

INTEREST RATE OUTLOOK

26 June 2020

RBI and Banks to finance fiscal deficit

Indian yields have fallen in-line with global yields even as general government issuances are estimated to increase to ~9.5% of GDP. This has been possible as RBI and SCBs will emerge as large buyers of government securities in FY21 at 23% and 32% of net issuances (9% and 42% in FY20). Hence, 10Y yield is likely to remain in 5.5-6% range in FY21. Other factors supporting 10Y yield are expected decline in food inflation, rate cuts and excess liquidity by RBI, current account surplus and low global yields.

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Yields heading south: India's 10Y yield has a high 0.8 correlation with the US 10Y paper and has fallen in tandem with the latter, shedding 56bps over Jan-Jun'20 to 6%. Global yields have declined because of steep policy rate cuts by central banks and quantitative easing via purchase of government and corporate credit as well as debt securities.

India's fiscal response: India's fiscal response to the pandemic has been an increase in general government issuances to Rs 19.4tn – including the Centre's Rs 12tn – which translates to ~9.5% of GDP. Nonetheless, yields have seen downward momentum as banks and RBI are expected to emerge as large buyers.

RBI to buy Rs 3.5tn of bonds: After a 32% increase in 2019-20 (Jul-Jun), we expect RBI's balance sheet to expand by 9% in 2020-21. This will be led by a Rs 4tn rise in notes and Rs 2.9tn increase in other liabilities. On the asset side, international and domestic securities are estimated to rise by Rs 3.1tn and Rs 3.5tn respectively. OMOs to be seen in H2 when FX intervention is lower.

Banks' liquidity to boost buying: Banks will have a large surplus by way of estimated deposits at Rs 147tn in FY21 (Rs 136tn in FY20), which can be deployed in government securities. In FY20, banks bought G-Secs worth Rs 4.4tn as credit deployment opportunities dried up. The incremental investment-deposit ratio is currently elevated at 105%. Insurance companies and provident funds will also remain large investors in bonds.

Muted outlook on yields: Apart from demand and supply side dynamics, we believe other economic factors support lower yields, including falling inflation, RBI rate cuts, excess liquidity and the current account surplus. Thus, yields are projected to remain in the 5.5-6% range in the near term.

KEY HIGHLIGHTS

- 10Y yield is expected to be in the 5.5-6% range.
- RBI and SCBs will be large buyers of government securities.
- Net OMO purchase of Rs 3.5tn is likely in FY21
- Lower inflation, rate cuts and current account surplus also support lower yield.



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FY21 yield outlook

After holding on an average at 6.68% in FY20, we expect India's 10-year yield to remain in a range of 5.5-6% in FY21. Our forecast is based on a comprehensive study of global yield trends, domestic demand and supply dynamics, and allied influencing factors such as inflation, RBI rate cuts, liquidity and the current account position.

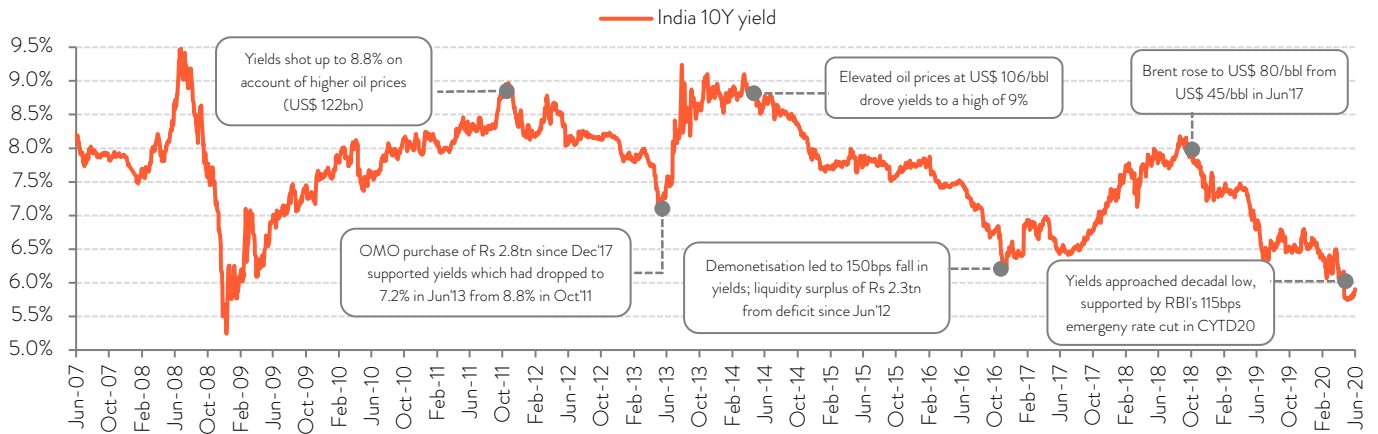
Summary of key findings

- Global yields are on the decline – the US 10Y paper which has a high correlation to domestic yields has shed >123bps in CYTD20 vs. 56bps for India.
- Muted global and domestic growth and monetary accommodation worldwide support lower yields.
- Lower inflation in the coming months on the back of normal monsoon, depressed commodity prices and improved sowing will keep 10Y yield lower.
- RBI undertook 250bps rate cut in the current cycle with abundant liquidity measures, which in turn will keep yield lower.
- Record issuances of debt securities by states and the Centre due to the Covid-19 crisis (at an estimated Rs 19.5tn) are expected to keep yields range-bound.
- RBI and commercial banks will be large buyers of government securities.

Global yields heading south

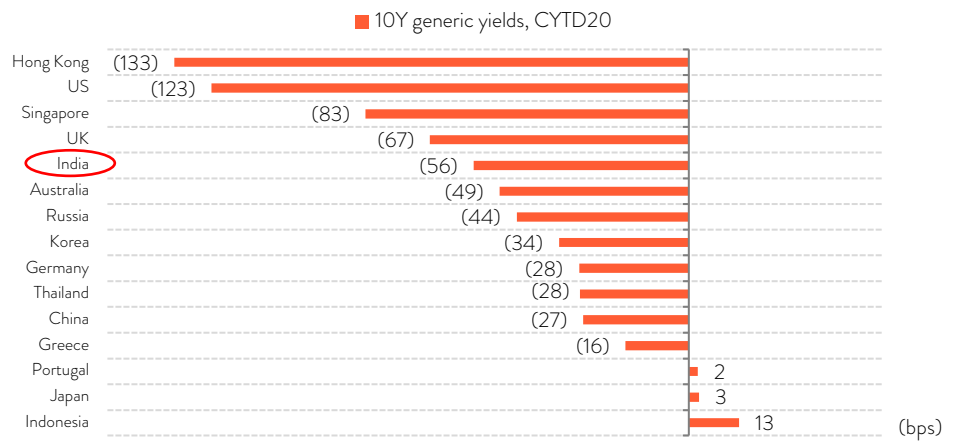
Global interest rates have been falling this year led by the US where the 10Y yield has dropped over 123bps since the start of the year, exacerbated by the economic crisis caused by Covid-19. Indian yields are highly correlated with the US, with domestic 10Y yields down 56bps since January.

FIG 1 – INDIA 10Y YIELD EXHIBITS HIGH CORRELATION OF 0.8 WITH US 10Y YIELD



Source: Bloomberg, Bank of Baroda Research | Note: Till 23 Jun 2020

FIG 2 – 10Y YIELD OF MAJOR ECONOMIES ON THE DECLINE

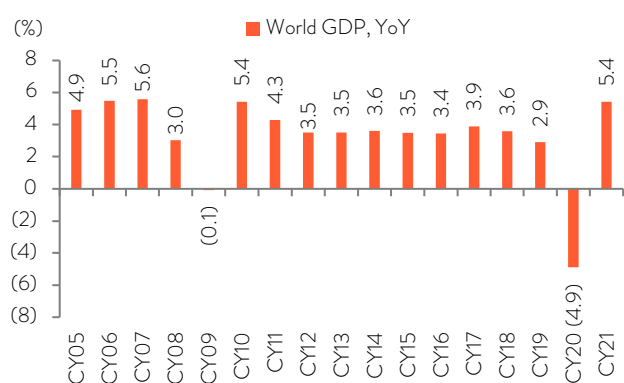


Source: Bloomberg, Bank of Baroda Research | Note: CYTD20: Jan-Jun'20

Weak global outlook exerting pressure on yields

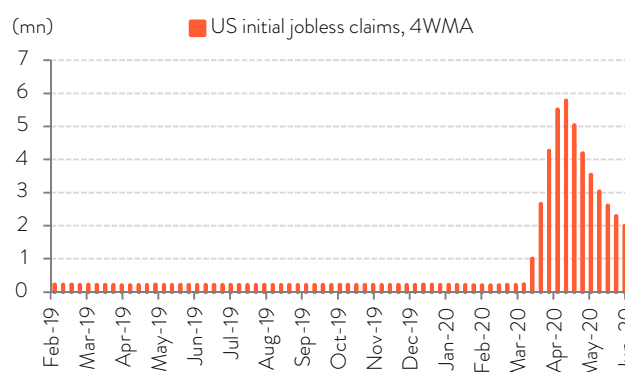
The global growth outlook for CY20 is even worse than that during the CY08 financial crisis when world output had fallen by 0.1%. In the US, the pandemic has eroded consumer confidence and retail sales, while ratcheting up the unemployment rate to 14.7%/13.3% in April/May'20. Europe too is witnessing large contraction in demand and output.

FIG 3 – IMF EXPECTS WORLD GDP GROWTH TO CONTRACT BY 3% IN CY20



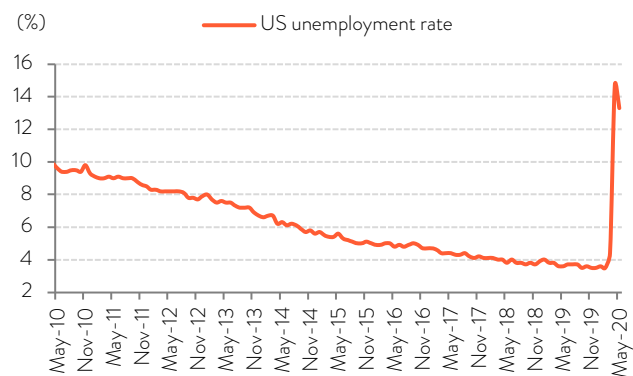
Source: IMF World Economic Outlook, Bank of Baroda Research

FIG 4 – US WEEKLY JOBLESS CLAIMS UP SHARPLY SINCE MAR'20 BUT MODERATING OF LATE



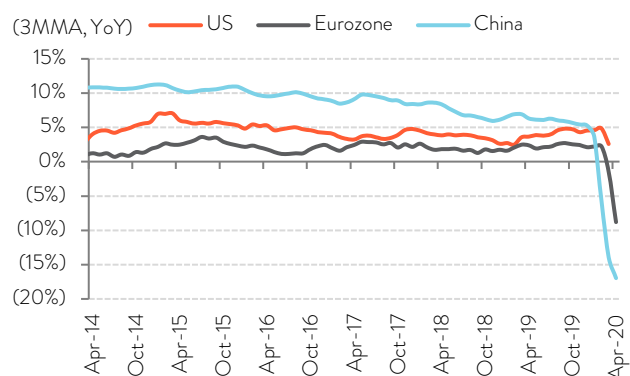
Source: Bloomberg, Bank of Baroda Research

FIG 5 – SPIKE IN US UNEMPLOYMENT RATE WITH MARGINAL EASING IN MAY'20



Source: Bloomberg, Bank of Baroda Research

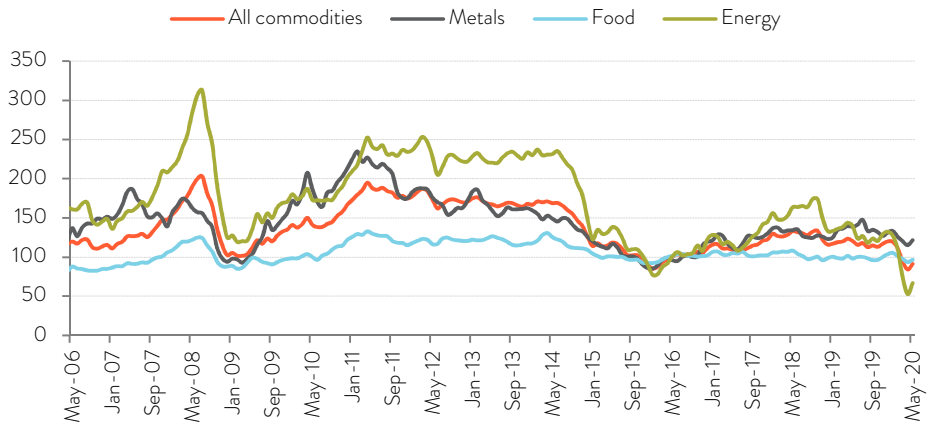
FIG 6 – RETAIL SALES DECLINING ACROSS COUNTRIES



Source: Bloomberg, Bank of Baroda Research. Note: Data for US till Mar'20.

The global demand slump is most visible in crude prices which collapsed 71% at one point, before recovering to US\$ 41/bbl currently. Other commodities that have fallen during the year are metals and food. On the other hand, gold prices have risen 22% in FY20. (Annexure A has more details on broad indicators of the global downturn)

FIG 7 – BROAD-BASED DECLINE IN PRICES



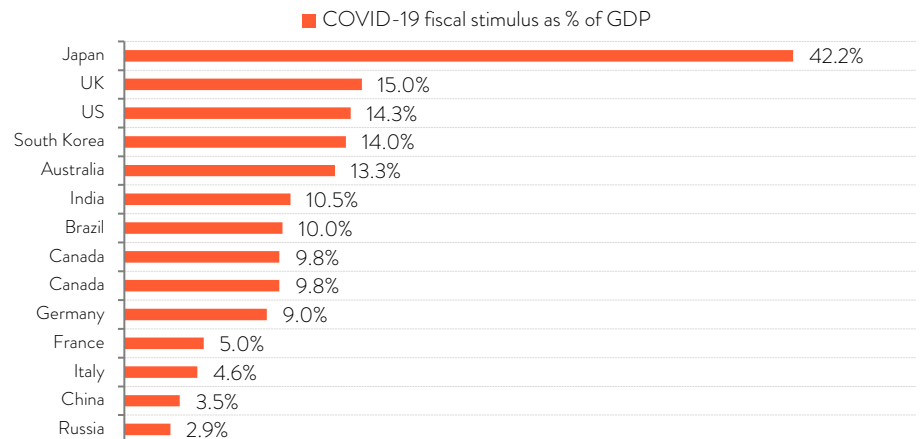
Source: IMF Primary Commodity Price System, Bank of Baroda Research

Stimulus packages announced the world over

In order to mitigate the economic impact of the pandemic, both fiscal and monetary policy are being leveraged in tandem. Japan has extended a record stimulus of 42% of GDP to tide over the stress, followed by the UK and US at 15% and 14.3% respectively. India too has announced a package at ~10.5% of GDP.

Stimulus across the world consists of direct fiscal support and liquidity provided by central banks or commercial banks on the basis of underlying guarantees by respective governments. Central banks too have done their bit to revive the economy by reducing interest rates, led by the US at 150bps. Asian central banks have pruned policy rates anywhere between 50bps and 375bps. As a result, the difference in policy rates between emerging markets and the US has increased.

FIG 8 – STIMULUS TO OVERCOME ECONOMIC CRISIS



Source: IMF, Bloomberg, News Reports, Bank of Baroda Research

FIG 9 – GLOBAL MONETARY EASING SPREE

Countries	Current policy rates (%)	Chg in policy rates in CY19 (bps)	Chg in policy rates* in CYTD20 (bps)	Chg in rates in CY18	Current inflation rates (%)
Germany	0	0	0	-	0.6
Japan	(0.10)	0	0	-	0.1
China	4.35	0	0	-	2.4
Australia	0.25	(75)	(50)	↓	2.2
UK	0.1	0	(65)	↓	0.5
Korea	0.50	(50)	(75)	↓	(0.3)
Indonesia	4.25	(100)	(75)	↓	2.2
Thailand	0.5	(50)	(75)	↓	(3.4)
Malaysia	2.00	(25)	(100)	↓	(2.9)
India	4	(135)	(115)	↓	5.9
Phillipines	2.75	(75)	(125)	↓	2.1
US	0.25	(75)	(150)	↓	0.1
Russia	4.5	(150)	(175)	↓	3.0
Mexico	5.50	(100)	(175)	↓	2.8
Brazil	2.25	(200)	(225)	↓	1.9
Turkey	8.25	(1200)	(375)	↓	11.4

Source: Bloomberg, Bank of Baroda Research | *As of 24 Jun 2020

Central banks’ balance sheets expanding

As part of the stimulus, central banks the world over have been pumping massive amounts of liquidity into the banking system. In the US, the liquidity injection has been to the extent of US\$ 3tn (14.8% of GDP) in CYTD20. While the policy rate is expected to remain at ultra-low levels (0-0.25%) till CY22, the Fed will continue with asset purchases to support the economy. ECB which has been injecting liquidity for the last few years through its bond purchase programs has also increased the quantum of liquidity infusion to EUR 1.35tn to tide over the crisis. So is the case with Japan.

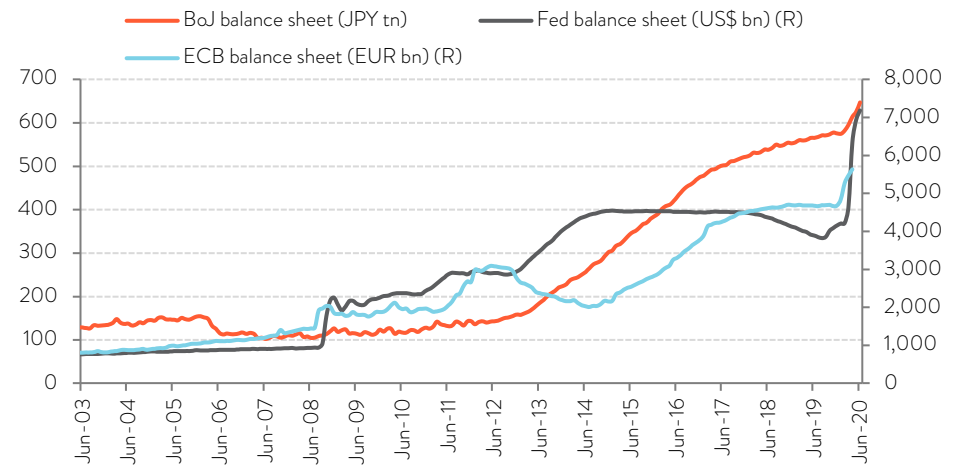
FIG 10 – ACTIONS BY MAJOR CENTRAL BANKS IN TIMES OF CRISIS

Steps taken during CY08 crisis	Steps taken during Covid-19 crisis
US Fed	
Balance sheet expansion: 8-15% of GDP	Balance sheet expansion: 19-31% of GDP
Policy rate: Reduced from 2% to 0%	Policy rate: Reduced from 1.75% to 0%
Liquidity instruments:	Liquidity instruments:
<ul style="list-style-type: none"> Increased bond holding by US\$ 3.7bn Introduced temporary term auction (TAF) worth US\$ 400bn Introduced AMLF, CPFF, MMIFF and TALF worth US\$ 1.5tn to promote mortgage-backed securities (MBS) and purchase of commercial paper Purchased MBS worth US\$ 1.25tn under QE1 	<ul style="list-style-type: none"> Purchases bonds worth US\$ 700bn Lowered rate for banks to borrow at the discount window by 1.5ppt and cut reserve requirement ratio (RRR) for banks to zero Began purchase of commercial paper or short-term debt Raised dollar liquidity with focus on currency swaps for other institutions in need of dollar-denominated assets

Steps taken during CY08 crisis	Steps taken during Covid-19 crisis
<ul style="list-style-type: none"> Purchased US\$ 600mn of long-term treasury securities at the rate of US\$ 75bn a month under QE2 Announced QE3 in Sep'12 – this was a mix of the previous two QEs of US\$ 40mn and US\$ 45mn respectively Passed a Trouble Asset Relief Program (TARP) 	<ul style="list-style-type: none"> Announced credit business program worth US\$ 300bn Announced lending program worth US\$ 2.3tn for SMEs Purchased corporate bonds through Secondary Market Corporate Credit Facility (SMCCF)
ECB	
Balance sheet expansion: 16-19% of GDP	Balance sheet expansion: 39-45% of GDP
Policy rate: Reduced from 4.25% to 1%	Policy rate: 0%
Liquidity INSTRUMENTS:	Liquidity instruments:
<ul style="list-style-type: none"> Purchased Euro-denominated bonds worth EUR 60bn Increased maturity of longer-term refinancing operations 	<ul style="list-style-type: none"> Launched Pandemic Emergency Purchase Programme (PEPP) Purchase of EUR 120bn temporary envelope in addition to monthly asset purchase program of EUR 20bn, till the end of the year Introduced non-targeted pandemic emergency longer-term refinancing operations (PELTRO) worth EUR 750bn. The (PEPP) currently stands at EUR 1.3tn and is likely to continue till Jun'21
BoJ	
Balance sheet expansion: 21-24% of GDP	Balance sheet expansion: 103-112% of GDP
Policy rate: Reduced from 0.5% to -0.1%	Policy rate: Short-term target rate at -0.1%, 10Y bond yield at near 0% under Quantitative and Qualitative Monetary Easing (QQE)
Liquidity instruments:	Liquidity instruments:
<ul style="list-style-type: none"> Cut basic loan and discount rate to 0.3% and 0.1% respectively Provided subordinated loans amounting to JPY 1tn to financial institutions Expanded security lending facility to allow BOJ to sell Japanese Government Bonds (JGB) with repurchase agreement Announced floating-rate JGBs and inflation-indexed JGBs Introduced special fund supplying operation under credit facility; outright purchase of CPs also started 	<ul style="list-style-type: none"> Announced unlimited government bond buying; scrapped earlier target of purchasing at the annual pace of JPY 80tn Increased corporate bond and CP buying three-fold to JPY 20tn to ease corporate funding strain Additional measures: (1) to support corporate financing through a special program of JPY 110tn, (2) to stabilise financial markets through unlimited Japanese government bonds purchases and USD operations, and (3) purchase of exchange traded funds (ETF) at annual pace of JPY 12tn
PBOC	
Balance sheet expansion: 61-62% of GDP	Balance sheet expansion: 37-40% of GDP*
Policy rate:	Policy rate:
<ul style="list-style-type: none"> Reduced rates from 7.47-6.6% Cut RRR by 2ppt and 4ppt for big and small banks respectively Cut 1Y benchmark lending and deposit rates to 5.31% and 2.25% respectively in span of 4 months 	<ul style="list-style-type: none"> 4.35% Reduced reverse repo from 2.4% to 2.2%. Cut 1Y loan prime rate by 10bps to 4.05%
	Liquidity instruments:
	<ul style="list-style-type: none"> Provided easier funding for SMEs, raising Yuan re-lending and re-discount quotas by CNY 500bn or US\$ 71bn Raised policy bank's loan quota by CNY 350bn Lowered RRR for small banks by 100bps, providing liquidity of CNY 400bn

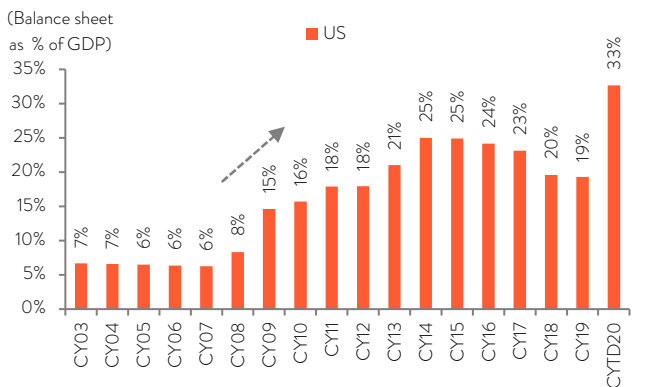
Source: Central Bank websites, Bank of Baroda Research | *PBOC balance sheet has not expanded, in contrast to other economies

FIG 11 – SHARP EXPANSION IN BALANCE SHEETS OF MAJOR GLOBAL CENTRAL BANKS



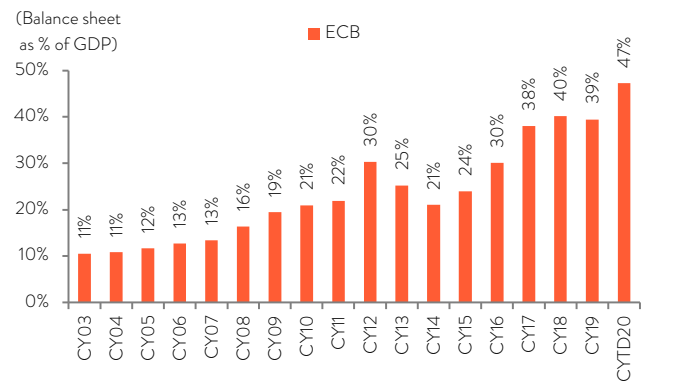
Source: Bloomberg, Bank of Baroda Research

FIG 12 – US BALANCE SHEET AS % OF GDP HAS SHOT UP TO 33%, AS ALSO SEEN IN CY08 CRISIS



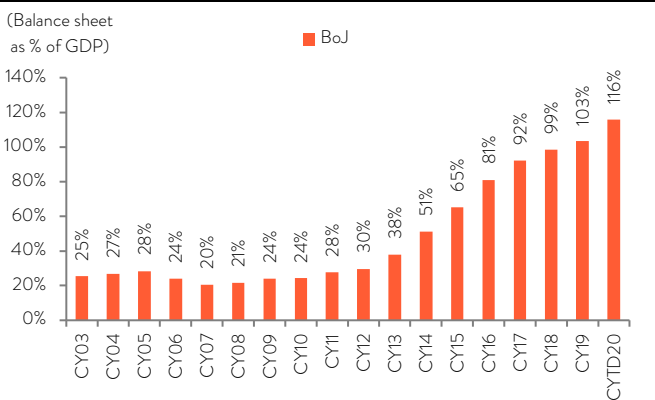
Source: CEIC, Bank of Baroda Research | CYTD: Till May'20

FIG 13 – SIMILAR TRENDS FOR ECB WITH THE RATIO AT 47%



Source: CEIC, Bank of Baroda Research | CYTD: Till May'20

FIG 14 – BOJ STIMULUS ALSO LED TO FURTHER EXPANSION OF BALANCE SHEET



Source: CEIC, Bank of Baroda Research | CYTD: Till May'20

FIG 15 – CHINA IS AN ANOMALY

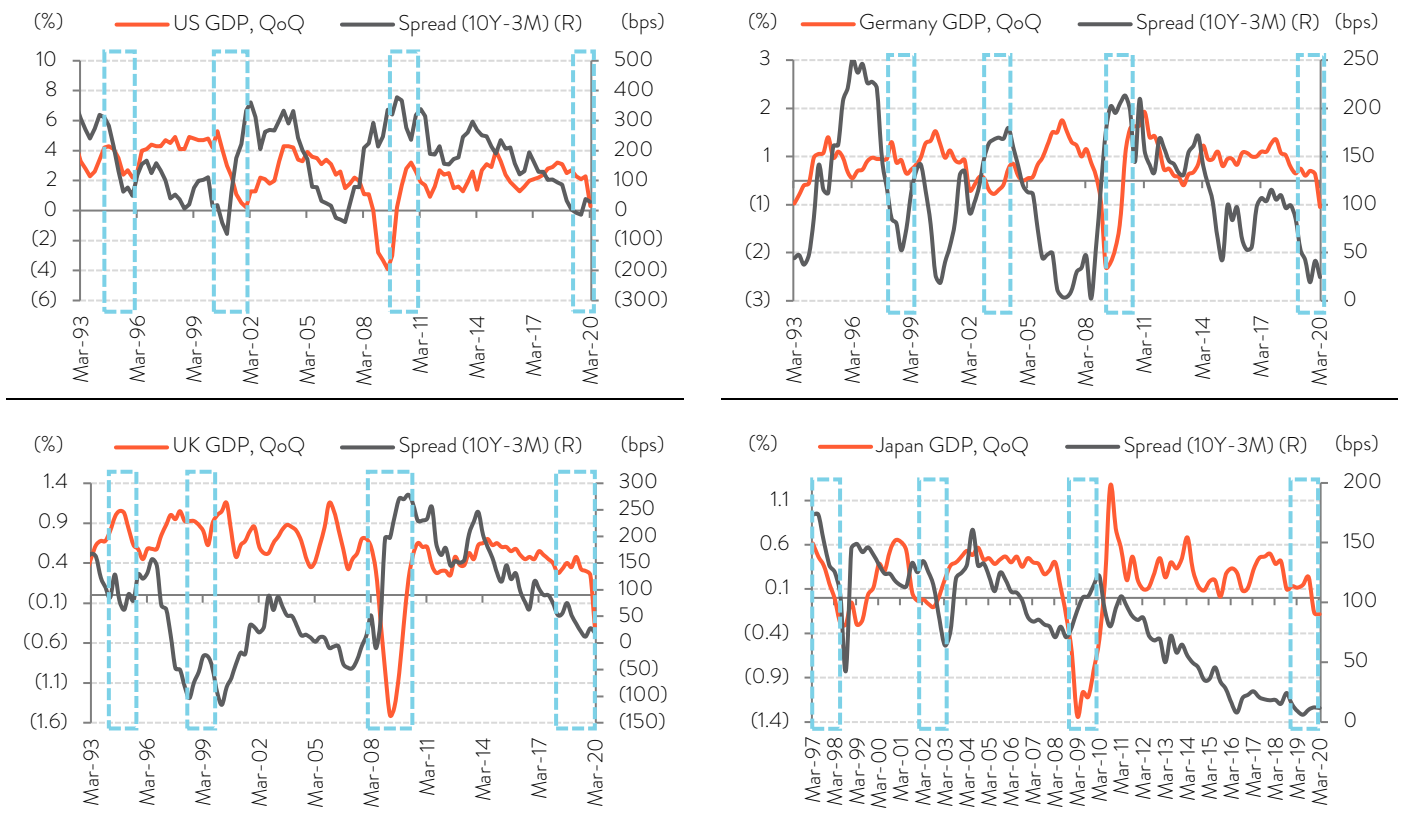


Source: CEIC, Bloomberg, Bank of Baroda Research | CYTD: Till May'20

Global yield spread signals recession

Given the large liquidity infusions by central banks the world over, the spread between long-end and short-end yields has decreased, signalling a global recession in coming months. In the past, a declining spread has been a harbinger of slowdowns in the US, Germany, UK and Japan in 1993, 2000 and 2008. Currently, markets are pricing in a recession in most world economies.

FIG 16 – FALLING SPREADS SIGNAL GLOBAL RECESSION



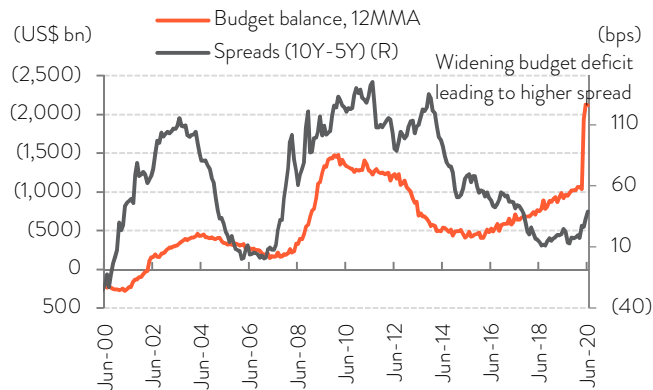
Source: Bloomberg, Bank of Baroda Research

Source: Bloomberg, Bank of Baroda Research

US fiscal deficit driving higher 10Y-to-5Y spreads

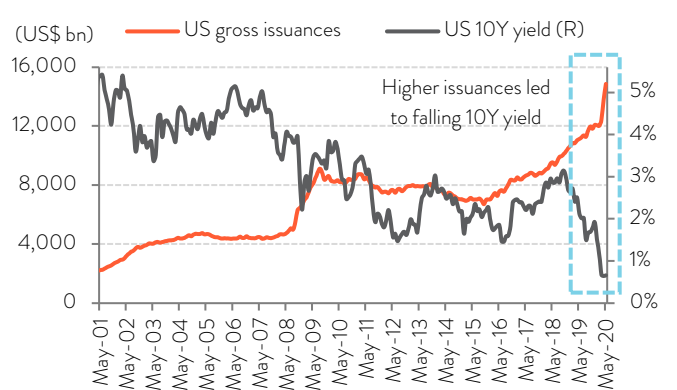
While the spread between 10Y and 3M maturity is falling, that between 10Y and 5Y paper is rising in the US. Historically, the 10Y-to-5Y spread increases before the budget deficit begins to rise. In 2000, this spread began to climb in the US before peaking in 2003 and hitting a trough in 2007. Then again as budget deficits rose, it began to increase and peaked in 2011. Hence, we expect further expansion in the 10Y-to-5Y spread as budget deficits swell. However, at some point in time, the rising spread implies that the 10Y yield will also inch up.

FIG 17 – 10Y-TO-5Y SPREADS HAVE BEGUN RISING ON ACCOUNT OF FISCAL STIMULUS



Source: Bloomberg, Bank of Baroda Research

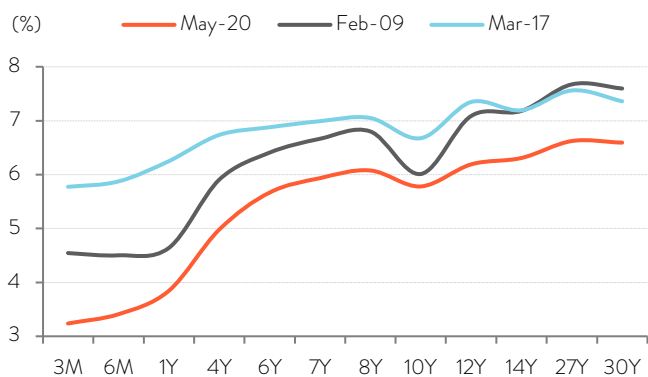
FIG 18 – US 10Y YIELD INCHING DOWN DUE TO HIGHER SUPPLY OF PAPERS



Source: Bloomberg, Bank of Baroda Research

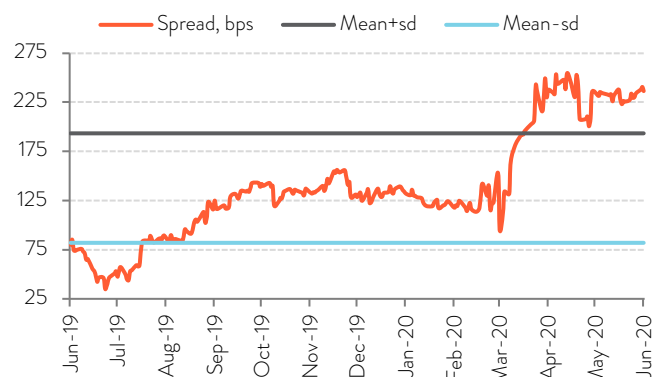
In India’s case as well, the spread has been increasing (see Annexure B). This is more to do with a large increase in government issuances to finance a much higher fiscal deficit. While RBI has been reducing repo rates and injecting liquidity, the short-end yields have fallen in line with the rate cuts. For ensuring transmission in longer term maturities, RBI will have to step up open market operations (OMO) (see Page 17 for details) or Operation Twist.

FIG 19 – INDIA SEEING YIELD CURVE STEEPENING BIAS



Source: Bloomberg, Bank of Baroda Research

FIG 20 – SPREAD BETWEEN 10Y YIELD AND 91 DAY TBILL RISING

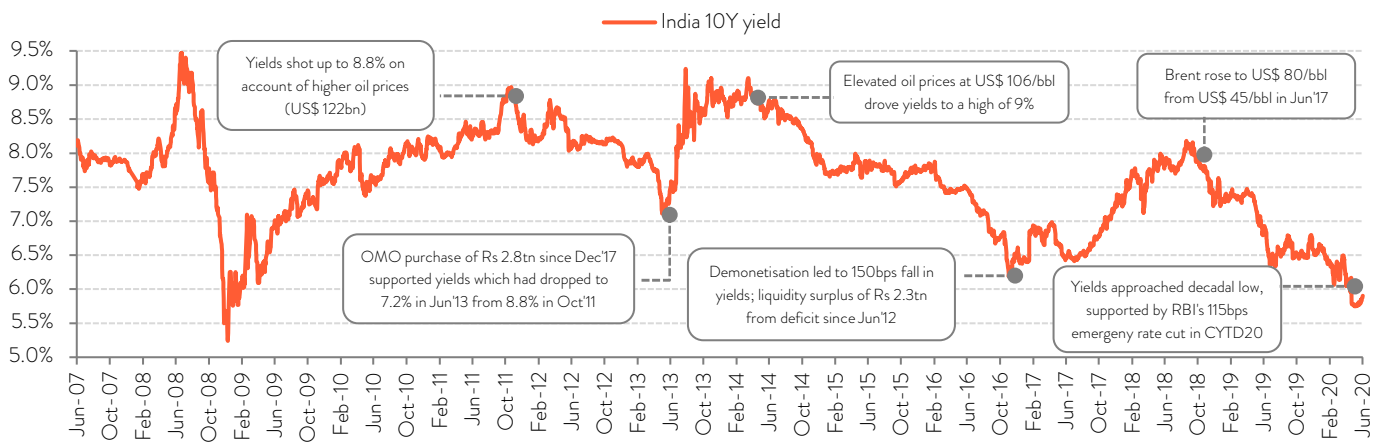


Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

India's 10Y yield approaching GFC lows

India's 10Y yield has been declining in the last few years, coming in at 6.68% in FY20 and currently at 6%. Since peaking in 2014, yields bottomed out in 2016 and then peaked once again in 2018 before falling steadily from thereon. The big question is how low can yields go? We estimate a tight band of 5.5-6% for FY21 based on global trends and a host of domestic factors including fiscal deficit, demand-supply dynamics, RBI intervention through OMO purchase, inflation, monetary policy, oil prices, and muted demand.

FIG 21 – INDIA'S 10Y YIELD APPROACHING LOWS OF CY08 FINANCIAL CRISIS

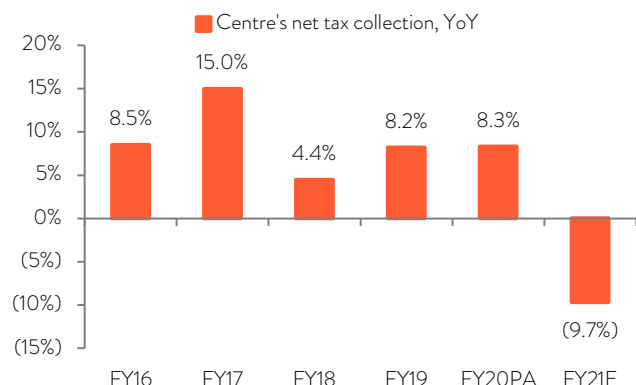


Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

Large fiscal deficit to drive up bond issuance, yields to remain range bound

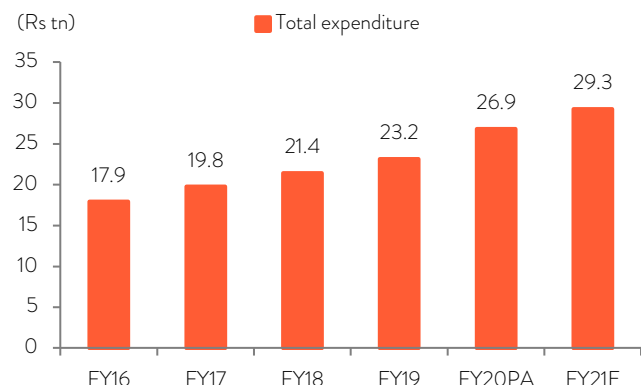
The Centre's fiscal deficit was stable in the 3.4-3.5% range between FY17 and FY19, but rose to 4.6% of GDP in FY20. It is expected to spike to 6.5% in FY21 due to a significant pandemic-related revenue shortfall and downward revision to nominal GDP growth. Our estimates indicate a ~Rs 5.7tn shortfall in the Centre's gross tax revenue led by a deficit of Rs 4.2tn in direct taxes and Rs 1.5tn in indirect taxes. To plug this gap, the Centre has already increased its gross issuances for the year to Rs 12tn from Rs 7.8tn budgeted earlier.

FIG 22 – CENTRE’S NET TAX COLLECTIONS TO PLUNGE IN FY21



Source: Budget documents, Bank of Baroda Research | PA-Provisional Accounts, E-Bank of Baroda Estimates

FIG 23 – CENTRE’S EXPENDITURE TO REMAIN STEADY IN FY21



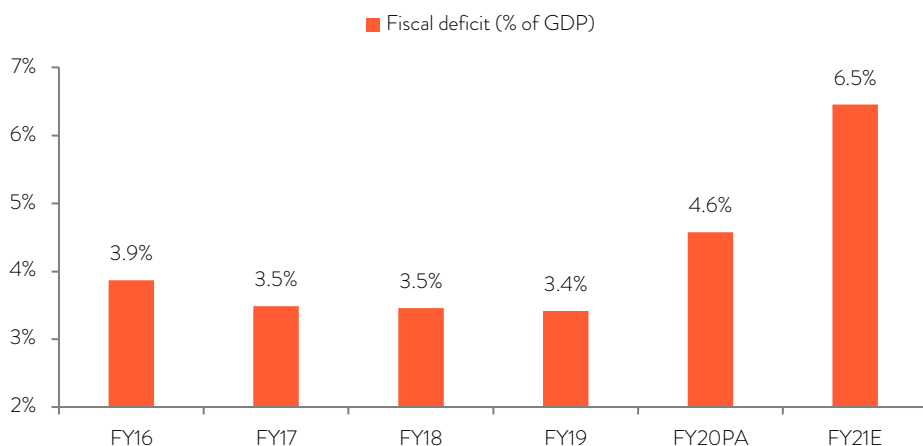
Source: Budget documents, Bank of Baroda Research | PA-Provisional Accounts, E-Bank of Baroda Estimates

FIG 24 – BORROWING MATH

(Rs bn)	FY17	FY18	FY19	FY20RE	FY21BE	FY21 Revised calc
H1	3,410	3,570	2,760	4,250	4,880	6,000
H2	2,420	2,310	2,950	2,850	2,920	6,000
Gross borrowing	5,830	5,880	5,710	7,100	7,800	12,000
Repayments	(1,748)	(1,373)	(1,483)	(2,360)	(2,351)	(2,351)
Net borrowing	4,082	4,507	4,227	4,740	5,449	9,649
Buyback	(597)	(416)	0	0	(300)	(300)
Net Switching	11	11	5	0	0	0
Short-term borrowing	55	449	69	250	250	250
NSSF	674	1,026	1,250	2,400	2,400	2,400
State provident funds	177	158	161	180	180	180
Others	861	54	740	49	508	508
External debt	180	79	55	49	46	46
Drawdown of cash	(89)	41	(13)	0	(570)	(570)
Total debt receipts	5,356	5,911	6,494	7,668	7,963	12,163

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

FIG 25 – CENTRE’S FISCAL DEFICIT TO INCREASE SHARPLY IN FY21E

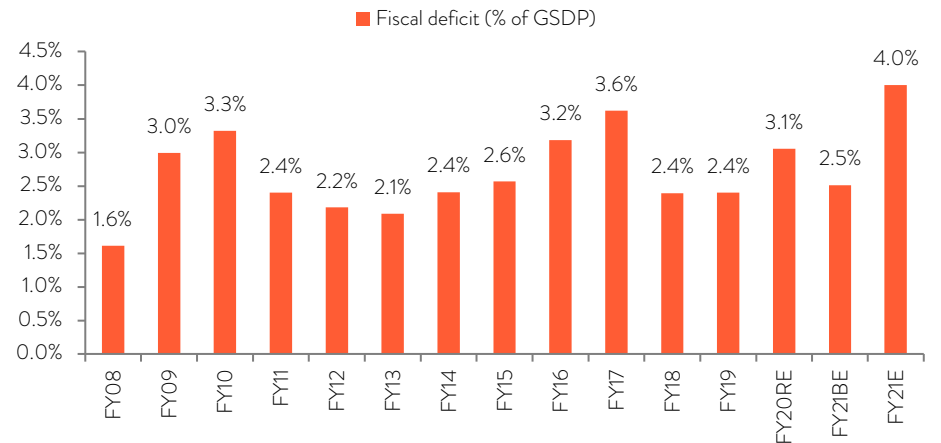


Source: Budget documents, Bank of Baroda Research | PA-Provisional Accounts, E-Bank of Baroda Estimates

With the Centre’s tax revenue declining by 9.7% in FY21, the devolution to states will also be lower to that extent. Moreover, states’ own tax revenues are also expected to drop due to the pandemic. Hence, we expect the fiscal deficit of states to shoot up to 4% in FY21 from 3.1% in FY20RE.

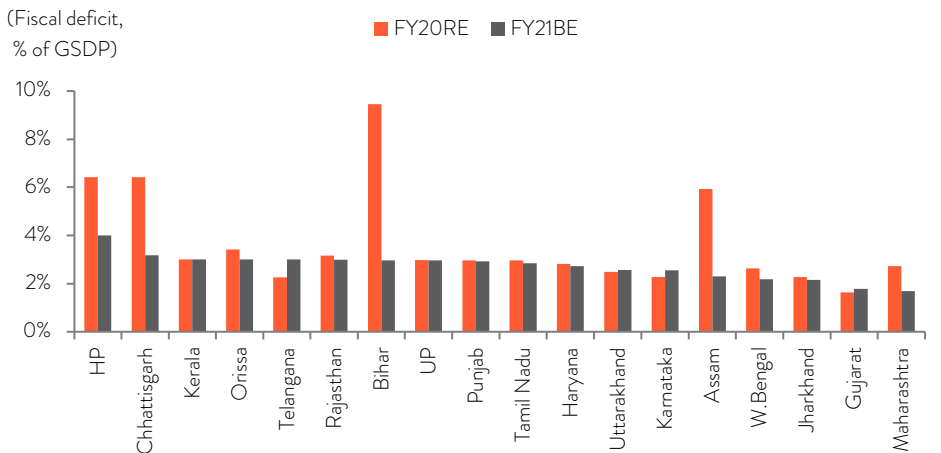
The Centre has allowed states to borrow up to 3.5% of GSDP without any conditions and 5% of GSDP conditional on implementation of reforms and performance under four pillars: power distribution, public distribution system, local body revenues and ease of doing business. Some states are likely to achieve these milestones. But most won’t. Hence, we expect borrowing by states to total ~Rs 8tn in FY21. Of this, ~Rs 7.4tn is likely to be borrowed from the market and Rs 600bn via RBI’s WMA facility.

FIG 26 – FISCAL DEFICIT OF STATES* TO SHOOT UP IN FY21E



Source: RBI, State Budget Documents, Bank of Baroda Research | *Includes Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Maharashtra, Odisha, Punjab, Rajasthan, TN, Telangana, UP, W. Bengal, Assam, HP and Uttarakhand

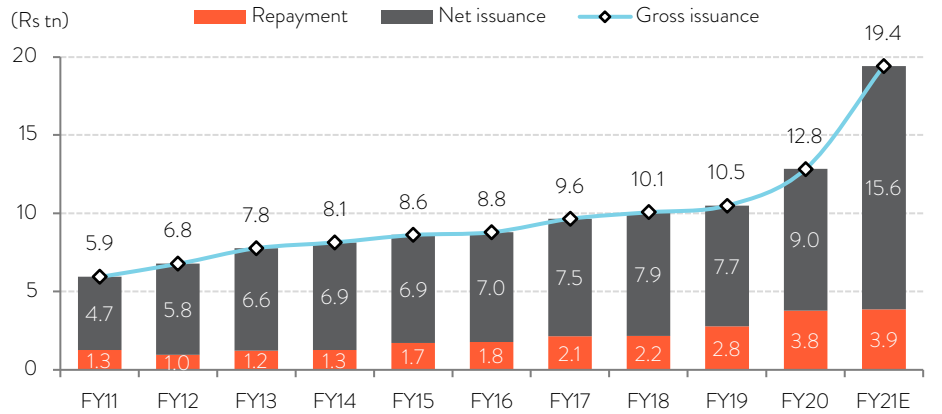
FIG 27 – STATE-WISE FISCAL DEFICIT TARGETS FOR FY21E (PRE-COVID)



Source: RBI, State Budget Documents, Bank of Baroda Research

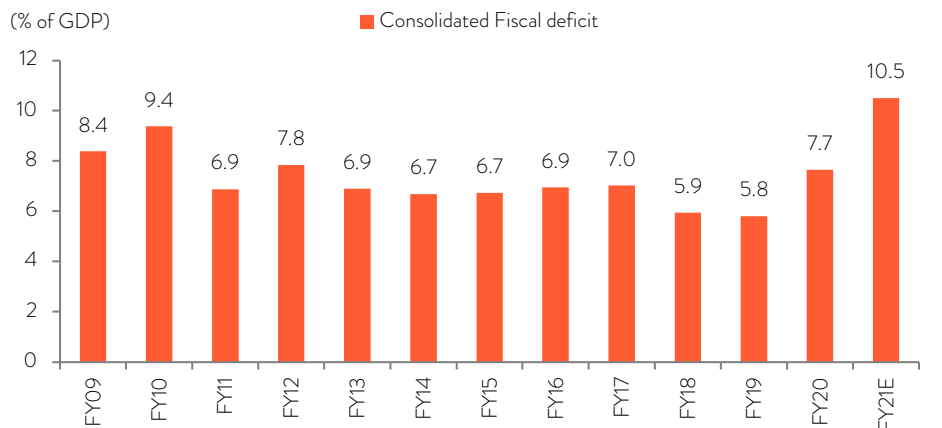
Thus, overall gross supply of bonds for FY21 is estimated at Rs 19.4tn compared with Rs 12.8tn in FY20 and net supply is estimated at Rs 15.6tn vs. Rs 9tn in FY20. This will take the general government fiscal deficit to 10.5% of GDP in FY21 from 7.7% in FY20.

FIG 28 – SUPPLY OF GOVERNMENT PAPERS



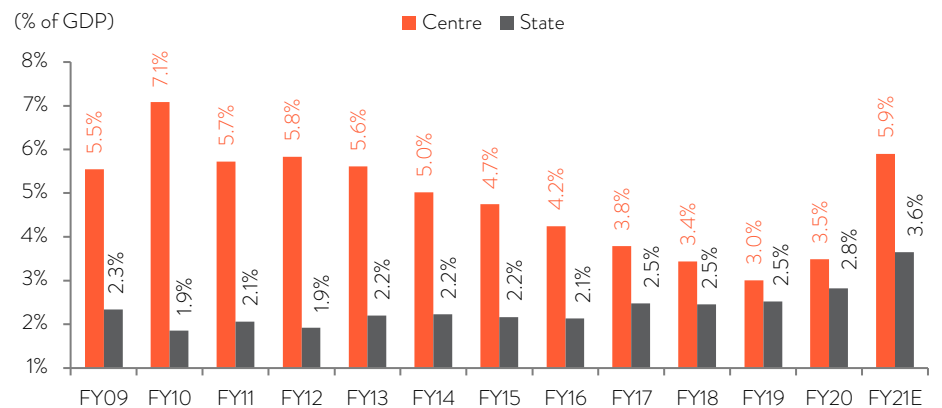
Source: RBI, PIB, Bank of Baroda Research | E - Bank of Baroda Estimates

FIG 29 – GENERAL GOVERNMENT FISCAL DEFICIT TREND



Source: RBI, budget documents, Bank of Baroda Research

FIG 30 – CENTRE AND STATE ISSUANCE AS % OF GDP



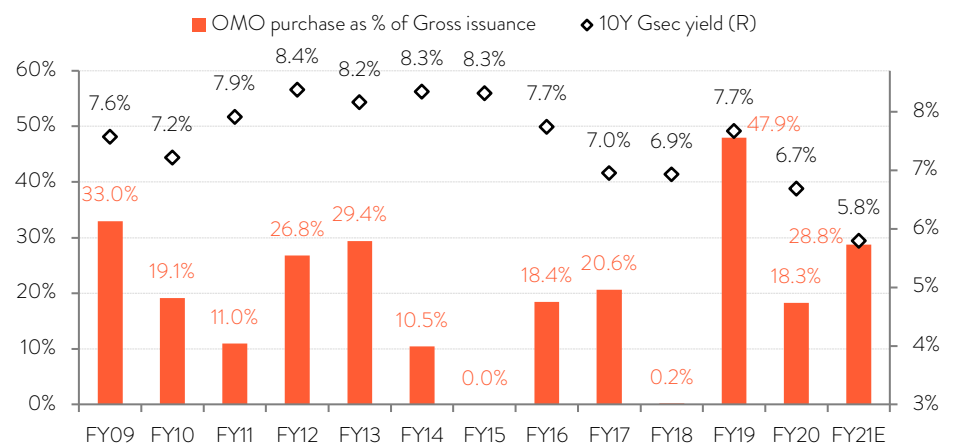
Source: RBI, PIB, Bank of Baroda Research | E - Bank of Baroda Estimates

Bond demand supported by commercial banks and RBI

On the demand side, RBI and scheduled commercial banks (SCB) are likely to emerge as large buyers in the bond market. We estimate that RBI alone would buy central government bonds worth Rs 3.5tn (net) in FY21. Banks and insurance companies are estimated to purchase Rs 3.15tn and Rs 2.11tn of bonds on a net basis respectively.

RBI is a significant player in determining bond yields given that OMOs are a significant part of gross issuances. In the last three years, yields have been trending lower due to increased OMO purchases. In FY20, RBI's holding of central government securities increased to Rs 9.8tn which has risen further by Rs 1.3tn in Q1FY21. In FY19, RBI's holding of central government bonds had increased by 44%.

FIG 31 – HIGHER OMO PURCHASE IS BRINGING DOWN YIELDS



Source: Bloomberg, Budget documents | Note: 10Y yield as of ending date of the fiscal year | E - Bank of Baroda Estimates

Demand drivers for RBI bond purchase

#1 Balance sheet stance

Note: Balance sheet comparison stands for Jul-Jun RBI financial year, hence 2018-19/20/21 are used according to this connotation

RBI's decision to buy or sell domestic assets is determined by its balance sheet expansion and liquidity stance (a derivative of monetary policy). For instance, in 2018-19, balance sheet increased by 13.4%. However, international assets increased by only 6% which meant it had room to increase its domestic holdings by 57%.

In 2019-20, the balance sheet is expected to increase by 32.4% led by a 30% increase in international assets. RBI has hiked its domestic asset purchase by 22%, resulting in surplus liquidity with banks – this is reflected on the liabilities side as reverse repo amounts, fuelling further balance sheet expansion.

Despite a relatively slower 9% rise in balance sheet planned for 2020-21, RBI will be purchasing bonds worth Rs 3.5tn. This is explained by incremental note issuance of Rs 4tn vs. Rs 5tn in 2019-20. An additional driver of expansion in RBI's balance sheet for 2019-20 has been rising reverse repo amounts which have even offset the decline in bank deposits with RBI due to the CRR cut. However, these reverse repo deposits will see a gradual decline in coming months as credit growth picks up. CRR deposits with the central bank will also increase as the ratio rises to 4% eventually.

On the asset side, we estimate accretion of ~US\$ 42bn to India's foreign reserves in 2020-21, due to a higher BoP surplus. This will be driven by a large decrease in trade deficit on the back of lower non-oil, non-gold imports and oil imports. Foreign inflows in the form of remittances and software exports will be relatively muted. This will create an estimated 9% increase in international securities to Rs 39tn (assuming INR remains at current levels).

In 2019-20 as well, international securities have increased by 30% due to a US\$ 34.1bn net cash forex intervention by RBI (Jul'19-Apr'20) and INR depreciation of 8.1% against the USD in the same period. The overall asset increase in RBI's balance sheet requires a Rs 3.5tn purchase of domestic assets which will be done through OMOs.

FIG 32 – HIGHER BOP SURPLUS IN FY20

Year	Inward remittances into India (US\$ bn)	Software receipts (US\$ bn)	FDI inflows (US\$ bn)	FII inflows (US\$ bn)	BoP Surplus (US\$ bn) (+/- accretion/depletion)
FY08	41.9	36.9	15.9	20.8	92.16
FY09	44.8	43.7	19.8	(15.0)	(20.08)
FY10	52.3	48.2	18.0	29.0	13.44
FY11	53.1	50.9	11.8	30.3	13.12
FY12	63.5	61.0	22.1	17.2	(12.75)
FY13	64.0	63.5	19.8	26.9	3.88
FY14	65.3	67.0	21.6	4.8	15.56
FY15	65.5	70.4	31.3	42.2	61.4
FY16	62.6	71.5	36.0	(4.1)	18.1
FY17	56	70.8	35.6	7.6	21.6
FY18	62.4	72.2	30.3	22.1	43.6
FY19	69.9	77.7	30.7	(0.6)	(3.3)
FY20	72.0	78.0	42.7	(6.0)	30.7

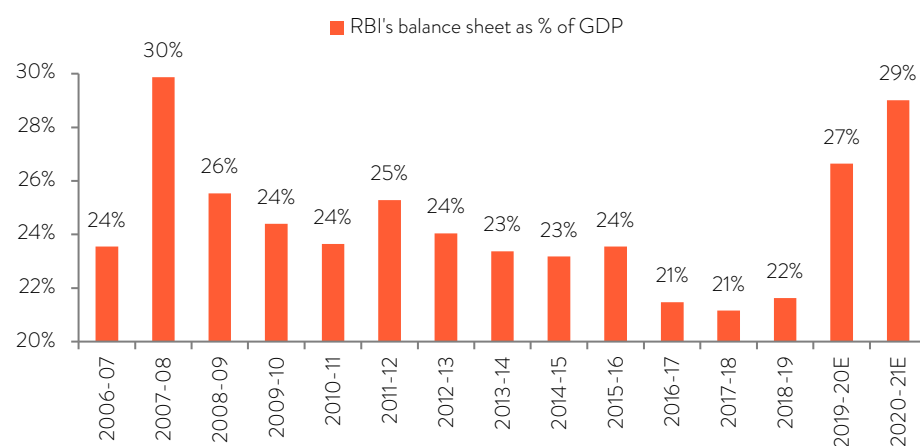
Source: CEIC, Bank of Baroda Research

FIG 33 – RBI’s BALANCE SHEET

(Rs bn)	2015-16	2016-17	2017-18	2018-19	2019-20E	2020-21E
Total Notes Issued	17,077	15,063	19,120	21,688	26,674	30,646
Capital & Reserves	67	67	67	67	67	67
Deposits	5,065	8,963	6,526	7,649	12,230	10,222
w/w Bank	4,294	5,042	5,071	5,494	4,690	4,971
Others-Reverse Repo (LAF)	770	2,974	1,454	2,154	7,539	5,250
Other Liabilities and Provisions	10,220	8,947	10,463	11,625	15,367	18,226
Total Liabilities	32,430	33,041	36,176	41,029	54,338	59,162
Gold Coins & Rupee Coins	1,393	1,324	1,450	1,683	2,526	2,576
Investments – Foreign	23,064	23,687	26,351	27,852	36,129	39,200
Investment – Domestic	7,033	7,558	6,297	9,899	12,058	15,550
Loans and Advances	520	173	1,639	932	3,483	1,644
Other Assets*	419	300	440	663	142	192
Total Assets	32,430	33,041	36,176	41,029	54,338	59,162

Source: RBI, Bank of Baroda Research Note: RBI balance sheet: Jul-Jun financial year | *Includes investments in subsidiaries | E – Bank of Baroda Estimates | Note: Our estimates do not include OMO repayment of ~Rs 500bn in FY21

FIG 34 – RBI BALANCE SHEET AT 27% OF GDP IN 2019-20-HAS SCOPE FOR EXPANSION

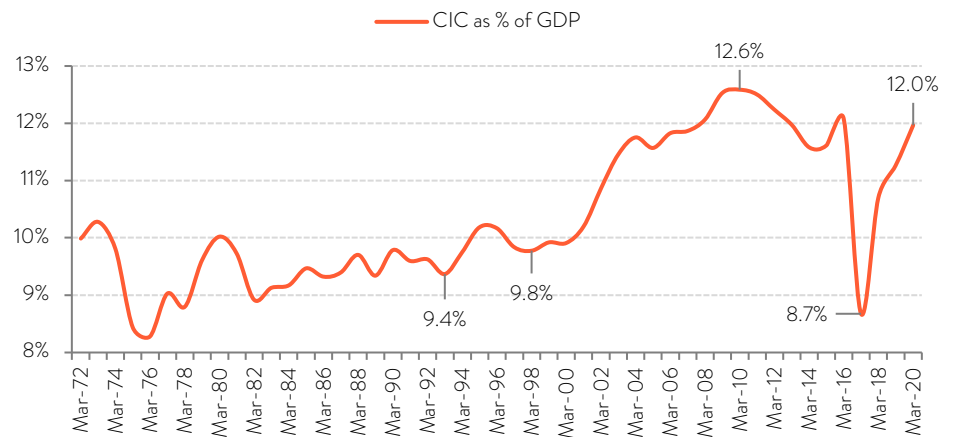


Source: CEIC, RBI, Bank of Baroda Research

#2 Currency in circulation

Currency in circulation (CIC) accretion picked up pace in H2FY20 to Rs 2.5tn vs. Rs 2.1tn last year. This has fuelled an increase in currency-to-GDP ratio to 12% in FY20 from 11.3% in FY19.

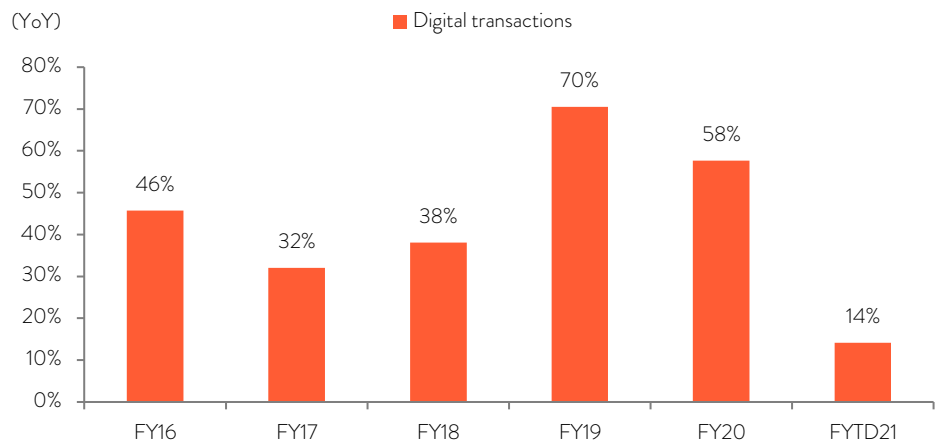
FIG 35 – CIC AS % OF GDP PICKED UP IN FY20



Source: CEIC, Bank of Baroda Research

Currency demand has continued to increase in FY21 despite the lockdown partly because smaller shops or establishments that favour cash transactions remained operational while organised retail chains were shut. In addition, individuals have a tendency to keep larger amounts of cash with them in uncertain circumstances such as the pandemic. As the economy opens up, we expect the volume of digital transactions to be far higher than cash transactions.

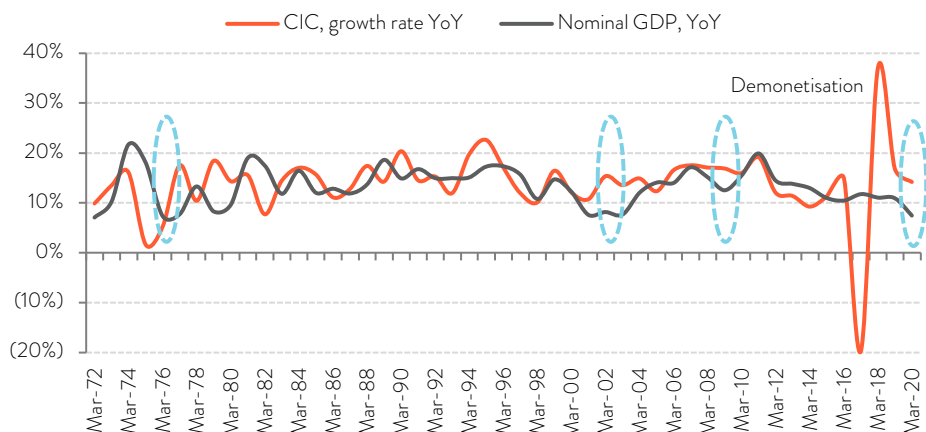
FIG 36 – DIGITAL TRANSACTIONS DECLINE, BUT TO PICK UP WITH REVIVAL OF ECONOMIC ACTIVITY



Source: NPCI, Bank of Baroda Research | Note: Both financial and non-financial volume transactions | FYTD21- Apr-May

Despite muted economic growth in FY21 (4.7% contraction in real GDP as per our estimates), CIC accretion is expected at Rs 3.5tn-4tn (Rs 3tn in FY20). So far this year, CIC accretion is at Rs 2.2tn compared with Rs 499bn in the same period last year.

FIG 37 – CIC GROWTH RATE MOVES IN TANDEM WITH NOMINAL GDP



Source: CEIC, Bank of Baroda Research

#3 Liquidity situation

Since Apr’19, RBI has focused on increasing durable liquidity. The central bank conducted OMO purchases of Rs 1.5tn in FY20. So far in FY21, it has purchased bonds worth Rs 1.3tn. Additionally, RBI undertook foreign exchange intervention of US\$ 45bn in FY20. This year, it bought US\$ 21bn worth of USD which has injected an equivalent amount of INR into the system. Thus, the current liquidity surplus has now reached 2.4% of NDTL. As economic activity picks up, the liquidity surplus will move closer to 1% of NDTL. All the above factors translate into OMO purchase of another Rs 3.5tn for RBI’s balance sheet adjustment.

FIG 38 – DATA SHOWING INTERRELATION BETWEEN OMO PURCHASE, FX INTERVENTION AND FOREIGN CURRENCY ACCOUNT (FCA)

Year	Reserve money 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)
2018-19	15	(15.4)	1,501.4	3,601.3	3,000
2019-20	10	49.2	6,671	1,903	1,136.39
2020-21E	13.2#	-	2,244	3,638	3,500

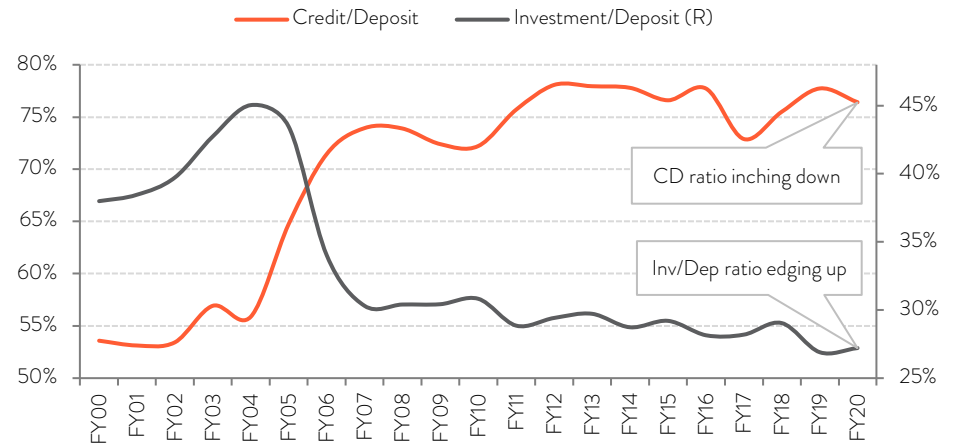
Source: RBI, CEIC, Bank of Baroda Research | E -Bank of Baroda Estimates | # Actual data as on 05 Jun 2020 | *Calculated from RBI’s balance sheet

Tepid credit growth to fuel SCB bond demand

In FY20, credit growth at 6.1% was far lower than deposit growth of 9.9%, prompting SCBs to park funds in central government securities worth Rs 2.36tn on a net basis. Thus, as SCBs’ credit-deposit ratio falls, their investment-deposit

ratio increases (Fig 39). At present, the incremental investment-deposit ratio is 105%.

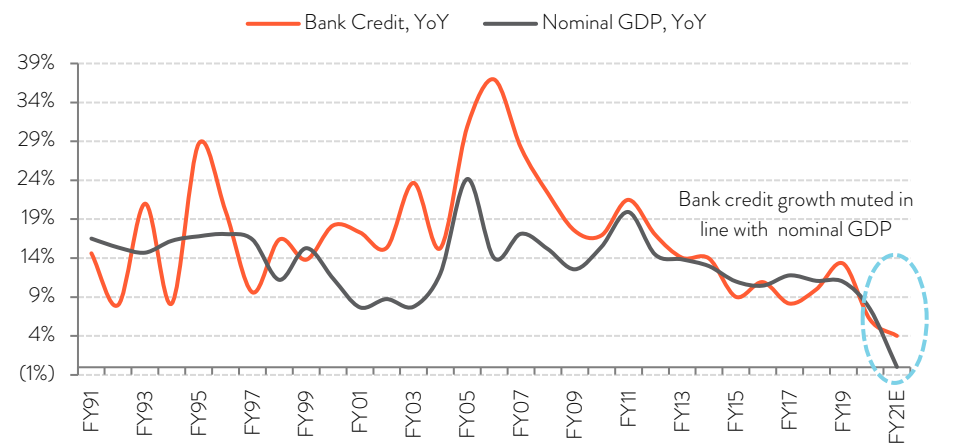
FIG 39 – CD RATIO FALLING, INVESTMENT-DEPOSIT RATIO PICKING UP



Source: Bloomberg, Bank of Baroda Research

The outlook on credit growth remains muted given our forecast of negative real GDP growth in FY21 and flat nominal growth (see Annexure C). Credit growth is intrinsically linked to nominal GDP growth as we have seen since 1991 (Fig 40).

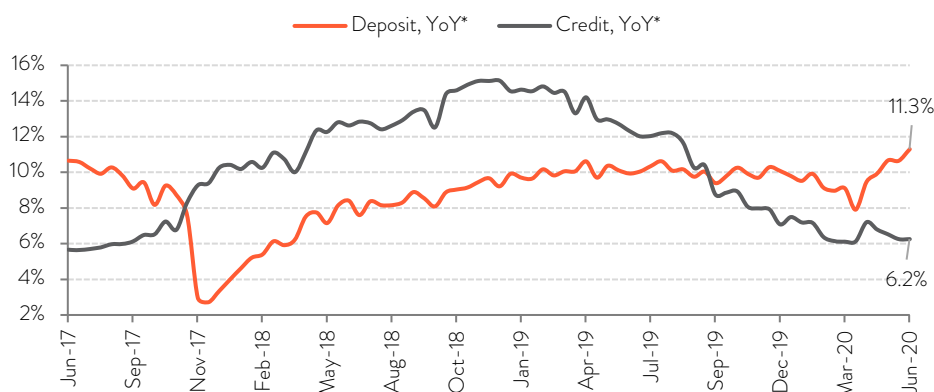
FIG 40 – NOMINAL GDP GROWTH TO REMAIN FLAT IN FY21E, CREDIT GROWTH EXPECTED TO BE LOWER AT 4%



Source: Bloomberg, Bank of Baroda Research | E - Bank of Baroda Estimates

With lukewarm credit offtake, banks will continue to purchase government securities. We estimate aggregate credit growth of 4% and deposit growth of 8% in FY21 – this leaves room for net purchases of Rs 3.15tn worth of central government securities by SCBs. In addition, SCBs should be in a position to purchase more than Rs 1.7tn of state government securities.

FIG 41 – CREDIT-DEPOSIT WEDGE AT 390BPS IN FY20 COMPARED TO 180BPS IN FY19; CURRENTLY AT 510BPS IN JUN'20



Source: CEIC, Bank of Baroda Research | *Fortnight as on 05 Jun 2020

FIG 42 – CREDIT, DEPOSIT AND INVESTMENT TRENDS

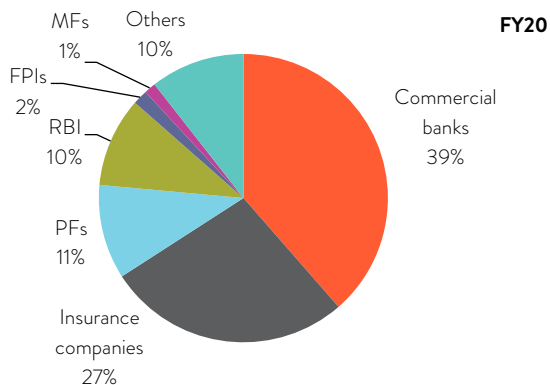
(Rs tn)	FY15	FY16	FY17	FY18	FY19	FY20
Credit	65.4	72.5	78.4	86.3	97.7	103.7
Abs change	5.4	7.1	5.9	7.8	11.4	6.0
% YoY	9.0	10.9	8.2	10.0	13.3	6.1
Deposit	85.3	93.3	107.6	114.3	125.7	135.7
Abs change	8.3	7.9	14.3	6.7	11.5	9.9
% YoY	10.7	9.3	15.3	6.2	10.0	7.9
Investment	24.9	26.3	30.3	33.2	33.8	36.9
Abs change	2.8	1.3	4.1	2.9	0.6	3.1
% YoY	12.6	5.4	15.4	9.5	1.9	9.2
CD ratio	76.6	77.7	72.9	75.5	77.7	76.4

Source: CEIC, Bank of Baroda Research

Insurers, PF also large buyers

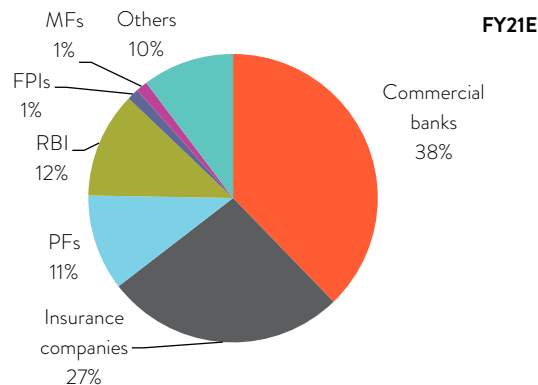
We estimate that insurance companies will continue to be net buyers at Rs 3.6tn (state and central government combined). Provident funds alone could be in a position to purchase state government securities of Rs 1.8tn in FY21 out of the total kitty of Rs 2tn.

FIG 43 – OWNERSHIP PATTERN OF CENTRAL GOVERNMENT SECURITIES IN FY20



Source: RBI, Bank of Baroda Research

FIG 44 – OWNERSHIP PATTERN OF CENTRAL GOVERNMENT SECURITIES IN FY21E



Source: RBI, Bank of Baroda Research

FIG 45 – OWNERSHIP PATTERN OF GENERAL GOVERNMENT SECURITIES (INCREMENTAL CHANGE)

(Rs bn)	FY18	FY19	FY20	FY21E
Commercial Banks	3,709	1,526	4,383	4,859
Insurance Companies	2,932	2,618	3,018	3,554
MFs	(300)	(396)	759	148
FPIs	654	(474)	(341)	(116)
PFs	1,267	1,441	923	1,808
RBI	(924)	2,766	777	3,534
Others	915	1,244	1,025	1,274
Total	8,253	8,726	10,543	15,061

Source: RBI, Bank of Baroda Research | E- Bank of Baroda Estimates for net demand

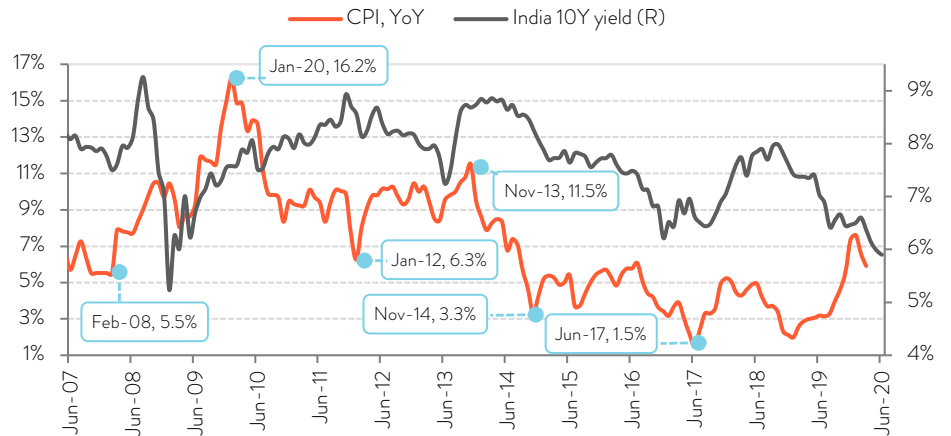
Key economic factors support lower yields

Apart from bond demand and supply side dynamics, we believe various other factors currently support lower yields, including easing of inflation, RBI rate cuts, lower oil prices, excess liquidity, and the likelihood of abating FII outflows.

Inflation trending down

India’s flexible inflation targeting mechanism calls for maintaining inflation at 4% within a band of +/-2%. Typically, the 10Y yield moves in the direction of inflation with a 0.6 correlation to headline CPI. So, when inflation is trending upwards, the 10Y yield starts inching up and vice versa. Headline inflation has already peaked in our view. Lower demand as a fallout of the Covid-19 economic impact and ample agriculture production will rein in food inflation.

FIG 46 – PEAK & TROUGH OF CPI & 10Y YIELD COINCIDE WITH A LAG

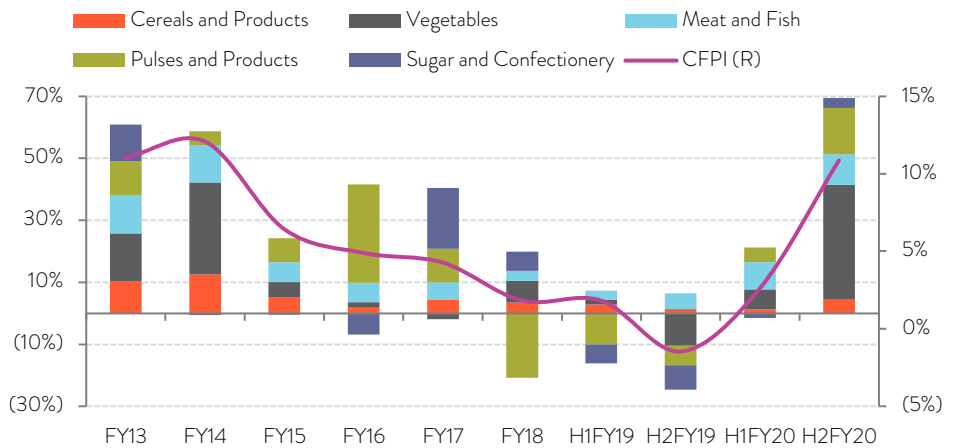


Source: CEIC, Bloomberg, Bank of Baroda Research | Note: Before Jan'12, CPI series was based on CPI-IW (2004-05=100) | Till 23 Jun 2020

We expect inflation to edge lower in coming months due to (1) a favourable base effect, (2) normal monsoon (IMD forecast at 96-104% of LPA), (3) easing of supply restrictions, and (4) decline in core inflation.

Headline inflation averaged 3.3% in H1FY20 before spiking to 6.3% in H2FY20, spurred by food inflation (at 10.9% from 2.6% in H1). Within food, the increase was fuelled by a 37.2% surge in vegetable prices in H2 compared with a 6.4% increase in H1. Inflation in cereals also rose from 1.3% in H1 to 4.3% in H2. An even steeper increase was seen in milk, fruits, pulses sugar and spices.

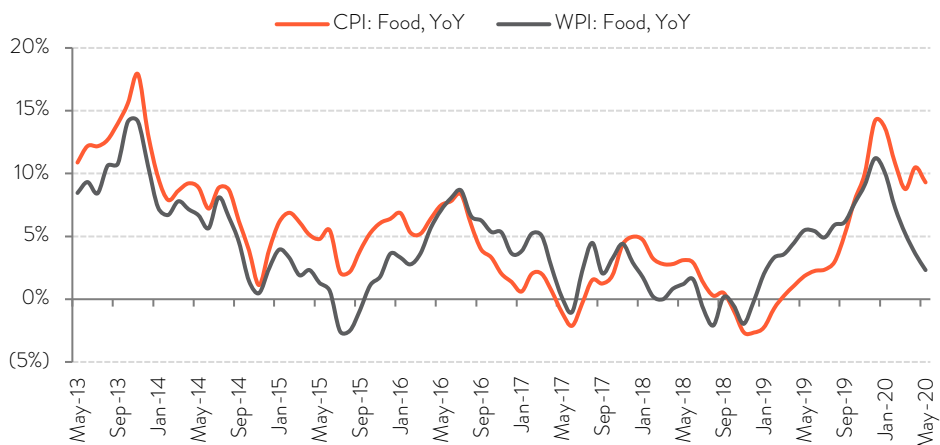
FIG 47 – FOOD INFLATION ROSE CONSIDERABLY IN H2FY20



Source: CEIC, Bank of Baroda Research

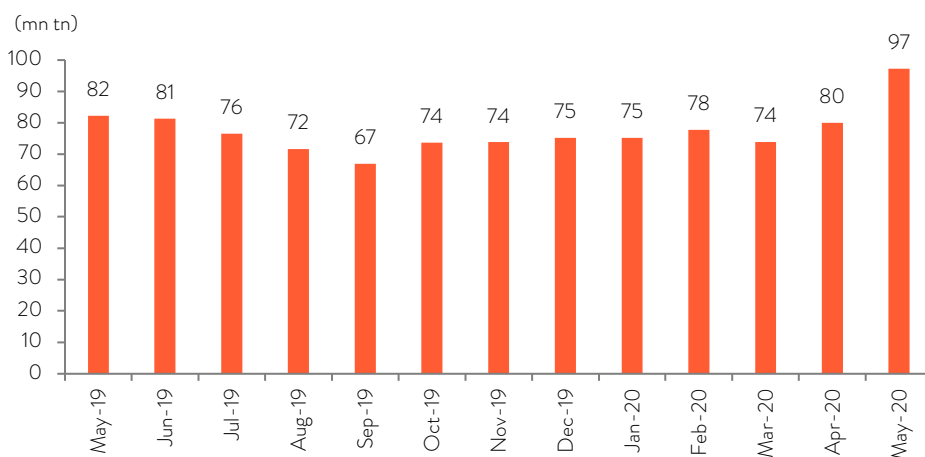
The broad-based increase in H2FY20 implies a positive base effect in H2FY21. In addition, the easing of lockdown restrictions will ensure adequate supply of food products. In fact, wholesale prices are falling more sharply compared with retail prices. Typically, wholesale price inflation is reflected in retail prices with a lag.

FIG 48 – CPI AND WPI FOOD INDEX BROADLY IN LINE AND BOTH INCHING DOWN LATELY



Source: CEIC, Bank of Baroda Research

FIG 49 – STOCK OF FOODGRAIN AT HEALTHY LEVELS



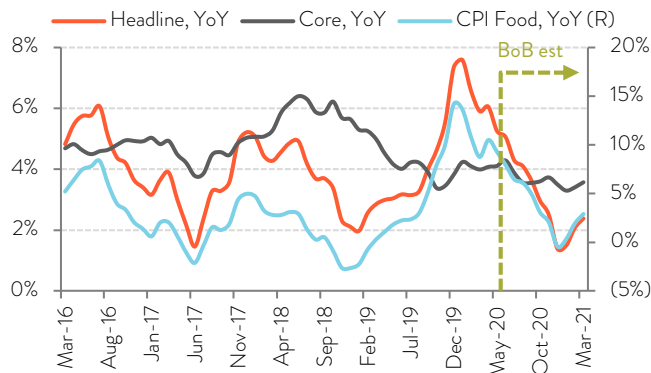
Source: CEIC, Bank of Baroda Research

FIG 50 – KHARIF SOWN AREA HIGHER COMPARED TO LAST YEAR

(mn hectare)	Normal area as on Date	Area sown in 2020-21	Area sown in 2019-20	Normal area for whole Kharif Season	Growth (YoY %)
Foodgrains	2.4	3.4	2.0	70.5	66.2
Cereals	1.8	2.9	1.8	58.5	61.3
Rice	0.8	1.0	1.0	39.6	(2.2)
Pulses	0.5	0.5	0.2	12.0	106.3
Cotton	2.4	2.9	1.8	12.1	58.3
Sugarcane	4.8	4.9	4.8	4.8	1.3
Jute and Mesta	0.7	0.6	0.6	0.8	(4.9)
Total	10.8	13.1	9.4	106.4	39.4

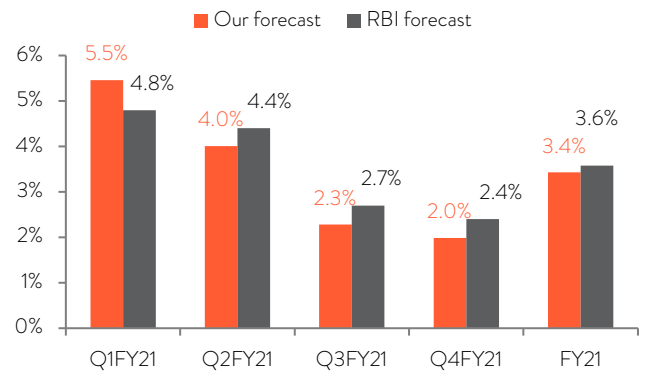
Source: CEIC, Bank of Baroda Research. As on 19 Jun 2020.

FIG 51 – CPI INFLATION TO EDGE DOWN FROM H2FY21E



Source: Bloomberg, Bank of Baroda Research

FIG 52 – CPI PRINT EXPECTED TO BE BELOW 4% TARGET IN FY21E



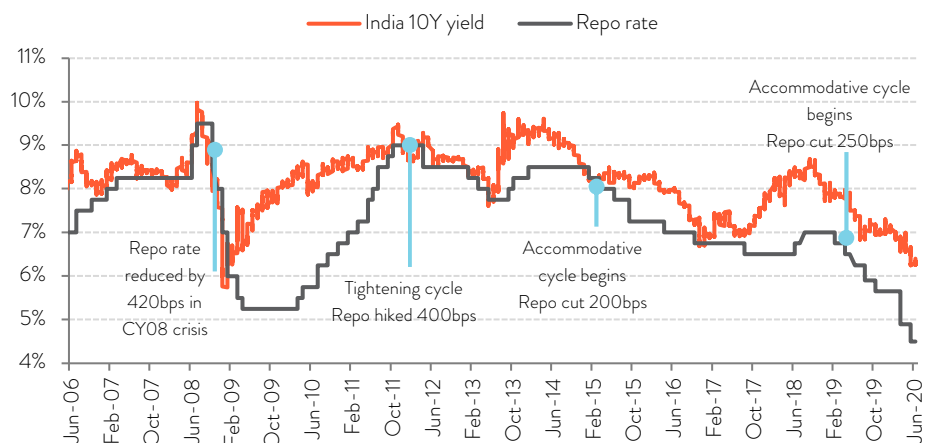
Source: Bloomberg, Bank of Baroda Research

Continued rate cuts

The policy rate and 10Y yield typically move in tandem. Since last year, the central bank has reduced the policy rate by 250bps. In the last two off-policy meetings, the MPC has cut policy rates by 115bps to combat the economic fallout of the pandemic. Correspondingly, the 10Y (6.45 GS 2029) yield has fallen to ~6% from a high of more than 8% in Dec'18.

As the output gap remains negative and is widening currently, we see scope for a further 25bps rate cut in CY20 against the backdrop of a below-target CPI print, especially in Q4FY21.

FIG 53 – RBI'S 250BPS RATE CUT IN THE CURRENT CYCLE WAS FOLLOWED BY A 200BPS DECLINE IN 10Y YIELD (~8% TO ~6% RECENTLY)



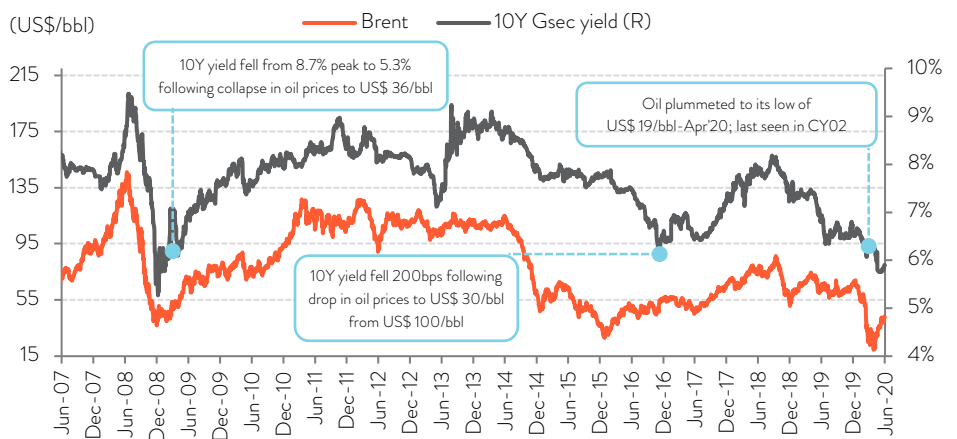
Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

Lower oil prices

From a high of US\$ 80/bbl in Oct’18, global oil prices hit lows last seen in CY02 at US\$ 19/bbl in Apr’20, pushing down yields. This fall can be explained by demand concerns and oversupply in the market due to Covid-19. OPEC+ members responded to the drop in demand with an output cut of 9.7mbpd till Jul’20.

With the easing of lockdown restrictions, oil prices are recovering (currently at US\$ 41/bbl), but are expected to be lower in the near term due to the slowdown in global growth. Softer oil prices are a big positive for India because they bring about lower inflation, lower foreign currency outflows and thus a stable currency outlook.

FIG 54 – SHARP FALL IN OIL PRICES TO US\$ 19/BBL FROM A PEAK OF US\$ 80/BBL LED TO FALL IN 10Y YIELD, CURRENTLY OIL AT US\$ 41/BBL

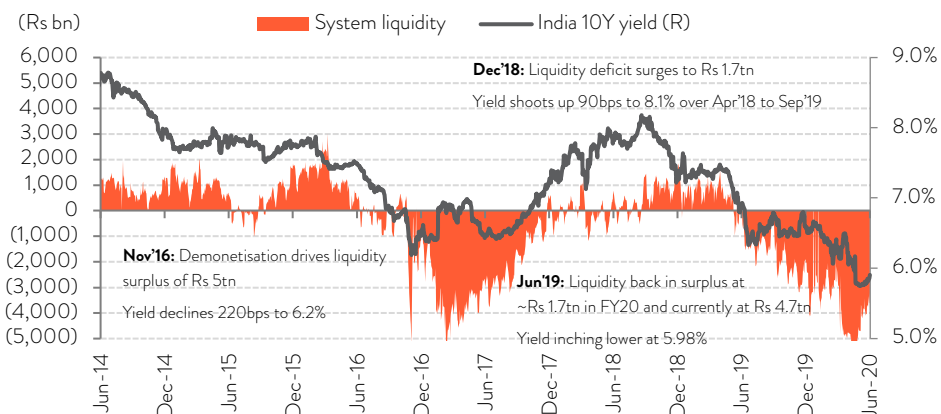


Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

Surplus liquidity

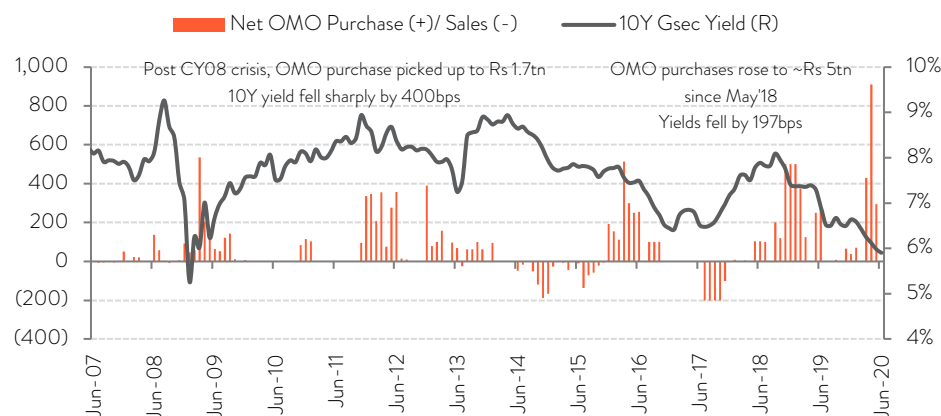
RBI has taken a host of measures ranging from (1) targeted long-term repo operations (TLTRO: Rs 1.25tn), (2) OMO purchases (Rs 1.5tn in FY20 and Rs 1.3tn in FYTD21) to inject durable liquidity, (3) Operation Twist (Rs 500bn) involving selling of short-term securities and buying long-term to ensure transmission of lower yields across the yield curve, (4) reduction in CRR, and (5) allowing additional borrowing of 1% of NDTL at marginal standing facility (MSF). The average liquidity surplus in May’20 was Rs 5.1tn as compared with Rs 4.7tn in Apr’20. In Jun’20, it has moderated to Rs 3.8tn. Periods of liquidity surplus have coincided with lower yields.

FIG 55 – MOUNTING LIQUIDITY SURPLUS (RS 3.8TN IN JUN'20) ON ACCOUNT OF RBI'S MEASURES SUPPORTED LOWER YIELDS



Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

FIG 56 – HIGHER OMO PURCHASE LEADS TO FALLING YIELD



Source: Bloomberg, Bank of Baroda Research | Till 23 Jun 2020

RBI has announced an additional Rs 8tn of monetary measures to combat the Covid crisis (Fig 57).

FIG 57 – RBI'S LIQUIDITY INSTRUMENTS

(Rs tn)	Liquidity infusion measures
LTRO	1.0
TLTRO	1.0
CRR & MSF cut	2.7
TLTRO 2.0	0.5
MFs	0.5
Special refinance to NABARD, SIDBI	0.5
OMO purchase	0.5
Operation Twist	0.1
WMA to centre	1.25
Credit line to SIDBI 2.0	0.15
Credit line to EXIM bank	0.15
Liquidity for states via CSF	0.13
Others	1.0
Total	8.43

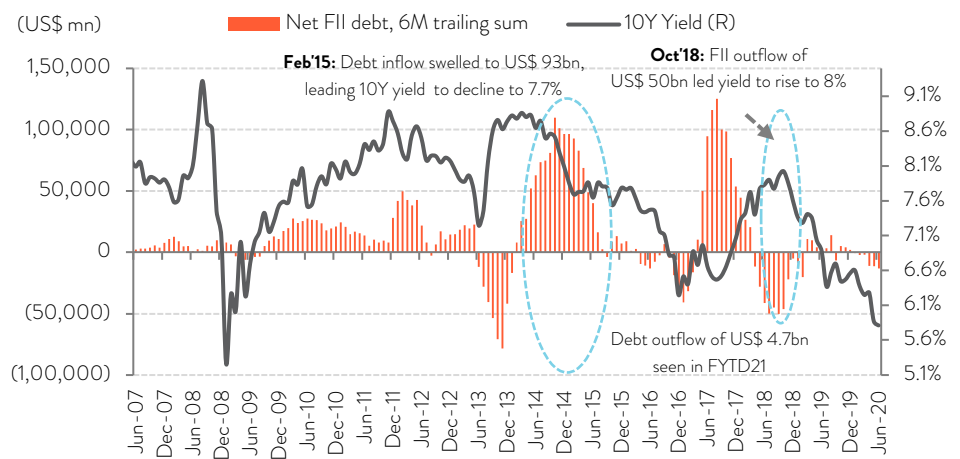
Source: RBI Bank of Baroda Research

Likely easing of FII debt outflows

In FY20, FII outflows (debt + equity) totalled US\$ 6bn with record outflows of US\$ 16.6bn in Mar’20 alone. A gloomy global economic outlook and the resulting risk-off sentiment have put FIIs into flight mode, particularly in the debt segment. In FY21 so far, FII outflows from the debt segment have risen to US\$ 4.7bn.

Inflows into India should pick up once the disruptions caused by Covid-19 ease, as Indian yields remain attractive. In addition, RBI has made several changes to the Voluntary Retention Route (VRR) scheme, such as doubling the limit for FPI investment from Rs 750bn to Rs 1.5tn and extending the limit to utilise funds by three months. This should make the Indian debt market more attractive for foreign investors.

FIG 58 – FII OUTFLOW IN DEBT SEGMENT PERSISTS (US\$ 6.8BN IN FY20 & US\$ 4.7BN IN FY21)



Source: Bloomberg, Bank of Baroda Research | Till 22 Jun 2020

Risks to our yield forecast

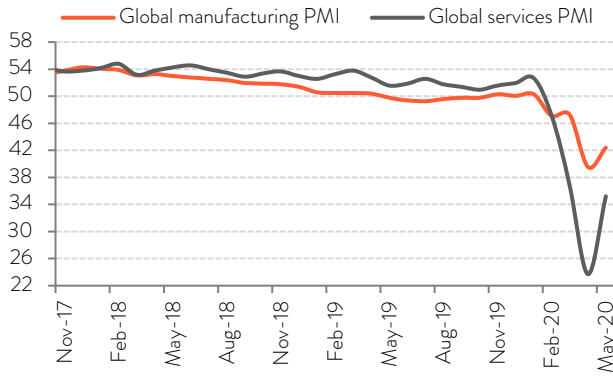
Key risks to our 10Y yield forecast of 5.5-6% for FY21 include:

- above-expected food and core inflation, primarily owing to labour shortage,
- a rise in global yields, signalling a V-shaped recovery, and
- persistent FII outflows, especially in the debt segment, on the back of a depreciating currency.

Annexure A

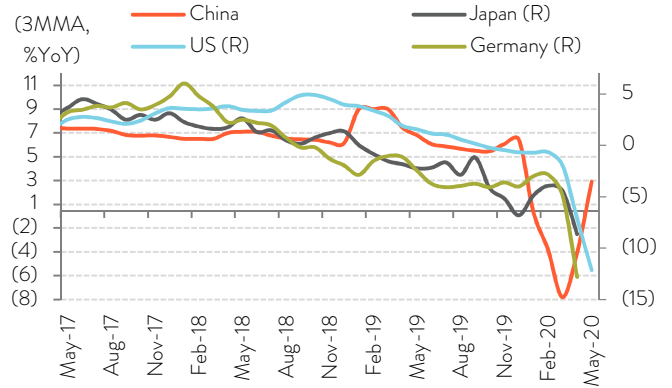
Global macroeconomic indicators: Covid-19 impact

FIG 1 – GLOBAL MANUFACTURING & SERVICES PMI PICKING UP



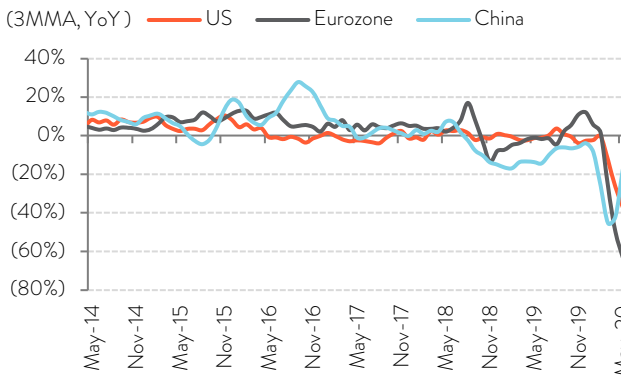
Source: Bloomberg, Bank of Baroda Research

FIG 2 – BARRING CHINA, GLOBAL INDUSTRIAL PRODUCTION YET TO RECOVER



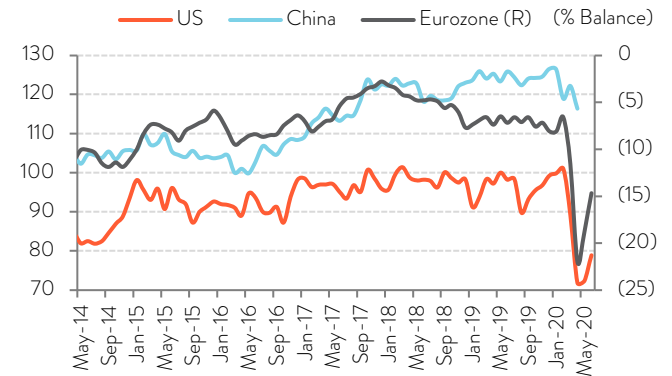
Source: Bloomberg, Bank of Baroda Research

FIG 3 – CHINA'S AUTO SALES SIGNALLING RECOVERY



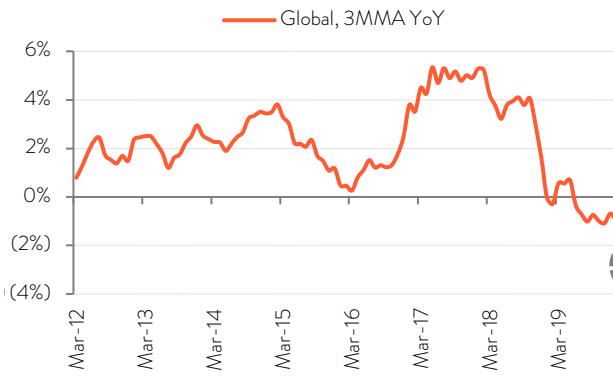
Source: Bloomberg, Bank of Baroda Research

FIG 4 – GLOBAL CONSUMER CONFIDENCE IMPROVES



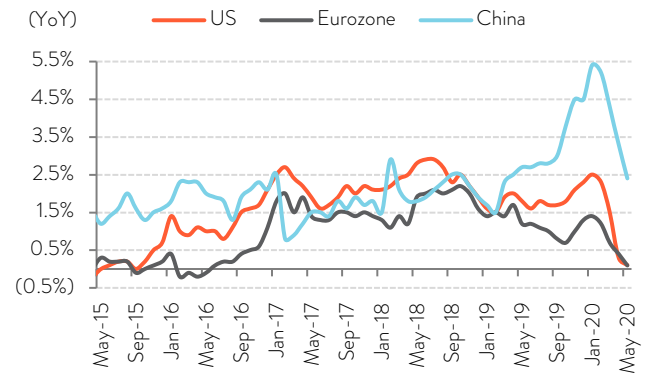
Source Bloomberg, Bank of Baroda Research | Note: Consumer confidence for Eurozone is % diffusion index. | Data for China is till Apr'20.

FIG 5 – GLOBAL TRADE VOLUME DECLINING



Source: Bloomberg, Bank of Baroda Research

FIG 6 – GLOBAL INFLATION EASES

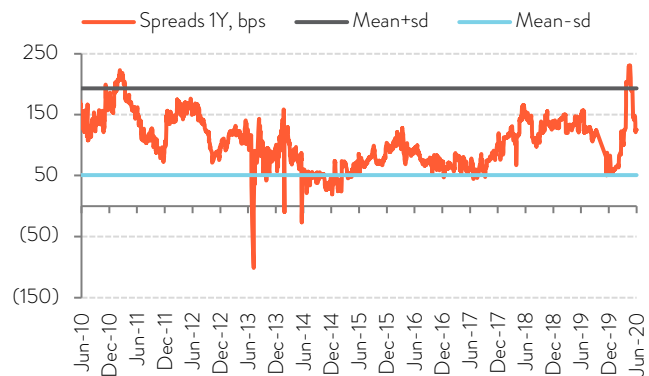


Source: Bloomberg, Bank of Baroda Research

Annexure B

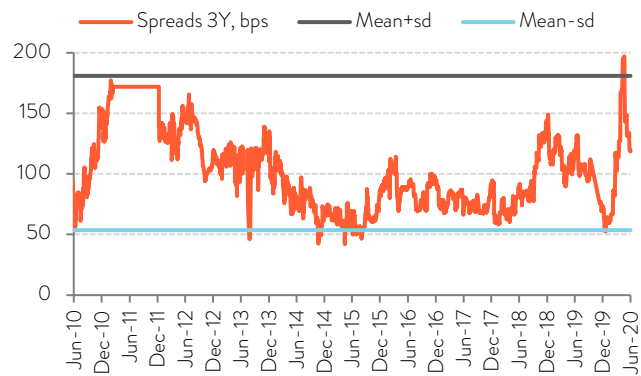
Interest rates

FIG 1 – 1Y CORPORATE & GOVT. BOND SPREAD FELL TO 137BPS IN JUN'20 (VS. 209BPS IN MAY'20)



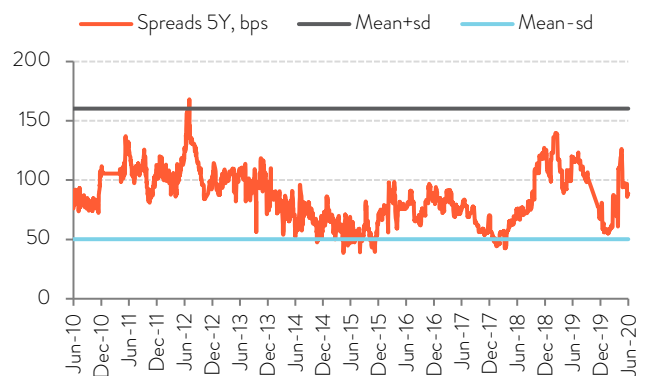
Source: CEIC, Bank of Baroda Research | Till 22 Jun 2020

FIG 2 – 3Y CREDIT RISK PREMIUM ALSO MODERATED TO 127BPS IN JUN'20 (170BPS IN MAY'20)



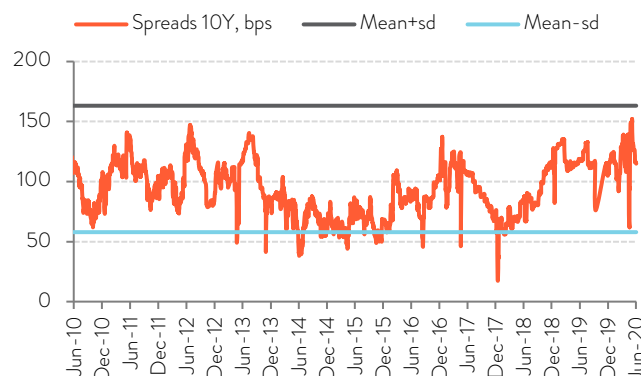
Source: CEIC, Bank of Baroda Research | Till 22 Jun 2020

FIG 3 – 5Y SPREAD FELL TO 93BPS IN JUN'20



Source: CEIC, Bank of Baroda Research | Till 22 Jun 2020

FIG 4 – 10Y SPREAD MODERATED TO 122BPS



Source: CEIC, Bank of Baroda Research | Till 22 Jun 2020

FIG 5 – RATES FALLING ACROSS A WIDE SPECTRUM

Instrument (%)	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	GSec Yield (1 Jun 2020)
Savings deposit	4	4	4	4	4	
1Y time deposit	7	6.9	6.9	6.9	5.5	3.82
2Y time deposit	7	6.9	6.9	6.9	5.5	4.44
3Y time deposit	7	6.9	6.9	6.9	5.5	4.61
5Y time deposit	7.8	7.7	7.7	7.7	6.7	5.46
5Y recurring deposit	7.3	7.2	7.2	7.2	5.8	5.46
5Y senior citizen savings scheme	8.7	8.6	8.6	8.6	7.4	5.46
5Y monthly income scheme	7.7	7.6	7.6	7.6	6.6	5.46
5Y national savings certificate	8	7.9	7.9	7.9	6.8	5.46
Public provident fund scheme	8	7.9	7.9	7.9	7.1	6.04
Kisan Vikas Patra	7.7	7.6	7.6	7.6	6.9	-
Sukanya Samridhhi Account Scheme	8.5	8.4	8.4	8.4	7.6	-

Source: Department of Economic Affairs, Ministry of Finance, Government of India, Bank of Baroda Research | *10Y benchmark yield 6.45GS2029

FIG 6 – DEPOSIT RATES ON THE DECLINE ACROSS TENORS

Tenure	Mar-20		Current	
	National Saving term deposits	Bank* term deposits (%)	National Saving term deposits	Bank* term deposits (%)
1Y	1Y	6.9	5.7	5.5
2Y	2Y	6.9	5.7	5.5
3Y	3Y	6.9	5.7	5.5
5Y	5Y	7.7	5.7	6.7
NSC (5Y)	7.9	-	6.8	-

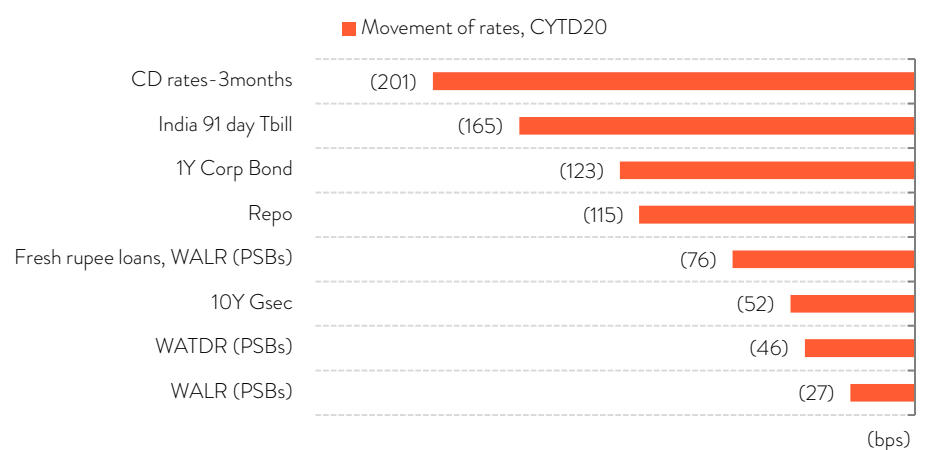
Source: Bloomberg, Bank of Baroda Research | *SBI term deposit. Current: As of 27 May 2020

FIG 7 – BANK-WISE ONE-YEAR MCLR ALSO REDUCING

(%)	Oct'19	Nov'19	Dec'19	Jan'20	Feb'20	Mar'20	Apr'20	May'20
Public Sector Banks								
Canara Bank	8.40	8.35	8.35	8.35	8.20	8.20	7.85	7.85
Bank of India	8.30	8.30	8.20	8.20	8.20	8.20	8.20	7.95
Bank of Baroda	8.35	8.30	8.25	8.20	8.15	8.15	8.00	7.80
Punjab National Bank	8.25	8.15	8.15	8.05	8.05	8.05	7.75	7.75
State Bank of India	8.05	8.00	7.90	7.90	7.85	7.75	7.40	7.25
Private Sector Banks								
IndusInd Bank	9.45	9.45	9.40	9.30	9.30	9.25	9.25	9.25
Kotak Mahindra Bank	8.60	8.50	8.40	8.40	8.35	8.35	8.10	7.90
Axis Bank	8.35	8.25	8.15	8.15	8.15	8.10	7.95	7.80
HDFC Bank	8.35	8.30	8.15	8.15	8.15	8.15	7.95	7.95
ICICI Bank	8.45	8.35	8.25	8.20	8.20	8.15	8.00	7.75

Source: RBI, Bank of Baroda Research

FIG 8 – YIELDS DOWN IN OTHER SEGMENTS AS WELL

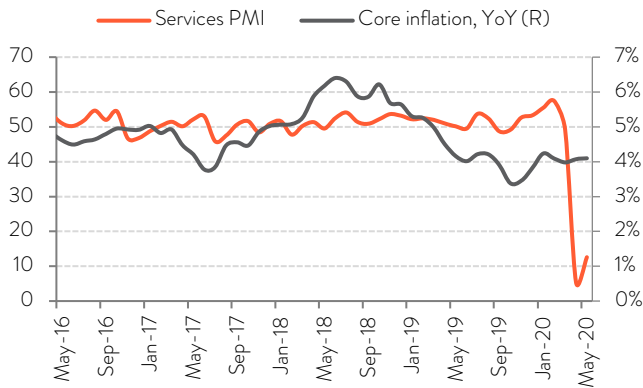


Source: RBI, Bloomberg, FBIL, Bank of Baroda Research

Annexure C

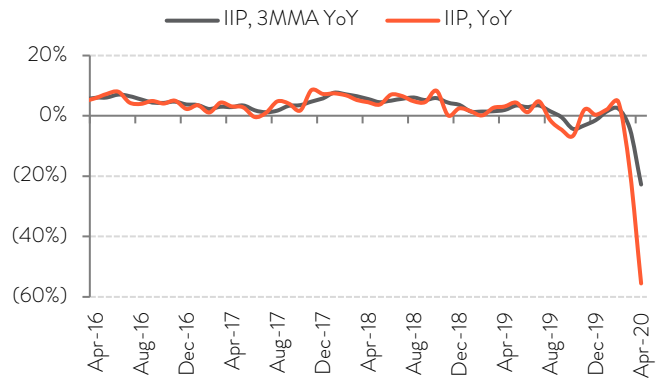
India macroeconomic indicators: Covid-19 impact

FIG 1 – SERVICES PMI STILL WEAK; CORE CPI FLAT



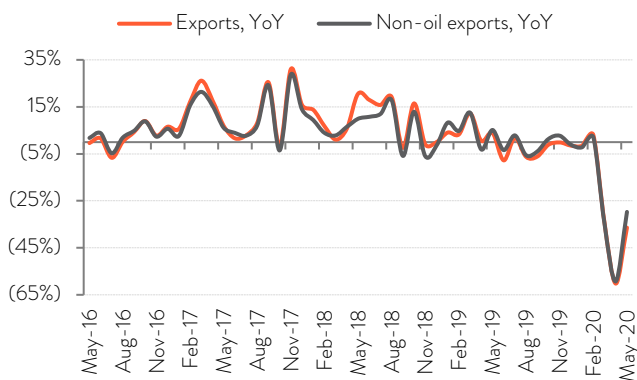
Source: CEIC, Bank of Baroda Research

FIG 2 – IIP GROWTH PLUNGES IN APR'20



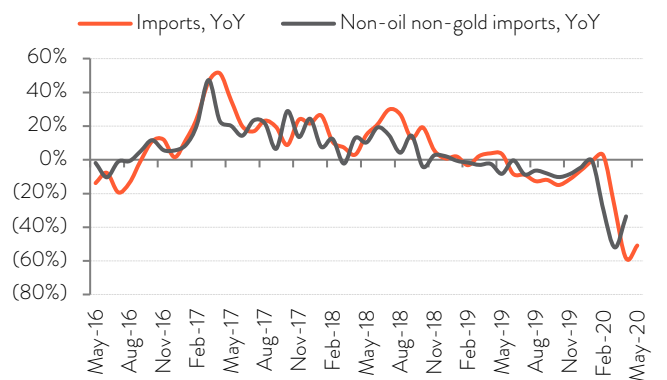
Source: CEIC, Bank of Baroda Research

FIG 3 – EXPORT GROWTH REMAINS MUTED...



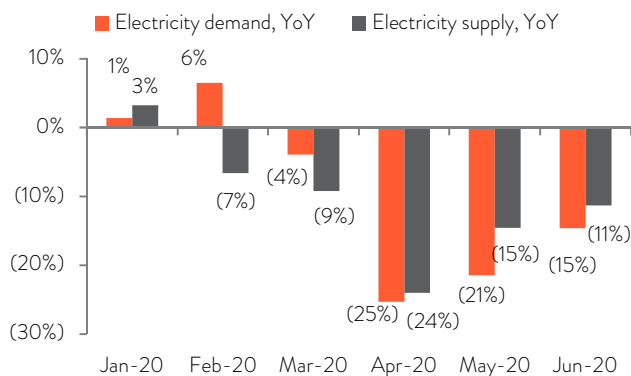
Source: CEIC, Bank of Baroda Research

FIG 4 – ...SIMILAR TREND IN IMPORT GROWTH



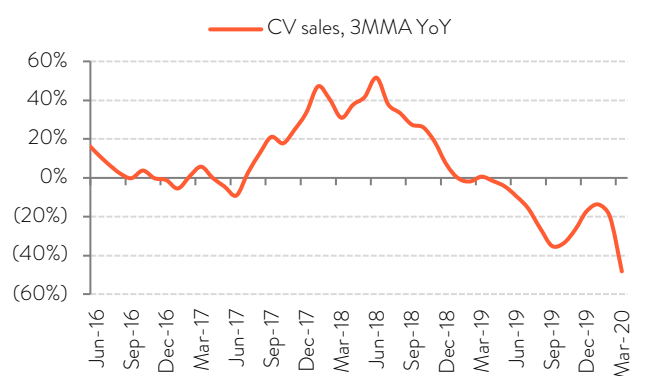
Source: CEIC, Bank of Baroda Research

FIG 5 – ELECTRICITY DEMAND AND SUPPLY DECELERATE AT A LOWER PACE



Source: POSOCO, Bank of Baroda Research, Data as of 24 Jun 2020

FIG 6 – CV SALES CONTINUE TO REMAIN UNDER PRESSURE



Source: CEIC, Bank of Baroda Research

FIG 7 – GDP EXPECTED TO CONTRACT SHARPLY TO 4.7% IN FY21E LED BY INDUSTRY AND SERVICES

(% change)	FY17	FY18	FY19	FY20PE	FY21E
Agriculture, forestry and fishing	6.8	5.9	2.4	4.0	3.3
Industry	7.7	6.3	4.9	0.9	(6.0)
Mining and quarrying	9.8	4.9	(5.8)	3.1	(0.8)
Manufacturing	7.9	6.6	5.7	0.0	(8.3)
Electricity, gas, water supply and other utility services	10.0	11.2	8.2	4.1	(2.5)
Construction	5.9	5.0	6.1	1.3	(3.8)
Services	8.5	6.9	7.7	5.5	(5.1)
Trade, hotels, transport, communication & svcs related to broadcasting	7.7	7.6	7.7	3.6	(7.5)
Financial, real estate & professional services	8.6	4.7	6.8	4.4	(7.5)
Public administration and defence	9.3	9.9	9.4	9.9	2.2
GVA at basic prices	8.0	6.6	6.0	3.9	(4.3)
GDP	8.3	7.0	6.1	4.2	(4.7)

Source: CSO, MOSPI, Bank of Baroda Research | PE: Provisional Estimate | E-Bank of Baroda estimate

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