# 1. Introduction

## 1.1 Global Macroeconomic Developments

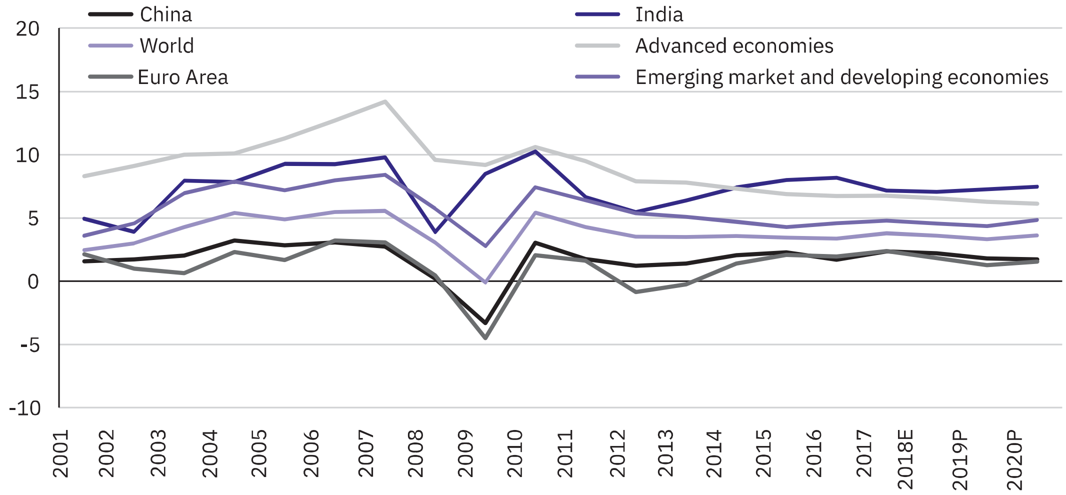
### 1.1.1 Output Growth

Global economic activity has begun to weaken towards the second half of 2018, after a stellar 2017. This trend has emerged from the overhang arising from trade war tensions between US and China, sluggish performance by large economies in Europe and Asia (Germany, Italy and China) and the overall weakening of financial market sentiments. Accordingly, in the latest IMF's World Economic Outlook April 2019, global growth forecasts have been lowered to 3.6% (from 3.7% earlier) for 2018, with downward revisions seen for the following years as well (see Chart 1.1).

Advanced economies have been one of the main drivers of this decline in global growth. The Euro Area, for example, is expected to have grown at 1.8% in 2018 from 2.4% in 2017 on account of a slowdown in Germany (weak industrial production following the introduction of revised auto emission standards), Italy (weak domestic demand and higher borrowing costs as sovereign yields remain elevated) and France (negative impact of street protests and industrial action). The UK as well remains in a state of policy uncertainty (Brexit outcome still awaited) that has lowered its growth to 1.4% in 2018 from 1.8% in the previous year. Japan is expected to witness a setback in 2018 with growth forecasted at 0.9% from 1.9% in 2017 weighed down by natural disasters that hit spending and disrupted exports. The US, although the only major developed economy expected to grow in 2018 to 2.9% from 2.2% in 2017, has already seen the pace of growth slowing in the second half of the year on account of indecisive trade policy action, tightening of interest rates, and an inverted yield curve that usually signals an impending economic recession.

Emerging and developing economies, on the other hand, are expected to decline only temporarily reflecting the contractions in Argentina and Turkey, and the impact of trade war uncertainty on China and other Asian countries. The slowdown in China has already commenced with growth expected at 6.6% in 2018 from 6.9% in 2017, as financial, regulatory tightening and trade war tensions offset the positive impact of a fiscal stimulus. Meanwhile growth in emerging and developing Europe also witnessed a sharp downtrend to 3.6% in 2018 from 6.0% in 2017, amid the currency and debt crisis that triggered a plunge in bank lending and slump in business confidence and consumer spending. The Middle East, North Africa, Afghanistan and Pakistan region's growth also dropped in 2018 to 1.8% from 2.2% in 2017 led by slower oil-GDP growth, ongoing macroeconomic adjustment challenges, the re-imposition of US sanctions on Iran and geopolitical tensions. And lastly, India is poised to grow further in 2018 (=FY19) to 7.1% from 6.7% in 2017, benefiting from lower oil prices, slower pace of monetary tightening and easing inflationary pressures.

### Chart 1.1: GDP Growth of Major Global Economies (%YoY)

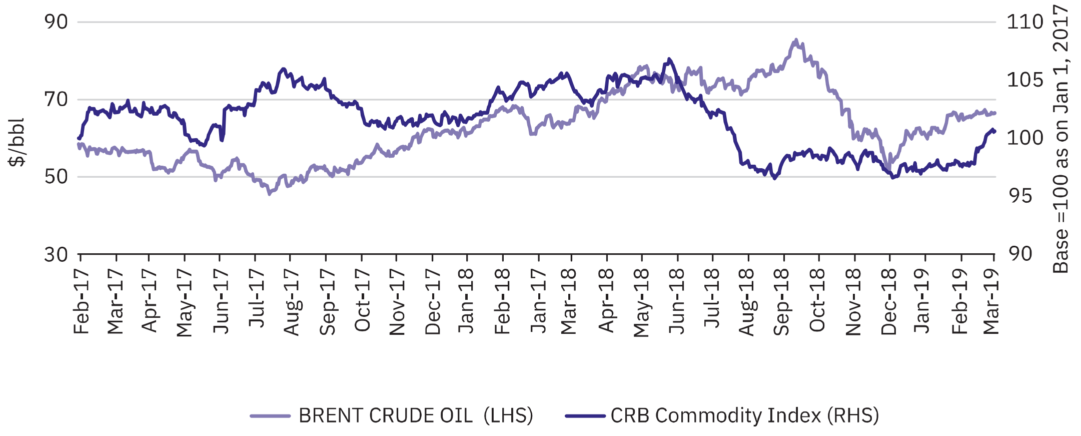


Source: World Economic Outlook, April 2019.
Note: E=Estimate, P=Projection.

## 1.1.2 Commodities, Inflation and Policy

Beyond growth prospects, a major factor that influenced the global macro environment in 2018 was volatile commodity prices. Crude oil price touched a high of US$85/bbl in October 2018 – the highest level since November 2014 – reflecting the collapse in Venezuela's production, unexpected outages in Canada and Libya, and expectations of lower Iranian exports following US sanctions. In December, oil price dropped to US$52/bbl following a decision by OPEC and non-OPEC oil exporters to increase production and has been volatile since then, reflecting supply influences and fears of softening global demand. Prices of metal and agricultural commodities have also softened slightly since August due to subdued demand from China.

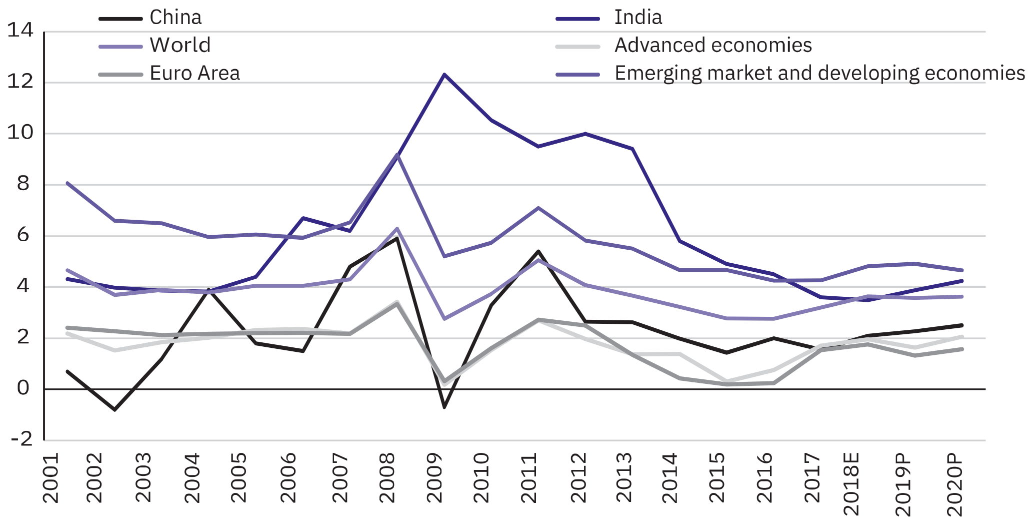
### Chart 1.2: Movement of Brent Crude Oil Price and CRB Commodity Index since 2017



Source: Thomson Reuters.

Headline inflation—percentage change in consumer price index (CPI) on y-o-y basis—declined remarkably in EMDEs from 9.2% in 2008 to about 4.2% in 2016 before a gradual increase towards 5% in 2018 (Chart 1.3). The trend has somewhat coincided with an even sharper decline in advanced economies towards 0.3% in 2015, which has since then started increasing gradually to reach 2% in 2018. As a result, headline inflation increased globally to 3.6% in 2018, and is expected to remain at a similar level in 2019.

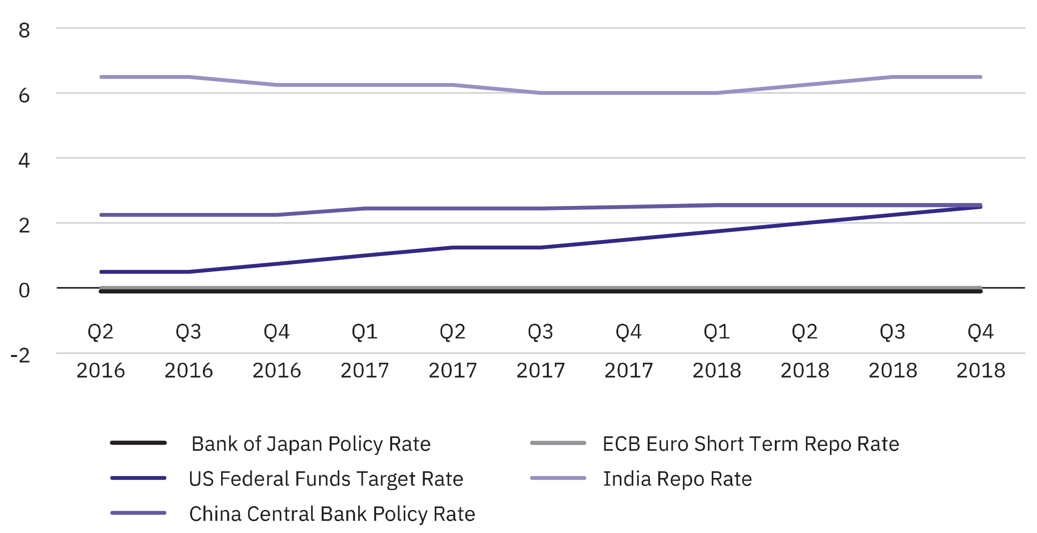
Chart 1.3: Consumer Price Inflation across Major Regions (%)



Source: World Economic Outlook, April 2019.
Note: E= Estimate, P=Projection.

Most central banks in emerging markets (Indonesia, Thailand, Russia, South Africa, Mexico, Philippines) have raised policy rates on rising inflationary pressures from the higher oil price, closing output gaps or pass-through from currency depreciation. The Chinese central bank, on the other hand, maintained policy rates on hold and chose to ease domestic funding conditions by lowering reserve requirements for banks and providing liquidity to NBFCs respectively. The Reserve Bank of India also kept its policy rate low till June 2018 to provide cheap funds in the market. Policy decisions for advanced economies have been largely data dependent, as seen in Euro Area and Japan, where the central banks chose to keep monetary policy accommodative amid a slower-than-expected pick-up in inflation and the overall economy, while US monetary policy tightened as inflationary pressures emerged amid solid growth and historically low unemployment. With global growth fears rising, a volatile domestic stock market and a prolonged government shutdown, the Fed too, recently decided to postpone rate hikes for now.

**Chart 1.4: Major Policy Rates of US, China, India, ECB, Japan (%)**



Source: Thomson Reuters.

### 1.1.3 Trade

Global trade has slowed to well below 2017 averages as world trade volumes have lowered to 4.0% in 2018 from 5.3% in 2017 (see Chart 1.5a and 1.5b). This trend has been evident for both advanced economies and emerging economies. The true underlying momentum, however, could be weaker than the data suggests as import front-loading ahead of tariff hikes, and a large uptick in tech exports on launch of new products could make headline figures appear better than the true picture. This is also supported by the Purchasing Manager's Index (PMI) for new orders, which points to less buoyant expectations of future activity. In addition, trade tensions, an increase in the probability of a no-deal Brexit and overall decline in global demand have affected business sentiment, disrupted supply chains and slowed productivity levels.

**Chart 1.5a: Growth of Export Volume (Goods & Services) (%YoY)**

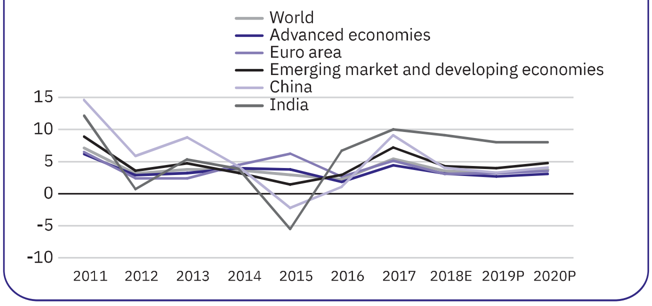
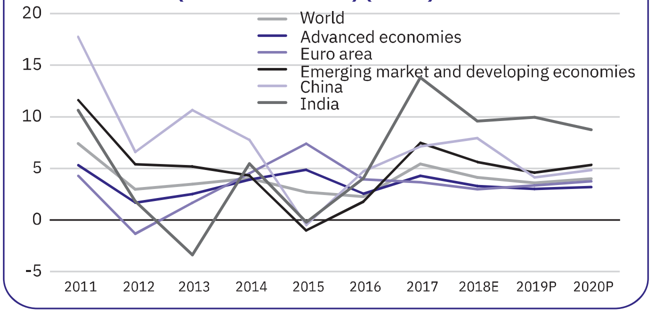


**Chart 1.5b: Growth of Import Volume (Goods & Services) (%YoY)**



Source: World Economic Outlook, April 2019
Note: E= Estimate, P=Projection

### Box 1.1: Major Developments in the World Economy

1. *US-China Trade War*: China and the US have been threatening to and actually raising tariff barriers on bilateral trade, given their divergent policy objectives, and have been embroiled in a *trade-war* since mid-2018. On July 6, US imposed a 25% tariff on $34bn of imports from China, which Beijing promptly matched with tariffs of its own, including agricultural products, automobiles and aquatic products. Later, in August and September, more tariffs were imposed by both the countries, but then on December 1, 2018, a 90-days "truce" was called on tariff increases, post which negotiations continue till date.
2. *No-deal Brexit*: The UK parliament strongly opposed to a no-deal Brexit but unable to reach a consensus on an agreement with EU. The parliament has rejected the Brexit proposal which is formulated under the leadership of the UK Prime Minister Theresa May. Hence, there is a risk that the Brexit negotiations could end without a deal with negative cross-border spill-overs and increased euro-scepticism affecting European parliamentary election outcomes.
3. *Rising US Fed rates*: The US Fed has tightened its monetary policy and increased Fed fund rates from 1.25-1.5% in December 2017 to 2.25-2.5% in December 2018.
4. *US-Mexico-Canada free trade agreement (USMCA) replaced NAFTA*: Under Trump administration, US has reached an agreement with Mexico and Canada in re-negotiation of the North American Free Trade Agreement (NAFTA). It is argued that, new USMCA will benefit North American workers, farmers and businesses.
5. *Dollar appreciation*: Investors gained confidence in the US market as DXY was up ~4% in 2018, which measures the US currency's performance against a basket of 16 others.
6. *Volatile crude oil prices*: Crude oil prices have been volatile since June 2018, reflecting supply influences, including US policy on Iranian oil exports, and fears of softening global demand.
7. *Expansionary policy by ECB*: In March 2019, ECB declared that it will extend the time to maintain a pause on interest rates (current rate = 0%) and continue to provide cheap funding to banks through the year. The central bank also said it would launch a series of targeted, long-term refinancing operations (TLTROs) in September 2019 which will run until March 2021 to help banks roll over €720bn of ECB loans and to ease out credit squeeze that could deepen economic slowdown.
8. *Downturn in emerging markets:* The US-China trade dispute, volatile financial markets, supply chain constraints, depreciating currency and slower global demand have together deeply impacted emerging markets that are now on a declining growth trend.

## 1.2 Macroeconomic Developments in India

### 1.2.1 Economic Growth

India's GDP growth has been accelerating for several years from 5.2% in 2011-12 to 8.2% in 2016-17 due to strong macro fundamentals. Thereafter, growth started to decline to 7.2% in FY18 and 7.0% in FY19 (CSO advance estimate) (see Table 1.1). Apart from the declining economic activity, other concerns for India's growth prospects emerge from the financial sector's asset quality issues, continued slowdown in private corporate capex and the deteriorating global environment.

So far, India has largely been a consumption driven economy. This is evident with the high share of private consumption (~60% of GDP), while investments continued to remain lacklustre (sub-30% of GDP). The trend, however, is shifting with consumption expected to moderate in FY19, for both private and government spending, on account of an overall slowdown in both domestic and global demand, while investment growth appears to be strengthening, particularly private investments, and with public investments still remaining muted, there is huge potential for investments to pick-up going forward.

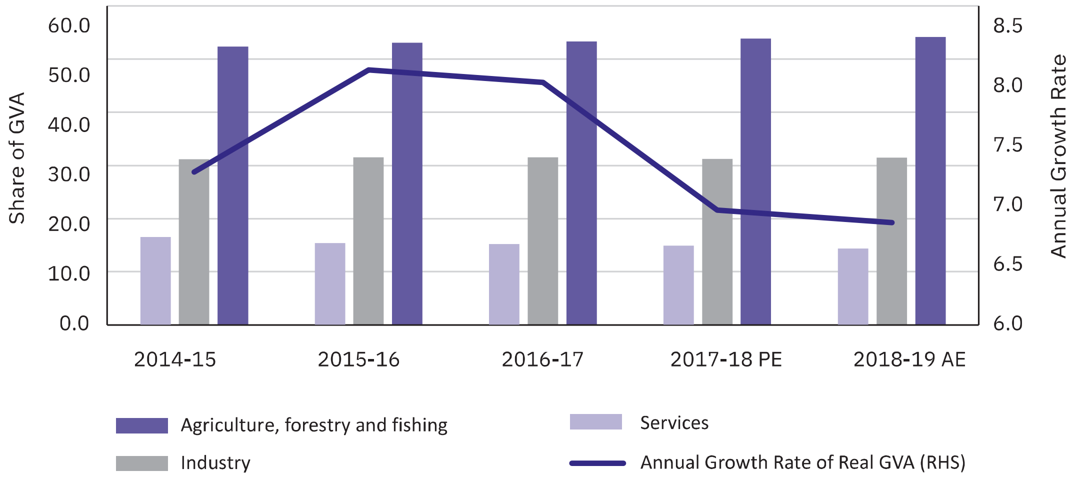
On a sectoral level, agricultural growth witnessed a sharp setback from 5% growth in FY18 to 2.8% in FY19, on account of erratic weather conditions and lower crop production. (see Table 1.1). Services growth also moderated due to subdued activity in trade, hotels, transport, communication and other services. And even though industrial growth accelerated during this period, it was not sufficient to offset the negative impact of agriculture and services. Overall, GVA growth decelerated to 6.8% in FY19 from 6.9% in the previous financial year.

**Table 1.1: Annual Growth of Real GVA, Sectoral GVA and GDP (%YoY)**

| Indicators | 2014-15 | 2015-16 | 2016-17 | 2017-18 RE | 2018-19 AE |
|---|---|---|---|---|---|
| Real GVA at basic prices | 7.2 | 8.0 | 7.9 | 6.9 | 6.8 |
| Agriculture, forestry and fishing | -0.2 | 0.7 | 6.3 | 5.0 | 2.8 |
| Industry | 7.0 | 9.6 | 7.7 | 6.0 | 7.7 |
| Services | 9.8 | 9.4 | 8.4 | 8.1 | 7.4 |
| Real GDP | 7.4 | 8.0 | 8.2 | 7.2 | 7.0 |

Source: CSO, RBI.
Note: RE= Revised Estimates and AE=Second Advance Estimates.

**Chart 1.6: Annual Growth Rate & Composition of Real GVA (At 2011 - 12 Prices)**



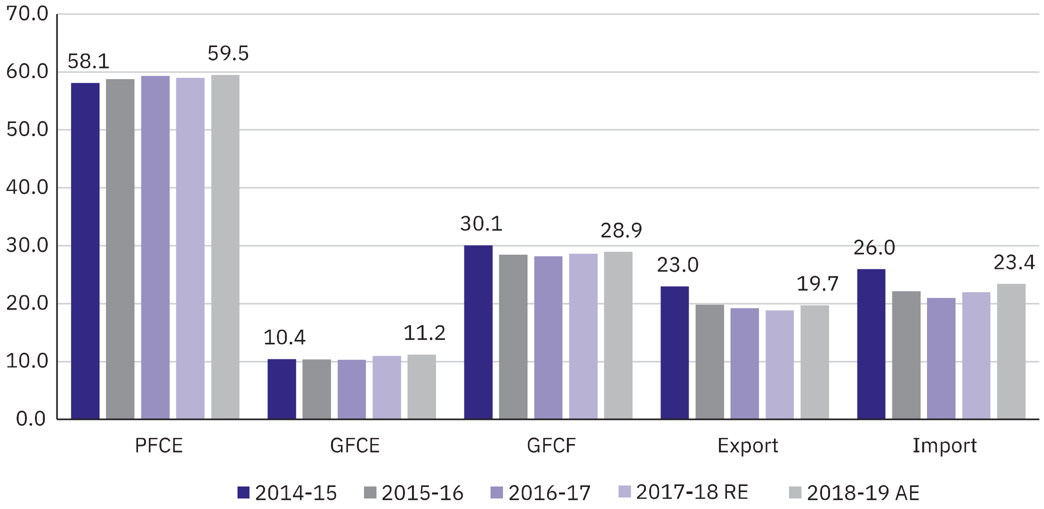
Source: CSO, RBI.
Note: RE= Revised Estimates and AE=Second Advance Estimates.

Table 1.2: Components of GDP by Expenditure

| Indicators | Annual Growth Rate (Constant prices at 2011- 12 Prices) | | | | |
|---|---|---|---|---|---|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 RE | 2018-19 AE |
| PFCE | 6.4 | 7.9 | 8.2 | 7.4 | 8.3 |
| GFCE | 7.6 | 7.5 | 5.9 | 15.0 | 8.9 |
| GFCF | 2.6 | 5.2 | 10.1 | 9.3 | 10.0 |
| Export | 1.8 | -5.6 | 5.1 | 4.7 | 13.5 |
| Import | 0.9 | -5.9 | 4.4 | 17.6 | 15.7 |
| GDP | 7.4 | 8.0 | 8.2 | 7.2 | 7.0 |

Source: CSO, RBI.
Note: RE= Revised Estimates and AE=Second Advance Estimates.
PFCE=Private Final Consumption Expenditure, GFCE=Government Final Consumption Expenditure,
GFCF=Gross fixed capital formation.

Chart 1.7: Different Components of GDP by Expenditure (% of GDP at Current Prices)

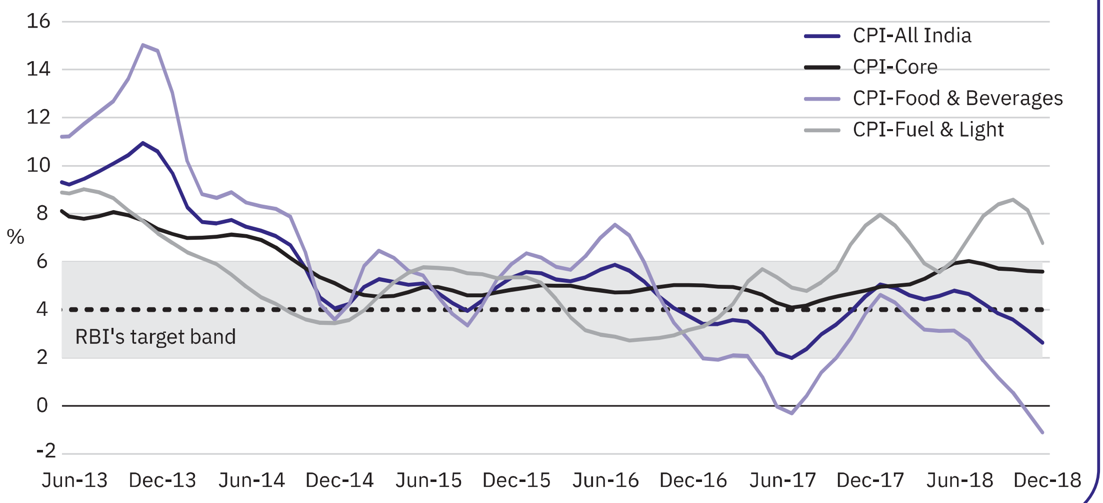


Source: CSO, RBI.
Note: RE= Revised Estimates and AE=Second Advance Estimates.

### 1.2.2 Inflation

Inflationary pressures in India have eased considerably in the past year. Retail inflation (CPI) has been on a downward trajectory since June 2018, dropping below 2% levels in January 2019 – for the first time in 19 months. For most part of FY19, CPI inflation has been towards the lower range of RBI's target band of 2-6%, providing comfort to the RBI to cut policy rates by 50bps in the last six months. The continuous deflation in food prices (~45% of inflation basket), especially pulses, sugar and vegetables, has been one of the main reasons for the decline in headline inflation, and the crude oil price volatility has also contributed with fuel inflation recording all-time lows in recent months. Excluding the volatile components of the inflation basket – food and fuel inflation – core inflation has remained sticky close to 6% in FY19, signalling that the underlying inflationary trend still remains high, which could become a major concern for the economy going forward.

Chart 1.8: CPI Inflation - Base Year 2012 (3 Month Moving Average)



Source: CMIE.

### 1.2.3 Fiscal Slippage

On the fiscal front, performance of both Central and State Governments have improved in FY19 compared to the previous financial year, as gross fiscal deficit (GFD) as a share of GDP for the General Government (centre and state) stood at 6% of GDP in FY19 compared to 6.6% in FY18 (Table 1.3). Revenue deficit as a share of GDP also improved, given an increase in tax revenue after demonetisation and implementation of GST, however, overall collections are still expected to be a miss this year (from the target), especially indirect tax collections, which means the Government would curtail spending in order to contain the deficit target for the year.

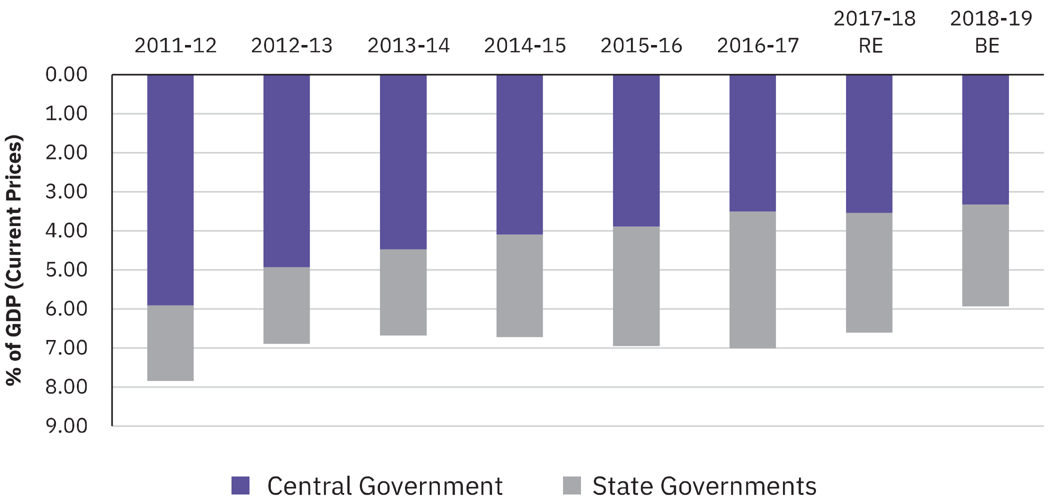
Table 1.3: Key Fiscal Indicators of the Centre and States (Percent to GDP)

| Year | Central Government | | State Governments | |
|---|---|---|---|---|
| | Gross Fiscal Deficit | Revenue Deficit | Gross Fiscal Deficit | Revenue Deficit |
| 2011-12 | 5.91 | 4.51 | 1.93 | -0.27 |
| 2012-13 | 4.93 | 3.66 | 1.96 | -0.2 |
| 2013-14 | 4.48 | 3.18 | 2.20 | 0.09 |
| 2014-15 | 4.10 | 2.94 | 2.62 | 0.37 |
| 2015-16 | 3.89 | 2.51 | 3.06 | 0.04 |
| 2016-17 | 3.51 | 2.07 | 3.50 | 0.27 |
| 2017-18 | 3.54 | 2.62 | 3.07 | 0.36 |
| 2018-19 | 3.40 | 2.20 | 2.60 | -0.16 |

Source: RBI, Budget documents of the Central and State Governments.

Notes: Data for 2017-18 relate to Revised Estimates while 2018-19 are Budget Estimates for State Governments and revised estimates for Central Government.
Data relates to 29 State Governments.
Negative (-) sign indicates surplus in deficit indicators.

Chart 1.9: General Government Gross Fiscal Deficit (Percent of GDP)



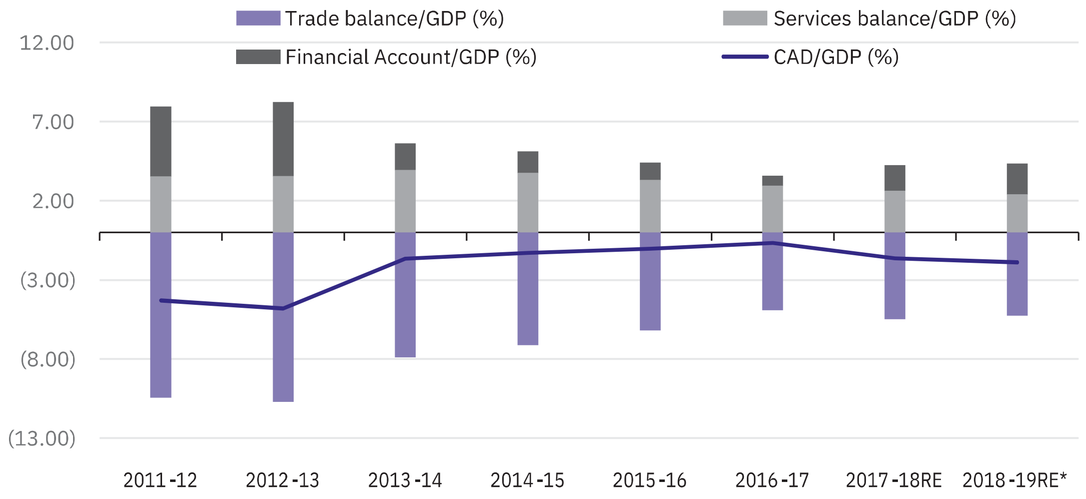
Source: RBI, Budget documents of the Central and State Governments.
Note: Data for FY18 relate to Revised Estimates while FY19 are Budget Estimates.

In the Union Budget 2019-20, the Indian economy has witnessed a marginal fiscal slippage for the second consecutive year as the fiscal deficit estimate for 2018-19 is revised to 3.4% of GDP (from budgeted figure of 3.3% of GDP). This was mainly due to the additional Rs200bn that would be given to support farm incomes in 2018-19, excluding which the Finance Minister stated that the fiscal deficit would have been lower than 3.3% of GDP. Further, the fiscal deficit for 2019-20 is projected at 3.4% of GDP, indicating a deviation from the fiscal consolidation path that was set under the Fiscal Responsibility and Budget Management (FRBM) Act for the Centre to reach a fiscal deficit of 3% of GDP by FY20.

### 1.2.4 External Sector

India's external account has been relatively stable over the last few years with current account deficit (CAD) at sub-2% of GDP from FY14-FY18. In the first three quarters of FY19, however, burgeoning trade deficit became a rising concern, with CAD averaging almost 2.6% of GDP. Trade deficit rose to US$145.3bn during this period from US$118.4 in the corresponding period last year. Towards the second half of the fiscal, however, crude oil price fell sharply and market sentiments improved towards emerging markets amid the pause in Fed rate hikes and the truce in US-China trade dispute. This is likely to have helped ease India's external balances on account of a lower trade deficit, and a stabilization and subsequent recovery in portfolio flows, which had dropped sharply in the first half of FY19. The recovery was particularly notable in early 2019 as investors increased allocations to emerging market bond and equity funds.

### Chart 1.10: Break-up of Balance of Payments as a Percent of GDP



Source: CMIE, Reserve Bank of India.
Note: RE= Revised Estimates, *till December 2018.

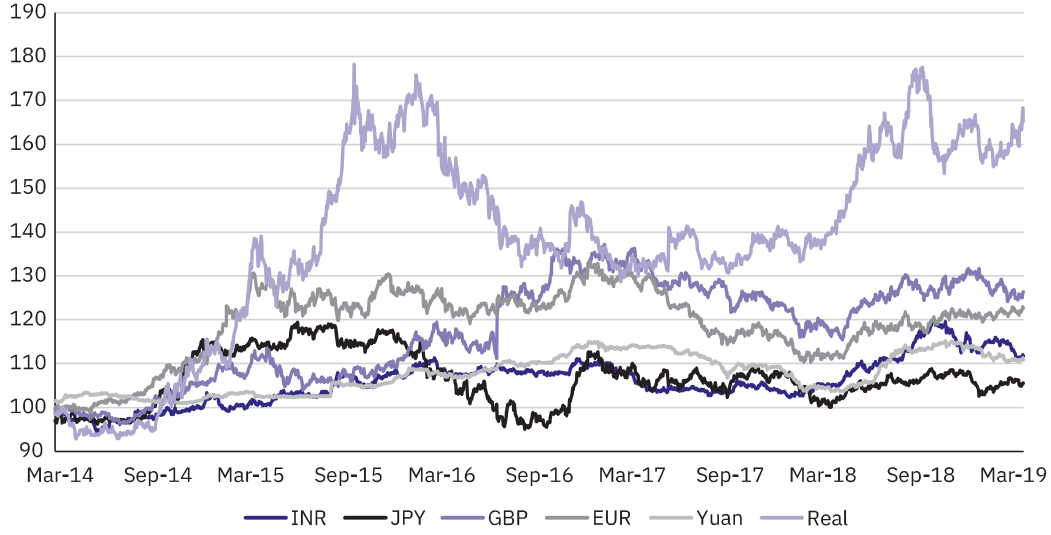
### Table 1.4: India's Key External Debt Indicators

| Year | External Debt (US$ billion) | Ratio of External Debt to GDP (%) | External Commercial Borrowing to Total Debt (%) | Ratio of Long-term Debt to Total Debt (%) | Ratio of Short-term Debt to Total Debt (%) | Ratio of Short-term Debt to Foreign Exchange Reserves (%) | Ratio of Foreign Exchange Reserves to Total Debt (%) |
|---|---|---|---|---|---|---|---|
| 2011 | 317.9 | 18.2 | 27.8 | 79.6 | 20.4 | 21.3 | 95.9 |
| 2012 | 360.8 | 21.1 | 29.0 | 78.3 | 21.7 | 26.6 | 81.6 |
| 2013 | 409.4 | 22.4 | 33.2 | 76.4 | 23.6 | 33.1 | 71.3 |
| 2014 | 446.2 | 23.9 | 33.5 | 79.5 | 20.5 | 30.1 | 68.2 |
| 2015 | 474.7 | 23.9 | 38.0 | 82 | 18 | 25 | 72 |
| 2016 | 484.8 | 23.4 | 37.2 | 82.8 | 17.2 | 23.2 | 74.3 |
| 2017 PR | 471.3 | 20 | 36.6 | 81.3 | 18.7 | 23.8 | 78.5 |
| 2018 PR | 529.7 | 20.5 | 38.2 | 80.7 | 19.3 | 24.1 | 80.2 |
| Till September 2018 P | 510.4 | 20.8 | 37.1 | 79.6 | 20.4 | 26.1 | 78.5 |

Source: Reserve Bank of India.
Note: PR=Partially Revised, P=Provisional.

Further, the rupee had also remained stable for most part of FY14-FY18 on account of a stable external account (see Chart 1.11). The situation, however, reversed in 2018 when rupee became more volatile, and depreciated to as low as Rs74.4/$ on Octobser 9, 2018 from 63.9 on December 31, 2017 partly driven by an increase in net outflows of FPIs. The turning point came in late-2018s when the dollar appreciation reversed following a shift in market expectations about the pace and extent of monetary policy tightening in the US, which led to most emerging market currencies strengthening, with the Indian rupee no exception.

Chart 1.11: The Rupee Remains Stable Relative to Other Major Currencies (Base=100 to 31-Dec-2013)



Source: Bank of International Settlement, Daily data.

### 1.2.5 Banking Sector

The health of India's banking sector has been deteriorating over past few years and particularly sharply since 2015-16, as reflected in the sudden surge of non-performing assets (NPAs). Gross NPAs of all scheduled commercial banks (SCBs) as a percentage of total advances has been rising since 2012-13 from 3.2% to as high as 11.2% in FY18 (See Chart 1.12). Notably, there was a sharp rise in GNPA ratio in 2015-16 due to the Asset Quality Review (AQR) conducted by RBI in Aug-Nov'15, forcing banks to clean up their books. The deeper issue was that bad loans had been accumulating over the years through aggressive lending practices, inadequate monitoring, loan frauds and a general downturn in the economy. The problem worsened over the next few years, especially for public sector banks (PSBs), as GNPA ratio rose to 14.6% of total advances for PSBs, given their large share of the overall loan book; private sector banks (PVBs) and foreign banks (FBs) were better placed, with NPAs at 4.6% and 3.8% respectively.

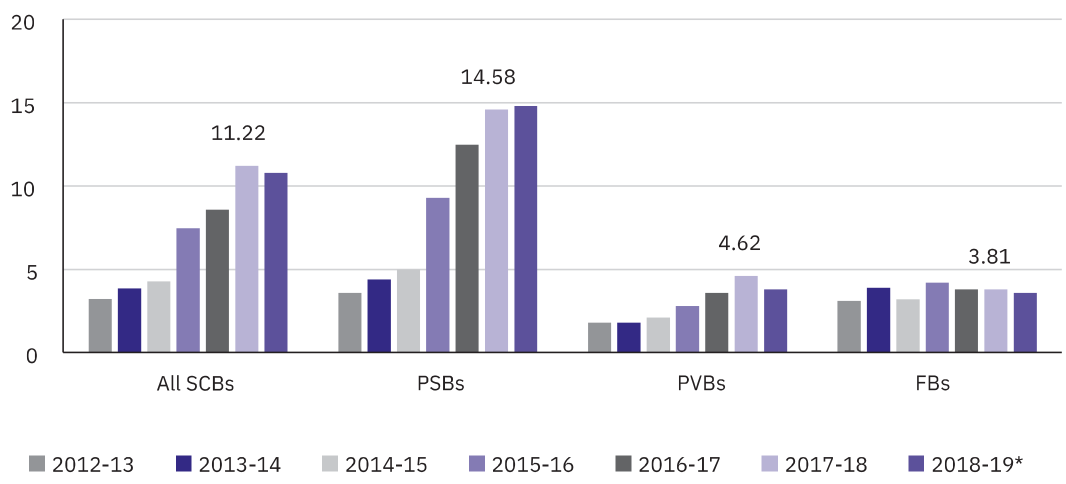
Recent data, however, shows early signs of improvement in the performance of banks as NPA ratios have begun to decline for the first time since the NPA crisis began in early 2015. Gross NPAs for SCBs declined from 11.5% in Mar'18 to 10.8% in Sep'18 (Financial Stability Report, December 2018). This indicates that asset quality issues might have topped out for the banking space in India.

SCBs' credit growth on a y-o-y basis improved across all bank groups in FY18 compared to the previous year, and the stellar performance continued in March and September 2018 as well (Chart 1.13a). And not surprisingly, growth was the highest in PSBs at 22.5% at the end of September 2018 quarter.

Overall deposit growth showed a markedly different trend during this period. After a sharp rise towards the end of FY17 post demonetisation on 8th November 2016, largely in public sector banks where deposit growth increased from 4.3% in FY16 to 9.8% in FY17 (Chart 1.13b), deposit growth eased off considerably in the following year, on a high base, before stabilising at ~6.9% levels in FY19.

Overall, the banking stability indicator (BSI) shows that the asset quality of banks has improved due to several factors including (1) recapitalisation of weak PSBs, (2) implementation of Insolvency and Bankruptcy Code (IBC) and (3) substantive reforms in corporate governance.

Chart 1.12: Gross NPAs to Total Advances (%)



Source: Reserve Bank of India.
Note: PSBs=Public sector banks, PVBs=Private sector banks and FBs=Foreign banks.
*till September 2018.

Chart 1.13a: Credit Growth (%YoY)

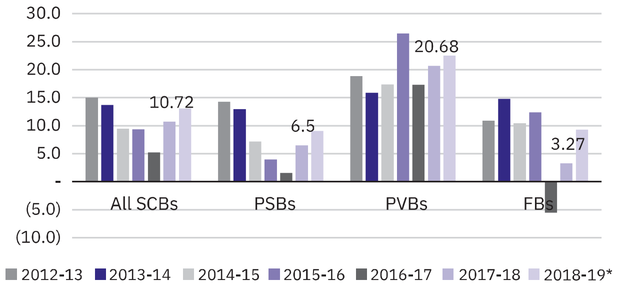
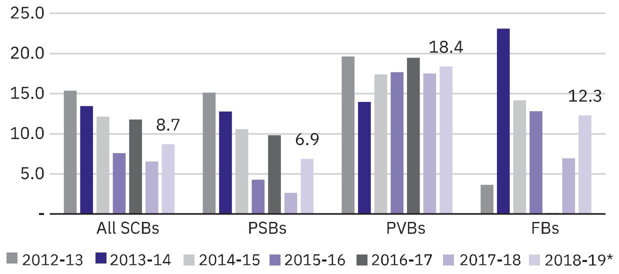


Chart 1.13b: Deposit Growth (%YoY)



Source: RBI Financial Stability Report, CMIE.
Note: PSBs=Public sector banks, PVBs=Private sector banks and FBs=Foreign banks.
*till September 2018.

### 1.2.6 Ease of Doing Business

The Government of India took a carefully designed approach to reform business regulatory environment over last few years. It focused on streamlining business processes through several measures such as:

a) The Value Added Tax (VAT) got replaced with a nation-wide Goods and Services Tax (GST), in which registration process is faster.

b) Under the National Trade Facilitation Action Plan 2017-20, the government implemented several initiatives that improved efficiency of cross-border trade by reducing border and documentary compliance time for both exports and imports.

c) India also invested in port equipment, strengthened management and improved electronic document flow by implementing Single Window Clearance System in Delhi and Online Building Permit Approval System in Mumbai during second half of 2017.

d) India continued to streamline and centralize its construction permitting process.

e) Under newly-adopted regulations of the Delhi Electricity Regulatory Commission, the government changed the process under which new electricity connections can be provided within 15 days of application.

As a result, India's global ranking in terms of 'ease-of-doing-business' improved remarkably from 100 in 2018 to 77 in 2019 out of 190 countries (World Bank's report on 'Doing Business', 2019). India also demonstrated considerable improvement in terms of global competitiveness index and ranked 58 out of 140 countries in 2018 up 5 notches from the previous year (The Global Competitiveness Report, 2018).

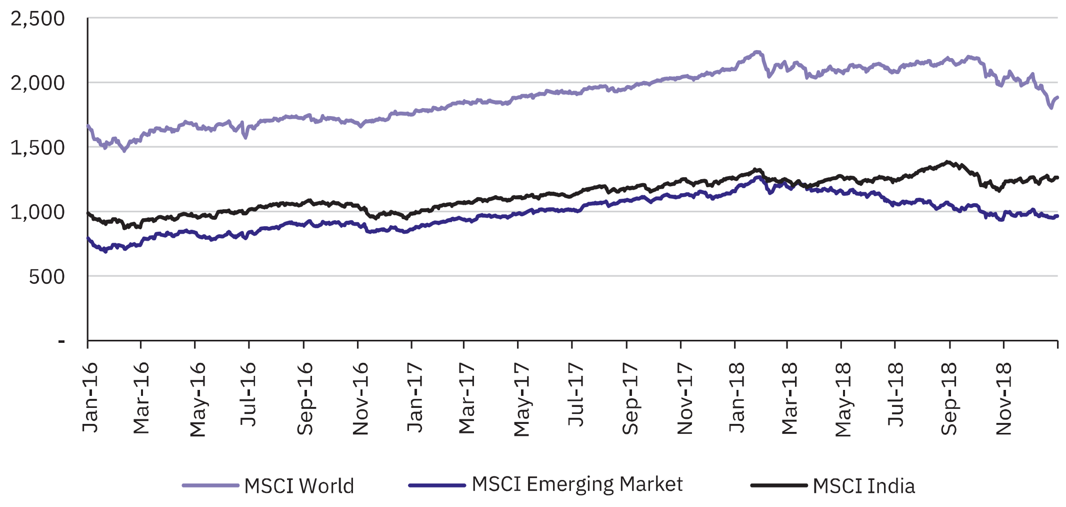
## 1.3 Trends in Securities Market –International Scenario

Escalating trade tensions, a global slowdown, elevated debt burdens in major economies and a US government shutdown led to a decline in equity prices globally during the second half of 2018 (IMF WEO, January 2019). As a result, investor sentiment deteriorated and near-term risks to financial stability started to rise (Global Financial Stability Report, October 2018). The medium-term risks continued to remain high, driven by high non-financial sector leverage in advanced economies and rising external borrowing in emerging market economies.

Consequently, overall return in securities market ended negative in 2018, with 10.4% decline in MSCI world index (Chart 1.14). In US, the S&P500 dropped by 4.4%, the Dow Jones Industrial Average index fell by 6% and the Nasdaq composite index fell by 4%. Among other developed markets, UK's FTSE 100 Index fell by 12.5% and Germany's DAX index fell by 18%, while South Korea's Kospi Index (17%), Hong Kong's Hang Seng index (14%) and Japan's Nikkei 225 (12%) rose for the year.

MSCI Emerging Market fell by 17% during the same time period mainly due to sharp outflows from the Chinese markets, as Shanghai Se Composite declined by 25% for the year. In contrast, securities market in India stayed stable during this period with a marginal (about 1%) uptick in MSCI India. Brazil's IBOVESPA index performed remarkably well during this time period with an increase by 15%.

Chart 1.14: Movement in MSCI World and Emerging Market Index



Source: Bloomberg.

According to the International Investment Funds Association, net assets in regulated open-end funds declined by about 5% on y-o-y basis to Rs46.7trn at the end of Q4 2018, excluding funds of funds (Table 1.5). Among all regulated open end fund categories, equity and bond contributed around 64% of all funds as on Q4 2018 which is marginally lower than that seen in Q4 2017 (65%). Notably, net assets in equity funds declined by 9% whereas net assets in bond funds declined merely by 2% during same time period.

**Table 1.5: Net Assets of Worldwide Regulated Open End Funds (US$bn; End of Period)**

| | 2016 | | | | 2017 | | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3** | Q4** |
| All funds* (USD billion) | 38,875 | 39,329 | 41,048 | 40,554 | 42,982 | 44,992 | 47,390 | 49,300 | 50,017 | 49,450 | 50,147 | 46,700 |
| Long-term | 33,722 | 34,240 | 35,899 | 35,420 | 37,826 | 39,662 | 41,669 | 43,401 | 43,915 | 43,489 | 44,168 | 40,623 |
| Equity | 16,294 | 16,433 | 17,303 | 17,326 | 18,766 | 19,585 | 20,626 | 21,826 | 21,935 | 22,113 | 22,747 | 19,922 |
| Bond | 8,368 | 8,680 | 9,071 | 8,796 | 9,313 | 9,740 | 10,183 | 10,370 | 10,549 | 10,249 | 10,263 | 10,136 |
| Balanced/Mixed | 5,227 | 5,294 | 5,458 | 5,323 | 5,667 | 5,932 | 6,231 | 6,414 | 6,474 | 6,275 | 6,291 | 5,844 |
| Guaranteed | 73 | 69 | 68 | 66 | 69 | 71 | 70 | 67 | 65 | 59 | 56 | 55 |
| Real Estate | 572 | 593 | 610 | 607 | 630 | 671 | 709 | 747 | 787 | 780 | 792 | 805 |
| Other | 3,188 | 3,171 | 3,388 | 3,302 | 3,381 | 3,662 | 3,851 | 3,978 | 4,105 | 4,014 | 4,019 | 3,861 |
| Money market | 5,152 | 5,088 | 5,149 | 5,135 | 5,156 | 5,330 | 5,720 | 5,900 | 6,101 | 5,961 | 5,979 | 6,076 |
| Memo items included above: | | | | | | | | | | | | |
| ETFs | 2,815 | 2,877 | 3,183 | 3,315 | 3,751 | 4,001 | 4,281 | 4,642 | 4,749 | 4,821 | 5,091 | 4,673 |
| Institutional | 3,404 | 3,554 | 3,720 | 3,560 | 3,799 | 4,002 | 4,238 | 4,378 | 4,586 | 4,371 | 4,409 | 4,425 |

Source: International Investment Funds Association[1].

Note: Regulated open-end funds include mutual funds, exchange-traded funds and institutional funds.
*Excludes funds of funds where possible.

### 1.3.1 Cash Market

Total domestic market capitalisation of member countries of the World Federation of Exchanges (WFE) dropped to US$74.4trn at the end of 2018 (Chart 1.15a) from a record high of US$87.1trn seen in 2017. This trend was similar across all regions. Total domestic market capitalisation in Asia Pacific region declined by 24% followed by EMEA countries (16%) and Americas (6%).

There were 51,582 listed companies at the end of 2018, up by 3% compare to previous year (Chart 1.15d). In secondary market, total value and volume of trades in equity shares increased by 16% and 12% respectively in 2018 (Chart 1.15b and Chart 1.15c).

[1] https://www.iifa.ca/industry_statistics/index.html

Chart 1.15a: Domestic Market Capitalisation (US$trn)

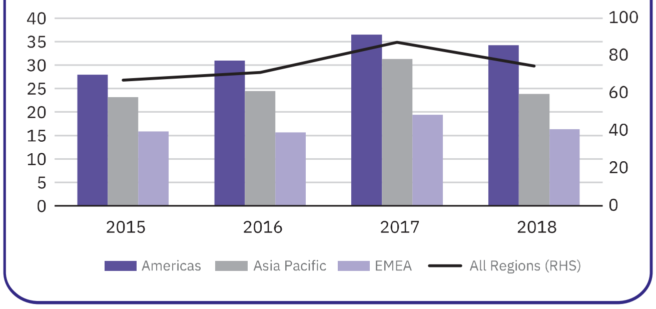


Chart 1.15b: Value of Share Trading (US$trn)

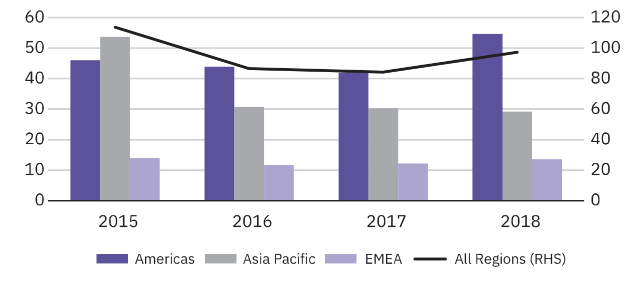


Chart 1.15c: Number of trades (bn of trades)

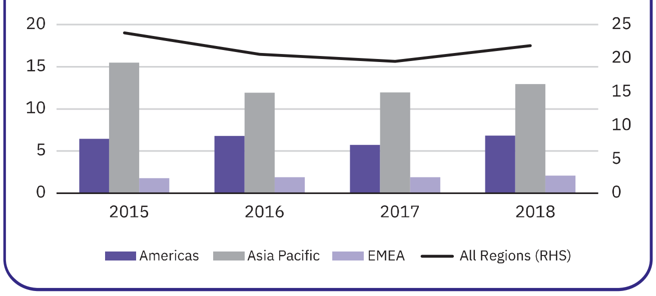
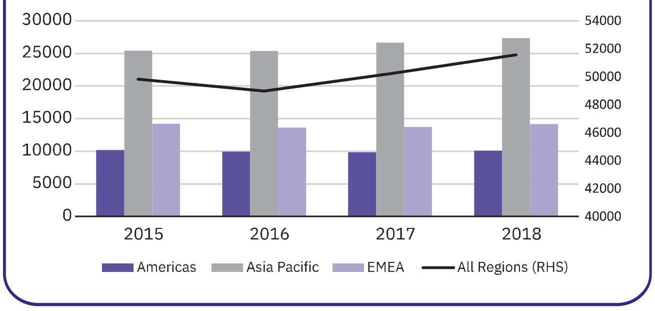


Chart 1.15d: Number of listed companies



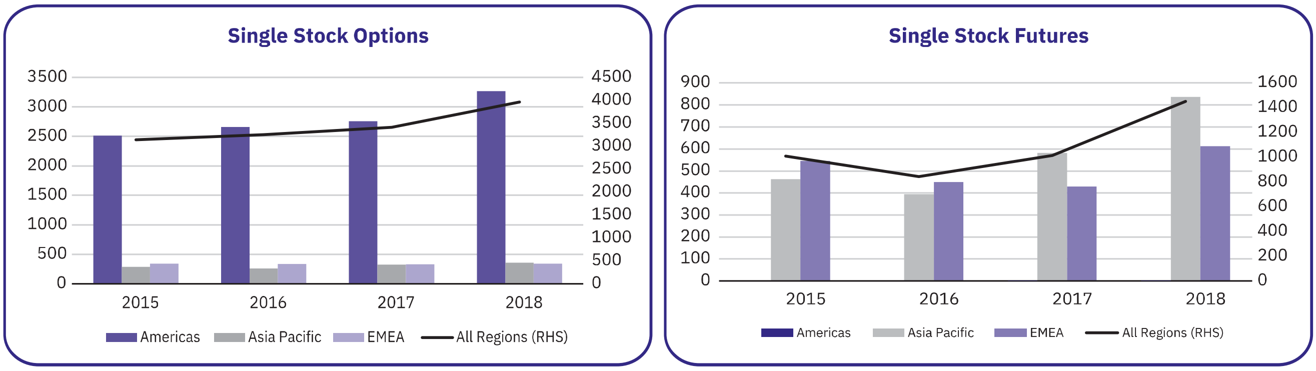
Source: World Federation of Exchanges, 2018- Full year market highlights based on data from World Federation of Exchanges members, affiliates, correspondents and non-members.

Note: Bats Chi-X Europe is included in the data for Value of share trading and Number of trades, but not in the data for Domestic Market capitalisation. Data is based on those exchanges which are reported by members of WFE. Excluding investment funds, Including Alternative and SME Markets.

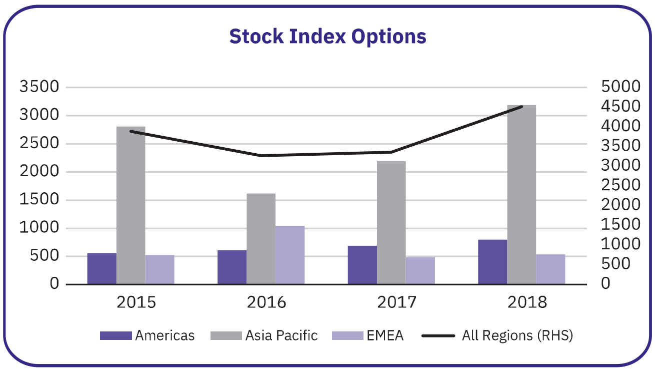
### 1.3.2 Derivatives Market

In 2018, total volume of the derivatives market was up significantly across all product types except commodity and interest rate derivatives (Chart 1.16). Despite an environment of monetary policy uncertainty and high volatility in equity and currency markets, volumes of single stock, stock index and currency derivatives were higher in 2018 than the previous year. Total volume of single stock futures increased by 43% in 2018 followed by stock index futures (38%), stock index options (34%) and currency derivatives (31%). In contrast, total volume of interest rate derivatives dropped by 49% as Americas and Asia Pacific regions recorded 75% decline in their total volume. Globally, total volume of commodity derivatives fell by 0.2% in 2018 while EMEA region reported 1.2% increase.

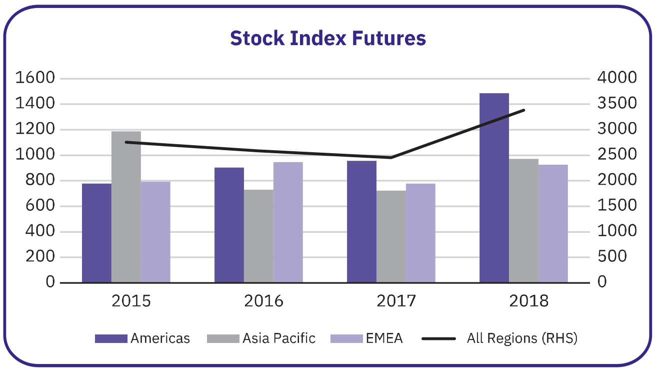
Chart 1.16: Number of Trades of Exchange Traded Derivatives (mn of Contracts Traded)


Single Stock Options

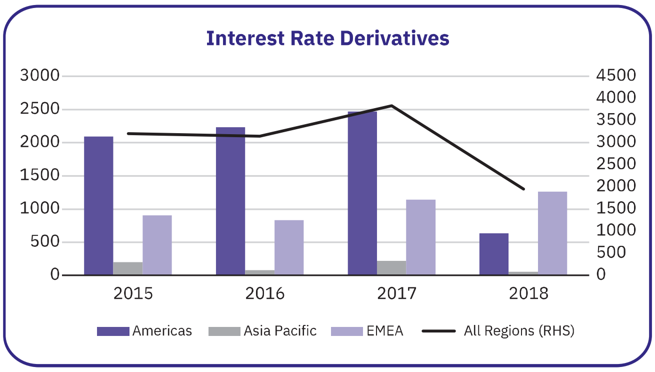
Single Stock Futures



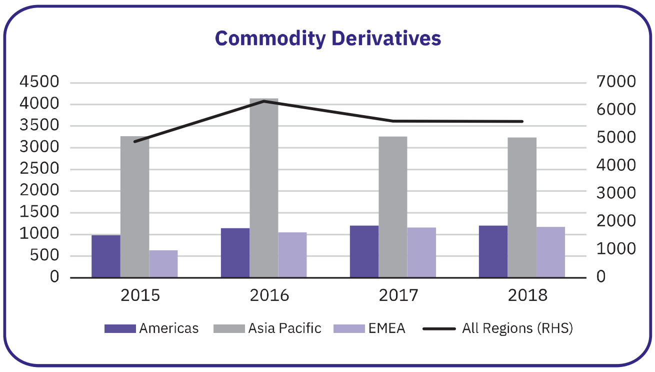
Stock Index Options



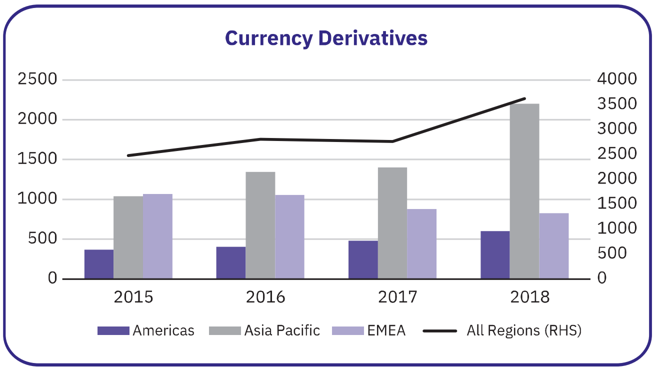
Stock Index Futures



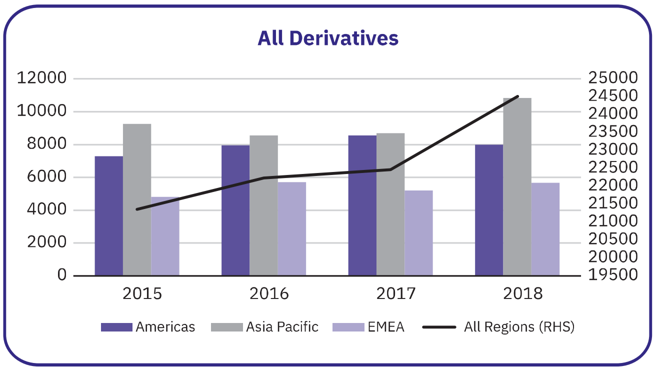
Interest Rate Derivatives



Commodity Derivatives



Currency Derivatives



All Derivatives

Source: World Federation of Exchanges, 2018- Full year market highlights.

### 1.3.3 Other Markets

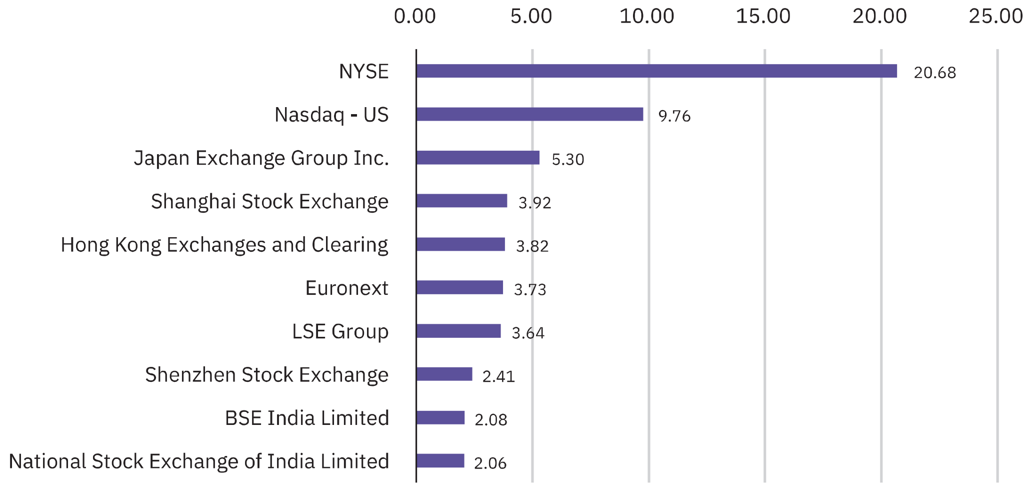
According to the WFE data, a total of 11,945 ETFs were listed at the end of 2018, an increase of 10.8% over the year. Total value traded in ETFs increased by 33.4% to reach US$24.12tn in 2018. Total turnover increased in both Americas and Asia Pacific regions by 36% and 48% respectively, which accounted for almost 97% of total volume in ETF segment. In contrast, traded value of ETFs declined by 29% in EMEA region although there was an increase in total number of ETFs listed in 2018.

## 1.4 Market Trends in Indian Securities Market

In 2018, Indian securities market outperformed other major emerging markets, particularly China, in terms of several parameters such as returns and volatility of major indices. During Apr-Dec'18, both S&P BSE Sensex and NSE Nifty 50 moved up by 8% and 6% (Chart 1.18), whereas MSCI World and MSCI emerging market indices declined by 10% and 17% respectively. Volatility in Indian equity market (12%) is among the lowest compare to major developed and emerging markets like UK (13%), US (18%), China (19%), Japan (19%), South Korea (14%), Hong Kong (19%) and Brazil (22%) (SEBI Bulletin, February 2019).

Two stock exchanges from India retained their position within top 10 exchanges out of all WFE member exchanges in terms of domestic market capitalisation at the end of December 2018 (Chart 1.17). BSE ranked 9th and NSE ranked 10th with domestic market capitalisation $2.08tn and $2.06tn respectively at the end of 2018.

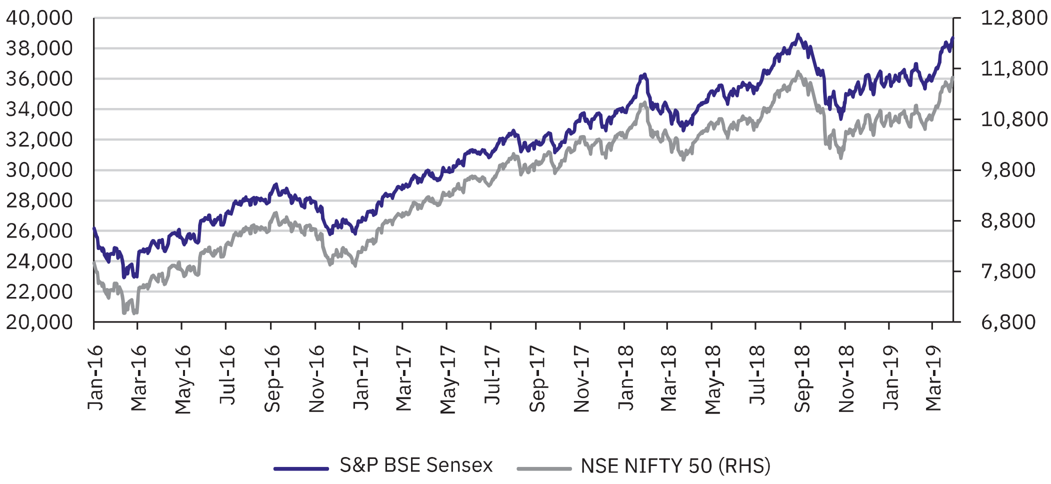
**Chart 1.17: Domestic Market Capitalisation (US$tn)**



Source: WFE, Monthly Statistics, December 2018.

Note: Ranking is based on data from 80 stock exchanges across world and is in terms of domestic market capitalisation at the end of December 2018.

**Chart 1.18: Movement of S&P BSE Sensex and NSE Nifty 50**



Source: NSE and BSE.

### 1.4.1 Primary Market

Unlike the performance of major indices in India, there was a decline in total resource mobilisation through primary market. During Apr-Dec'18, only 124 companies accessed primary market through public and rights issues to raise Rs444bn compared to Rs728bn raised through 153 issues during same period in 2017, showing 40% decline in resource mobilisation. Out of these, 93 companies raised Rs15.8bn through public and rights issues in SME platform during Apr-Dec'18.

Though resource mobilisation through private placements declined by 26% during Apr-Dec'18 compared to the previous year, it continues to dominate in primary market with Rs3.4tn raised through 1,671 issues. Resources mobilised through public debt issues during Apr-Dec'18 increased by 600% to Rs286bn on a y-o-y basis. Additionally, companies raised Rs70bn through 11 QIPs during Apr-Dec'18.

### 1.4.2 Secondary Market

In NSE, average daily turnover of cash market was Rs294bn during FY18, which marked a significant increase of 44% compare to Rs204bn in FY17. The trend continued in Apr-Dec'18 as well, where average daily turnover increased to Rs320bn. In BSE, it increased from Rs40bn in FY17 to Rs44bn in FY18, which declined to Rs31bn during Apr-Dec'18. Consequently, NSE maintained its position as the market leader with 91% share of total turnover in India.

Moreover, in 2018, NSE ranked second among all WFE member exchanges in terms of total number of trades with 2.8bn trades (Shenzhen Stock Exchange ranked first), and ranked 14th in terms of value of shares traded for the same period.

### 1.4.3 Derivatives Market

India's tryst with derivatives began in 2000 when both NSE and BSE commenced trading in equity derivatives. In June 2000, index futures derivatives launched in India, followed by index options in June 2001, options in individual stocks in July 2001, and futures in single stock derivatives in November 2001. Since then, equity derivatives have come a long way. For instance, NSE and BSE launched weekly options on Bank Nifty in 2016 and 2018 respectively. They launched weekly options in currency derivatives segment on USD-INR currency pair and weekly options contracts on NIFTY 50 Index in 2018.

*Equity Derivatives*: The response of Indian investors to equity derivatives segment has been extremely positive. In FY18, total turnover of derivatives in NSE reached Rs1,649trn maintaining a continuous upward trend. Notably, it increased by 75% in FY18 over previous financial year due to several factors, such as lower transaction cost in derivatives market than cash market and shift in investors' preference towards derivatives from cash market. Thereafter, growth in derivatives segment decelerated in Apr-Dec'18 perhaps due to increase in market risks both domestically and globally.

*Currency Derivatives*: Total turnover in currency derivatives segment at NSE increased by 4% to Rs50.3tn in FY18 compare to Rs48.6tn in FY17. The growth accelerated in FY19 due to a policy change that involved significant relaxation on limits of domestic investors and FPIs in currency derivatives. Total trading value during Apr-Dec'18 was Rs62.7trn which is about 92% higher than total turnover during the same period previous year.

*Interest Rate Futures*: Exchange traded interest rate futures (IRF) on NSE are standardized contracts based on 6 year, 10 year and 13 year Government of India Security (NBF II) and 91-day Government of India Treasury Bill (91DTB). All future contracts available for trading on NSE and BSE are cash settled. Total turnover of IRF at NSE increased by 4% to Rs3.2tn in FY18 from Rs3.1tn in FY17. In BSE, total turnover increased tremendously by 75% from Rs1,280bn in 2016-17 to Rs2,239bn in 2017-18. Total traded volume has declined tremendously in both NSE and BSE in Apr-Dec'18 compare to the same period previous year.

*Commodity Derivatives*: On October 1, 2018, SEBI allowed any single exchange to operate in various asset classes, such as equity, equity derivatives, commodity derivatives, debt, interest rate futures, and currency derivatives. In response, both NSE and BSE applied for and received SEBI approval to enter into commodity derivatives segment. BSE launched its commodity segment with gold and silver futures contracts, while NSE started with the same commodities from October 12, 2018. BSE and NSE floated 4 and 2 contracts respectively in commodity segment till December 2018, while other commodity exchanges viz. NCDEX, MCX and ICEX floated 24, 22 and 13 contracts respectively.

### 1.4.4 Other Markets

Exchange-traded funds (ETFs) have gained wide acceptance as financial instruments whose unique advantages over mutual funds have caught the eye of many investors. ETFs are baskets of securities that are traded, like individual stocks, on an exchange. Unlike regular open-end mutual funds, ETFs can be bought and sold throughout the trading day like any stock. These instruments are beneficial for investors who find it difficult to understand, analyse and pick stocks. Various mutual funds provide ETF products that attempt to replicate indices on NSE (e.g. Nifty50) so as to provide returns that closely correspond to total returns of securities represented in the index. Most ETFs charge lower annual expenses than index mutual funds. There are different types of ETFs available in NSE, viz. Equity ETF, Debt ETF, Gold ETF and International Indices ETF.

As on March 31, 2018, there were 68 ETFs (compared to 63 the previous year), of which 12 were gold ETFs and 56 were other ETFs. Total asset under management of ETF schemes rose by 55.7% to Rs776.9bn during FY18 compared to previous year.

**Box 1.2: Major Reform Initiatives Introduced in Securities Market During March 2017 - December 2018**

1. SEBI accepted several recommendations made by the Committee on Corporate Governance under the Chairmanship of Shri Uday Kotak to improve corporate governance of listed companies, such as:
   a. Continuation of a director will depend on their attendance in meetings held in last two financial years,
   b. Expertise/Skills of Directors shall be disclosed in the annual report,
   c. For continuation/appointment of non-executive directors over 75 years, special resolution of shareholders to be required,
   d. Reduction in the maximum number of listed entity directorships from 10 to 8 by April 01, 2019 and to 7 by April 1, 2020,
   e. Expanding the eligibility criteria for independent directors,
   f. Enhanced role of the Audit Committee, Nomination and Remuneration Committee and Risk Management Committee,
   g. Strengthening periodical financial disclosures, etc.
2. SEBI revised minimum haircuts applicable to Central Government securities (G-Sec) deposited by clearing members as following:
   a. 2% haircut for Treasury Bills, and Liquid G-Sec having residual maturity of less than 3 years,
   b. 5% for liquid G-Sec having residual maturity of more than 3 years, and
   c. 10% for other semi-liquid and illiquid G-Sec.

3. SEBI decided to move from cash settlement to physical settlement of all stock derivatives in phased manner based on daily average market capitalization for the month of December 2018 (on ascending order).
4. SEBI issued norms for interoperability among clearing corporations to reduce trading costs in securities market.
5. SEBI decided to permit foreign entities having actual exposure to Indian commodity markets, to participate in commodity derivative segment of recognized stock exchanges for hedging their exposure. However, they are not allowed to trade for those contracts having underlying commodity defined as 'sensitive commodity'.
6. Several measures were taken by SEBI to strengthen Algorithmic Trading and Co-location / Proximity Hosting framework. In order to facilitate small and medium sized Members, who otherwise find it difficult to avail colocation facility due to various reasons including high cost, lack of expertise in maintenance and troubleshooting to avail co-location facility, stock exchanges can introduce 'Managed Co-location Services'. Stock exchanges can also provide a simulated market environment for testing of software including algorithms.
7. As per the Amendments in Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012, there would be no separate category of 'Commodity Derivatives Exchanges' with effect from October 1, 2018. As a result, commodity derivatives came under the purview of SEBI along with other derivatives like equity, currency and interest rates, and all exchanges were allowed to introduce derivatives in all segments with a prior approval from SEBI.

## References:

Government of India, Ministry of Finance, Economic Survey, 2017-18.

International Investments Funds Association. Worldwide Regulated Open-End Fund Assets and Flows - Third Quarter 2018.

International Monetary Fund. Global Financial Stability Report: A Decade after the Global Financial Crisis: Are We Safer? October 3, 2018.

International Monetary Fund. World Economic Outlook, January 2019.

International Monetary Fund. World Economic Outlook, October 2018.

Reserve Bank of India. Financial Stability Report Issue No. 18, December 31, 2018.

Reserve Bank of India. Sixth Bi-monthly Monetary Policy Statement, 2018-19. Resolution of the Monetary Policy Committee (MPC), Febuary 07, 2019.

Securities and Exchange Board of India. Annual Report, 2017-18.

Securities and Exchange Board of India. SEBI Bulletin – January 2019.

Securities and Exchange Board of India. SEBI Bulletin – March 2018.

Securities and Exchange Board of India. SEBI Bulletin – January 2018.

World Bank. Global Economic Prospects, Darkening Skies, January 2019.

World Bank. Training for Reform, Doing Business 2019, 16th Edition.

World Economic Forum. The Global Competitiveness Report, 2018.

World Federation of Exchanges. Full Year Market Highlights (2018).

# Appendix

## 1A.1 Basic Market Structure

The securities market has essentially three categories of participants: (a) issuers of securities, (b) investors in securities (in both primary and secondary markets), and (c) intermediaries. The issuers are borrowers or deficit savers, who issue securities to raise funds. The investors in primary markets, who are surplus savers, deploy their savings by subscribing to these securities. The investors in secondary markets buy and sell securities from each other to adjust their holdings of securities depending on their changing needs. The intermediaries are the agents who match the needs of the users and the suppliers of funds in the primary market for a commission to help both the issuers and the investors to achieve their respective goals; besides, they play a variety of roles in the secondary market as well. There are a large variety of intermediaries providing various services in the Indian securities market (Table 1A.1).

**Table 1A.1: Market Participants in Securities Market**

| Market Participants | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019$ |
|---|---|---|---|---|---|---|
| Securities Appellate Tribunal (SAT) | 1 | 1 | 1 | 1 | 1 | 1 |
| Regulators* | 4 | 4 | 4 | 4 | 4 | 4 |
| Depositories | 2 | 2 | 2 | 2 | 2 | 2 |
| **Stock Exchanges** | | | | | | |
| Cash Market | 20 | 18 | 18 | 5 | 5 | 5 |
| Equity Derivatives Market | 3 | 3 | 3 | 3 | 3 | 3 |
| Currency Derivatives Market | 4 | 3 | 3 | 3 | 3 | 3 |
| Commodity Derivatives Segment | NA | NA | 12 | 10 | 6 | 5 |
| Brokers (Cash Segment)** | 9,411 | 3,744 | 3,219 | 3,192 | 6 | 5 |
| Corporate Brokers (Cash Segment) | 4,917 | 3,290 | 2,820 | 2,775 | 3,038 | 2,734 |
| Brokers (Equity Derivatives) | 3,051 | 2,990 | 2,760 | 2,651 | 2,549 | 2,566 |
| Brokers (Currency Derivatives) | 2,395 | 2,406 | 2,205 | 1,985 | 2,245 | 2,187 |
| Sub-brokers (Cash Segment) | 51,885 | 42,351 | 35,246 | 30,610 | 25,579 | - |
| Foreign Portfolio Investors | - | 8,214 | 8,717 | 7,807 | 9,227 | 9,351 |
| Portfolio Managers | 212 | 188 | 202 | 218 | 270 | 307 |
| Custodians | 19 | 19 | 19 | 19 | 19 | 20 |
| Registrars to an issue & Share Transfer Agents | 71 | 72 | 71 | 73 | 73 | 73 |
| Merchant Bankers | 197 | 197 | 189 | 189 | 195 | 203 |
| Bankers to an Issue | 59 | 60 | 62 | 64 | 66 | 66 |
| Debenture Trustees | 31 | 32 | 31 | 32 | 32 | 32 |
| Underwriters | 3 | 2 | 2 | 2 | 1 | 2 |
| Venture Capital Funds | 207 | 201 | 200 | 198 | 195 | 195 |
| Foreign Venture Capital Investors | 192 | 204 | 215 | 218 | 232 | 253 |
| Mutual Funds | 50 | 47 | 48 | 45 | 45 | 47 |
| KYC Registration Agency (KRA) | 5 | 5 | 5 | 5 | 5 | 5 |

Source: SEBI Bulletin.

Note: *DCA, DEA, RBI & SEBI, **Including brokers on Mangalore SE (58), HSE (303), Magadh SE (197), SKSE (399), $ indicates as on December 31, 2018.

The securities market has two interdependent and inseparable segments, namely, the primary market and the secondary market. The primary market provides the channel for the creation and sale of new securities, while the secondary market deals with the securities that were issued previously. The securities issued in the primary market are issued by public limited companies or by government agencies. The resources in this kind of market are mobilised either through a public issue or through a private placement route. If any member of the public can subscribe to the issue, it is called a public issue; if the issue is made available only to a select group of people, it is known as private placement. There are two major types of issuers of securities—corporate entities, who issue mainly debt and equity instruments, and the government (Central as well as State), which issues only debt securities (dated securities and treasury bills).

The secondary market enables the participants who hold securities to adjust their holdings in response to changes in their assessment of risks and returns. Once new securities are issued in the primary market, they can be traded in the secondary market. The secondary market operates through two mediums, namely, the over-the-counter (OTC) market and the exchange-traded market. The OTC markets are markets where trades are negotiated. Most of the trades in government securities take place in the OTC market. All the spot trades where securities are traded for immediate delivery and payment occur in the OTC market. The other option is to trade using the infrastructure provided by the stock exchanges. The exchanges in India follow a systematic settlement period. All the trades taking place over a trading cycle (trading day = T) are settled together after a certain time (T + 2 days). The trades executed on the exchanges are cleared and settled by a clearing corporation. The clearing corporation acts as a counterparty and guarantees settlement. One component of the secondary market is the forward market, where securities are traded for future delivery and payment. A variant of the forward market is the futures and options (F&O) market. Currently, trading in futures and options in equity occurs mainly on the National Stock Exchange of India Ltd. (NSE).

The process of mobilising resources is carried out under the supervision and overview of the regulators. The regulators regulate the conduct of the issuers of securities and the intermediaries and attempt to ensure fair market practices, so as to protect the interests of the investors. The regulators are also responsible for ensuring supply of quality securities as well as high service standards of the intermediaries. The regulator’s aim is to ensure that the market participants behave in such a manner so that the securities markets continue to be a secure and important source of finance for the corporate sector and the government, while protecting the interests of investors. In India, the responsibility for regulating the securities market is shared by the Department of Economic Affairs (DEA), the Ministry of Corporate Affairs (MCA), the Reserve Bank of India (RBI), and Securities and Exchange Board of India (SEBI). The orders of SEBI under the securities laws are appealable before a Securities Appellate Tribunal (SAT).

The Ministry of Finance regulates through the Capital Markets Division of the Department of Economic Affairs. - The Division is responsible for institutional reforms in the securities markets, building regulatory and market institutions, strengthening investor protection mechanism, and providing efficient legislative framework for securities markets. The Division administers legislations and rules made under the Depositories Act, 1996, Securities Contracts (Regulation) Act, 1956 and Securities and Exchange Board of India Act, 1992. The Investor Education and Protection Fund (IEPF) has been set-up under Section 205C of the Companies Act, 1956 by way of the Companies (Amendment) Act, 1999 under the chairmanship of the Secretary of the Ministry of Corporate Affairs (MCA).

The Reserve Bank of India (RBI) derives statutory powers to regulate market segments from specific provisions of the RBI Act, 1934. The prudential guidelines issued to eligible market participants form the broad regulatory framework for government securities, money market and interest rate derivatives. All the secondary market transactions in Government Securities are settled through a central counterparty mechanism under Delivery Versus Payment mode. Multilateral netting is achieved with a single funds settlement obligation for each member for a particular settlement date. The settlement is achieved in the RTGS (Real Time Gross Settlement) Settlement/Current Account maintained by the member in the RBI. The RBI formulates detailed guidelines on each segment of the money market (collaterised borrowing, uncollaterised call money market, Commercial Paper issuances by corporates, Primary Dealers and financial institutions and Certificates of Deposit) under the section Master Circulars for financial markets. In the foreign exchange market, the Foreign Exchange Management Act, 1999 (Act 42 of 1999), better known as FEMA, 1999, provides the statutory framework for the regulation of Foreign Exchange derivatives contracts. The powers in respect of the contracts for the sale and purchase of securities, gold-related securities, money market securities and securities derived from these securities, and ready forward contracts in debt securities are exercised concurrently by the RBI.

The SEBI is the regulatory authority established under the SEBI Act 1992 and is the principal regulator for stock exchanges in India. SEBI’s primary functions include protecting investor interests and promoting and regulating the Indian securities markets. Foreign Portfolio Investors are required to register with Designated Depository Participants (DDPs) in order to participate in the Indian securities markets. Most of the powers under the Securities Contracts (Regulation) Act, 1956 (SCRA) can be exercised by the DEA while a few others can be exercised by SEBI. The powers of the DEA under the SCRA are also concurrently exercised by SEBI. Besides, the Depositories Act is administered by SEBI. The rules under the securities laws are framed by the government and the regulations are framed by SEBI.