	Fiscal year/quarter/month	FX reserves
	%		% change y-o-y				%	US$ billion			US$ billion
Sep-17	6.00	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	FY15	341.6
Oct-17	6.00	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	FY16	355.6
Nov-17	6.00	FY17	3.1	10.1	7.9	11.6	7.0	35.6	7.6	FY17	370.0
Dec-17	6.00	FY18	22.1	9.5	7.5	7.5	7.0	30.3	22.1	FY18	424.4
Jan-18	6.00	2Q FY18	1.6	5.6	6.1	9.3	6.6	12.4	2.1	2Q FY18	399.7
Feb-18	6.00	3Q FY18	45.8	10.6	8.8	4.9	7.1	4.3	5.3	3Q FY18	409.4
Mar-18	6.00	4Q FY18	22.1	9.5	10.1	5.4	7.5	6.4	2.3	4Q FY18	424.4
Apr-18	6.00	1Q FY19	18.1	9.8	12.7	7.8	7.8	9.7	-8.1	1Q FY19	406.1
May-18	6.00	Apr-18	22.0	10.6	12.3	7.7	7.5	4.3	-2.9	May-18	412.8
Jun-18	6.25	May-18	20.7	10.4	13.0	8.1	7.8	3.7	-1.4	Jun-18	406.1
Jul-18	6.25	Jun-18	18.1	9.8	12.8	7.6	7.9	1.7	-3.9	Jul-18	404.2
Aug-18	6.50	Jul-18	17.4	9.9	12.4	8.1	7.8	2.0	0.6	Aug-18	400.1

Source: Database on Indian Economy-RBI

Table A5: External trade and global growth

External trade indicators (annual, quarterly and monthly growth rates)							Global growth (annual)			
Fiscal year/quarter/month	Exports	Imports	Trade balance	Ex. rate (avg.)	Crude prices (avg.)	Coal prices (avg.)	Calendar year	World GDP	Adv. econ.	Emer. econ.
	% change y-o-y		US$ billion	INR/US$	US$/bbl.	US$/mt		% change y-o-y		
FY15	-1.3	-0.5	-137.7	61.1	83.2	66.6	2012	3.5	1.2	5.3
FY16	-15.6	-15.2	-117.7	65.5	46.0	54.7	2013	3.3	1.2	5.0
FY17	5.1	0.9	-108.2	67.1	47.9	73.0	2014	3.4	1.9	4.6
FY18	9.8	20.0	-157.9	64.5	55.7	90.8	2015	3.4	2.1	4.3
2Q FY18	12.7	19.8	-33.1	64.3	50.2	90.9	2016	3.2	1.7	4.4
3Q FY18	13.1	16.1	-42.7	64.7	58.7	95.5	2017	3.8	2.3	4.8
4Q FY18	3.9	13.9	-42.0	64.3	64.6	98.0	2018**	3.9	2.4	4.9
1Q FY19	14.2	13.5	-44.9	67.0	71.4	102.0	2019**	3.9	2.2	5.1
May-18	20.2	14.9	-14.6	67.5	73.4	104.0	2020*	3.8	1.7	5.1
Jun-18	17.6	21.3	-16.6	67.8	72.0	109.3	2021*	3.8	1.7	5.1
Jul-18	14.3	28.8	-18.0	68.7	72.7	112.8	2022*	3.7	1.5	5.0
Aug-18	19.2	25.4	-17.4	69.5	71.1	107.9	2023*	3.7	1.5	5.0

Source: Database on Indian Economy - RBI, Pink Sheet - World Bank and IMF World Economic Outlook April 2018 and IMF World Economic Outlook Update, July 2018; * indicates projections as per the April 2018 database and **indicates projections as per July 2018 database

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
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
1QFY19	8.0	5.3	0.1	13.5	7.3	8.7	6.7	6.5	9.9	4.6

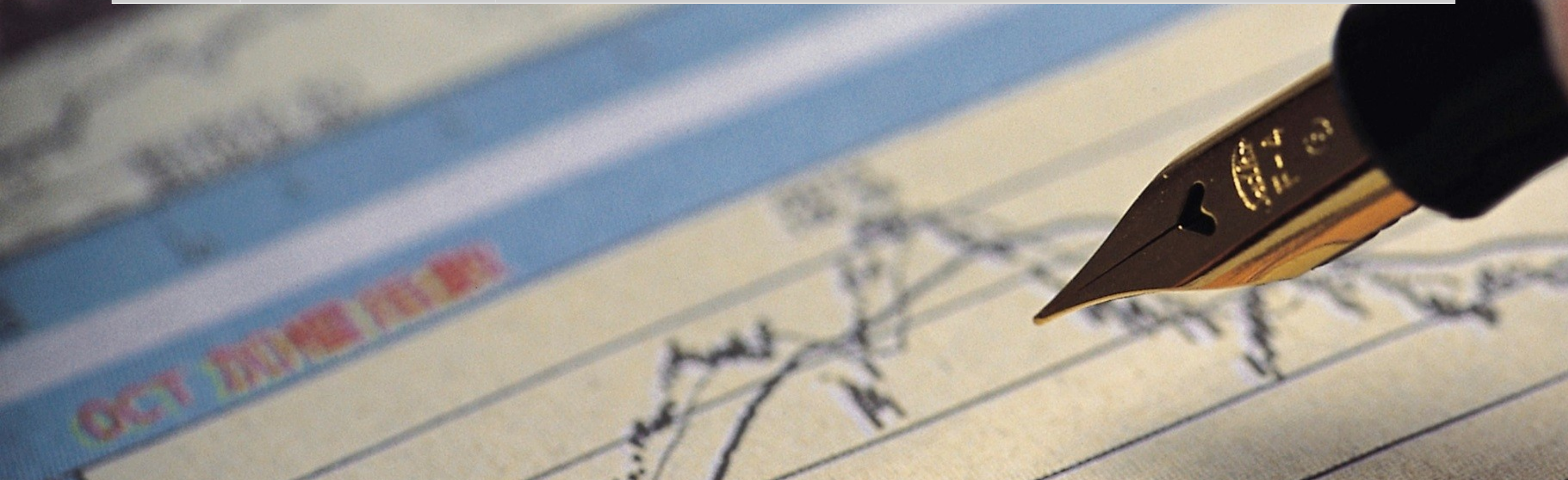
	Expenditure components						IPD inflation
Fiscal year/quarter	GDP	PFCE	GFCE	GFCF	EX	IM	GDP
FY15	7.4	6.4	7.6	2.6	1.8	0.9	3.3
FY16	8.2	7.4	6.8	5.2	-5.6	-5.9	2.1
FY17 (1st RE)	7.1	7.3	12.2	10.1	5.0	4.0	3.5
FY18 (PE)	6.7	6.1	10.9	7.6	4.4	9.9	3.0
Q1FY17	8.1	8.3	8.3	15.9	3.6	0.1	2.7
Q2FY17	7.6	7.5	8.2	10.5	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
1QFY19	8.2	8.6	7.6	10.0	12.7	12.5	5.1

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	BIS	Bank of International Settlements
7	CAB	Current account balance
8	CGA	Comptroller General of Accounts
9	CGST	Central Goods and Services Tax
10	CIT	Corporate Income Tax
11	Cons.	Construction
12	CPI	Consumer Price Index
13	CSO	Central Statistical Organization
14	Disc.	Discrepancies
15	dmtu	Dry metric ton unit
16	ECBs	External Commercial Borrowings
17	EIA	US Energy Information Administration
18	Elec.	Electricity, gas, water supply and other utility services
19	EMEs	Emerging Market Economies
20	EXP	Exports
21	FEMA	Foreign Exchange Management Act
22	FERA	Foreign Exchange Regulation Act
23	FII	Foreign investment inflows
24	Fin.	Financial, real estate and professional services
25	FPI	Foreign portfolio investment
26	FY	Fiscal year (April–March)
27	GDP	Gross Domestic Product
28	GFCE	Government final consumption expenditure
29	GFCF	Gross fixed capital formation
30	GoI	Government of India
31	GST	Goods and Services Tax
32	GVA	Gross value added
33	IAD	Index of Aggregate Demand
34	IEA	International Energy Agency
35	IGST	Integrated Goods and Services Tax

36	IIP	Index of Industrial Production
37	IMF	International Monetary Fund
38	IMI	Index of Macro Imbalance
39	IMP	Imports
40	INR	Indian Rupee
41	IPD	Implicit price deflator
42	JCT	Joint Committee on Taxation
43	JV	Joint Venture
44	LAF	Liquidity adjustment facility
45	MCLR	Marginal cost of funds based lending rate
46	Ming.	Mining and quarrying
47	Mfg.	Manufacturing
48	m-o-m	Month-on-month
49	mt	Metric ton
50	MPC	Monetary Policy Committee
51	NDU	Non-departmental undertaking
52	NEXP	Net exports (exports minus imports of goods and services)
53	NRI	Non-Resident Indian
54	OPEC	Organisation of the Petroleum Exporting Countries
55	PFCE	Private final consumption expenditure
56	PIT	Personal Income Tax
57	PMI	Purchasing Managers' Index (reference value = 50)
58	RE	Revised estimate
59	RBI	Reserve Bank of India
60	RTP	Reverse Tranche Position
61	SBNs	Specified Bank Notes
62	SDRs	Special Drawing Rights
63	Trans.	Trade, hotels, transport, communication and services related to broadcasting
64	USD	US dollar
65	UTGST	Union territory goods and services tax
66	WPI	Wholesale Price Index
67	y-o-y	Year on year



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