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Highlights

- Real GDP growth has fallen steadily, to 5.7% in 1QFY18 from a peak of 9% in 4QFY16.
- The manufacturing and construction sectors experienced the largest fall in growth during 4QFY16 to 1QFY18.
 Manufacturing growth decreased from 12.7% in 4QFY16 to 1.2% in 1QFY18.
- 3. CPI inflation increased for the second successive month to 3.4% in August 2017 from 2.4% in July 2017 due to an increase in food prices. The upward movement of CPI inflation may pre-empt the chances of a repo rate reduction in the near future.
- 4. Growth in the Center's capital expenditure increased sharply to 33.4% during April-July FY18 as compared to a contraction of (-) 17.1% in FY17 due to the frontloading of the Center's capital expenditure. This was possible due to the advancement of the Budget presentation.
- Fiscal deficit has already reached 92.3% of the annual budgeted target (during April-July FY18). This may rule out the possibility of fiscally supported expansionary policies in the latter part of the year.
- Uplifting growth in subsequent quarters of FY18 from its low level in 1QFY18 through policy stimulus may become difficult as stimuli from both the monetary side and the fiscal side appear highly constrained.
- 7. The rate of credit growth remains extremely low at 5.2% (in July 2017). It has remained in the range of 4% to 7% since November 2016. The chances of the private sector serving as the engine of growth do not appear to be bright at this juncture.
- 8. Export growth is constrained by India's rupee appreciation, which started in January 2017 when the rupee was at INR68.1 per US dollar. In August 2017, it was at INR64 per US dollar.
- 9. The current account deficit relative to GDP shot up to 2.4% in 1QFY18 from 0.6% in 4QFY16, largely reflecting a spurt in growth in non-oil imports, particularly gold imports, consequent to India's appreciating rupee.

Foreword: Overcoming growth slowdown



The economic discourse following the publication of the 1QFY18 GDP data has focused on the steady decline in growth in real terms, both of GVA and GDP, from 4QFY16 to 1QFY18. In the case of GVA, which reflects the output side of the economy, growth in 1QFY18 is estimated at 5.6% y-o-y, which is 3.1% points below that in 4QFY16. In terms of GDP, growth in 1QFY18 in real terms at 5.7% is 3.3% points below that in 4QFY16 at 9%. This steady decline can be attributed to three reasons:

- (a) A steady fall in investment demand is reflected in the growth of gross fixed capital formation (GFCF), which decreased from a peak of 7.4% in 1QFY17 to (-) 2.1% in 4QFY17. It has only marginally risen to 1.6% in 1QFY18.
- (b) Demonetization had a short-term adverse impact on overall growth especially in the informal sectors of the economy. Sectors that took the maximum hit were manufacturing and construction. On the demand side, apart from the fall in investment demand, private final consumption expenditure (PFCE) also decreased during this period.
- (c) The low growth in 1QFY18 also reflects the behavioral responses in anticipation of the implementation of GST from 1 July 2017. In particular, the occurrence of extensive de-stocking in the case of goods adversely affected the manufacturing sector.

Both IPD-based GDP and GVA deflators have shown a fall in the recent guarters. The IPD-based GDP deflator in 1QFY18 was at 3.3%, down from 6% in 4QFY17. The GVA deflator decreased from 5.4% in 4QFY17 to 2.2% in 1QFY18. In 1QFY18, the nominal GDP growth at 9.3% reduced because of both a fall in real growth as well as a fall in the inflation rate of the IPD-based deflator. This low nominal growth at sub-two digit level would also have implications for tax buoyancy both for Central and state governments. If this happens, meeting FY18 fiscal deficit budget target would become a challenge. Already, by July 2017, the fiscal deficit as a percent of budgeted amount has crossed 92%. The corresponding ratio in the previous year was close to 74%. These levels of fiscal deficit would also constrain the Government's policy options for stimulating the economy from the fiscal side. However, there are still some policy options for stimulating the economy without disturbing the annual fiscal deficit target of 3.2% of GDP. For this, relatively more conscious efforts should be made for disinvesting, restructuring government expenditure in favor of capital expenditure, and bringing some of the larger state governments on board to undertake additional expenditures on their statelevel infrastructure without breaching their own fiscal deficit limits. With stock markets continuing to scale new heights, this may be the appropriate time for actively pursuing the disinvestment targets. Moreover, the departmental and public sector entities dealing with infrastructure, including railways and surface transport, may be persuaded to finance their expansion programs using special purpose vehicles (SPVs). Following these steps, there may be some space for reporate reduction during the course of the year. Some support to the Indian economy may also come from prospects of strengthening global growth. The US and Japan have shown signs of stronger

strengthening global growth. The US and Japan have shown signs of stronger growth in recent quarters. The fall in Chinese growth rate has also been arrested. These trends may help increase India's export growth rate, although it continues to be constrained by the appreciating Indian rupee.

Once the short-term challenges in the context of GST are overcome, it does have the potential for bringing in a far more efficient and growth-supporting domestic indirect tax regime in the country.

D.K. Srivastava

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1 Growth: GDP growth slows to a three-year low in 1QFY18

A. Real GDP growth

- Real GDP grew by 5.7% in 1QFY18, its slowest pace since 4QFY14. Having reached a peak of 9.0% in 4QFY16 (Table 1), it fell in each subsequent guarter thereafter.
- ► The current moderation is attributed to a slowdown in the growth of private final consumption expenditure (PFCE) and negative contribution of net exports to overall GDP growth. Growth in PFCE slowed to 6.7% in 1QFY18 from 7.3% in 4QFY17. Since imports grew at a faster pace than exports, contribution of net exports to growth was sharply negative at (-) 2.6% points in 1QFY18 ((-) 0.3% points in 4QFY17).
- ▶ Similar to the previous four quarters, growth in government consumption expenditure continued to support overall growth in 1QFY18. Government final consumption expenditure (GFCE) posted a double-digit growth of 17.4% in 1QFY18 but was still lower as compared to a growth of 31.9% in 4QFY17.
- ▶ Growth in investment demand as measured by gross fixed capital formation (GFCF) turned positive but remained subdued at 1.6% in 1QFY18 (Table 1).

Table 1: Real GDP growth (%)										
Aggregate demand (AD) component	2Q FY16	3Q FY16	4Q FY16	1Q FY17	2Q FY17	3Q FY17	40 FY17	1Q FY18		
PFCE	3.9	5.9	11.8	8.4	7.9	11.1	7.3	6.7		
GCE	4.1	5.1	2.4	16.6	16.5	21.0	31.9	17.2		
GFCF	5.0	7.0	3.9	7.4	3.0	1.7	-2.1	1.6		
EXP	-4.4	-8.7	-1.6	2.0	1.5	4.0	10.3	1.2		
IMP	-3.7	-10.0	-3.7	-0.5	-3.8	2.1	11.9	13.4		
GDP	8.4	7.4	9.0	7.9	7.5	7.0	6.1	5.7		

Source: MOSPI

- Output as measured by gross value added (GVA) grew by 5.6% in 1QFY18, the same rate as in the previous quarter. GVA growth was supported largely by public administration and defense and a rebound in the growth of other services
- ► The trade, hotels and transportation sector grew by 11.1% in 1QFY18, while growth in the financial and real estate sector recovered to 6.4% during the quarter (Table 2). The public administration and defense sector grew by 9.5% in 1QFY18, lower than the 17.0% growth in 4QFY17. However, its growth remains high as compared to growth of other sectors.
- ► Growth in the manufacturing sector at 1.2% in 1QFY18 was the lowest in five years. This slowdown is mainly attributed to uncertainties relating to GST and de-stocking by firms ahead of the GST rollout on 1 July 2017.
- ▶ Growth in construction increased from (-) 3.7% in 4QFY17 but continued to remain low at 2.0% in 1QFY18.

Table 2: Se	Table 2: Sectoral real GVA growth (%)												
Sector	2Q FY16	30 FY16	4Q FY16	1Q FY17	2Q FY17	3Q FY17	4Q FY17	1Q FY18					
Agr.	2.3	-2.1	1.5	2.5	4.1	6.9	5.2	2.3					
Ming.	12.2	11.7	10.5	-0.9	-1.3	1.9	6.4	-0.7					
Mfg.	9.3	13.2	12.7	10.7	7.7	8.2	5.3	1.2					
Elec.	5.7	4.0	7.6	10.3	5.1	7.4	6.1	7.0					
Cons.	1.6	6.0	6.0	3.1	4.3	3.4	-3.7	2.0					
Trans.	8.3	10.1	12.8	8.9	7.7	8.3	6.5	11.1					
Fin.	13.0	10.5	9.0	9.4	7.0	3.3	2.2	6.4					
Publ.	7.2	7.5	6.7	8.6	9.5	10.3	17.0	9.5					
GVA	8.2	7.3	8.7	7.6	6.8	6.7	5.6	5.6					

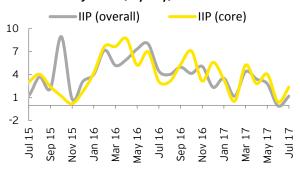
Source: MOSPI

B. Industry growth: Overall and core sector IIP growth remained low in July 2017

Sustained weakness in investment demand has held back the recovery in industrial activity. Reflecting this trend, both overall IIP and core sector IIP continued to post subdued growth in July 2017.

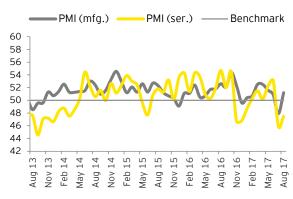
- ▶ IIP posted a modest growth of 1.2% (y-o-y) in July 2017, improving only marginally from a contraction of (-) 0.2% in June 2017. Nearly two quarters of low growth in IIP is indicative of the fact that economic activity is yet to recover.
- ▶ In spite of a strong pickup in the growth of the electricity (6.5%) and mining (4.8%) sectors, overall IIP grew only moderately due to the meagre pace of growth of the manufacturing sector (accounting for over 77% of the overall IIP) at just 0.1% in July 2017.
- ▶ Output of the capital goods industry (a proxy for investment demand) continued to contract for the fourth consecutive month, although at a slower pace of (-) 1.0% (y-o-y) as compared to (-) 6.6% in June 2017. Output of consumer durables also contracted for the second straight month by (-) 1.3% as compared to (-) 2.4% in June 2017. After posting a near-muted growth in May and June 2017, output of the infrastructure sector grew by 3.7% in July 2017.
- ▶ Output of eight core infrastructure industries, contributing nearly 40% to overall IIP, grew by 2.4% (y-o-y) in July 2017, an improvement over the growth of 0.8% (revised) in June 2017. Among the sub-industries, there was strong growth in the output of steel (9.2%), natural gas (6.6%) and electricity (5.4%), while the output of cement ((-) 2.0%) and petroleum refinery ((-) 2.7%) continued to contract.

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



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

Chart 2: NIKKEI PMI



Source: NIKKEI PMI, Markit Economics

C. PMI: Signals recovery in manufacturing but continued contraction in services

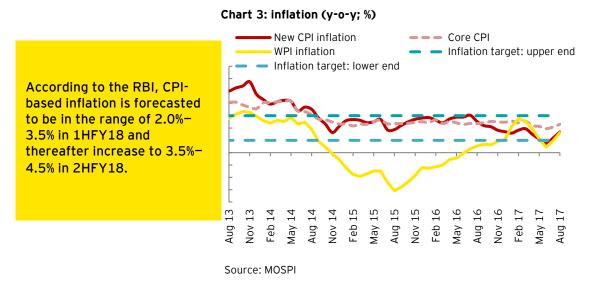
In August 2017, manufacturing PMI recovered from the sharp contraction witnessed in July 2017. However, revival in investment demand and private consumption is crucial for a sustained recovery. PMI services continued to contract, possibly due to GST-related uncertainties.

- ▶ Headline manufacturing PMI (sa) recovered to 51.2 in August 2017 from the sharp contraction witnessed in July 2017 (47.9) after the introduction of GST (Chart 2). The upturn reflected resumed growth in new orders, output and employment. However, a sustained recovery in manufacturing PMI is contingent on a revival in investment demand and private consumption in the Indian economy.
- ▶ Headline services PMI (sa) contracted for the second consecutive month in August 2017, although less sharply as in July 2017. Services PMI was at 47.5 in August 2017 from 45.9 in July 2017. Uncertainties related to GST continued to act as a drag on the services sector.
- Composite PMI Output Index (sa) remained in the contraction territory at 49 in August as compared to 46 in July 2017, resulting largely from continued contraction in services.

2 Inflation: CPI inflation increased for the second successive month mainly due to a surge in some vegetable prices

CPI inflation increased to 3.4% in August 2017 from 2.4% in July 2017 due to a recovery in food prices.

- ► CPI-based inflation (Chart 3) rose to a five-month high of 3.4% in August 2017 from 2.4% in July 2017. In June 2017, it was only 1.5%.
- ► The Consumer Food Price Index based inflation turned positive at 1.5% in August 2017 from (-) 0.4% in July 2017, contributing 80% to the overall increase in CPI inflation. Inflation in vegetable prices rose to 6.2% after 11 successive months of contraction ending at (-) 3.6% in July.
- ► Core CPI inflation (excluding food and fuel and light) increased to 4.6% in August 2017 from 4.2% in July 2017 due to an increase in inflation in housing, transport and communication services.
- As per the RBI annual report released on 30 August 2017, food prices are likely to remain moderate over the ensuing months, though some increase may be expected from August onward due to unfavorable base effects. The implementation of GST is not likely to have a material impact on CPI inflation, though the implementation of farm loan waivers and the 7th Central Pay Commission award is likely to impart an upside bias.



WPI-based inflation also increased to 3.2% in August from 1.9% in July due to a sharp rise in food and fuel based inflation.

- ▶ Inflation in vegetables remained positive for the second successive month, reaching a 45-month high of 44.9% in August 2017 as compared to 21.9% in July 2017. It had earlier been falling for 11 successive months ending at (-) 21.2% in June 2017.
- ▶ WPI-based inflation in onions reached 88.5% after 19 successive months of contraction and that in tomatoes remained high at 413.3% as compared to 456.6% in the previous month.
- ▶ Fuel and power inflation increased to a three-month high of 10.0% in August 2017 from 4.4% in July 2017.
- ▶ WPI core inflation edged up to 2.6% in August 2017 as compared to 2.2% in July 2017.
- ▶ Inflation based on the newly constructed WPI Food Price Index, consisting of primary food articles and manufactured food products, more than doubled to 4.4% in August 2017 from 2.1% in the last month.

3 Fiscal performance: Fiscal deficit crossed 92% of annual budgeted target up to July FY18

A. Tax and non-tax revenues

As per CGA data, gross central tax revenues grew by 17.1% during April-July FY18, while non-tax revenues contracted by (-) 2.8% during this period.

- ► Gross central taxes grew by 17.1% during April–July FY18 (Chart 4). However, this may not fully reflect the receipts from GST for the month of July 2017 as the deadline for tax payment has been extended. The growth rate in the Center's gross taxes during the corresponding period of FY17 was 26.7%.
- ► Growth in direct taxes up to July FY18 was marginally lower at 21.1% as compared to 23.9% in the same period of FY17. However, after demonetization, a substantial number of new taxpayers have been brought into the tax net.
- ► Growth in income tax revenues was at 18.8% during April–July FY18 as compared to 48.2% in the corresponding period of FY17 (Chart 5).
- ► Corporate tax revenues witnessed a growth of 24.2% during April–July FY18 as compared to just 1.1% in the corresponding period of FY17.
- ► Growth in indirect taxes was lower at 14.3% during April–July FY18 as compared to the corresponding value of 28.7% in FY17.
- ▶ With the introduction of GST from 1 July 2017, most of the commodities have been subsumed under GST. Hence excise duties reflect a contraction of (-) 0.6% during April−July FY18.
- ► Growth in customs duties was at 31.7% during April–July FY18 as compared to the corresponding value of 8.7% in FY17. Collections under customs during April–July FY18 include INR21,377 crore on account of IGST on imports/exports and compensation cess on imports/exports amounting to INR609 crore for 2017–18.
- Service tax revenues grew by 14.3% up to July FY18. For FY18, service tax liabilities would arise only for April-June 2017 as service tax has been subsumed in GST. Any service tax revenue figures afterward would only reflect payment of arrears etc.

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

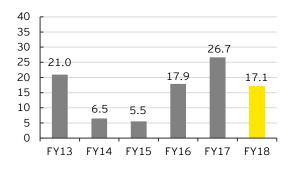
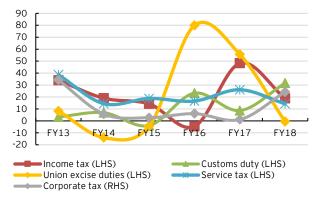


Chart 5: Growth in cumulated tax revenues up to July 2017



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

- ▶ During April-July FY18, non-tax revenues contracted by (-) 2.8% as compared to (-) 38.2 in the same period of FY17.
- ► Total receipts from disinvestment up till 7 September 2017 amounted to INR19,078.44 crore, which is 26.3% of the annual budgeted target.

B. Expenditures: Revenue and capital

- ▶ Total expenditure grew by 23.1% during April-July FY18 as compared to the corresponding value of 9.3% in FY17.
- ► Growth in revenue expenditure was at 21.8 % up to July FY18 as compared to 13.7% in the same period of FY17 (Chart 6).
- ▶ Growth in the Center's capital expenditure increased sharply to 33.4% during April–July FY18 as compared to a contraction of (-) 17.1% in the corresponding period of FY17 (Chart 7). As a percentage of the annual budgeted target, capital expenditure was at 30.7% as compared to 28.9% in the corresponding period of FY17.

The Center's capital expenditure grew by 33.4% during April-July FY18 as compared to a contraction of (-) 17.1% in the corresponding period of FY17.

Chart 6: Growth in cumulated revenue expenditure up to July 2017 (%, y-o-y)

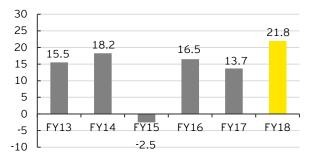
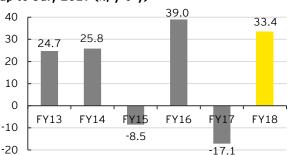


Chart 7: Growth in cumulated capital expenditure up to July 2017 (%, y-o-y)



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

C. Fiscal imbalance

- ► Fiscal deficit during April–July FY18 stood at 92.4% of the annual budgeted target as compared to 73.7% in the corresponding period of FY17 due to front-loading of expenditure this fiscal year (Chart 8). However, such a high level of fiscal deficit in the first four months of the fiscal year may constrain the Government from undertaking more capital expenditure for stimulating growth in the remaining part of the fiscal year.
- ► The Center's revenue deficit had crossed the 100% mark up to June 2017. Revenue deficit up to July 2017 was at 131.5% of the annual budgeted target as compared to 93.1% during the corresponding period of FY17 (Chart 9).

The Center's fiscal deficit during April-July FY18 stood at 92.4% of the annual budgeted target, while the revenue deficit during this period was at 131.5% of its annual budgeted target.

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

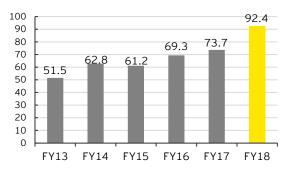
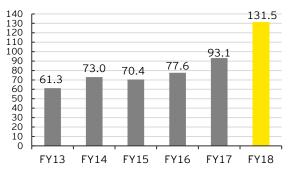


Chart 9: Revenue deficit up to July 2017 as a % of annual budgeted estimate for FY18



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

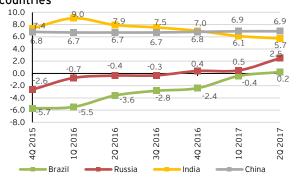
4 India: Comparative economic performance and prospects

- Based on quarterly trends in real GDP growth, while India's growth rate was higher than China's during 1Q2016 to 4Q2016, it fell below that of China in 1Q2017 and 2Q2017 (Table 3).
- Although India is expected to grow faster than the majority of the selected emerging and developed countries, its growth decreased by as much as 3.3% points from 1Q2016 to 2Q2017 (Table 3).
- ► Chart 10 shows that BRIC countries other than India have shown a turnaround in their growth rates in recent quarters while India's growth momentum has slowed down.

Table 3: Real GDP growth (%, y-o-y)

40 1Q 2Q 10 20 30 Country 2016 2016 2016 2016 2017 2017 China 6.7 6.7 6.7 6.8 6.9 6.9 India 9.0 7.9 7.5 7.0 6.1 5.7 0.5 2.5 Russia -0.7 -0.4 -0.3 0.4 ΕU 1.8 1.9 1.9 2.0 2.1 2.4 US 1.4 1.2 1.5 1.8 2.0 1.9 UK 2.0 1.6 1.7 2.0 1.7 South -0.60.6 0.6 0.4 0.7 0.5 Africa -2.4 0.2 -5.5 -2.8-0.4Brazil -3.6

Chart 10: Real GDP growth (%, y-o-y) - selected countries



Source (Basic Data): OECD Quarterly National Accounts, Data is based on calendar year

- CPI inflation for most of developing economies eased during 1Q2016 to 2Q2017. In India, it trended downward sharply (Table 4).
- ► Chart 11 shows that although CPI inflation for all BRIC countries decreased, for South Africa and China it was still above 4% and for India and Russia it was close to 2%.
- Measured on a quarterly basis, CPI inflation in India dropped to its lowest level at 2.2% in 2Q2017 (1QFY18). On a monthly basis, however, a reversal of this trend is now visible (see Chart 3)

Table 4: CPI based inflation rate (%, v-o-v)

Tubic 4. Ci	i buscu ii	Table 4: et i basea illiation fate (%, y o y)											
Country	1Q 2016	2Q 2016	3Q 2016	4Q 2016	1Q 2017	2Q 2017							
South Africa	6.6	6.5	6.4	6.9	6.5	5.2							
China	8.3	7.3	6.8	5.7	4.6	4.2							
Brazil	10.1	9.1	8.7	7.0	4.9	3.6							
UK	0.3	0.4	0.7	1.2	2.1	2.7							
India	5.3	5.7	5.2	3.7	3.6	2.2							
US	1.1	1.0	1.1	1.8	2.5	1.9							
EU	0.1	-0.1	0.3	0.8	1.8	1.7							
Russia	2.1	2.1	1.7	2.2	1.4	1.4							

Source (Basic Data): OECD Monthly Indicators, Data is based on calendar year

Chart 11: CPI based inflation (%, y-o-y) - selected countries

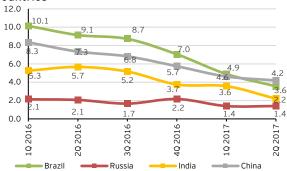
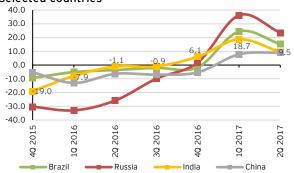


Table 5: Merchandise exports in US dollar (% growth, y-o-y)

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Country	1Q 2016	2Q 2016	3Q 2016	4Q 2016	1Q 2017	2Q 2017
Russia	-32.9	-25.8	-9.8	1.9	36.2	23.5
South Africa	-22.1	-10.8	-4.5	8.1	29.0	15.8
Brazil	-5.1	-3.6	-2.1	-1.6	24.3	15.2
India	-7.9	-1.1	-0.9	6.1	18.7	9.5
China	-13.0	-6.4	-7.0	-5.3	7.8	9.0
US	-7.0	-6.2	-2.4	2.0	7.5	6.0
UK	-9.1	-12.0	-15.7	-7.0	6.5	3.1
EU	-2.5	1.8	-0.8	0.5	6.6	2.9

Chart 12: Merchandise exports growth (%, y-o-y) - selected countries



Source (Basic Data): OECD Monthly Indicators, Data is based on calendar year

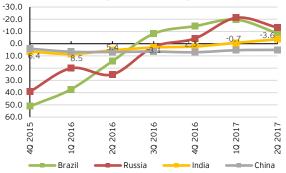
- For most emerging and developed countries, merchandise export growth contracted during 2016. With global demand recovering in 1Q2017, growth in merchandise exports also picked up considerably.
- Although export growth in India has also shown an upward trend in recent quarters, it is still showing the weakest growth as compared to other BRIC countries (Chart 12).

Table 6: Exchange rate movements (%, y-o-y)

				(10)	, ,	
Country	1Q 2016	2Q 2016	3Q 2016	4Q 2016	1Q 2017	2Q 2017
Russia	20.0	25.1	2.6	-4.3	-21.2	-13.3
South Africa	34.9	24.3	8.2	-2.1	-16.4	-11.9
Brazil	37.2	14.3	-8.2	-14.4	-19.7	-8.6
India	8.5	5.4	3.1	2.3	-0.7	-3.6
Euro Area	2.1	-2.1	-0.4	1.6	3.4	2.7
China	6.6	6.8	6.4	7.0	5.3	5.0
UK	5.9	6.8	18.0	22.2	15.5	12.1
Russia	20.0	25.1	2.6	-4.3	-21.2	-13.3

Source (Basic Data): OECD Monthly Indicators, Data is based on calendar year, a positive value indicates depreciation while a negative value represents appreciation

Chart 13: Exchange rate movements (%, y-o-y) - Selected countries (inverted scale)



- Currencies of major emerging economies, excluding China, have appreciated against the US dollar in the last three quarters, with the Russian ruble appreciating by the highest magnitude (Table 6 and Chart 13; negative sign shows appreciation of domestic currency vis-à-vis the US dollar).
- The depreciation of the Indian rupee against the US dollar showed first signs of a slowdown during 1Q2016 to 4Q2016. After that, it has been appreciating continuously. This has the potential of adversely affecting the prospects of export growth.
- Meanwhile, the Chinese yuan continued to depreciate against the US dollar and this is expected to provide China a competitive edge over India in the global market.

5 In focus: Revisiting demonetization — balancing long-term gains with short-term costs

The RBI's recent annual report, which contained the first official estimate of the volume of demonetized cash in the form of specified bank notes (SBNs) at INR15.28 trillion, triggered another major round of debate around the success or failure of India's 8 November 2016 demonetization. Since it had earlier been acknowledged that the demonetized cash amounted to INR15.44 trillion, it is only 1.036% of the demonetized cash that has not come back into the formal banking system. Notably, the figure of INR15.28 trillion is still an estimate, possibly an underestimate. This is because the RBI, in its annual report of FY17, has qualified its statement saying that "Till such time these notes are processed by the Reserve Bank for their numerical accuracy and authenticity, only an estimation of SBNs received back is possible."

Furthermore, the RBI has also clarified that these SBNs do not include cash returned to District Central Cooperative Banks and Indian rupee held by Nepalese citizens/financial institutions. Once these are also accounted for, the percentage of cash returned out of the demonetized currency may well be quite close to 100%. This makes it clear that if there was any expectation of a fiscal surplus arising out of demonetization due to some portion of the demonetized currency remaining unreturned leading to an extinguishment of the RBI's liabilities, such an expectation has been belied. This however, may not mean that black money was not held in the form of cash. It may imply that people who held money in this form found ways of getting it back into the banking system. One of the ways was possibly through discounts offered by these people to owners of Jan-Dhan accounts and savings accounts whereby large amounts could be dispersed into smaller deposits. The average balance in Jan Dhan accounts increased noticeably by nearly 48% during the period of demonetization, that is, from 9 November 2016 to 28 December 2016, but has fallen by 19% since then. The net outcome therefore has been that any black money held in the form of cash has now been "whitened."

Short-term shocks and related costs: Erosion of growth momentum and employment

The Government and people at large did have to bear considerable costs in the immediate aftermath of demonetization. Some of these costs may be difficult to quantify, but objective evidence of the short-term costs is available in at least some important dimensions.

First, there was an erosion of growth of output and employment. Second, the Government itself lost dividend from the RBI due to demonetization-related expenses. Third, there were a variety of private costs that had to be incurred by the citizens to cope with the disruption. Fourth, there was a loss of growth momentum in the economy. These adverse effects were the result of a combination of factors, and demonetization alone may not be held fully responsible for these short-term impacts as discussed below.

Demonetization had a tangible adverse impact on GDP growth. As shown in Table 1, real GDP growth has been falling steadily quarter after quarter since 4QFY16, when it was 9.0%. It fell to 5.7% in 1QFY18, a decrease of 3.3% points. The two quarters that can be considered as the demonetization quarters in FY17 were 3QFY17 and 4QFY17. In these two quarters, the GDP growth rate fell to 7% and 6.1% respectively. Clearly, the downward trend in GDP growth preceded demonetization largely due to an investment slowdown that had already hit the economy. Demonetization further accentuated this downward trend. The sector most vulnerable to demonetization was the informal sector. This is also argued by the Economic Survey, Volume 2, brought out by the Ministry of Finance on 2 August 2017. In terms of the overall GVA at basic prices, was a fall from 8.7% in 4QFY16 to 5.6% in 1QFY18. Charts 14 and 15 track the quarterly growth rates from 4QFY16 to 1QFY18 respectively for overall GVA and GDP and their major components.

Chart 14: Components of aggregate output (real, % annual)

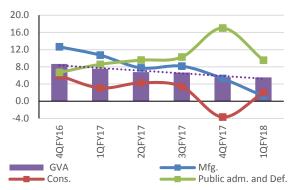
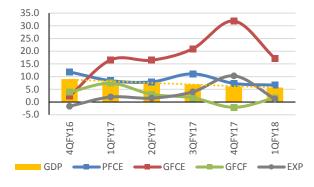


Chart 15: Components of AD (real, % annual)



Source (Basic Data): MOSPI

In terms of sectoral GDP growth, employment-intensive sectors such as manufacturing and construction suffered the most. In the case of manufacturing, the fall from 12.7% in 4QFY16 to 1.2% in 1QFY18, a fall of 11.5% points, is quite

debilitating. The fall in the growth rate of construction from 6% in 4QFY16 to (-) 3.7% in 4QFY17, a fall of 9.7% points, is equally deleterious. A slight increase in the growth rate of construction at 2% in 1QFY18 is hardly any consolation. On the demand side, PFCE declined from 11.8% to 6.7% during 4QFY16 to 1QFY18, rising to a local peak in 3QFY17, the quarter where demonetization took place. This was explained by many analysts as a result of the extra spending that people undertook using their cash balances held in the form of demonetized currency. Even more disturbing is the fall in the growth of GFCF from 7.4% in 1QFY17 to (-) 2.1% in 4QFY17, with a mild upturn at 1.6% in 1QFY18. Furthermore, export growth also reached extremely low levels, largely been driven by weak global demand. Various agencies, including international agencies such as the IMF, had estimated economic costs of demonetization in terms of erosion of GDP growth at close to 1% point (See In-Focus in the February 2017 issue of Economy Watch).

A distinction also needs to be made between the effects of demonetization and those of GST. Observers say that the effect of demonetization might have continued well into 1QFY18. However, in this quarter, part of the low growth might have been due to the de-stocking that happened in anticipation of GST, which was introduced in July 2017. These are separate influences, but it is still clear that demonization did adversely affect GDP growth and employment in the Indian economy for possibly three guarters: from 3QFY17 to 1QFY18.

Second, the Government itself, instead of reaping a fiscal surplus, actually lost out in terms of the dividend that it receives from the RBI, which declined sharply to INR30,659 crore in FY17 from INR65,876 crore in FY16, a fall of 53.4%, primarily on account of demonetization. Two sources of this erosion in RBI's dividends to the Government were (a) increased cost of printing new money, which was at INR7,965 crore in FY17 and (b) payment of interest of INR17,426 crore by the RBI in FY17 due to the surge in bank deposits (under the LAF) after demonetization.

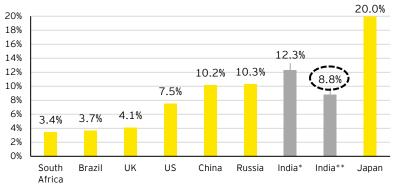
Third, other costs that are important although not necessarily quantifiable are the private costs in coping with or resulting from demonetization such as closure of businesses, productive time lost in queueing up in front of the banks as well as physical and emotional discomforts in such places. Another important dimension of the costs involved is those suffered by the banking system as a whole. It is now well recognized that demonetization resulted in considerable increase in bank deposits, a part of which remains frozen because of restrictions placed by the Government on its withdrawal. Additionally due to the weak demand for credit, the banking system was left with excess liquidity. Since these balances were held in savings deposits or other interest-bearing deposits, the banks had to pay interest on them while they received a much lower return on the cash that they held with the RBI, even though banks were given relief in a number of ways (for example, the RBI had mandated scheduled banks to maintain an incremental CRR of 100%, effective the fortnight beginning 26 November 2016, on the increase in net demand and time liabilities between 16 September 2016 and 11 November 2016). The detrimental impact of demonetization on the informal sector is analyzed in the Economic Survey. Volume 2, by making reference to data on the demand for reliance on the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). The Survey says that there is suggestive evidence of increased demand for this scheme over the demonetization period (early November 2016 to March 2017). This increased reliance on MGNREGS was especially strong in the less-developed states comprising Bihar, Chhattisgarh, Rajasthan and Jharkhand. This reflects increased unemployment in urban areas and people moving back to rural areas to work under this Scheme.

Fourth, there is a loss of growth momentum due to the combined effect of demonetization and uncertainties relating to GST. A visible sign of the weakening growth impulse in the economy is extremely low credit growth rate, which has been in the range of 4% to 6% for almost 8 months. The GST-related uncertainties may take some additional time to wane before the growth pulse of the economy normalizes. It is often not recognized that once in a downslide, persistence in the behavior of economic agents continue the downward movement significantly beyond the point at which the short-term adverse impact of the disruptive events get absorbed.

Short-term benefit: New normal for currency intensity

One immediate benefit of demonetization is a reduction in the demand for holding currency. We may recognize that if currency in circulation were to stabilize at a lower level in terms of percentage of GDP, which the RBI refers to as the new norm, this would itself be a positive gain of some importance. The RBI observes (para I.20, Annual Report, FY17), "... currency demand appears to have attained a new normal (currently around 87% of the pre-demonetization peak)" Reducing currency intensity in India, which was the second highest among the major countries, was one of the objectives of demonetization. If currency in circulation as a percentage of GDP stabilizes at a tangibly lower level compared to its pre-demonetization level, it can be considered as a major positive resulting from demonetization.

Chart 16: Currency-intensity of GDP: Selected countries



Source: IMF Financial Statistics and respective Central Banks Notes: Ratios for South Africa, Brazil and Japan pertain to 2016 while those of UK, US, China and Russia pertain to 2015 * Data pertains to 2015-16, ** Data pertains to 2016-17, currency in circulation pertains to the amount as on $31^{\rm st}$ March 2017.

Long-term benefits: Digitization and improved tax compliance

The long-term potential benefits of demonetization are expected to emanate from (a) increased formalization of the economy and (b) increased digitization of the economy, which would consequently increase the tax-GDP ratio. Again, these changes cannot be considered as entirely due to demonetization. First, formalization and digitization are increasing on their own on a trend basis with increased availability of IT, internet etc. Second, these trends are likely to be strengthened by the introduction of GST.

Chart 17: Y-o-y growth in the total value of transactions through electronic payment systems (%)



Source (Basic data): RBI

Table 7: Monthly shares in respective annual total value of transactions through electronic payment systems (%)

Month/ Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17
April	7.5	5.6	9.5	8.1	7.7	8.0	7.6
May	6.0	7.1	10.2	7.8	7.5	7.2	8.2
June	7.3	8.5	11.1	8.3	8.5	8.8	9.1
July	7.1	6.5	8.6	8.8	7.9	8.3	8.3
Aug	5.4	6.2	8.1	7.4	7.5	7.8	8.6
Sep	7.0	7.6	8.8	8.4	9.4	8.3	9.5
Oct	8.8	6.8	9.0	8.0	7.6	7.9	8.6
Nov	10.1	8.0	5.6	7.2	7.3	6.7	7.0
Dec	11.8	10.4	6.8	8.7	9.1	8.7	7.8
Jan	9.2	10.3	7.0	8.6	8.3	8.0	7.3
Feb	8.3	9.9	6.4	7.4	7.7	8.4	6.9
Mar	11.6	13.0	9.0	11.1	11.4	11.8	11.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source (Basic data): RBI

Chart 17 shows y-o-y growth in total value of transactions carried out through electronic payment systems. Two trends are clearly visible. First, there is an identifiable seasonality discernible in the monthly shares in respective annual total value of transactions through electronic payment systems. These shares peak in June, September, December and March, the months when tax payments, including advance tax payments, are made (Table 7). Second, the growth rates on average have been much higher in the pre-demonetization months as compared to the post-demonetization months. In fact, in June and July 2017, these growth rates were negative. Thus, it would be too early to assert that digitization has increased due to demonetization.

The Ministry of Finance has come out with estimates of the impact of demonetization on widening the tax base and increasing direct tax collections. In terms of widening of the tax base, the Ministry notes that the number of e-returns of individual taxpayers filed till 5 August 2017, which was the due date of filing of returns for FY17, increased to 2.79 crore from 2.22 crore during the corresponding period of the previous year, an increase of 25.3%. The total number of all returns, comprising both electronic and paper returns, during FY17 was 17.3% more than the returns filed during FY16. The Ministry also argues that growth in direct tax collections is also clearly visible. Collection of advance tax under personal income tax (other than corporate tax) as on 5 August 2017 showed a growth of nearly 42% over the corresponding period of FY17. Furthermore, collection of self-assessment tax under personal income tax showed a growth of more than 34% over the corresponding period of FY17. Soon after the GST registration facility opened up, by 29 July 2017, the number of new registrants under GST had crossed 10 lakh, over and above the existing 86 lakh registrants. The combined effect of demonetization and GST is expected to increase India's tax-GDP ratio in the medium term. Considering both direct and indirect taxes, we can estimate our tax-GDP ratio to increase by 4% points in a period of five years. If this happens, it would allow significant additional fiscal space for increasing spending on vital sectors such as health, education and infrastructure. Over the medium term, we need to recognize that in a perspective of one to two years, the positive impact of demonetization on the tax-GDP ratio can also directly fructify provided the Government is able to follow up in terms of tracing the sources of additional bank deposits after demonetization. The press note released by the Government on 31 August 2017 indicates that the number of searches and surveys that the IT department has undertaken after demonetization has witnessed a quantum jump. It has noted that there has been an increase of 158% in the number of searches, an increase of 106% in seizures and an increase of 38% in admission of undisclosed income. The number of surveys has increased by 183% and the percentage increase in undisclosed income detected as a result of the enforcement action is 44%. Clearly, as a result of pursuing these enforcement actions, there would also be a short-term demonetization-linked increase in tax revenues, but these effects would be one-time. The economy would of course benefit relatively more from the longer-term forces that would be pushing our tax-GDP ratio further up.

In conclusion, it can be said that while demonetization led to an adverse impact on the economy in the short run, its benefits may yet overtake the short-term costs in the long run provided complementary policies are pursued to uplift the tax-GDP ratio and to increase the depth of digitization.

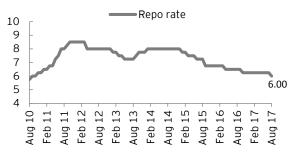
6 Money and finance: Rising inflation may reduce chances of a rate cut in the near-term

A. Monetary sector

i. Monetary policy

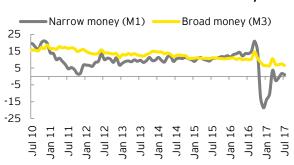
- ▶ The RBI reduced its policy reporate by 25 basis points to 6.0% during its monetary policy review held on 2 August 2017 (Chart 18) in the backdrop of low inflation and subdued demand. Even though CPI inflation had dropped to significantly low levels during May and June 2017, the trend reversed in July and August 2017 as both CPI and WPI inflation increased.
- ► This rate reduction by the RBI should have ideally prompted the banks to lower their lending rates. However, given the problem of non-performing assets (NPAs), banks would find it difficult to fully pass on the benefits to the borrowers, thereby limiting the monetary transmission.

Chart 18: Movements in reporate



Source: Database on Indian Economy, RBI

Chart 19: Growth in narrow and broad money



Falling inflation and subdued demand in the economy had prompted the RBI to reduce its policy reporate by 25 basis points to 6.0% in August 2017. However, a reversal in the trend of CPI inflation, particularly the core CPI inflation, has dimmed the prospects of any rate cut by the RBI in the nearterm.

ii. Money stock

- ▶ Growth in broad money stock (M₃) fell to 6.6% in July 2017 from 7.4% in June 2017 due to slower growth in time and demand deposits. Growth in time deposits (accounting for over 76% of the broad money stock) moderated to 8.1% in July 2017 from 9.1% in June 2017, while demand deposits grew by 22.4% in July 2017 as compared to 25.5% in June 2017.
- ▶ Narrow money (M₁) continued to post a meager growth of 1.1% in July 2017, easing from 1.7% in June 2017 (Chart 19). Currency in circulation (excluding non-demonetized currency) as percentage of the total demonetized currency (indicating the extent of re-monetization) was 85.6% by 1 September 2017, marginally lower than 86.0% on 18 August 2017.

iii. Aggregate credit and deposits

- ► Credit by scheduled commercial banks grew at a slower pace of 5.2% (y-o-y) in July 2017 as compared to 6.0% in June 2017 (Chart 20). Since November 2016, credit growth has remained low and range bound averaging around 4% to 7%.
- ▶ Growth in non-food credit marginally increased to 5.3% in July 2017 from 4.8% in June 2017. Growth in personal loans, a major component of retail sector credit, increased to 15% in July (14.1% in June), while growth in services sector credit increased to 4.9% in July 2017 from 4.7% in June 2017.
- ▶ Credit growth to industries has continued its declining trend for 10 consecutive months. The pace slowed to (-) 0.3% in July 2017 as compared to (-) 1.1% in June 2017 (Chart 21). Despite the majority of large banks having dropped interest on home loans in May 2017, growth in housing loans moderated to 10.5% in July 2017, its lowest level since July 2012.

► Growth in aggregate bank deposits moderated to 9.7% (y-o-y) in July 2017, its slowest pace since November 2016, falling from 11.1% in June 2017.

Chart 20: Growth in credit and deposits

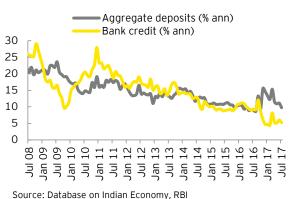
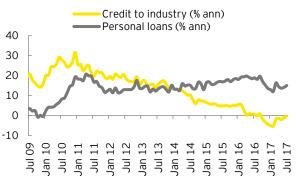


Chart 21: Growth in industrial and personal loans



Source: Database on Indian Economy, RBI

B. Financial sector

i. Interest rates

- ▶ Interest rate paid by banks on term deposits with more than one-year maturity was marginally lowered to range between 6.25% and 6.75% in August 2017 as compared to 6.25%–6.90% in July 2017. The State Bank of India had also lowered the interest rate paid on savings deposits by 50 basis points to 3.5% in July 2017.
- ▶ The average yield on 10-year government securities was broadly stable, averaging around 6.6% during June 2017 to August 2017, falling from 7.1% in May 2017. Although the RBI's decision to reduce the policy rate by 25 basis points lowered the yields during the first half of the month, benchmark yields began hardening during the latter part of the month as retail inflation grew more than expected in July 2017 and it continued its trend in August 2017.

ii. FPI and stock market

- The benchmark S&P NIFTY continued its positive trend for the seventh consecutive month to reach 9,850 points (average), increasing by 243 points in July 2017 from 9,607 in June 2017 (Chart 22). Market sentiments were influenced by strengthening prospects of a rate cut by the RBI in August 2017, improving global growth outlook and slower pace of rate hikes by the US Fed.
- As per provisional data, overall FIIs increased to US\$6.7 billion in July 2017 from US\$6.2 billion (revised) in June 2017 as FDI inflows improved during the month. FII flows into emerging economies have been influenced by the monetary policy stance adopted by central banks across major developed economies including Japan, US and the ECB

Chart 22: Stock market movement

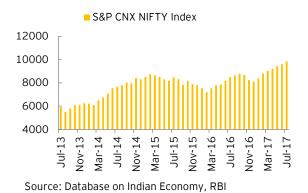
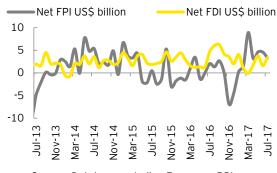


Chart 23: Net FDI and FPI



Source: Database on Indian Economy, RBI

▶ Net FDI inflows increased to US\$3.4 billion in July 2017 from US\$1.6 billion (revised) in June 2017, while net FPI inflows were lower at US\$3.3 billion in July 2017 as compared to US\$4.6 billion in June 2017 (Chart 23).

7 Trade and current account balance (CAB): CAB deteriorates sharply

A. CAB: Significant deterioration

CAB as a percentage of GDP declined sharply to a four-year low of (-) 2.4% in 1QFY18 from (-) 0.6% in 4QFY17 (Table 8, Chart 25). This was partly due to a pickup in gold imports prior to GST and the lagged effect of rupee appreciation leading to faster growth in non-gold and non-oil imports relative to exports. Merchandise trade balance declined substantially to a four-year low of (-) US\$41.2 billion from (-) US\$29.7 billion in 4QFY17 while growth in net service exports reached a 19-quarter high of 15.7% mainly due to an increase in net earnings from travel, construction and other business services.

Table 8: CAB

	CAB (- deficit/+surplus) (US\$ billion)	CAB as a % of nominal GDP	Goods account net (US\$ billion)	Services account net (US\$ billion)	Income account net (US\$ billion)	Transfers net (US\$ billion)
FY14	-32.4	-1.7	-147.6	73.0	-23.0	65.3
FY15	-26.8	-1.3	-144.9	76.6	-24.1	65.7
FY16	-22.2	-1.0	-130.1	69.7	-24.4	63.0
FY17	-15.3	-0.7	-112.4	67.5	-26.3	56.6
2QFY17	-3.5	-0.6	-25.6	16.3	-8.1	14.0
3QFY17	-8.0	-1.4	-33.3	17.8	-6.4	14.0
4QFY17	-3.5	-0.6	-29.7	17.6	-5.6	14.4
1QFY18	-14.3	-2.4	-41.2	18.2	-5.8	14.6

Source: Database on Indian Economy, RBI

B. Merchandise trade and exchange rate: Rupee keeps appreciating

- ▶ Growth in merchandise exports recovered to a four-month high of 10.7% in August 2017 from 3.9% in July 2017. It has continuously declined from a five-year peak of 27.6% (Chart 24) in March 2017.
- ▶ Growth in oil exports nearly doubled to 39.6% from 20.3% in July 2017. The pace of contraction in exports of gems and jewelry increased further to (-) 25.8% from (-) 22.7% in the previous month. The slowdown in non-oil exports may be attributed to the lagged effect of rupee appreciation as well as some disruption due to GST.
- ▶ Growth (y-o-y) in overall imports increased to 21.5% in August 2017 from 15.4% in July 2017 on account of growth in imports of oil, transport equipment, machinery, project goods, electronic goods and precious and semi-precious stones. Growth in imports of transport equipment and machinery increased from 4.6% in July 2017 to 18.7% in August 2017, although it may not reflect a demand-side recovery since IIP growth in July 2017 continued to remain subdued. Growth in oil imports remained stable at 15.0%.
- ▶ Due to a pick-up in imports, India's merchandise trade deficit increased marginally to US\$11.6 billion from a fourmonth low of US\$11.4 billion in July 2017.
- ► The Indian rupee appreciated further to INR64.0 per US dollar in August 2017 from INR64.5 per US dollar in July 2017 partly due to rising FDI inflows.

Chart 24: Developments in merchandise trade

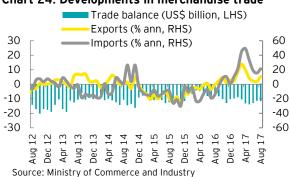
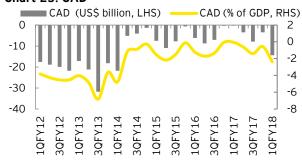


Chart 25: CAD



Source: Database on Indian Economy, RBI

8 Global economy: Global growth expected to show mild improvement

A. Global growth outlook

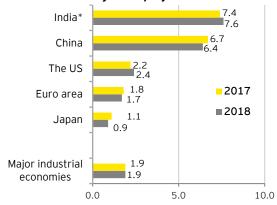
- ► The UNCTAD (Trade and Development Report, September 2017) has estimated global growth at 2.6% in 2017, only slightly above the average rate of 2.5% witnessed during the five-year period from 2011 to 2016. Developed economies are estimated to grow by 1.9% while developing countries are projected to grow by 4.2% in 2017.
- The World Bank (Global Monthly, July 2017) has estimated global growth at 2.6% in 1Q2017, lower than the average of 3% in the last two quarters of 2016.
- ▶ As per ADB (Asian Development Outlook Supplement, July 2017), growth in major industrial economies¹ is forecasted at 1.9% in 2017 and 2018 (Chart 26).
- ▶ ADB has revised down the GDP growth forecast for the US from 2.4% to 2.2% in 2017 in light of a temporary consumption-led slowdown in 1Q2017. The 2017 growth estimate by UNCTAD is marginally lower at 2.1%. Growth estimate has been retained at 2.4% in 2018 by the ADB.

The UNCTAD estimated global growth to marginally improve to 2.6% in 2017. The mild pick-up is attributed to the turnaround in developing countries, which as a group is expected to grow by 4.2%. Growth in developed countries is projected at 1.9%.

- ▶ The ADB has revised the growth forecast for the Euro area up to 1.8% and 1.7% in 2017 and 2018 respectively. UNCTAD's estimate of the 2017 growth also stands at 1.8%. GDP growth in 1Q2017 was higher at 2.3% from 2.1% in 4Q2016, reflecting recovering domestic demand on account of accommodative monetary policy and improving labor markets.
- ▶ In Japan, growth forecast has been revised up to 1.1% in 2017 and is retained at 0.9% in 2018 by the ADB. The UNCTAD estimated 2017 GDP growth at 1.2% for the Japanese economy. Since the beginning of 2017, private consumption has been growing, although private investment growth has been sluggish. The Bank of Japan kept its accommodative monetary policy unchanged at its last meeting.
- Among developing economies, the ADB has revised up the growth projections for China to 6.7% in 2017 (same as UNCTAD's estimate) and 6.4% in 2018. Growth in 1H2017 was stronger than expected at 6.9% (y-o-y), supported by strong consumption growth and a pick-up in exports. However, investment growth remains low, constrained by excess capacity and high debt.
- ▶ UNCTAD has estimated GDP growth in Brazil and Russia at 0.1% and 1.5% respectively in 2017.
- ▶ In case of India, the ADB forecasts real GDP growth at 7.4% and 7.6% in 2017 and 2018 respectively. However, the recently released UNCTAD report estimates 2017 GDP growth at 6.7%, 0.7% points lower than the ADB growth estimate. UNCTAD has attributed this slowdown to the adverse impact of demonetization on growth, which may further be affected by the rollout of GST.

1 the US, the euro area, and Japan

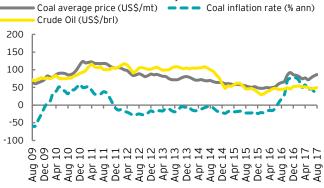
Chart 26: Global growth projections



Source: Asian Development Outlook Supplement, July 2017,

*Forecast pertains to fiscal year

Chart 27: Global crude and coal prices



Souce: World Bank, Pinksheet

B. Global energy prices

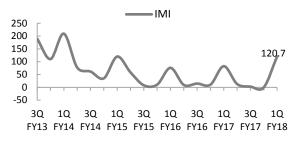
- ▶ Global crude prices increased marginally to US\$49.9/bbl. in August 2017 from US\$47.7/bbl. in July 2017 (Chart 27). Despite strengthening demand for oil, increases in production by Libya, Nigeria and particularly the US are exerting downward pressure on prices and minimizing the potential for significant crude oil price increases through 2018 (Asian Development Outlook Supplement, July 2017).
- On the other hand, average global coal prices increased for the third straight month in August 2017 to US\$86.5/mt. from US\$82.7/bbl. in July 2017. However, this is still lower than the peak price of US\$92/bbl. in November 2016.

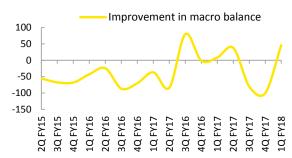


9 Index of macro imbalance (IMI): Deteriorated sharply in 1QFY18

- ► The IMI is obtained by adding the percentage deviation of inflation rate (based on new CPI 2011–12=100), fiscal deficit (as a percentage of GDP) and current account deficit (as a percentage of GDP) from their respective benchmarks of 4% of GDP, 3% of GDP and 1.3% of GDP². All three components of IMI have been given equal weightage (33.33%). The state of "balance" is judged by a value of "0."
- An index value >0 indicates the presence of 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 negative and positive deviations across indices are not canceled out.
- Quarterly y-o-y change in the IMI indicates a sharp increase in the macro imbalance in 1QFY18 as compared to 1QFY17. This is because two components of IMI, namely, the Center's fiscal deficit and CAD, increased above their respective benchmarks (Chart 28). In 1QFY18, the Center's fiscal deficit and CAD widened to 11.4% and 2.4% respectively while CPI inflation was at 2.2%.

Chart 28: IMI (Quarterly)





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

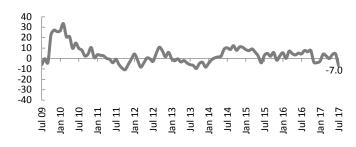
After attaining near-full macro balance in 4QFY17, an increase in the Center's fiscal deficit and CAD above their respective benchmarks during 1QFY18 led to a high macro imbalance in the economy. In an economy where growth is on a downward trend, a sharp increase in the macro imbalance could be a cause of worry if it persists.

10 Index of aggregate demand (IAD): Contracted in July 2017

After showing signs of revival in May 2017 and June 2017, growth in IAD plummeted to (-) 7.0% in July 2017, its worst performance since January 2014. This is indicative of deteriorating demand conditions in the economy

► The y-o-y growth in IAD contracted to (-) 7.0% in July 2017 as compared to a growth of 4.5% in June 2017 (Chart 29). Demand conditions in both manufacturing and services sectors contracted during the month.

Chart 29: Growth in IAD (y-o-y)



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

² 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/	IIP	Mining	Manufactu ring	Electricity	Core IIP	Fiscal year/quarter/	PMI mfg.	PMI ser.
month	% change y-o	-у		month				
FY14	3.3	-0.2	3.6	6.0	2.6	FY14	50.5	48.5
FY15	4.0	-1.3	3.8	14.8	4.9	FY15	52.2	51.7
FY16	3.3	4.3	2.9	5.7	3.0	FY16	51.3	51.7
FY17	4.6	5.3	4.3	5.8	4.8	FY17	51.6	51.0
2QFY17	4.5	-1.5	5.5	3.1	3.8	2QFY17	52.2	52.9
3QFY17	3.8	6.7	3.1	6.1	5.3	3QFY17	52.1	49.3
4QFY17	3.1	7.9	2.2	4.3	3.1	4QFY17	51.2	50.2
1QFY18	2.0	1.3	1.8	5.3	2.7	1QFY18	51.7	51.8
Apr-17	3.2	3.0	2.9	5.4	2.6	May-17	51.6	52.2
May-17	2.8	0.2	2.6	8.3	4.1	June-17	50.9	53.1
Jun-17	-0.2	0.4	-0.5	2.1	8.0	July -17	47.9	45.9
Jul-17	1.2	4.8	0.1	6.5	2.4	Aug-17	51.2	47.5

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

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

Fiscal year/quart	СРІ	Food Price Index	Fuel and lighting	WPI	Food Index	Mfg. products	Fuel and power			
er/month	% change y-o-y			% change y-o-y	% change y-o-y					
FY14	9.4	12.1	7.7	5.2	9.6	3.0	7.1			
FY15	5.9	6.4	4.2	1.3	4.3	2.6	-6.1			
FY16	4.9	4.9	5.3	-3.7	1.2	-1.8	-19.7			
FY17	4.5	4.2	3.3	1.7	5.9	1.3	-0.3			
2QFY17	5.2	6.1	2.8	1.0	7.2	0.8	-6.8			
3QFY17	3.7	2.2	3.2	1.7	4.8	1.9	1.7			
4QFY17	3.6	1.5	4.2	5.0	4.7	3.3	21.3			
1QFY18	2.2	-0.9	5.4	2.3	0.4	2.6	11.2			
May-17	2.2	-1.0	5.5	2.2	0.1	2.6	11.7			
Jun-17	1.5	-2.1	4.5	0.9	-1.3	2.3	5.3			
Jul-17	2.4	-0.3	4.9	1.9	2.1	2.2	4.4			
Aug-17	3.4	1.5	4.9	3.2	4.4	2.5	10.0			

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	Custom duty	Excise duty	Service tax	Fiscal deficit	Revenue deficit
	% change y-o-y						% of GDP	% of GDP
FY15	9.3	8.7	8.7	9.2	11.6	8.6	4.0	2.9
FY16	17.0	6.0	8.5	11.9	51.9	25.8	3.9	2.5
FY17	17.9	6.7	21.5	7.4	32.7	20.4	3.5	2.0
FY18 (BE)	12.2	9.1	24.9	12.9	5.0	11.1	3.2	1.9
Cumulated growt	h (% y-o-y)						% of budget targ	get
Dec-16	18.3	4.8	20.5	4.9	43.7	25.0	93.8 (RE)	113.9 (RE)
Jan-17	17.7	3.2	19.7	5.2	42.9	23.3	105.6 (RE)	130.2 (RE)
Feb-17	17.6	3.5	20.9	5.2	40.3	21.3	113.4 (RE)	142.8 (RE)
Mar-17	17.9	6.7	21.5	7.4	32.7	20.4	100.1 (RE)	99.1 (RE)
Apr-17	33.0	322.4	8.0	16.5	429.1	14.3	37.6	55.5
May-17	25.0	2068.2	11.4	17.6	15.9	10.2	68.3	100.7
Jun-17	15.2	24.3	10.6	15.0	7.3	20.4	80.8	119.3
July-17	17.1	24.2	18.8	31.7	-0.6	14.3	92.4	131.5

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

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

Fiscal year/month	Repo rate (end of period)	Fiscal year/quarter /month	M1	М3	Bank credit	Agg. deposits	10 yr. Govt. B Yield	Net FDI	Net FPI	FX reserves
	%		% change	y-o-y			%	US\$ billion	US\$ billion	US\$ billion
FY14	8.00	FY14	8.5	13.4	14.9	14.2	8.4	21.6	4.8	304.2
FY15	7.50	FY15	11.3	10.9	11.0	12.1	8.3	31.3	42.2	341.6
FY16	6.75	FY16	13.5	10.1	9.7	10.5	7.7	36.0	-4.1	355.6
FY17	6.25	FY17	3.6	10.6	8.0	11.7	7.0	35.6	7.6	370.0
Feb-17	6.25	2Q FY17	21.0	14.6	10.4	10.7	7.0	17.0	6.1	372.0
Mar-17	6.25	3Q FY17	-18.6	6.6	6.5	13.2	6.6	9.7	-11.3	360.3
Apr-17	6.25	4Q FY17	3.6	10.6	5.8	13.6	6.9	5.0	10.8	370.0
May-17	6.25	1Q FY18	1.7	7.4	5.5	11.2	7.0	8.0	12.4	386.5
Jun-17	6.25	Apr-17	-2.3	7.1	5.2	11.5	7.2	1.7	3.2	372.7
Jul-17	6.25	May-17	-0.9	7.0	5.1	10.9	7.1	3.7	4.6	378.8
Aug-17	6.00	Jun-17	1.7	7.4	6.0	11.1	6.6	1.6	4.6	386.5
Sep-17	6.00	Jul-17	1.1	6.6	5.2	9.7	6.6	3.4	3.3	392.9

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/quarte r/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		
FY14	4.7	-8.3	-135.8	60.5	103.7	76.1	2009	-0.1	-3.4	2.9
FY15	-1.3	-0.5	-137.7	61.1	83.2	65.9	2010	5.4	3.1	7.5
FY16	-15.5	-15.0	-117.7	65.5	46.0	52.7	2011	4.2	1.7	6.3
FY17	5.0	0.0	-105.6	67.1	47.9	70.4	2012	3.5	1.2	5.3
2QFY17	-0.9	-12.2	-23.7	67.0	44.7	63.5	2013	3.3	1.2	5.0
3QFY17	1.0	-1.4	-33.5	67.4	49.1	87.7	2014	3.4	1.9	4.6
4QFY17	19.2	10.4	-29.2	67.0	52.9	79.8	2015	3.4	2.1	4.3
1QFY18	11.2	34.3	-40.1	64.4	49.4	75.3	2016*	3.2	1.7	4.3
May-17	8.3	33.1	-13.8	64.4	49.9	71.7	2017**	3.5	2.0	4.6
Jun-17	4.4	19.0	-13.0	64.4	46.2	77.4	2018**	3.6	1.9	4.8
July-17	3.9	15.4	-11.4	64.5	47.7	82.7	2019**	3.7	1.9	4.9
Aug-17	10.7	21.5	-11.6	64.0	49.9	86.5	2020**	3.7	1.7	4.9

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

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

Fiscal year/quarter GVA Agr. Ming. Mfg. Elec. Cons. Trans. Fin. Publ. GVA FY14 6.2 5.6 3.1 5.1 4.0 3.0 6.8 11.0 3.8 6.0 FY15 7.0 -0.2 9.8 7.7 7.3 4.1 8.9 11.3 8.1 3.5 FY16 7.9 0.7 10.5 10.8 5.0 5.0 10.5 10.8 6.9 0.5 FY17 (PE) 6.6 4.9 1.8 7.9 7.2 1.7 7.8 5.7 11.3 2.9 10 FY16 7.6 2.4 8.3 8.2 2.8 6.2 10.3 10.1 6.2 1.0 20 FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5	Fiscal year/quarter	Output: Major sectors IPD inflation									
FY15 7.0 -0.2 9.8 7.7 7.3 4.1 8.9 11.3 8.1 3.5 FY16 7.9 0.7 10.5 10.8 5.0 5.0 10.5 10.8 6.9 0.5 FY17 (PE) 6.6 4.9 1.8 7.9 7.2 1.7 7.8 5.7 11.3 2.9 1Q FY16 7.6 2.4 8.3 8.2 2.8 6.2 10.3 10.1 6.2 1.0 2Q FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.	Fiscal year/quarter	GVA	Agr.	Ming.	Mfg.	Elec.	Cons.	Trans.	Fin.	Publ.	GVA
FY16 7.9 0.7 10.5 10.8 5.0 5.0 10.5 10.8 6.9 0.5 FY17 (PE) 6.6 4.9 1.8 7.9 7.2 1.7 7.8 5.7 11.3 2.9 1Q FY16 7.6 2.4 8.3 8.2 2.8 6.2 10.3 10.1 6.2 1.0 2Q FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4	FY14	6.2	5.6	3.1	5.1	4.0	3.0	6.8	11.0	3.8	6.0
FY17 (PE) 6.6 4.9 1.8 7.9 7.2 1.7 7.8 5.7 11.3 2.9 1Q FY16 7.6 2.4 8.3 8.2 2.8 6.2 10.3 10.1 6.2 1.0 2Q FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6	FY15	7.0	-0.2	9.8	7.7	7.3	4.1	8.9	11.3	8.1	3.5
1Q FY16 7.6 2.4 8.3 8.2 2.8 6.2 10.3 10.1 6.2 1.0 2Q FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	FY16	7.9	0.7	10.5	10.8	5.0	5.0	10.5	10.8	6.9	0.5
2Q FY16 8.2 2.3 12.2 9.3 5.7 1.6 8.3 13.0 7.2 -1.4 3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	FY17 (PE)	6.6	4.9	1.8	7.9	7.2	1.7	7.8	5.7	11.3	2.9
3Q FY16 7.3 -2.1 11.7 13.2 4.0 6.0 10.1 10.5 7.5 0.9 4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	1Q FY16	7.6	2.4	8.3	8.2	2.8	6.2	10.3	10.1	6.2	1.0
4Q FY16 8.7 1.5 10.5 12.7 7.6 6.0 12.8 9.0 6.7 1.6 1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	2Q FY16	8.2	2.3	12.2	9.3	5.7	1.6	8.3	13.0	7.2	-1.4
1Q FY17 7.6 2.5 -0.9 10.7 10.3 3.1 8.9 9.4 8.6 1.1 2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	3Q FY16	7.3	-2.1	11.7	13.2	4.0	6.0	10.1	10.5	7.5	0.9
2Q FY17 6.8 4.1 -1.3 7.7 5.1 4.3 7.7 7.0 9.5 2.4 3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	4Q FY16	8.7	1.5	10.5	12.7	7.6	6.0	12.8	9.0	6.7	1.6
3Q FY17 6.7 6.9 1.9 8.2 7.4 3.4 8.3 3.3 10.3 2.6 4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	1Q FY17	7.6	2.5	-0.9	10.7	10.3	3.1	8.9	9.4	8.6	1.1
4Q FY17 5.6 5.2 6.4 5.3 6.1 -3.7 6.5 2.2 17.0 5.4	2Q FY17	6.8	4.1	-1.3	7.7	5.1	4.3	7.7	7.0	9.5	2.4
	3Q FY17	6.7	6.9	1.9	8.2	7.4	3.4	8.3	3.3	10.3	2.6
1Q FY18 5.6 2.3 -0.7 1.2 7.0 2.0 11.1 6.4 9.5 2.2	4Q FY17	5.6	5.2	6.4	5.3	6.1	-3.7	6.5	2.2	17.0	5.4
	1Q FY18	5.6	2.3	-0.7	1.2	7.0	2.0	11.1	6.4	9.5	2.2

	Expenditure components						IPD inflation
Fiscal year/quarter	GDP	PCE	GCE	GFCF	EX	IM	GDP
FY14	6.5	7.4	0.6	1.8	7.8	-8.1	6.0
FY15	7.3	6.2	9.6	3.2	1.8	0.9	3.2
FY16	8.0	6.1	3.3	6.5	-5.3	-5.9	1.8
FY17 (PE)	7.1	8.7	20.8	2.4	4.5	2.3	3.6
1Q FY16	7.6	2.0	0.1	4.7	-6.1	-5.8	2.9
2Q FY16	8.4	3.9	4.1	5.0	-4.4	-3.7	1.0
3Q FY16	7.4	5.9	5.1	7.0	-8.7	-10.0	1.2
4Q FY16	9.0	11.8	2.4	3.9	-1.6	-3.7	1.6
1Q FY17	7.9	8.4	16.6	7.4	2.0	-0.5	2.3
2Q FY17	7.5	7.9	16.5	3.0	1.5	-3.8	2.8
3Q FY17	7.0	11.1	21.0	1.7	4.0	2.1	3.2
4Q FY17	6.1	7.3	31.9	-2.1	10.3	11.9	6.0
1Q FY18	5.7	6.7	17.2	1.6	1.2	13.4	3.3

Source: National Accounts Statistics, MOSPI

List of abbreviations

Sr. no	Abbreviations	Description
1	AD	Aggregate demand
2	bbl.	Barrel
3	CAB	Current account balance
4	CGA	Comptroller General of Accounts
5	CPI	Consumer Price Index
6	CSO	Central Statistical Organization
7	Disc.	Discrepancies
8	EMDEs	Emerging market and developing economies
9	EXP	Exports
10	FII	Foreign investment inflows
11	FPI	Foreign portfolio investment
12	FY	Fiscal year (April–March)
13	GDP	Gross domestic product
14	GFCE	Government final consumption expenditure
15	GFCF	Gross fixed capital formation
16	Gol	Government of India
17	GST	Goods and Services Tax
18	GVA	Gross value added
19	IAD	Index of Aggregate Demand
20	IEA	International Energy Agency
21	IIP	Index of Industrial Production
22	IMF	International Monetary Fund
23	IMI	Index of macro imbalance
24	IMP	Imports
25	IPD	Implicit price deflator
26	LAF	Liquidity adjustment facility
27	MCLR	Marginal cost of funds based lending rate
28	MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
29	m-o-m	Month-on-month
30	mt	Metric tonne
31	MPC	Monetary Policy Committee
32	NDU	Non-departmental undertaking
33	NEXP	Net exports (exports minus imports of goods and services)
34	PFCE	Private final consumption expenditure
35	PMI	Purchasing Managers' Index (reference value = 50)
36	PSU	Public sector undertaking
37	RE	Revised estimate
38	UNCTAD	United Nation Conference on Trade and Development
39	WPI	Wholesale Price Index
_40	у-о-у	Year on year

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EYIN1709-007

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