



बैंक ऑफ़ बड़ौदा
Bank of Baroda

FY20 Interest Rate Outlook



Global and domestic rates

Opposite ends of the spectrum

January 2019

Sameer Narang | +91 22 6698 5713

chief.economist@bankofbaroda.com

INTEREST RATE OUTLOOK

04 January 2019

Global and domestic rates: Opposite ends of the spectrum

A confluence of slowing global economic growth, easing oil prices, open market (OMO) purchases by the RBI, and contained inflation has helped rein in domestic yields. We estimate OMO purchases of Rs 2.5tn-3tn in FY19, dipping to Rs 1.5tn-2tn (at currency demand of Rs 3tn) in FY20 as FPI inflows likely gather pace. While this should ensure a narrow range for India's 10-year yield at 7.25-7.75% in FY20, we expect bank deposit rates to continue to move up as credit growth outstrips that of deposits.

Sameer Narang

+91 22 6698 5713

chief.economist@bankofbaroda.com

Dipanwita Mazumdar

dipanwita.mazumdar@bankofbaroda.com

Sonal Badhan

sonal.badhan@bankofbaroda.com

Aditi Gupta

aditi.gupta3@bankofbaroda.com

Jahnavi

jahnavi@bankofbaroda.com

Yields exhibited high volatility in CY18: India's 10Y yield has oscillated by ~100bps in 2018 – it recently hit a high of 8.18% and has since fallen to 7.37%. The decline in domestic yields is a result of lower global yields, 38% drop in oil prices from its peak in Oct'18, and market expectations of a change in the RBI's stance from calibrated to neutral as early as Feb'19. The RBI's OMO purchases of Rs 1.96tn during 9MFY19 (Rs 2.36tn announced till Jan'19) and Rs 700bn reduction in bond issuance by the Centre also pushed yields lower.

Deposit rates inching up: Even as yields have eased in the recent past, deposit rates of banks are seeing upward pressure. During 2018, the weighted average deposit rates of large commercial banks have increased by 28bps till now, fuelled by the large wedge between credit and deposit growth. With NBFCs squeezed for liquidity, this uptrend may persist as seen in the 57.2% YoY rise in bank credit offtake by NBFCs in Nov'18.

OMOs to keep yields range-bound in FY20: With banks facing upward pressure on deposit rates, RBI is likely to continue with OMO purchases to ease liquidity. Assuming currency demand of Rs 1tn in Q4FY19 and Rs 3tn in FY20 (Rs 4.9tn in FY18), lower amount of OMOs may be needed in FY20 if FPI inflows pick-up. For FY19/FY20, we estimate OMO purchases at Rs 2.5-3.0tn/Rs 1.5tn-2tn. Government yields are thus likely to remain range-bound at 7.25-7.75% in FY20, but deposit and lending rates could see a sustained uptrend.

Global factors also at play: Global factors will play an even more significant role next year. Benign yields in India are contingent upon lower global oil prices. US yields also have to stay below 3% for Indian yields to remain in our projected range – this assumes rate hikes of not more than 0.25-0.5% by the US Fed in 2019.

KEY HIGHLIGHTS

- Interest rates to remain range bound between 7.25-7.75% in FY20.
- For FY19/FY20, we estimate OMO purchases at Rs 2.5-3.0tn/Rs 1.5tn-2tn.
- Yawning Credit-Deposit growth mismatch to put upward pressure on domestic rates.
- Muted global growth and US Fed outlook pose downside risk to our forecasts.



Contents

FY20 rate outlook	3
Global markets: Where are rates headed?	3
India: Higher oil prices, FPI outflows and tight liquidity	5
OMO purchases of Rs 2.5tn-3tn likely in FY19.....	8
G-Sec demand-supply dynamics to ease pressure on rates.....	9
Credit-Deposit mismatch may harden rates in FY20	12
Annexure	15
US macroeconomic conditions	15
Global macroeconomic conditions.....	16
Global financial markets	17
Indian interest rates inching up.....	18

FY20 rate outlook

Global interest rates have had a volatile year. In India, the 10Y yield increased 53bps between Jan'18 and Oct'18, while falling by 25bps & 24bps in Nov'18 & Dec'18. Though the 10Y yield has been seesawing, other interest-bearing instruments such as post-office deposits (+30bps over Mar-Dec'18), bank term deposits (+38bps for one-year maturity) and banks' overnight MCLR (+35bps) all point to higher rates. Given the gap between deposit and credit growth, we expect interest rates to remain on an upswing.

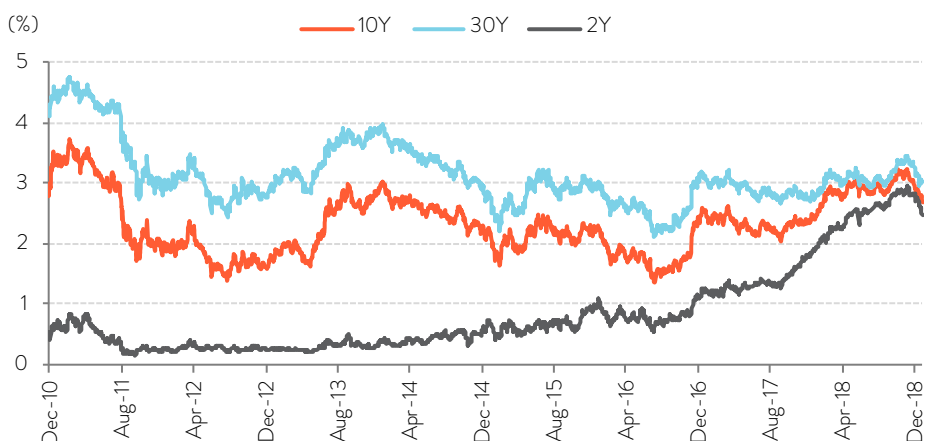
However, the spread between government securities (G-Secs) and other benchmark instruments may come down (already visible in Dec'18), as inflation is undershooting the RBI's trajectory and oil prices have declined (down 38% from a peak of US\$ 86/bbl in Oct'18). In addition, the RBI is in favour of injecting more liquidity (via OMOs) into the economy to ensure growth. At the same time, global yields have also fallen as the world economy has hit a soft patch. In our view, the upswing in credit growth in India will ensure that banks won't be large buyers of government bonds next year – this suggests a band of 7.25-7.75% for India's 10Y yield in FY20.

Global markets: Where are rates headed?

US yields on a rollercoaster ride

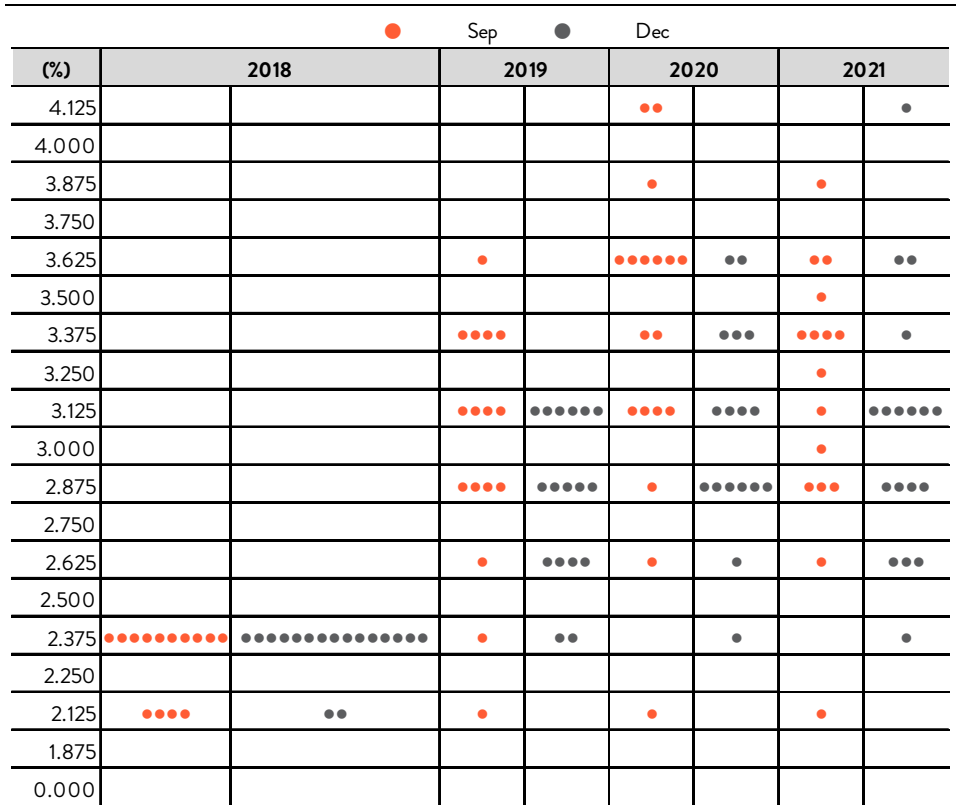
US interest rates have been on a rollercoaster ride this year. From a low of 2.4% in Feb'18, the 10Y yield increased to 3.25% in Sep'18, a four-year high, before retracing to 2.68% in Dec'18. The uptick in yields was led by a steady increase in real wages and record-low unemployment rates, the lowest since 1958. The downward movement since Sep'18 can be linked to the weak housing market, US mid-term elections, fall in oil prices and Fed statements indicating that rates are close to neutral levels.

FIG 1 – US LONG-END AND SHORT-END YIELDS



Source: Bloomberg, Bank of Baroda Research

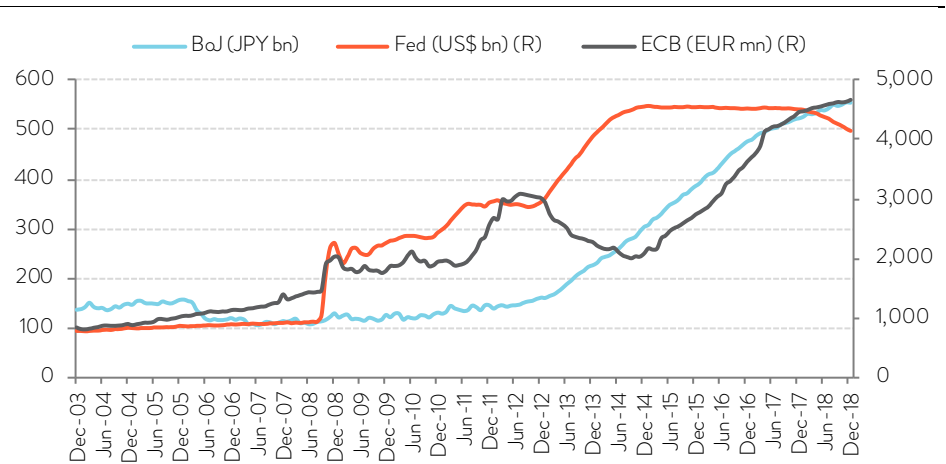
FIG 2 – US FED DOT PLOT INDICATES 2 RATE HIKES IN 2019



Source: US Fed, Bank of Baroda Research

While the Fed is close to neutral rates, the future policy stance of the ECB and BoJ is not known fully and is also dependent on the economic outlook. The ECB has ended its asset purchase programme in Dec'18 and this is likely to act as breather for the ballooning balance sheet. With global liquidity from central banks drying up and global oil prices elevated, markets were assuming higher risk-free yields in 2019 – however, this narrative has changed post the 38% decline in oil since Oct'18.

FIG 3 – EXPANSIONARY BALANCE SHEET OF ECB AND BOJ CONTRASTS WITH THAT OF THE US FED



Source: Bloomberg, Bank of Baroda Research

The decline in oil prices was driven by (a) higher US output and (b) an expected dip in demand due to a worsening global economic outlook led by the US-China trade spat and now a Democrat-controlled US House of Representatives which will ensure tighter fiscal policy.

Softening oil prices could halt EM rate hikes

In CY18, emerging markets (EM) have raised policy rates in the range of 25-1,600bps. The recent decline in oil prices and changing narrative by the US Fed suggests that EM central banks may not have to raise rates further.

FIG 4 – GLOBAL POLICY RATES ON THE RISE IN CY18

Countries	Current policy rates (%)	Chg in policy rates in CY17 (bps)	Chg in policy rates* in CY18 (bps)	Chg in rates in CY18	Current inflation rates (%)
Turkey	24	0	1,600	↑	21.6
Argentina	40	400	1125	↑	46.8
Indonesia	6	(50)	175	↑	3.2
Philippines	4.75	0	175	↑	6.0
Saudi Arabia	2.75	0	75	↑	2.4
Mexico	8	150	75	↑	4.7
UAE	2.5	75	75	↑	1.3
Brazil	1.75	50	50	↑	4.1
India	6.5	(25)	50	↑	2.3
Malaysia	3.25	0	25	↑	0.2
Korea	1.75	25	25	↑	2.0
South Africa	6.75	(25)	0	-	5.2
Taiwan	1.375	0	0	-	0.3
Thailand	1.5	0	0	-	0.9
China	4.35	0	0	-	2.2
Russia	7.75	(225)	0	-	3.8

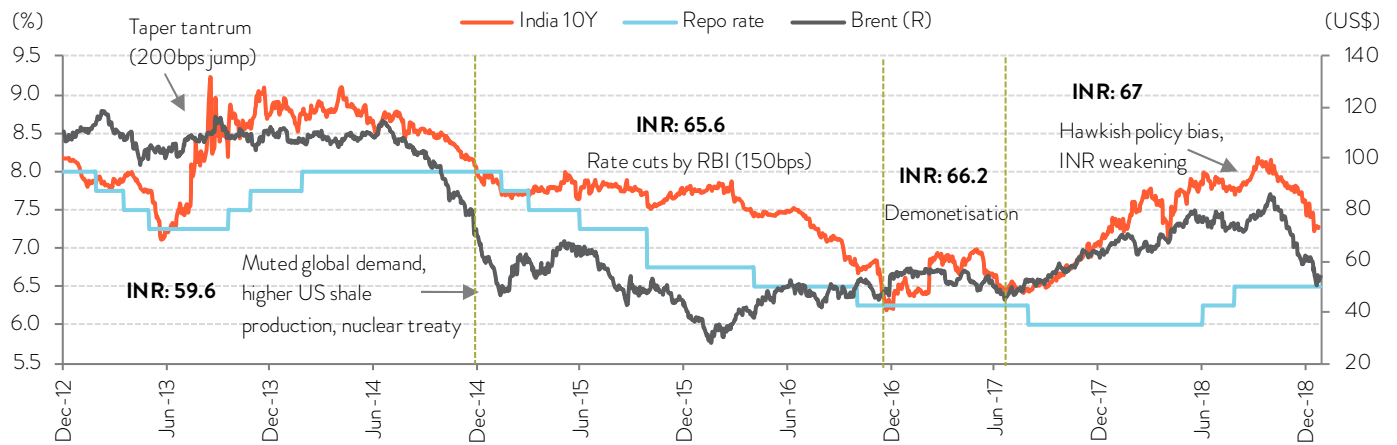
Source: Bloomberg, Bank of Baroda Research | *till Dec'18

India: Higher oil prices, FPI outflows and tight liquidity

In India's context, the run-up in international crude prices and interest rates has coincided with FPI outflows. Historically, higher oil prices and FPI outflows lead to tighter liquidity (RBI intervention in forex market), higher interest rates (tight liquidity and rising inflation), and depreciation pressure on the INR (rising trade deficit and CAD). With oil prices fizzling out of late on concerns of oversupply and ebbing global growth prospects, this situation could reverse.

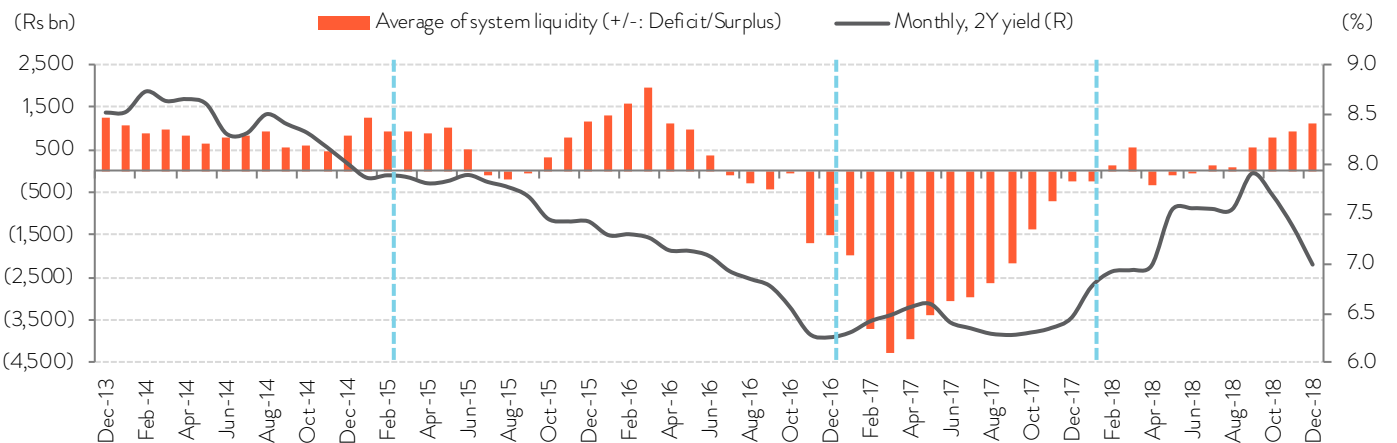
The chart below shows four phases of India's interest rates, liquidity and currency since 2013.

FIG 5 – MOVEMENT OF CRUDE, 10YR AND POLICY RATES



Source: Bloomberg, Bank of Baroda Research

FIG 6 – LIQUIDITY AND MOVEMENT OF SHORT TERM RATES



Source: Bloomberg, Bank of Baroda Research

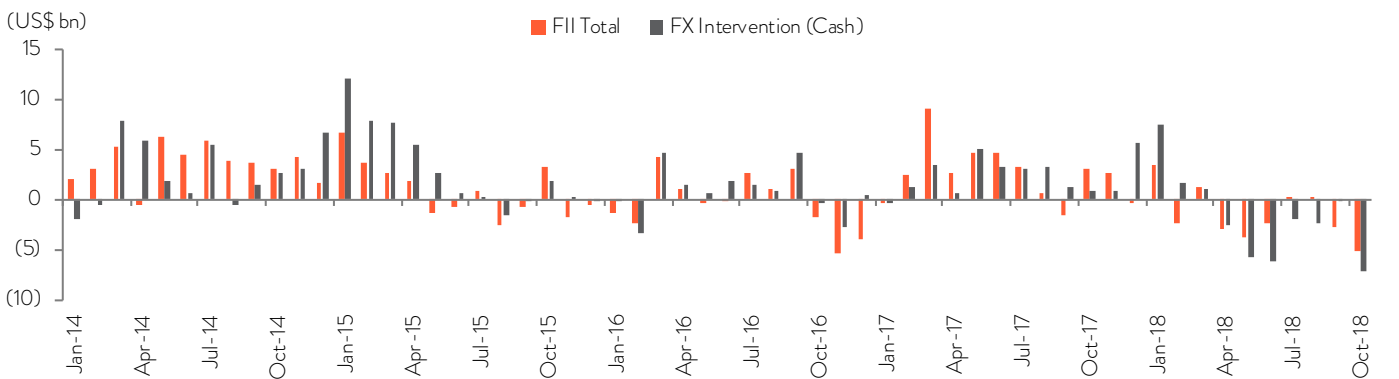
The following features stand out:

- **Taper tantrum (May-Dec'13):** The impact of the taper tantrum was mostly felt during May-Dec'13 when bond yields surged across the globe, with US 10Y yields rising 90bps to 3%. Oil prices averaged ~US\$ 108/bbl. The Indian economy slowed to 5.5% in FY13 from 8.5% in FY11 and inflation skyrocketed to 9.4% in FY14, causing 10Y yields to rise more than 200bps. India's system-wide average liquidity deficit surged to Rs 1.1tn during Aug-Dec'13.
- **Rate cuts (Oct'14-Jan'16):** During this period, oil prices slumped to US\$ 27/bbl on account of muted global growth (3.3-3.6% from a high of 5.4% in 2010) and the Iran nuclear treaty. At this time, India's inflation dropped to 4.9% in FY16. This led the RBI to cut rates by 150bps, which

resulted in a 75bps decline in bond yields. The average liquidity deficit in the system also reduced to Rs 667bn during this time.

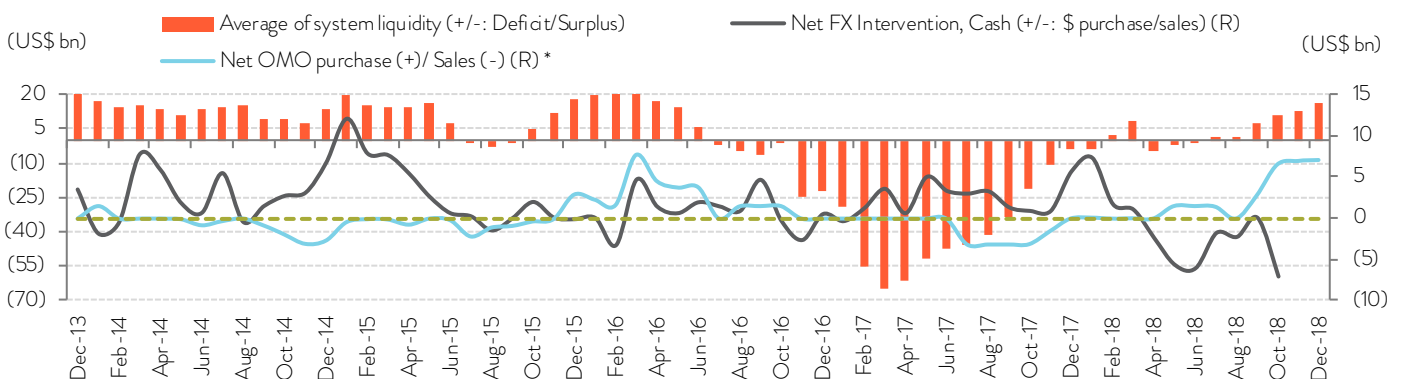
- Demonetisation (Nov'16-Aug'17):** Bond yields declined by 50bps in Nov'16, but stabilised soon enough. At this time banks were flush with excess funds and the system witnessed its highest liquidity surplus of ~Rs 2.3tn. The RBI in turn tried to mop up this excess liquidity via OMO sales of Rs 900bn and higher issuance of MSS bonds at Rs 6tn from just Rs 0.3tn. Policy rates were reduced by 25bps during this period and the central bank's stance moved from accommodative to neutral in Feb'17.
- Tightening of global rates (Aug'17-Dec'18):** The US Fed has hiked fund rates by 100bps during this period, prompting EMs to follow suit (Fig 5). On the domestic front, the 10Y yield increased from a low of 6.43% in CY17 to 8.15% in Oct'18 on the back of higher oil prices (averaged US\$ 80/bbl in October), a pick-up in domestic inflation and a depreciating currency. The RBI raised rates by 50bps and adopted a posture of calibrated tightening in October. India's average liquidity deficit increased to Rs 1.1tn as on Dec 2018. However, RBI's conduct of OMO purchases and falling oil prices might support liquidity in the near term.

FIG 7 – HIGHER FII OUTFLOWS LEADING TO HIGHER FX INTERVENTION



Source: CEIC, Bloomberg, Bank of Baroda Research

FIG 8 – INTERRELATIONSHIP BETWEEN NET OMOS, FX INTERVENTION AND SYSTEM LIQUIDITY



Source: Bloomberg, Bank of Baroda Research

OMO purchases of Rs 2.5tn-3tn likely in FY19

FX intervention driving higher G-Sec buying by RBI

Compared with a forex purchase of US\$ 33.7bn in FY18, the RBI has had to sell dollars to balance the currency market this year. Given RBI's forex intervention (cash) of US\$ 25.9bn in FYTD19, the liquidity deficit in the system increased to Rs 1.1tn as on Dec 2018 versus a liquidity surplus of Rs 1.7tn in FY18. Since this is a durable withdrawal of liquidity from the system, the RBI undertook open market (OMO) purchases of Rs 1.96tn during 9MFY19. The demand for currency during this period was Rs 1.8tn compared with Rs 3.6tn in the same period last year. Currency demand (a liability for RBI's issuing department) requires a corresponding increase in assets, another reason behind the OMO purchases.

Currency demand in run-up to elections key to watch

Going forward, with FPI inflows of US\$ 1.8bn in Nov'18 and US\$ 1.2bn in Dec'18, OMO purchases may not be required from a forex intervention standpoint. However, currency demand in the economy will continue. If FPI inflows pick up materially, the need for OMO purchases will be lower. Conversely, should FPI inflows remain at the run-rate seen in Nov'18 and Dec'18, another Rs 540bn-1.04tn of purchases will be required. This is contingent upon Rs 1tn of currency demand in the economy in Q4FY19. Currency demand may be far higher in the run-up to the general elections in Q1FY20, which is a key risk to our assumption. Thus we expect OMO purchases to continue to the quantum of Rs 1.5-2tn in FY20 contingent upon FII inflows.

FIG 9 – RBI's BALANCE SHEET

(Rs bn)	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19E
Total Notes Issued	13,445	14,732	17,077	15,063	19,120	21,620
Capital & Reserves	67	67	67	67	67	67
Deposits	3,769	5,187	5,065	8,963	6,526	6,525
w/w Bank	3,677	3,947	4,294	5,042	5,071	5,517
Other Liabilities and Provisions	8,962	8,905	10,220	8,947	10,463	11,523
Total Liabilities	26,244	28,892	32,430	33,041	36,176	39,735
Gold Coins & Rupee Coins	1,242	1,218	1,393	1,324	1,450	1,566
Investments – Foreign	17,580	21,359	23,064	23,687	26,351	27,440
Investment – Domestic	6,695	5,185	7,033	7,558	6,297	9,054
Loans and Advances	371	802	520	173	1,639	1,535
Other Assets*	356	327	419	300	440	140
Total Assets	26,244	28,892	32,430	33,041	36,176	39,735

Source: RBI, Bank of Baroda Research | *Includes investments in subsidiaries | E - Bank of Baroda Estimates

FIG 10 – DATA SHOWING INTERRELATION BETWEEN OMO PURCHASE, FX INTERVENTION AND FOREIGN CURRENCY ACCOUNT (FCA)

Year	RM growth (%)	FX intervention (US\$ bn)	Chg in FCA (Rs bn)*	Chg in domestic investments (Rs bn)*	Net OMO purchase (Rs bn)
2011-12	11	(20.1)	1,805.4	1,669.3	1,342
2012-13	5	(2.6)	754.9	1,037.2	1,461
2013-14	14	9.0	2,331.8	(44.2)	520
2014-15	11	54.8	3,779.5	(1,509.7)	(627)
2015-16	13	10.2	1,704.7	1,847.9	623
2016-17	(13)	12.4	623.1	524.2	1,105
2017-18	27	33.7	2,663.9	(1,260.1)	(888)
2018-19E	13	(20.0)	1,088.8	2,757.0	3,000

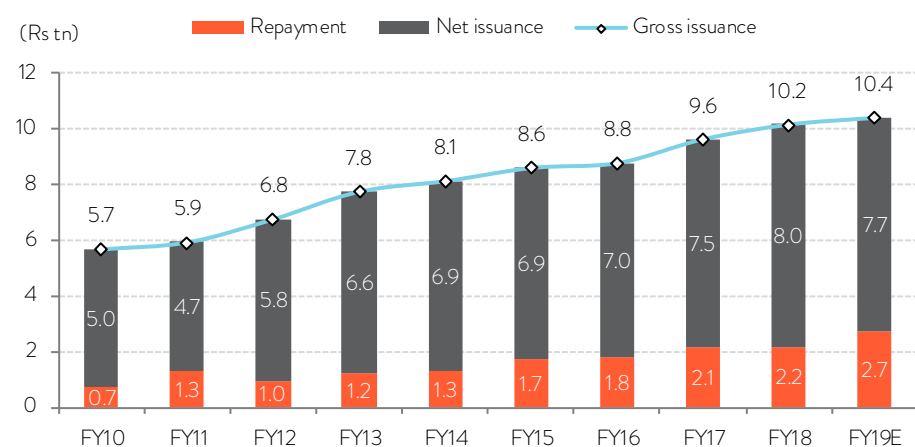
Source: RBI, CEIC, Bank of Baroda Research | RM: Reserve Money | E- Bank of Baroda Estimates | *Calculated from RBI's balance sheet

G-Sec demand-supply dynamics to ease pressure on rates

Reduced government borrowings will lower bond supply

OMO purchases imply lower bond yields as demand for bonds increases. The supply side also matters. With the government reducing its borrowing target by Rs 700bn in FY19, the gross issuance of central government securities now stands at Rs 5.35tn compared with Rs 6.05tn projected in the Budget. State governments are likely to have another Rs 5.1tn of issuances during the year. Hence, we estimate the overall gross supply of bonds at Rs 10.4tn in FY19 compared with Rs 10.2tn in FY18, with net supply at Rs 7.7tn vs. Rs 8tn in FY18.

FIG 11 – SUPPLY OF GOVERNMENT PAPERS



Source: RBI, PIB, Bank of Baroda Research | E- Bank of Baroda Estimates

FIG 12 – CENTRAL GOVERNMENT BORROWING MATH

(Rs bn)	FY17	FY18RE	FY19BE	FY19E
H1	3,410	3,570	3,380	2,880
H2	2,420	2,420	2,675	2,470
Gross borrowing	5830	5990	6,055	5,350
Repayments	(1,748)	(1,396)	(1,435)	(1,435)
Net borrowing	4,082	4,594	4,621	3,915
Buyback	(586)	(570)	(719)	(469)
Short-term borrowing	55	775	170	170
NSSF	674	1,026	750	1,206
State provident funds	177	150	170	170
Others	861	343	847	847
External debt	180	24	(26)	(26)
Drawdown of cash	(89)	(394)	431	431
Total debt receipts	5,356	5,948	6,243	6,243

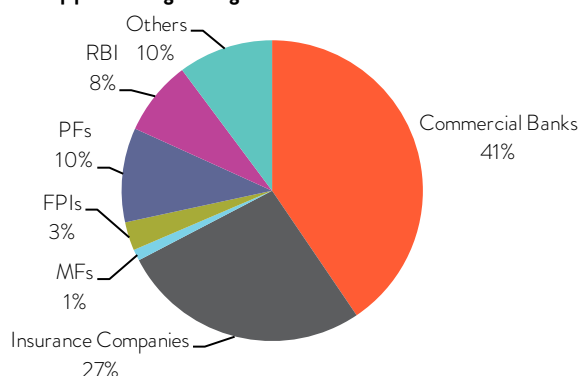
Source: Budget Documents, Bank of Baroda Research | RE – Revised Estimates; BE – Budgeted Estimates; E- Bank of Baroda Estimates

Bond demand from banks declining

On the demand side, commercial banks own a majority of dated securities (~41%). Other major holders are insurance companies (27%), provident funds (PF, 10%) and the RBI (8%). The holding patterns for central and state government securities are almost similar, except that the RBI has recently paced up purchase of central government securities.

FIG 13 – OWNERSHIP PATTERN OF GENERAL GOVERNMENT SECURITIES

Ownership pattern of general government securities (as of Mar-18)



Source: RBI, Bank of Baroda Research

Evaluating past trends and the current macroeconomic climate, we believe commercial banks would continue to be the largest holder of outstanding dated securities and would add Rs 2.2tn to their net position in FY19 against the average net accretion of Rs 2.6tn in the last five years. The pick-up in credit, which is more margin-accretive, explains the relatively lower demand

for G-Secs this year. Further, we estimate that insurance companies and provident funds will continue to be net buyers at Rs 3.0tn and Rs 1.3tn respectively in FY19, akin to the Rs 2.9tn and Rs 1.3tn levels in the previous fiscal.

RBI purchases to plug liquidity gap post FPI exit

With a continuous outflow in debt mutual funds (~Rs 1.7tn for the overall debt segment and Rs 65bn in the gilt segment in CYTD18), MFs are likely to be net sellers of Rs 281bn in FY19 vs. Rs 300bn in FY18. Due to persistent FPI outflows in the debt segment (US\$ 6.7bn in CY18), the outstanding holding of FPIs in G-Secs is expected to fall to Rs 1.7tn in FY19 from Rs 2.4tn last year. However, the RBI's initiatives such as increasing the limit for FPIs in debt securities is likely to add support in the medium term.

The central bank is trying to fill the vacuum created by the exit of FPIs, already purchasing G-Secs worth Rs 1.96n. To support the liquidity needs of the economy, a further OMO purchase of Rs 540bn-1.04tn is likely to be conducted in the remaining period of FY19.

FIG 14 – OWNERSHIP PATTERN OF GENERAL GOVERNMENT SECURITIES (INCREMENTAL CHANGE)

(Rs bn)	FY17	FY18	FY19E
Commercial Banks	2,198	3,709	2,216
Insurance Companies	2,679	2,932	3,046
MFs	118	(300)	(281)
FPIs	51	654	(697)
PFs	1,360	1,267	1,317
RBI	1,092	(924)	2,255
Others	866	915	633
Total	8,364	8,253	8,489

Source: RBI, Bank of Baroda Research | E – Bank of Baroda Estimates

Demand for government paper to rise by 2.9% in FY19E

Aggregating all the buyers, the total demand for government paper is likely to be slightly higher at Rs 8.5tn versus Rs 8.3tn in the previous year, driven by highest quantum of OMO purchase by RBI. This would be considerably higher than the estimated net supply of Rs 7.7tn.

Credit-Deposit mismatch may harden rates in FY20

10Y yield could range between 7.25% and 7.75%

We expect the Centre's fiscal deficit to fall from 3.3% in FY19E to 3.1% in FY20E. Gross issuance by the Centre is pegged at Rs 6.13tn and States at Rs 5.53tn. Repayments are estimated to be far higher at Rs 3.9tn compared with Rs 2.7tn in FY19E. This will require some switches in Mar'19 and next year so as to ensure a more orderly repayment calendar.

On the demand side, EMs may remain favourable if the US rate cycle softens as expected. Hence, FPI outflows may reduce, which is positive for rates. However, as credit growth picks up, banks may no longer be large buyers of G-Secs, a negative for rates. To ensure liquidity demand of more than Rs 3tn next year, the RBI will have to conduct large OMO purchases to adequately fund the banking system. This will ensure that the borrowing rate for the sovereign will be lower than other debtors in the economy.

Yields will also be affected by oil prices. We are assuming a baseline projection of US\$ 60-65/bbl, which in turn would ensure inflation remains contained within the RBI's trajectory in FY20. The dip in inflation in H2FY19 might prompt the central bank to alter its stance from calibrated tightening to neutral in the near term. Overall, we see 7.25-7.75% range for the 10Y yield in FY20 vs. 7-7.5% expected in FY19 and 6.9% seen in FY18.

Rising credit-deposit mismatch...

Other interest rates in the economy may not benefit from the above economic backdrop. A steadily rising credit-deposit mismatch is also expected to exert upward pressure on interest rates. Credit growth at commercial banks has risen at a robust pace of 15.1% in Nov'18 against 10.1% in Jan'18. Deposit growth on the other hand has only risen by 9.4% compared with 4.6% in Jan'18. This signals that interest rates may continue their upswing.

...and NBFC liquidity crunch to exert upward pressure on rates

Demand for credit is led by NBFCs – their borrowing pattern reveals that debentures constitute a major portion of credit followed by bank borrowings (Fig 15). Over the years, borrowing through commercial papers has increased by ~50%. In FY18, NBFCs' balance sheet rose by 15% to Rs 22.8tn, while that of housing finance companies' (HFC) expanded by 19.7%. With the drying up of liquidity for the sector, banks have had to step up lending which has led to an increase in interest rates. This trend may sustain.

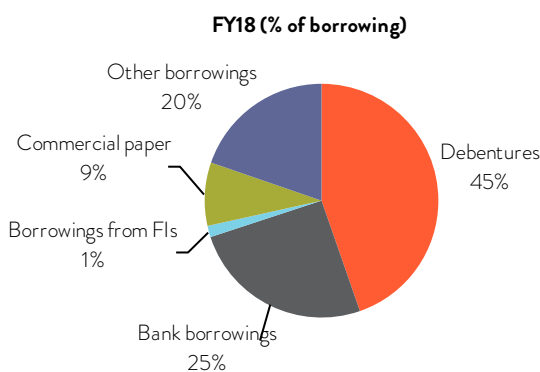
FIG 15 – NBFC SECTOR BALANCE SHEET

(Rs tn)	FY15	FY16	FY17	FY18
1. Share Capital, Reserves & Surplus	3.2	3.8	4.5	5.2
2. Borrowing	10.6	12.3	13.8	16.0
Debentures	4.9	5.4	6.5	7.2
Bank Borrowings	2.8	3.4	3.1	4.0
Commercial Paper	0.6	0.9	1.3	1.4
Other Borrowings	2.3	2.6	2.9	3.4
3. Other Liabilities	1.0	1.2	1.5	1.6
Total Liabilities	14.8	17.2	19.8	22.8
1. Loans & Advances	11.1	13.1	14.8	17.6
2. Investments	2.1	2.3	2.8	3.0
3. Other Assets	1.6	1.8	2.2	2.1
Total Assets	14.8	17.2	19.8	22.8

Source: RBI, Bank of Baroda Research

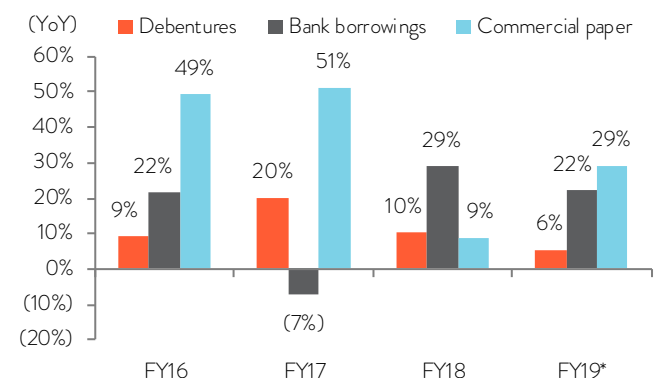
Downside risks to our baseline projections for FY20 include global interest rates leaning towards lower end of the spectrum owing to uncertainty over global growth, change in US Fed outlook and deceleration in China’s economy. Hence, US 10Y yield is expected to hover in the range of 2-2.5%. On the domestic front however, several upside risks persists. First, higher government expenditure to stimulate the rural economy (~Rs 2.3tn as per news reports) would exert pressure on bond yields in FY20. Second, higher market borrowing by NHA1 to support infrastructure spending and state government issuances already at ~Rs 5.1tn in FY19 will add to these risks.

FIG 16 – BORROWING PATTERN OF NBFCs



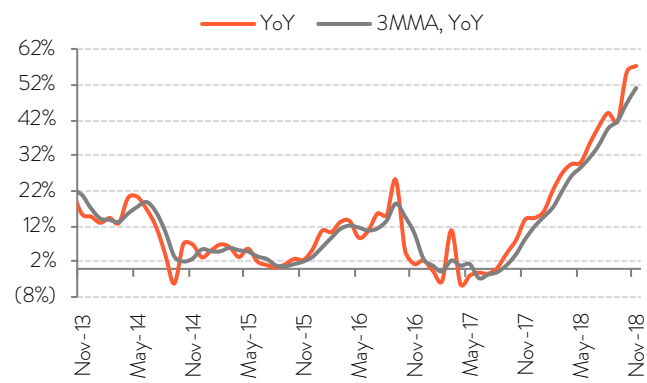
Source: RBI, Bank of Baroda Research

FIG 17 – DEBENTURES & BANK BORROWING TO GROW FASTER FOR NBFCs



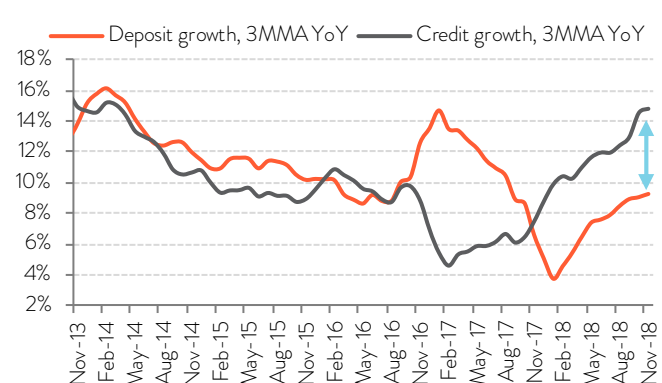
Source: RBI, Bank of Baroda Research | * as of Sep'18

FIG 18 – SCB CREDIT TO NBFCs ACCELERATING IN FY18 OWING TO LOW BASE



Source: CEIC, Bank of Baroda Research

FIG 19 – OVERALL DEPOSIT GROWTH LAGGING CREDIT GROWTH

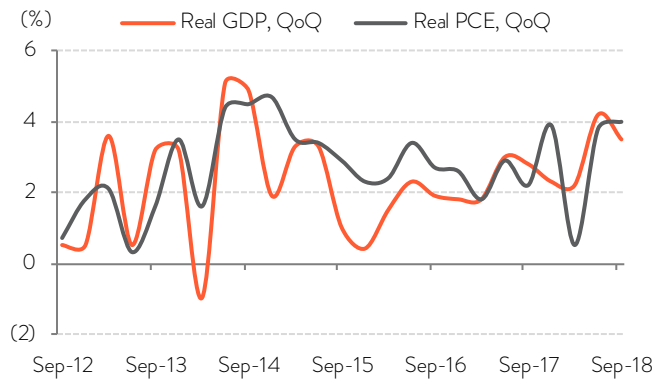


Source: CEIC, Bank of Baroda Research

Annexure

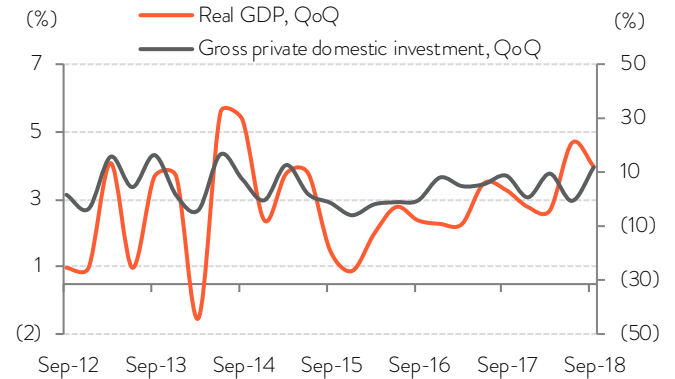
US macroeconomic conditions

FIG 20 – US GDP AND PCE



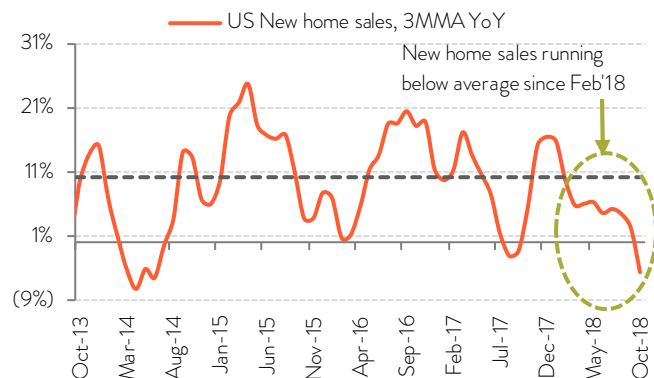
Source: Bloomberg, Bank of Baroda Research

FIG 21 – US GDP AND INVESTMENT



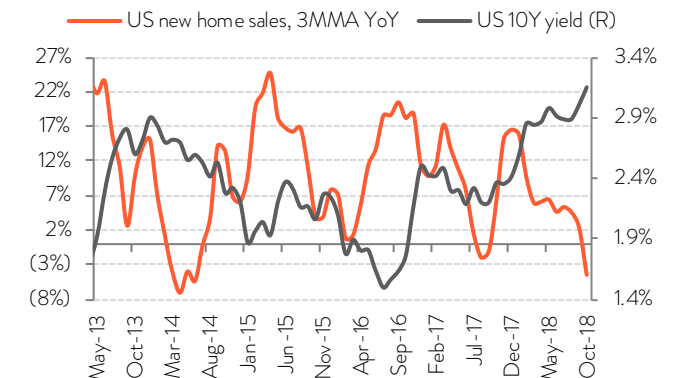
Source: Bloomberg, Bank of Baroda Research

FIG 22 – US NEW HOME SALES



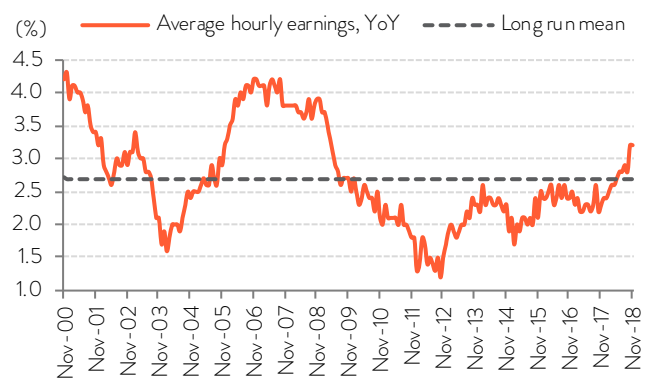
Source: US Census Bureau, Bank of Baroda Research

FIG 23 – US NEW HOME SALES AND G-SEC YIELD



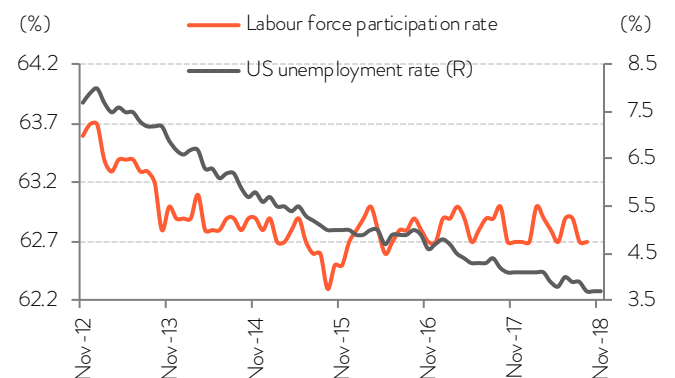
Source: US Census Bureau, Bloomberg, Bank of Baroda Research

FIG 24 – US WAGE GROWTH



Source: Bloomberg, Bank of Baroda Research

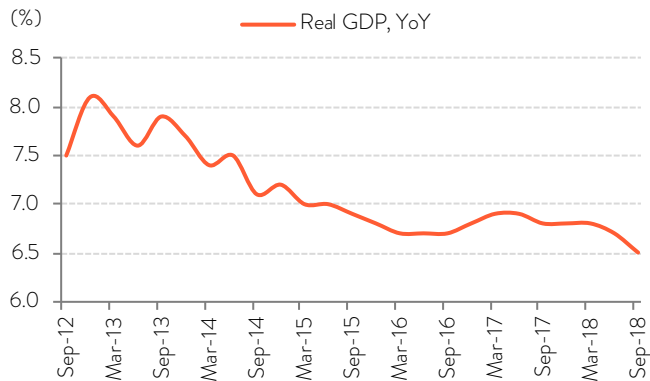
FIG 25 – US LABOUR MARKET



Source: Bloomberg, Bank of Baroda Research

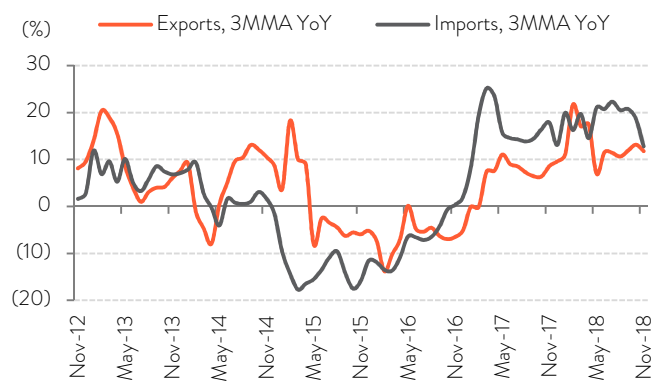
Global macroeconomic conditions

FIG 26 – CHINA GDP GROWTH



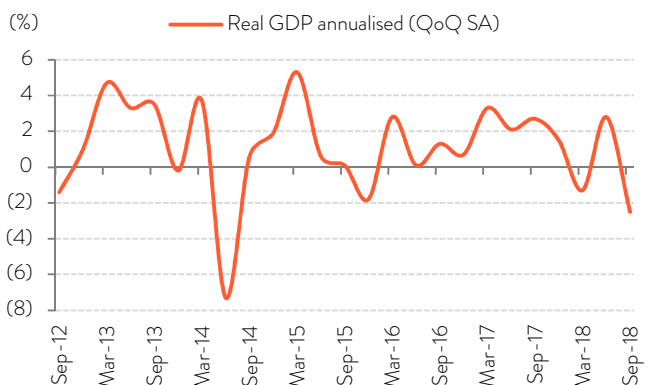
Source: Bloomberg, Bank of Baroda Research

FIG 27 – CHINA EXPORTS & IMPORTS



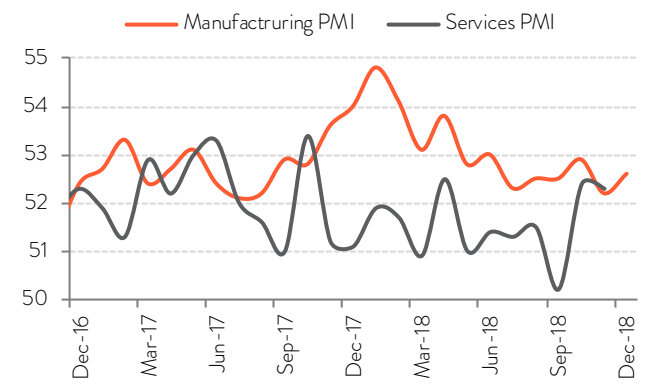
Source: Bloomberg, Bank of Baroda Research

FIG 28 – JAPAN GDP GROWTH



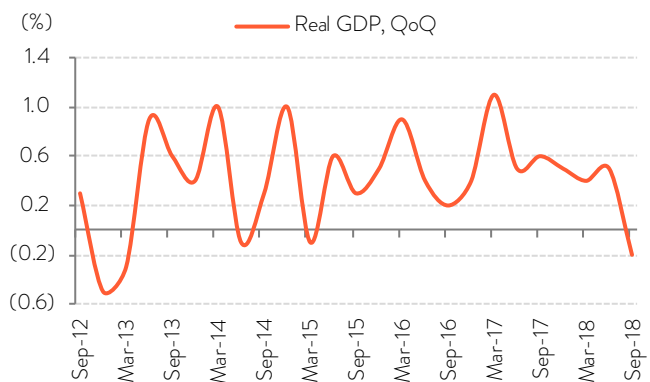
Source: Bloomberg, Bank of Baroda Research

FIG 29 – JAPAN MFG & SERVICES PMI



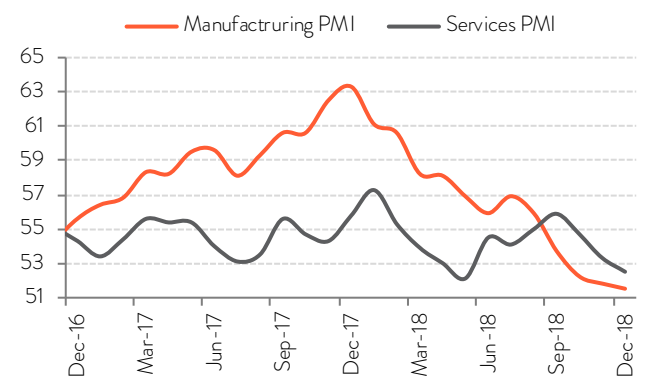
Source: Bloomberg, Bank of Baroda Research

FIG 30 – GERMANY GDP GROWTH



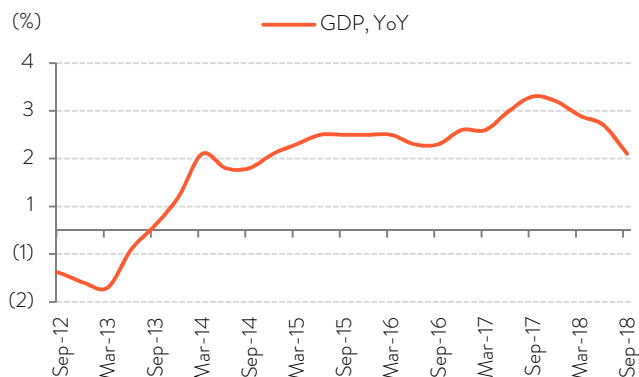
Source: Bloomberg, Bank of Baroda Research

FIG 31 – GERMANY MFG & SERVICES PMI



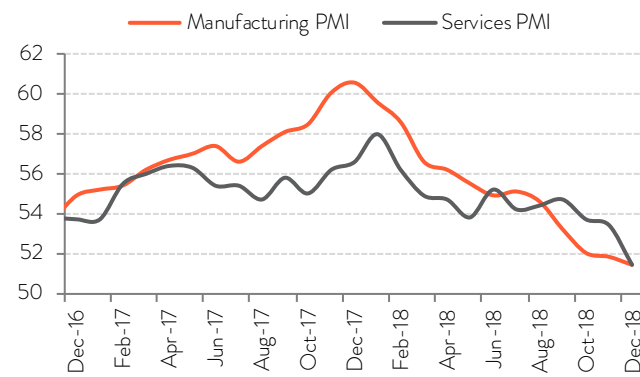
Source: Bloomberg, Bank of Baroda Research

FIG 32 – EURO AREA GDP GROWTH



Source: Bloomberg, Bank of Baroda Research

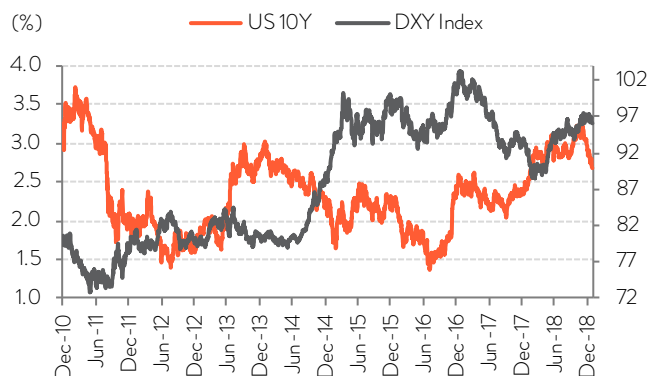
FIG 33 – EURO AREA MFG & SERVICES PMI



Source: Bloomberg, Bank of Baroda Research

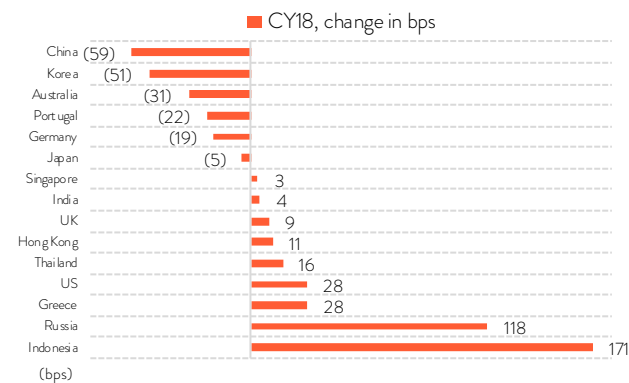
Global financial markets

FIG 34 – DXY INDEX AND US 10Y YIELD



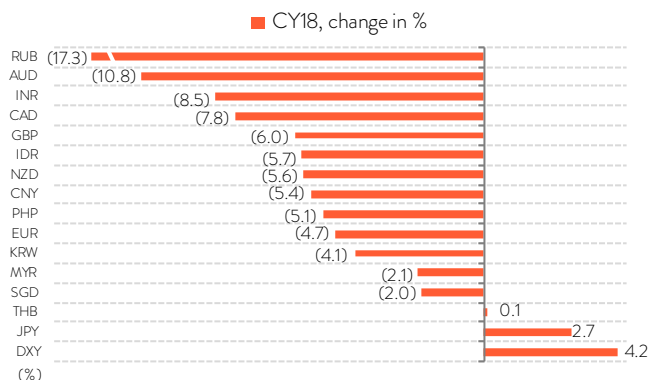
Source: Bloomberg, Bank of Baroda Research

FIG 35 – BOND YIELDS CY18



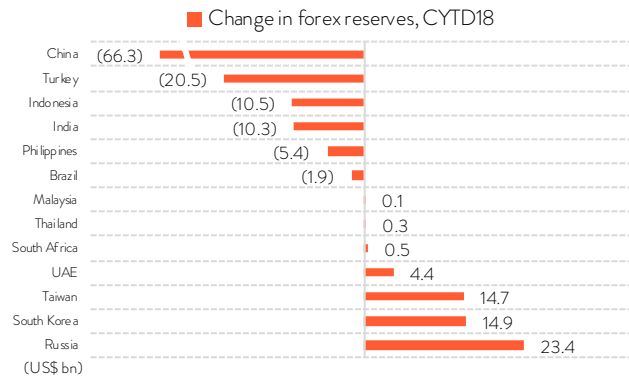
Source: Bloomberg, Bank of Baroda Research

FIG 36 – CURRENCIES CY18



Source: Bloomberg, Bank of Baroda Research

FIG 37 – FOREIGN RESERVES IN MAJOR EMS



Source: Bloomberg, Bank of Baroda Research

Indian interest rates inching up

FIG 38 – DEPOSIT RATES OF SELECT BANKS

Tenure (%)	Post office term deposits	Bank* term deposits	G-Sec	Differential b/w post office deposits and banks (bps)
1Y	6.90	6.80	6.93	10
2Y	7.00	6.80	6.86	20
3Y	7.20	6.80	7.08	40
5Y	7.80	6.85	7.17	95
NSC (5Y)	8.00	-	-	-

Source: Bloomberg, Bank of Baroda Research | *SBI

FIG 39 – BANK-WISE ONE-YEAR MCLR

(%)	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Public Sector Banks								
Canara Bank	8.45	8.50	8.50	8.60	8.65	8.60	8.70	8.70
Bank of India	8.40	8.50	8.50	8.75	8.60	8.60	8.65	8.70
Bank of Baroda	8.40	8.45	8.50	8.50	8.55	8.55	8.65	8.65
Punjab National Bank	8.30	8.40	8.45	8.45	8.45	8.45	8.50	8.50
State Bank of India	8.15	8.25	8.25	8.25	8.45	8.45	8.50	8.55
Private Sector Banks								
IndusInd Bank	9.35	9.55	9.55	9.55	9.65	9.65	9.75	9.80
Kotak Mahindra Bank	8.70	8.90	8.95	8.95	8.95	9.05	9.00	9.00
Axis Bank	8.50	8.60	8.60	8.60	8.70	8.75	8.80	8.85
HDFC Bank	8.30	8.40	8.40	8.40	8.40	8.65	8.70	8.70
ICICI Bank	8.30	8.40	8.40	8.40	8.55	8.55	8.70	8.80

Source: RBI, Bank of Baroda Research

Disclaimer

The views expressed in this research note are personal views of the author(s) and do not necessarily reflect the views of Bank of Baroda. Nothing contained in this publication shall constitute or be deemed to constitute an offer to sell/ purchase or as an invitation or solicitation to do so for any securities of any entity. Bank of Baroda and/ or its Affiliates and its subsidiaries make no representation as to the accuracy; completeness or reliability of any information contained herein or otherwise provided and hereby disclaim any liability with regard to the same. Bank of Baroda Group or its officers, employees, personnel, directors may be associated in a commercial or personal capacity or may have a commercial interest including as proprietary traders in or with the securities and/ or companies or issues or matters as contained in this publication and such commercial capacity or interest whether or not differing with or conflicting with this publication, shall not make or render Bank of Baroda Group liable in any manner whatsoever & Bank of Baroda Group or any of its officers, employees, personnel, directors shall not be liable for any loss, damage, liability whatsoever for any direct or indirect loss arising from the use or access of any information that may be displayed in this publication from time to time.

Visit us at www.bankofbaroda.com



For further details about this publication, please contact:

Economics Research Department

Bank of Baroda

+91 22 6698 5713

chief.economist@bankofbaroda.com