



Confederation of Indian Industry



ICRA

# Building India For A New World

## Role of Financial Markets

SEPTEMBER 2021

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## Foreword

To say that the Covid-19 pandemic has dealt a blow to the Indian economy over the last two years would be stating the obvious. While economic agents are learning to cope with the new reality, measures to boost confidence through accelerated vaccination and faster Government spending, would aid the economy in regaining a firmer footing. Targeted fiscal measures to support the less formal economy would ease the pressure on monetary policy, allowing it to adjust to the post-pandemic scenario.

**Q1 FY2022 GDP growth stood at 20.1%:** The 7.3% GDP contraction seen in FY2021 was an unavoidable outcome of the stringent nationwide lockdown. Subsequently, India's real GDP has bounced back with a record-high 20.1% expansion in year-on-year (YoY) terms in Q1 FY2022. As anticipated, the low base of last year's stringent nationwide lockdown has concealed the impact of the second wave of Covid-19 that was accompanied by staggered state-wise restrictions in Q1 FY2022.

The recovery, while encouraging and most welcome, was, however, incomplete. The real GDP in Q1 FY2022 trailed the pre-Covid level of Q1 FY2020 by a considerable 9.2%, led by private consumption (-11.9%) and investment (-17.1%). The latter is a fallout of low capacity utilisation and deferral of investment plans.

The Central Bank's consumer confidence survey had highlighted the weak consumer sentiments in the light of the second wave of Covid-19, although resilient farm demand buffered private consumption to an extent in Q1 FY2022.

On the production side, only agriculture (+8.2%) and electricity (+3.0%) posted a higher GVA in real terms in Q1 FY2022, relative to their pre-Covid performance. The recovery was most delayed in the contact-intensive parts of the economy, such as trade, hotels, transport, communication and services related to broadcasting, as well as construction.

**GDP trends mirror India Inc.'s Q1 performance:** The trends provided by the GDP data are mirrored by our analysis of the Indian corporate sector's performance. Despite YoY growth on a low base, India Inc. reported a sequential weakening in revenues in Q1 FY2022 on account of the second wave of the pandemic.

The impact was the highest in consumer-oriented sectors, with hotels, airlines, automobiles, retail etc. reporting a significant sequential slowdown due to increased wariness, pressure on purchasing power etc.

On the other hand, essential services, construction activity etc. were relatively less impacted vis-à-vis last year, with learnings from the first wave and temporally and spatially distributed restrictions aiding functioning. Commodity-oriented sectors also benefited from the firm realisation trend.

**All these trends highlight the importance of rejuvenating confidence, central to which is sustaining the recent acceleration in the vaccination administration.**

**Signs of deepening recovery in Q2 FY2022:** Globally, the spread of the Delta variant has reignited uncertainty about the sustainability of demand and stalled the surge in commodity prices.

In India, high frequency indicators reveal a cautiously optimistic picture of a deepening recovery in Q2 FY2022, driven by the easing of state-wise restrictions and growing confidence led by widening vaccination coverage. Moreover, the 15% shortfall in rainfall in July-August 2021 has afforded a longer window for construction and mining activities, which will boost industrial growth in the ongoing quarter.

While crop output may display a modest growth, farm demand may remain buffered by the rise in Minimum Support Prices (MSP) and the expectation of continued robust procurement. Trends for non-farm demand in

rural areas are mixed. Demand for work under the MGNREGA has eased in August 2021, even as rural unemployment has modestly picked up.

The permission to continue industrial/ construction activities with some conditions during the second wave, as well as the extension of free food-grains under the PM *Gareeb Kalyan Anna Yojana* up to November 2021, have helped retain labour in the urban areas. This will reduce disruptions on account of labour shortages in the urban areas during the revival phase.

Merchandise exports have displayed a robust performance this year. While the Government's PLI scheme will help in enhancing exports in some sectors, a spike in cases resulting from the Delta plus variant, poses a non-marginal risk.

Despite the lifting of state-wise restrictions, revenue and capital spending of the Government of India contracted by 23% and 28%, respectively, in the month of July 2021 on a YoY basis. We are hopeful that the rollout of the National Monetisation Pipeline (NMP) scheme will provide a back-ended push to the capex. **With the economy at a critical juncture, boosting Government spending will be critical to unleash animal spirits and drive a faster recovery in economic activity.**

**GDP to exceed pre-pandemic levels in H2 FY2022:** We expect the GDP in the ongoing quarter to mildly trail the level in Q2 FY2020 as the services sector struggles to catch up with the rest of the economy. However, we are hopeful that real GDP will exceed the pre-pandemic levels in H2 FY2022, with a pick-up in demand during the festive season.

Learnings from the first and second wave of Covid-19 may reduce the severity of a third wave, if, and when it occurs. However, some businesses may not be able to survive another shutdown.

While the pan-India coverage of Covid-19 vaccines is growing impressively, the state-wise situation varies considerably, which suggests heightened vulnerability to a potential third wave and/or new variants in some geographies. **Therefore, it is critical to ensure 70% coverage of the second Covid-19 vaccine shot by end-December 2021 and extend targeted fiscal support to the sectors that are most susceptible at this stage.**

**Sticky CPI inflation to nudge policy normalisation:** The CPI inflation is expected to remain sticky, and average 5.5-5.7% in FY2022, close to the upper end of the Monetary Policy Committee's (MPC's) medium term target range of 2-6%. With this, the real interest rate is expected to remain negative this year as well.

The Q1 FY2022 GDP growth is mildly lower than the MPC's own forecast of 21.4%. As a result, we anticipate status quo until strengthening domestic demand replaces supply-side constraints as the key driver of inflationary pressures.

We expect policy normalisation to commence in February 2022, with a change in the Monetary Policy stance to neutral from accommodative. Comments made by the MPC members suggest that once the lift-off starts, rate increases will be staggered over a period of time, instead of immediately trying to push real interest rates back into the positive territory. Based on this, we expect a hike in the repo rate of 25 bps each in the April 2022 and June 2022 meetings, followed by a breather to reassess the durability of economic growth.

**Negative real interest rates may no longer be appropriate:** However, will continued negative real interest rates be appropriate in a post-pandemic world? While the US Federal Reserve has broadly confirmed that tapering of its bond purchases will start soon, it has signalled that rate hikes are still distant. This offers some breathing space for domestic rate normalisation. In any case, with India's current account deficit projected at a modest 0.7% of GDP in FY2022, and foreign exchange reserves at record-highs, we do not expect a repeat of the 2013 taper tantrum.

While the informal sector continues to struggle, listed corporates have made significant progress on de-leveraging over the last five quarters and emerged healthier. In our view, once conditions are ripe for capacity

expansion and they are ready to bite the bullet to improve their domestic and global presence, the level of interest rates will be a lesser consideration. Therefore, keeping rates low may not be necessary to support capacity expansion.

In contrast, denying savers opportunities to protect their interest income will delay a recovery in consumption and prove to be counter-productive.

What about the struggling MSMEs? They may be much better off with targeted fiscal measures, including payroll support, rather than low interest rates when they have no appetite to borrow in the first place.

The GoI's fiscal booster shot will have to be targeted and that brings us to an assessment of the fiscal realities. With a healthy rise in receipts amidst a decline in total spending, the GoI's fiscal deficit printed at a modest Rs. 3.2 trillion in April-July 2021, relative to the year-ago level of Rs. 8.2 trillion recorded amidst the first wave of Covid-19, as well as the pre-Covid level of Rs. 5.5 trillion.

As per our estimates, the FY2022 Budget Estimate (BE) for gross tax revenues of Rs. 22.2 trillion can be achieved, even with a sizeable 7.5% contraction in the remainder of FY2022, which appears unlikely with a deepening of the economic recovery in the ongoing quarter. We believe it is important to have conviction in the tax revenue upturn and spend more freely to allow confidence to revive faster. Also, in our view, fresh fiscal measures should be carefully targeted to support the sectors and scale of entities that are most vulnerable.

Even though the threat of a potential third wave continues to loom for the country, high frequency indicators indicate a gradual albeit uneven improvement in activity across regions and segments of the domestic economy. As the Indian economy springs back from the 'pandemic-hit' dip in GDP, and to support the vision of achievement of \$5 trillion economy and AatmaNirbhar Bharat, the Indian Financial Markets will have to play a very productive role in providing the necessary risk capital to boost and sustain economic growth.

### Mr Nilesh Shah

Chairman  
CII National Committee on Financial Markets

### Mr N. Sivaraman

Managing Director & Group CEO  
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# Macroeconomy

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## India Macro

### Global GDP growth rates

According to the data released by the International Monetary Fund (IMF) in July 2021, the world economy contracted by 3.2% in 2020 amidst the Covid-19 pandemic, in contrast to the modest growth of 2.8% witnessed in 2019 (refer Exhibit 1). The Indian economy contracted by a steeper 7.3% in FY2021, in contrast to the growth of 4.0% recorded in FY2020. The contraction in the Indian economy in FY2021 was significantly steeper than the set of emerging market and developing economies (-2.1%) as well as advanced economies (-4.6%) following the stringent nationwide lockdown in India in Q1 FY2021. However, some countries such as Argentina (-9.9%), United Kingdom (-9.8%), Philippines (-9.6%), France (-8.0%), Italy (-8.9%), etc. did record a deeper contraction in economic activity in 2020, compared to the Indian performance for FY2021. In contrast, China was the only major economy to display growth in 2020, albeit its weakest in decades, at 2.3%, as the economy recovered steadily after the shock inflicted by the pandemic.

Looking ahead, the IMF projects the world economy to grow by 6.0% in 2021 and 4.9% in 2022, while it expects the Indian economy to grow by a steeper 9.5% in FY2022, and 8.5% in FY2023. Nevertheless, the spread of the Delta variant in many large countries has fuelled uncertainty about the sustainability of global demand, which has also arrested the rise in commodity prices.

#### EXHIBIT 1: IMF growth projections of GDP in July 2021 WEO

Country/Group	Estimates	Projections	
	2020	2021	2022
<b>Emerging Market and Developing Economies</b>	<b>-2.1</b>	<b>6.3</b>	<b>5.2</b>
Argentina	-9.9	6.4	2.4
China	2.3	8.1	5.7
Brazil	-4.1	5.3	1.9
Philippines	-9.6	5.4	7.0
Russia	-3.0	4.4	3.1
South Africa	-7.0	4.0	2.2
India*	-7.3	9.5	8.5
<b>Advanced Economies</b>	<b>-4.6</b>	<b>5.6</b>	<b>4.4</b>
Japan	-4.7	2.8	3.0
Euro Area	-6.5	4.6	4.3
France	-8.0	5.8	4.2
Italy	-8.9	4.9	4.2
United Kingdom	-9.8	7.0	4.8
Canada	-5.3	6.3	4.5
United States	-3.5	7.0	4.9
<b>World</b>	<b>-3.2</b>	<b>6.0</b>	<b>4.9</b>

\*As per fiscal year, whereas rest of the countries are forecasted on a calendar year basis; **Source:** World Economic Outlook; IMF; ICRA research

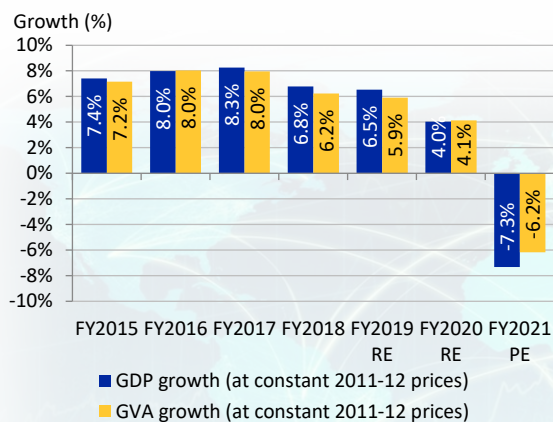


## Indian GDP growth

The provisional estimates released by the NSO for FY2021 in May 2021 indicate a contraction in the Indian GDP and gross value added (GVA) at basic prices (at constant 2011-12 prices), of 7.3% and 6.2%, respectively, in contrast to the revised growth of 4.0% and 4.1%, respectively in FY2020 (refer Exhibit 2).

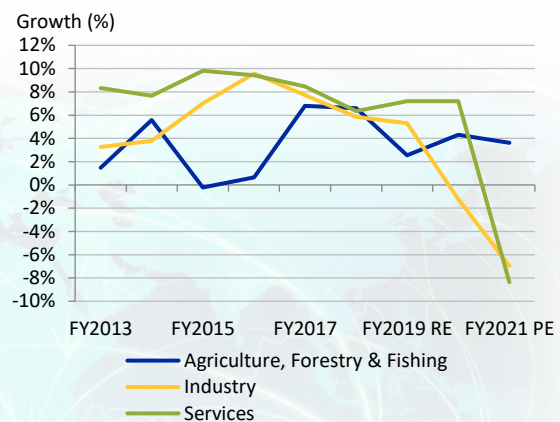
The contraction in GDP in FY2021 was broad-based, with a weakening in the performance of private final consumption expenditure (PFCE), gross fixed capital formation (GFCF) and government final consumption expenditure (GFCE), and (to -9.1%, -10.8%, +2.9%, respectively, from +5.5%, +5.4%, +7.9%, respectively). The impact of the Covid-19 pandemic on job losses and income levels had resulted in a considerable contraction of 9.1% in the PFCE in FY2021, especially related to discretionary purchases and contact-intensive services. Moreover, investment activity contracted by 10.8% in FY2021, with a sharp slowdown amidst the recession in H1 caused by the pandemic and lockdowns, followed by a cautious revival in sentiment in H2 FY2021. For instance, the value of new projects plunged to a 16-year low Rs. 7.2 trillion in FY2021 from Rs. 16.8 trillion in FY2020 (Source: Centre for Monitoring Indian Economy; Sep 3, 2021), reflecting a sharp contraction in the government-led investments (-65%; to Rs. 2.9 trillion from Rs. 8.5 trillion) followed by the private sector (-49%; to Rs. 4.3 trillion from Rs. 8.3 trillion). However, the GFCE stood out as the only constituent of GDP to record a growth in FY2021, although the pace of the same declined sharply to 2.9% in that fiscal, relative to 7.9% in FY2020. Excluding GFCE, the YoY contraction in GDP stood at a deeper 8.5% in FY2021, in real terms.

**EXHIBIT 2: Annual GVA growth and GDP growth (at constant 2011-12 prices) for FY2021**



RE: Revised Estimates; PE: Provisional Estimates; P: Projected;  
Source: NSO; CEIC; ICRA Research

**EXHIBIT 3: Annual GVA growth of broad sectors of the economy-agriculture, forestry and fishing, industry, and services**



P: Projected; Source: NSO; CEIC; ICRA Research

The worsening in the performance of the GVA in FY2021 (-6.2%) relative to FY2020 (+4.1%) was led by the contraction in services (to -8.4% from +7.2%) and industry (to -7.0% from +1.2%), along with a dip in the growth of agriculture, forestry and fishing (to +3.6% from +4.3%; refer Exhibit 3). Within the services sector, trade, hotels, transport, communication and services related to broadcasting (THTCS) witnessed a steep decline of 18.2% in FY2021 (+6.4% in FY2020), reflecting the severe impact of the pandemic on contact-intensive sectors such as tourism, recreation, etc. However, the YoY decline in the GVA for public administration, defence and other services (PADOS) was moderate at 4.6% in FY2021 (+8.3% in FY2020), followed by a mild 1.5% de-growth in GVA of financial, real estate and professional services (FRP: +7.3% in FY2020).

Within industry, the GVA of construction contracted by a sharp 8.6% in FY2021 (+1.0% in FY2020), followed by mining and quarrying (-8.5% in FY2021; -2.5% in FY2020), and manufacturing (-7.2%; -2.4%). Construction and manufacturing activities had been severely impacted by the restrictions imposed during the nationwide

lockdown in Q1 FY2021. In contrast, the GVA for electricity, gas, water supply, and other utility services grew by a mild 1.9% in FY2021, similar to the 2.1% rise in FY2020.

The provisional estimates pegged the contraction in nominal GDP and GVA for FY2021 at 3.0% each. With this, the nominal GDP for FY2021 was placed at Rs. 197.5 trillion as per the provisional estimates.

**YoY economic performance in Q1 FY2022:** The data released by the NSO has pegged the YoY expansion in GDP (at constant 2011-12 prices) and GVA in Q1 FY2022 at a record-high 20.1% and 18.8%, respectively (refer Exhibit 4). As anticipated, the distorted base of last year's stringent nationwide lockdown (-24.4% in Q1 FY2021) obscured the impact of the second wave of Covid-19 in Q1 FY2022 and led many components of the GDP and the GVA to display a record performance as well.

#### EXHIBIT 4: Growth of GDP and GVA and their Components (in %, Constant 2011-12 Prices, YoY)

	Q1 FY2021	Q2 FY2021	Q3 FY2021	Q4 FY2021	Q1 FY2022	FY2020 RE	FY2021 PE
Private Final Consumption Exp.	-26.2%	-11.2%	-2.8%	2.7%	19.3%	5.5%	-9.1%
Government Final Consumption Exp.	12.7%	-23.5%	-1.0%	28.3%	-4.8%	7.9%	2.9%
Exports	-21.8%	-2.0%	-3.5%	8.8%	39.1%	-3.3%	-4.7%
Imports	-40.9%	-17.9%	-5.0%	12.3%	60.2%	-0.8%	-13.6%
Gross Fixed Capital Formation	-46.6%	-8.6%	2.6%	10.9%	55.3%	5.4%	-10.8%
<b>GDP</b>	<b>-24.4%</b>	<b>-7.4%</b>	<b>0.5%</b>	<b>1.6%</b>	<b>20.1%</b>	<b>4.0%</b>	<b>-7.3%</b>
	Q1 FY2021	Q2 FY2021	Q3 FY2021	Q4 FY2021	Q1 FY2022	FY2020 RE	FY2021 PE
<b>Agriculture, Forestry &amp; Fishing</b>	<b>3.5%</b>	<b>3.0%</b>	<b>4.5%</b>	<b>3.1%</b>	<b>4.5%</b>	<b>4.3%</b>	<b>3.6%</b>
<b>Industry</b>	<b>-35.8%</b>	<b>-3.0%</b>	<b>2.9%</b>	<b>7.9%</b>	<b>46.1%</b>	<b>-1.2%</b>	<b>-7.0%</b>
Mining & Quarrying	-17.2%	-6.5%	-4.4%	-5.7%	18.6%	-2.5%	-8.5%
Manufacturing	-36.0%	-1.5%	1.7%	6.9%	49.6%	-2.4%	-7.2%
Electricity, gas, water supply & other utilities	-9.9%	2.3%	7.3%	9.1%	14.3%	2.1%	1.9%
Construction	-49.5%	-7.2%	6.5%	14.5%	68.3%	1.0%	-8.6%
<b>Services</b>	<b>-21.5%</b>	<b>-11.4%</b>	<b>-1.2%</b>	<b>1.5%</b>	<b>11.4%</b>	<b>7.2%</b>	<b>-8.4%</b>
Trade, Hotels, Transport, Communication & Services related to Broadcasting	-48.1%	-16.1%	-7.9%	-2.3%	34.3%	6.4%	-18.2%
Financial, Real Estate & Professional Services	-5.0%	-9.1%	6.7%	5.4%	3.7%	7.3%	-1.5%
Public Administration, Defence and Other Services	-10.2%	-9.2%	-2.2%	2.3%	5.8%	8.3%	-4.6%
<b>GVA at Basic Prices</b>	<b>-22.4%</b>	<b>-7.3%</b>	<b>1.0%</b>	<b>3.7%</b>	<b>18.8%</b>	<b>4.1%</b>	<b>-6.2%</b>

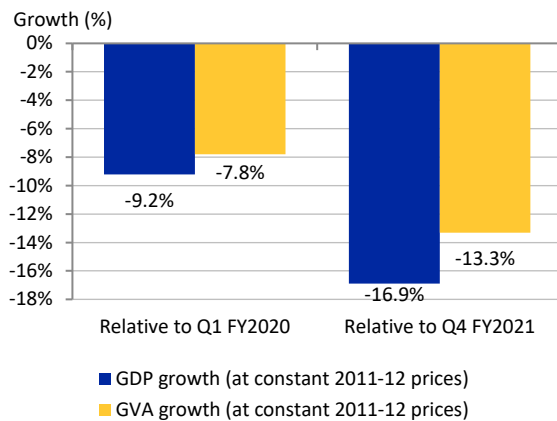
RE: Revised Estimates; PE: Provisional Estimates; **Source:** NSO; CEIC; ICRA Research

Nevertheless, the real GDP posted a considerable sequential slowdown of 16.9% over Q4 FY2021, trailing the pre-Covid level of Q1 FY2020 by 9.2% (refer Exhibit 5). Similarly, the GVA at basic prices dipped by 13.3% in Q1 FY2022, in sequential terms, while trailing the Q1 FY2020 performance by 7.8%. Net indirect taxes (taxes on products minus subsidies on products) expanded by 47.1% in Q1 FY2022, contributing to the higher YoY growth of GDP (+20.1%) relative to GVA (+18.8%).

On the expenditure side, PFCE, GFCF and exports powered the YoY GDP expansion in Q1 FY2022. Higher capital spending by the Centre and states, and an improvement in project announcement and completion, boosted investment activity by a sharp 55.3% on a YoY basis in the just-concluded quarter. While the Central Bank's consumer confidence survey had revealed a sombre trend in the wake of the second wave of Covid-19, resilient farm demand buffered private consumption to an extent in Q1 FY2022, resulting in a 19.3% growth in PFCE in that quarter. However, both PFCE and GFCF trailed their pre-Covid levels by 11.9%, and 17.1%. Moreover, the robust demand from major export destinations following the vaccine rollout boosted the YoY expansion in exports to 39.1% during Q1 FY2022. With a sharper growth in imports relative to exports in Q1 FY2022, net exports exerted a drag on the GDP of Rs. 0.6 trillion (in contrast to a surplus of Rs. 0.3 trillion in Q1 FY2021).

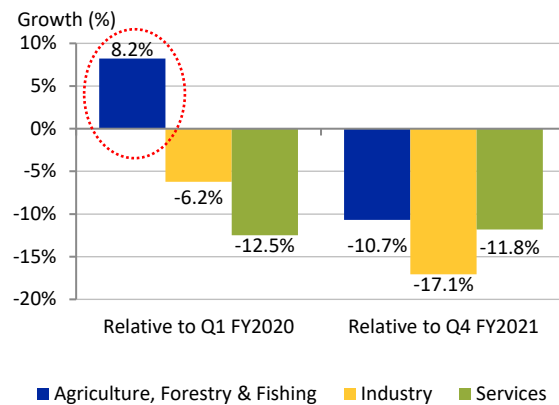
Additionally, exports rose above the pre-Covid level by 8.7%, even as imports trailed the same by 5.3%. In contrast, GFCE contracted by 4.8% in Q1 FY2022, emerging as a drag on the pace of GDP growth, even though it exceeded the pre-Covid level by 7.4%.

**EXHIBIT 5: Performance of GDP and GVA in Q1 FY2022, relative to Q4 FY2021 and Q1 FY2020 (pre-Covid)**



Source: NSO; CEIC; ICRA Research

**EXHIBIT 6: Sectoral performance in Q1 FY2022, relative to Q4 FY2021 and Q1 FY2020 (pre-Covid)**



Source: NSO; CEIC; ICRA Research

The YoY GVA expansion of 18.8% in Q1 FY2022 (-22.4% in Q1 FY2021) was driven the base-effect driven YoY growth of industry (+46.1% in Q1 FY2022) followed by services (+11.4%). Benefitting from the robust rabi harvest, the GVA in agriculture, forestry and fishing recorded a healthy 4.5% rise in Q1 FY2022. Excluding agriculture, the GVA expansion stood at a higher 21.9% in Q1 FY2022 (-26.4% in Q1 FY2021).

The healthy YoY growth in industrial GVA of 46.1% in Q1 FY2022 (-35.8% in Q1 FY2021) was driven by a sharp GVA expansion of construction (+68.3%) and manufacturing (+49.6%), with a relatively moderate rise in the GVA of mining and quarrying, and electricity, gas, water supply and other utility services at 18.6% and 14.3%, respectively. Relative to pre-Covid levels of Q1 FY2020, industrial GVA was 6.2% lower in Q1 FY2022 (refer Exhibit 6), driven by construction (-14.9%), followed by manufacturing (-4.2%) and mining and quarrying (-1.8%). In contrast, the GVA of electricity, gas, water supply and other utility services surpassed the pre-Covid performance by 3.0%.

The GVA growth of agriculture, forestry and fishing was pegged at 4.5% in Q1 FY2022 (+3.5% in Q1 FY2021), benefitting from the robust rabi harvest. Moreover, it exceeded the Q1 FY2020 level by a robust 8.2%, emerging as the only other sector (apart from electricity, gas, water supply and other utility services) with an improved performance, relative to pre-Covid levels.

The 11.4% YoY expansion in the GVA of the services sector during Q1 FY2022 (-21.5% in Q1 FY2021) on the back of muted base, was primarily on account of the GVA of THTCS, which rose by 34.3% in Q1 FY2022. However, the YoY expansion in the GVA of PADOS and FRP was modest at 5.8% and 3.7%, respectively, in Q1 FY2022. Relative to pre-Covid performance in Q1 FY2020, the GVA for THTCS was a sharp 30.2% lower in Q1 FY2022, reflecting the adverse impact of contact-intensive sectors from the pandemic. In contrast, the GVA of other two sectors, namely, FRP and PADOS, trailed their Q1 FY2020 levels by a modest 1.5% and 5.0%, respectively, in Q1 FY2022.

Overall, on the production side, only agriculture (+8.2%) and electricity (+3.0%) posted a higher GVA in real terms in Q1 FY2022, relative to their pre-Covid performance. The recovery was most delayed in the contact-intensive parts of the economy, such as trade, hotels, transport, communication and services related to broadcasting (-30.2%), as well as construction (-14.9%).



**Performance of Nominal GDP during Q1 FY2022:** In nominal terms, the GDP expanded by 31.7% in Q1 FY2022, while the GVA recorded a lower 26.5% growth in Q1 FY2022 (refer Exhibit 7). The GDP deflator surged to a series-high 11.6% in Q1 FY2022 from 7.1% in Q4 FY2021, while the GVA deflator rose modestly to 7.7% from 5.0%, respectively. This reflects the surge in the WPI inflation in Q1 FY2022 led by the double whammy of the low base of Q1 FY2021 and the prevailing rise in global commodity prices. Moreover, the CPI inflation recorded a broad-based uptrend in Q1 FY2022 amid domestic supply-side disruptions during the second Covid wave.

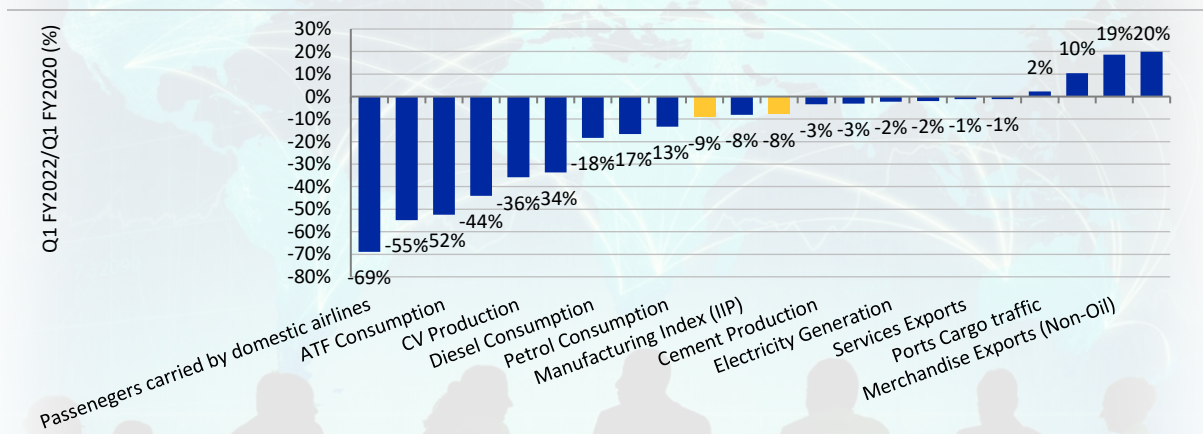
#### EXHIBIT 7: GDP and GVA data

GDP	Q1 FY2021	Q2 FY2021	Q3 FY2021	Q4 FY2021	Q1 FY2022	GVA at Basic Prices	Q1 FY2021	Q2 FY2021	Q3 FY2021	Q4 FY2021	Q1 FY2022
Constant	-24.4%	-7.4%	0.5%	1.6%	20.1%	Constant	-22.4%	-7.3%	1.0%	3.7%	18.8%
Current	-22.3%	-4.4%	5.2%	8.7%	31.7%	Current	-20.2%	-5.3%	4.3%	8.8%	26.5%
Deflator	2.1%	3.0%	4.8%	7.1%	11.6%	Deflator	2.2%	2.1%	3.3%	5.0%	7.7%

Source: NSO; CEIC; ICRA Research

**Volume performance of high frequency indicators in Q1 FY2022 relative to pre-Covid level:** While recording a double-digit YoY expansion, several non-financial indicators (domestic passenger traffic, vehicle registrations, CV and scooter production, fuel consumption, GST e-way bills, etc.; refer Exhibit 8) recorded a weaker volume performance in Q1 FY2022 relative to the pre-Covid level of Q1 FY2020, in line with the trend in the real GDP and the GVA. On the other hand, rail and port cargo traffic, and non-oil merchandise exports improved in Q1 FY2022, relative to Q1 FY2020, reflecting the robust trade with economic rebound in major trading nations, as well as improved efficiency in rail operations backed by tariff and non-tariff initiatives undertaken in August 2020. In addition, wholesale domestic tractor sales were a robust ~20% higher in Q1 FY2022, relative to Q1 FY2020, benefitting from the healthy cash flows of the farm segment given the favourable procurement of crops by the Government.

#### EXHIBIT 8: Growth in volume trends of economic indicators, as well as GDP and GVA at basic prices, in Q1 FY2022 compared to pre-Covid levels of Q1 FY2020



Source: NSO; CEIC; Society of Automobile Manufacturers (SIAM); CIL; Central Electricity Authority (CEA); Indian Ports Association; Ministry of Commerce; Goods and Services Tax Network (GSTN); Ministry of Petroleum & Natural Gas; Directorate General of Civil Aviation (DGCA); Petroleum Planning and Analysis Cell (PPAC); Indian Railways; Reserve Bank of India (RBI); Ministry of Road Transport and Highways; CEIC; ICRA research

## OUTLOOK

After a relatively delayed onset of sowing related to the heavy rainfall in June 2021, the lull in monsoon rains in July-August 2021 allowed sowing to pick up pace, with a mild YoY decline of 1.1% for the week ended Sep 3, 2021. Overall, nearly 97% of the 2020 kharif area had been covered as on Sep 3, 2021, and the acreage is a robust 5.0% higher than sowing in the same period of the 2019 season. However, the erratic rainfall with episodes of flooding in certain states, may not be supportive of a rise in yields.

By early September 2021, reservoir levels were substantially lower than the corresponding levels in the previous two years. Unless ample rainfall in September 2021 pushes up the reservoir storage, the outlook for the upcoming rabi crop would weaken to an extent. However, heavy rainfall this month may not be beneficial for the standing crops that were sown early.

We expect GVA growth of agriculture, forestry and fishing to be mild at 2.0% each over Q2-Q4 FY2022. Farm demand may remain buffered by the modest rise in Minimum Support Prices and the expectation of continued robust procurement. However, the loss of employment/income/remittances and rise in medical expenses following the higher incidence of Covid-19 cases in rural areas in the second wave is likely to constrain demand of the non-farm segment of the rural economy in H1 FY2022, with a gradual recovery in the subsequent quarters.

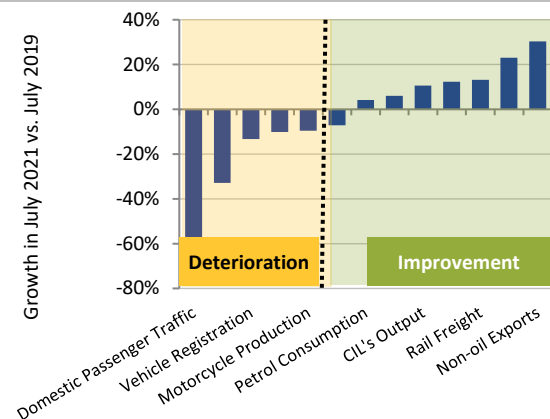
High frequency indicators suggest a deepening recovery in Q2 FY2022, driven by the easing of state-wise restrictions and growing confidence led by widening vaccination coverage. To gauge the strength of the recovery across sectors, we have compared the performance of indicators in July-August 2021 with the pre-Covid level of July-August 2019.

The volumes of seven of the 13 non-financial indicators rose above both their pre-Covid levels in July 2021 (refer Exhibit 9), including non-oil exports (+30.4%), GST e-way bills (+23.0%), rail freight traffic (+13.2%), passenger vehicle production (+12.3%), output of Coal India Limited (CIL; +10.6%), electricity generation (+6.1%) and petrol consumption (+4.2%). In contrast, domestic passenger traffic (-57.9%), scooter production (-32.8%), vehicle registration (-13.3%), diesel consumption (-10.2%), motorcycle production (-9.6%) and ports cargo traffic (-7.2%) recorded lower volumes in July 2021 relative to July 2019.

Moreover, a majority of the early high frequency indicators for August 2021 (refer Exhibit 10), displayed higher volumes compared to August 2019, including non-oil exports (+25.4%), GST e-way bills (+23.6%), CIL's output (+22.8%), rail freight traffic (+21.4%), electricity demand (+14.6%) and petrol sales (+4.1%). On the other hand, vehicle registrations (-14.7%) and diesel sales (-9.8%) displayed lower volumes in August 2021 relative to August 2019.

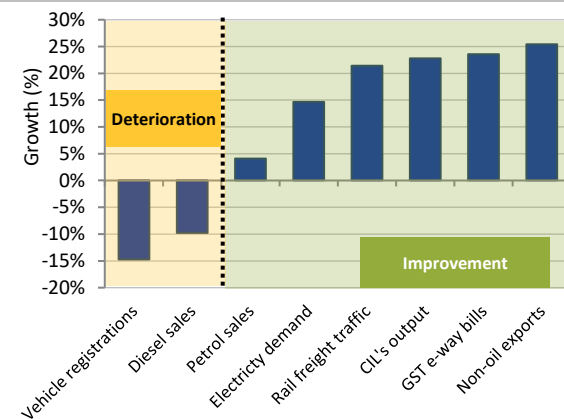


**EXHIBIT 9: YoY performance of economic indicators in July 2021 relative to July 2019 (pre-Covid levels)**



**Source:** SIAM; CIL; CEA; Ministry of Road Transport and Highways; Ministry of Commerce, GoI; Indian Ports Association; Indian Railways; GSTN; DGCA; PPAC; RBI; CEIC; ICRA Research

**EXHIBIT 10: YoY performance of economic indicators in Aug 2021 (available as on Sept 6, 2021) relative to Aug 2019 (pre-Covid levels)**



<sup>^</sup>Preliminary fuel sales data released by state refiners for Aug 2021; **Source:** Indian Railways; Ministry of Commerce, GoI; CIL; Vaahan portal; GSTN; PPAC; CEIC; ICRA Research

Despite the lifting of state-wise restrictions, the revenue and capital spending of the Government of India contracted by 23% and 28%, respectively, in the month of July 2021. With widening vaccine coverage, the contract-intensive services should witness sequential improvement in the remainder of this fiscal. **We expect GDP growth in the ongoing quarter to range between 7.5-8.5%, with the absolute level of GDP mildly trailing the pre-pandemic performance on account of a delayed recovery in the services sector.**

Subsequently, we expect real GDP to exceed the pre-pandemic levels in H2 FY2022. We are cautiously optimistic of a pick-up in consumer demand during the festive season, provided there is no major resurgence of Covid-19 cases domestically in the interim, and a back-ended revival in the contact-intensive services. Merchandise exports are expected to grow by 38% and surpass ~US\$400 billion in FY2022, benefitting the global vaccine-led revival, support from domestic production-linked incentive (PLI) scheme and elevated commodity prices; however, the Delta variant spread, and renewed lockdowns remain a risk. Services trade is expected to recover relatively moderately, with subdued cross-border tourism and business travel until the Delta variant spread and related curbs subside.

We expect the capacity utilisation to have declined to ~60% in Q1 FY2022, given the impact of the second Covid wave, before improving steadily in the next three quarters. Robust exports may boost capacity utilisation in export-oriented sectors, and other PLI-specific sectors such as steel, pharma, etc. are also likely to see a healthy performance. We anticipate broad-based capacity expansion once aggregate capacity utilisation exceeds 75%, which is likely in CY2022. Government spending should improve as revenues consolidate, especially on capital expenditure and infrastructure, with the latter benefitting from the recently announced National Monetisation Pipeline.

The Indian GDP is poised to grow by 8.5-9.5% in FY2022, with faster vaccine coverage to provide a back-ended upside. Regardless, a potential third wave, and whether the existing vaccines are able to protect against any new variant that might emerge, remain risks.

Subsequently, we expect the Indian GDP to expand by 7.5% in FY2023, with all the major drivers of aggregate demand, namely consumption, government spending, investment and exports projected to display a healthy performance as risks ebb following the widening coverage of Covid-19 vaccines.

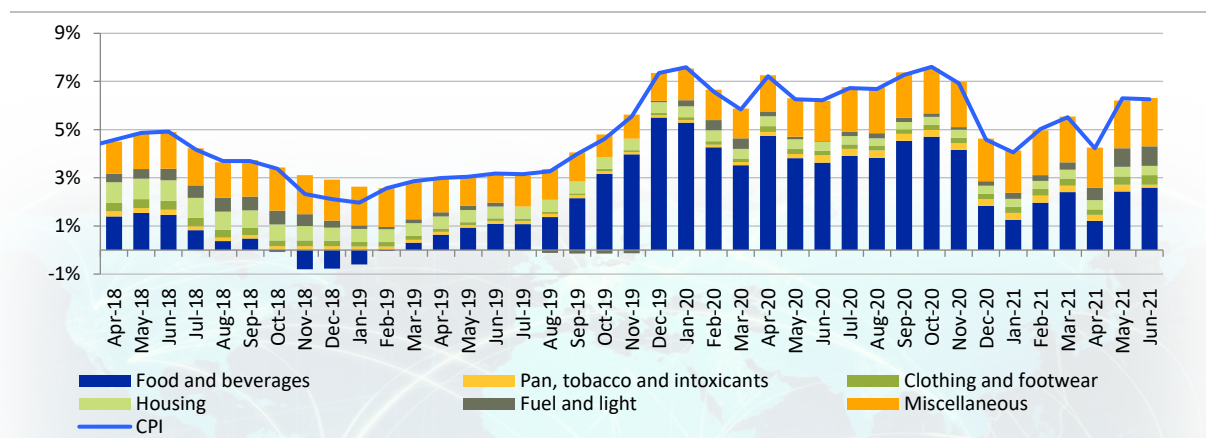


## Inflation

The CPI inflation in India increased significantly from 3.4% and 4.8%, respectively, in FY2019 and FY2020, to 6.2% in FY2021, rising above the upper threshold of the Monetary Policy Committee's (MPC's) medium term target band of 4%+/-2%, after a gap of six years, partly on account of supply-side issues related to the pandemic. The hardening in the CPI inflation in FY2021 relative to FY2020 had been driven by food and beverages (to +7.3% in FY2021 from +6.0% in FY2020), pan, tobacco and intoxicants (to +9.9% from +4.2%), along with a slight rise in the inflation for clothing and footwear (to +3.4% from +1.6%), fuel and light (to +2.7% from +1.3%), miscellaneous items (to +6.6% from +4.4%). However, the inflation eased during these two fiscals for housing (to +3.3% from +4.5%). Moreover, the core-CPI inflation (excluding food and beverages, and fuel and light) rose to 5.6% in FY2021 from 4.2% in FY2020. In quarterly trends, the YoY CPI inflation increased from 6.6% in Q1 FY2021 to 6.9% in Q2 FY2021, before easing to 6.4% in Q3 FY2021 and further to a six-quarter low 4.9% in Q4 FY2021.

In the recent months, the CPI inflation rose from 5.5% in March 2021 to 6.3% in June 2021, before easing to 5.6% in July 2021 (refer Exhibit 11). The considerable moderation in the YoY CPI inflation in July 2021 relative to June 2021 was partly driven by a base-effect led cooling in the inflation for food and beverages, and miscellaneous items, and a mild easing in the inflation for fuel and light. In contrast, the inflation rose between these months in the case of pan, tobacco and intoxicants, housing, and clothing and footwear.

**EXHIBIT 11: Composition of CPI Inflation (YoY)**



Source: NSO; CEIC; ICRA Research

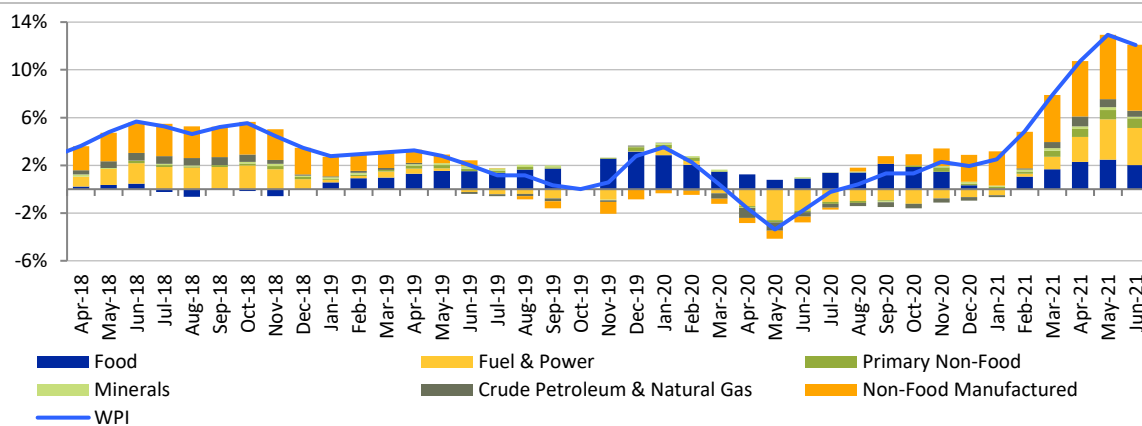
The Indian WPI inflation declined from 4.3% in FY2019 to 1.7% in FY2020, and further to a low 1.3% in FY2021, in contrast to the trend in the CPI. The softening in the WPI inflation in FY2021 relative to FY2020 was driven by the collapse in commodity prices following the onset of the pandemic, which resulted in a widening of disinflation in crude petroleum and natural gas (to -17.4% in FY2021 from -7.6% in FY2020), and fuel and power (to -8.0% from -1.8%). Moreover, the YoY inflation decreased in FY2021 relative to FY2020 for primary food articles (to +3.2% from +8.4%), primary non-food articles (to +1.3% from +4.6%) and minerals (to +6.8% from +13.2%). On the other hand, the YoY inflation increased for manufactured food products (to +5.6% from +4.1%), while the core-WPI increased by 2.2% in FY2021 in contrast to the 0.4% decline recorded in FY2020.

In quarterly trends, the WPI turned from a disinflation of 2.3% in Q1 FY2021 to an inflation of 0.5% in Q2 FY2021, which increased further to 1.9% in Q3 FY2021. Subsequently, the YoY WPI inflation surged to a 10-quarter high 4.9% in Q4 FY2021, reflecting the rise in global commodity prices fuelled by vaccine-driven optimism.

In the recent months, the WPI inflation rose from 7.9% in March 2021 to 13.1% in May 2021, reflecting the double-whammy of a low base and elevated commodity prices, before easing to 11.2% in July 2021 (refer Exhibit

12) as the uncertainty related to the spread of the Delta plus variant arrested the rise in global commodity prices. The softening in the YoY WPI inflation in July 2021 relative to June 2021, was led by minerals, fuel and power, primary food articles and to some extent, manufactured food products. In contrast, the inflation for primary non-food articles, crude petroleum and natural gas, and core-WPI hardened in July 2021 relative to the previous month.

**EXHIBIT 12: Composition of WPI Inflation (YoY)**



Source: Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India (Gol); CEIC; ICRA Research

**Inflation outlook:** We expect the CPI inflation for food and beverages to ease to 4.5% in FY2022 from 7.3% in FY2021, benefitting from the high base, healthy kharif sowing and recent supply-side measures taken by the Government of India for pulses and edible oils. However, as demand conditions firm up, we expect the core-CPI inflation to witness sustained MoM increases, resulting in prints in the range of 6.0-6.5% in H2 FY2022, relative to the average of ~5.8% in April-July FY2022. Overall, we expect the CPI inflation to average 5.5-5.7% in FY2022, close to the upper end of the Monetary Policy Committee's (MPC's) medium term target range of 2-6%.

In addition, we expect the core-WPI inflation to have peaked at 10.8% in July 2021. The rapid rise in the core-WPI inflation from August 2020 onwards as well as the impact of concerns related to the Delta plus variant on commodity prices are likely to gradually soften the core-WPI prints going ahead. The headline WPI inflation is expected to remain in double-digits until October 2021. We project the headline and the core-WPI inflation to average a high 9.2% and 8.7%, respectively, in FY2022 (+1.3% and +2.2%, respectively, in FY2021).

**MPC outlook:** In the August 2021 policy review, the six-member MPC voted unanimously to maintain the policy repo rate unchanged at 4.0%, in line with our anticipation. Looking ahead, the Committee anticipates that the revival of southwest monsoon, pickup in kharif sowing and adequate availability of food stocks should aid in controlling the cereal price pressures. Moreover, the supply-side interventions by the Government related to the changes in customs duty on pulses and oilseeds have contributed to softer prices in July 2021, as per the daily data provided by the Department of Consumer Affairs. However, the MPC cautioned that input prices are rising across the manufacturing and services sectors, although cost-cutting measures and subdued demand conditions are limiting the transmission into output prices.

**While the Q1 FY2022 GDP growth is mildly lower than the MPC's own forecast of 21.4%, the CPI inflation is expected to remain sticky during Q2-Q4 FY2022. As a result, we anticipate status quo until strengthening domestic demand replaces supply-side constraints as the key driver of inflationary pressures. We foresee a change in the stance to neutral from accommodative in the February 2022 Policy review, followed by a hike in the repo rate of 25 bps each in the April 2022 and June 2022 meetings. Once the lift-off starts, we believe that the MPC will stagger rate increases over a period of time, instead of immediately trying to push real interest rates back into the positive territory.**





# Financing Infrastructure



## Massive scale up of infrastructure investment in the offing in next five years; availability of long-term financing continues to remain a challenge

### Infrastructure Investment: Planned to be doubled in next five years

The Central Government has set an investment target in infrastructure of over Rs. 111 lakh crore during FY2020-FY2025 under the National Infrastructure Pipeline (NIP). Most of the targeted Rs. 111 lakh crore infrastructure investments are planned towards transportation, energy, and urban infrastructure. The planned NIP would translate into an average annual investment of Rs. 18.5 lakh crore, which is a significant increase from the pace of infrastructure investment of Rs. 10 lakh crore in FY2019. The NIP had projected infrastructure investment at Rs. 21.5 lakh crore in FY2021. While the target itself was ambitious, with the Covid-19 pandemic, achieving it has become almost improbable. Against the total infrastructure investment of Rs. 36 lakh crore in FY2020-FY2021, ICRA expects the actual investment of Rs. 22-25 lakh crore during this period. With a slower-than-projected start to the NIP, achieving the target would require a significant step-up in investments in the remaining four years (FY2022-FY2025) with average investment of over Rs. 21 lakh crore per annum. In the light of the huge funding requirements of the NIP, the importance of availability of adequate financing avenues for infrastructure becomes even more critical now.

The existing sources of financing would be able to meet 83–85% of the capital expenditure to be incurred between fiscals 2020 and 2025. The NIP task force recommends that a proportion of the financing gap could be met through establishing new DFIs and using asset monetisation as a tool to monetise operational assets by both the GoI and the states. Nevertheless, a shortfall of about 10% remains, financing for which is not certain as of now. The setting up of a new development finance institution (DFI) with an initial allocation of Rs. 20,000 crore in the recent budget is a positive. For meeting the increased credit requirement, it is crucial to augment the institutions providing credit to the sector. The new DFI would in turn be able to leverage and fund infra projects worth around Rs. 2 lakh crore (assuming D/E of 9:1). The target is to have a lending portfolio of at least Rs. 5 lakh crore for this DFI in three years. It may be recalled that 3-6% of the overall NIP is envisaged to be funded by the new DFI.

With lower economic growth due to the Covid pandemic, it will be a daunting task to meet the funding requirements, especially by the state governments. With reduced revenues, many state governments could resort to a lower-than-required infrastructure spending. This would put pressure on the Central Government which, in itself, is likely to face a stretched fiscal deficit position in the medium term. This is where higher participation from the private sector (PPP projects) becomes important. At the same time, as private developers' ability and appetite for fresh equity commitment towards infrastructure project could be weak in the near term, the National Investment and Infrastructure Fund (NIIF) can help in bridging this gap.

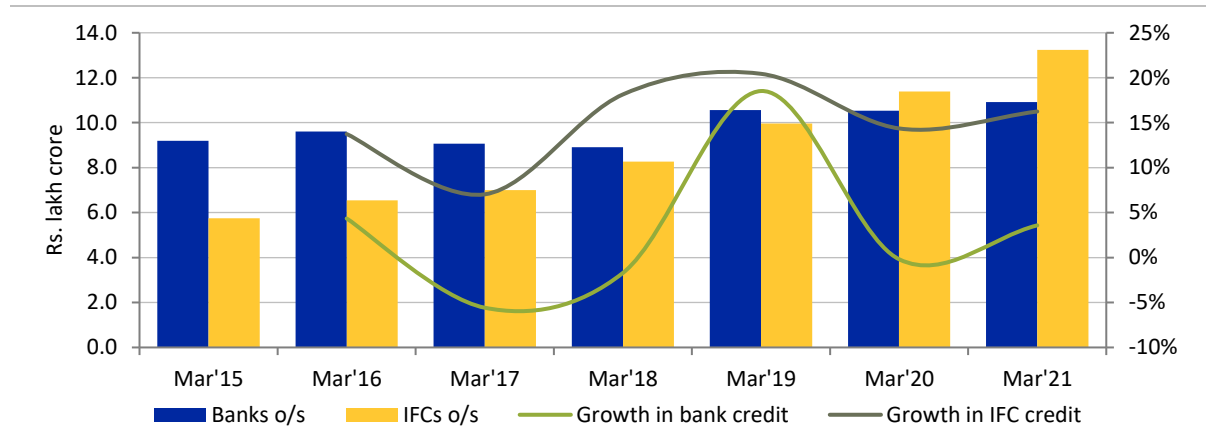
### Infrastructure credit dominated by banks and NBFC-IFC

The key sources of debt for the infrastructure sector in India are banks, non-banking financial companies (NBFCs), External Commercial Borrowings (ECB), Mutual Funds, Pension Funds, Insurance Funds, Capital/Corporate Bond market, etc. Banks and Public- Infrastructure Finance Companies (IFCs) remain the major players in the infrastructure credit market, though Private-IFCs have also become sizeable over the years. Given the nature of long-term funding requirements of the infrastructure sector, it is best suited to be financed by institutional investors which have matching long-term liabilities as well as risk appetite. At the current industry size, India's infrastructure credit penetration to GDP stood at ~11.1% as on March 31, 2020. Overall, infrastructure credit grew at a CAGR of 11% in period from FY2012 to FY2020 and further grew by 10% in FY2021

to Rs. 24.2 lakh crore as on March 31, 2021. Of this, banks have a share of 45% and infrastructure NBFCs (primarily public-infra finance companies like PFC, REC etc.) account for the remaining 55%.

**Banks:** The public-sector banks have been the major sources of infrastructure project financing in India. The credit to infrastructure sector from banks has increased sharply from Rs. 2.0 lakh crore as of Mar-2008, to Rs. 9.3 lakh crore as of Mar-2015. However, the outstanding bank credit to infrastructure has slowed down in the last few years due to increasing NPAs, and sector specific constraints. The total bank credit to the infrastructure sector stood at Rs. 10.9 lakh crore as of March-2021.

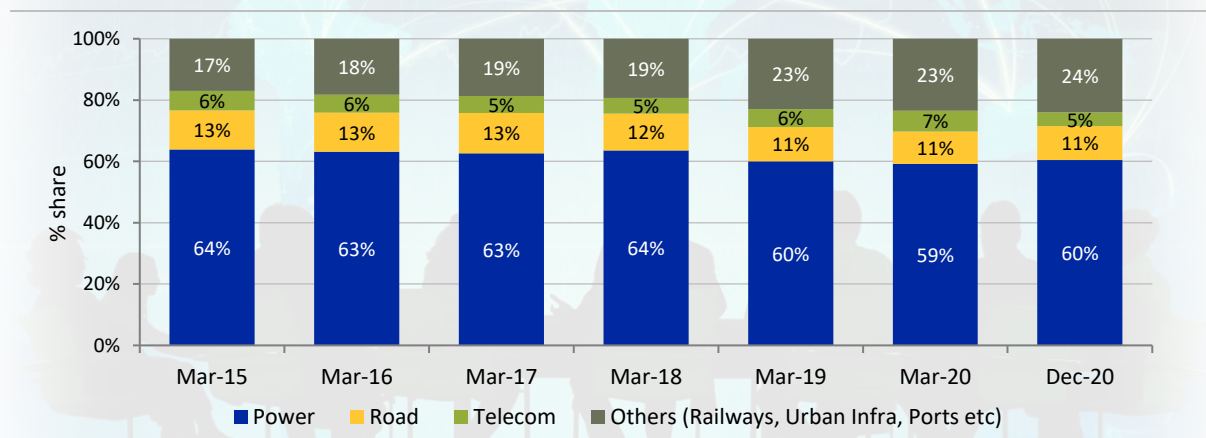
**Exhibit 1: Trend in Credit to Infrastructure from Banks and NBFCs**



Source: RBI, NBFC annual reports/Financial results, ICRA Research

**NBFCs:** Amongst the NBFCs, the IFCs which are dedicated for lending to infrastructure sectors (a minimum of 75% of total assets of IFCs should be deployed in infrastructure loans) also play a major role in providing credit to infrastructure entities. For the NBFCs lending to infrastructure, a majority is from PFC/REC, IRFC, IIFCL, HUDCO, IREDA, PTC, L&T Infra Finance. These are primarily sector-focussed IFCs with exposure and has been instrumental in supporting capex in infrastructure. While the banking credit growth has slowed down, credit from the NBFCs to the infrastructure sector has grown at a faster pace in the last five years as IFCs have continued to lend to the sector. The credit growth for NBFCs stood at 15% during F2016-FY2021 as against 3% for banks.

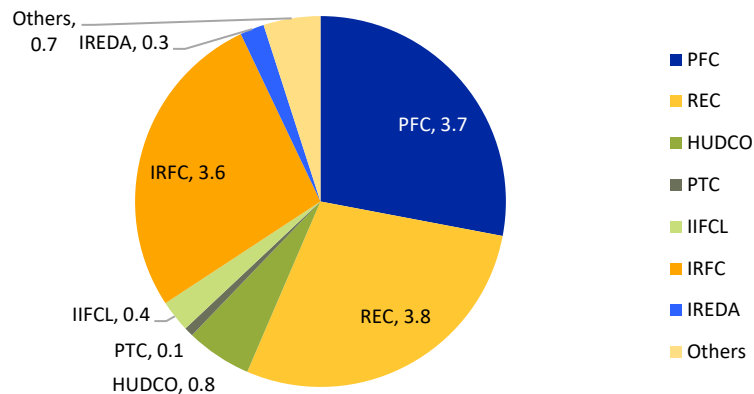
**Exhibit 2: Sector-wise break-up of infrastructure finance credit (including IDFs)**



Exposure to the power sector (including the renewable and transmission segments) continues to dominate the overall portfolio mix of banks and IFCs, accounting for 60% of their total loan books as on December 31, 2020. Other substantial exposures remain to the road (11%) and telecommunications (5%) sectors.

While there are multiple IFCs at the Centre's level, some states have also set up such development finance institutions (DFIs) for infrastructure development, though only some of these have been successful – the Tamil Nadu Urban Development Fund and Water and Sanitation Pooled Fund (Tamil Nadu), the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) and the Odisha Urban Infrastructure Development Fund (OUIDF). Hence, at the state level infrastructure investment is conducted through budgetary support, or through loans raised by state or state undertakings.

### Exhibit 3: Key IFC-NBFCs and their loan book as of Mar-2021



Amount in Rs. Lakh crore; Source: NBFC financial results, ICRA Research

**Other sources:** The other sources of debt-funding include the corporate bond market, ECBs, Infrastructure Debt Funds (IDF), etc. However, contribution of these remains low in the overall credit to the sector. Besides the above-mentioned sources, funding of some infrastructure projects is also from multilateral agencies like the World Bank, International Finance Corporation, the Asian Development Bank, Japan International Cooperation Agency, etc.

### Corporate bond market's role remains limited

The participation of corporate bond markets in financing infrastructure in India has been miniscule; however, for debt-refinancing, bond markets have played a significant role over the last few years, especially the operational projects, which opt for refinancing through this route. While the corporate bond market has grown considerably over the years, the depth still remains low with limited investors, and issuances dominated by financial institutions and public-sector entities. Further, the participation of the bond market in project financing in India has been very low due to the higher risk perception during the project implementation stage. The high-risk perception stems from the experience of implementation delays, cost overruns, and issues faced in stabilisation, for infrastructure projects. This, along with concentration on single asset cash flows, shorter debt tenure compared to the overall economic life of the project, unpredictable ramp-up periods etc constrain a project's credit rating. Some of the prominent investors like pension funds, insurance funds, which have long-term funds matching the long tenure requirement of infrastructure sector, are constrained by regulations to invest in lower-rated debt. The rating agencies have also devised a new expected loss-based credit rating system as per the guidance of the Department of Economic Affairs which focuses on the recovery prospects for lenders. IRDAI in January 2021 directed insurers to classify debt instruments issued by infra entities rated not less than 'A' along with an expected loss rating of 'EL1' as approved investments. However, this is yet to gain traction.

Overall, availability of long-term infrastructure financing continues to remain a challenge, given the twin problems faced by these lenders— asset-liability mismatch and increase in stressed assets.



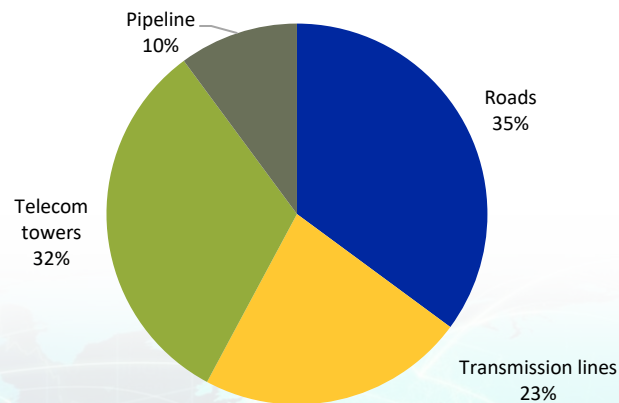
#### NIIF and InvITs can play an important role

NIIF has entered into MoUs with some large investors and has secured funding commitment both from the Government of India and other investors and is better placed to mobilise funds and invest in infrastructure assets. The Union Budget has also provided Rs. 1,000 crore capital towards the NIIF Infrastructure Debt Financing Platform which could be leveraged to provide debt funding to the sector. The NIIF debt platform is targeting to build a debt portfolio of Rs. 1 lakh crore by 2025 with the support of equity capital by the Government and the NIIF Strategic Opportunities Fund.

Infrastructure Investment Trust (InvITs) have shown the potential of channelising long-term capital (like pension and insurance funds) into the infrastructure sector.

So far, six developers viz. Sterlite Power, IRB Infra, L&T IDPL, Reliance, Oriental Structure Engineers and Powergrid have been able to monetise their assets through the InvIT platform and with a total unit holder capital of Rs. 680 billion. The total enterprise value of these assets is estimated at Rs.1.37 trillion. Roads has been the dominant asset class followed by telecom towers and transmission lines.

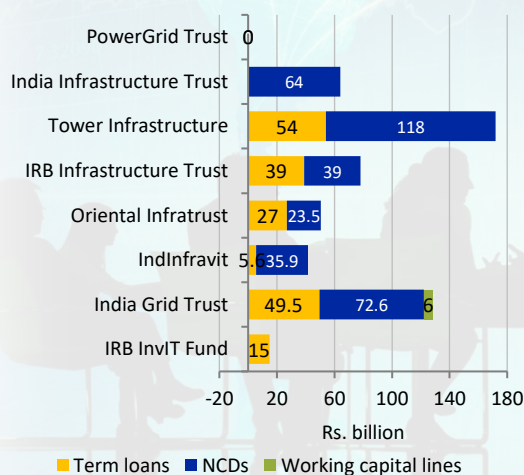
#### Exhibit 4: InvITs as per asset type



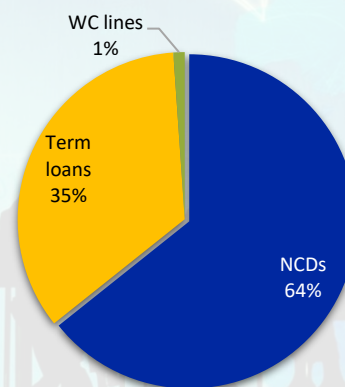
Source: ICRA research

#### Exhibit 5: InvIT debt issuances so far billion

##### External Debt outstanding in Rs.



##### Debt distribution instrument wise









Source: ICRA Research

Overall debt issuances from InvITs stood at Rs. 550 billion, and another Rs.95 billion is in the pipeline. Majority of this debt was through the NCD route at 64%, followed by term loans at 35% and the remaining is working capital debt. During the initial years of InvIT, majority of the debt raising happened at the SPV level as lenders wanted to stay closer to the assets. Over the years, lenders became more comfortable lending at the trust level. This is also reflected in the compression in the spread between borrowing rate of InvIT and 5-year G-sec yields over the years. Borrowing rate for a AAA rated InvIT used to be at a premium of more than 100 bps when compared to a AAA rated corporate till 2020, which is now almost at par. With the InvITs now recognised as borrowers under the SARFAESI Act, lenders to these trusts, shall have adequate statutory enforcement options, absence of which was earlier becoming a constraint to lend directly at the Trust level. Recent debt issuances happened at Trust level.

Insurance companies, mutual funds and pension funds have minimal presence in infrastructure. The InvITs are expected to see healthy traction in the near to medium term, supported by the track record of entities which have already floated such structures, enabling regulatory developments and focus on attracting investments into the infrastructure space. The Insurance Regulatory and Development Authority of India (IRDAI) has recently allowed insurers to invest in debt instruments of InvITs rated AA and above as a part of their approved investments, which evidences growing comfort of investors around such structures. The GoI, for its national monetisation pipeline, is also using these platforms for the NHAI, PowerGrid and GAIL among others. The NHAI and PowerGrid together are expected to monetise assets worth Rs. 25,000 crore through this route. The funds thus raised will be used towards funding new projects. Till date, assets worth Rs. 1.4 trillion have been floated through InvITs. The capital raising by InvITs is also aided by the favourable view that investors have taken on the long-term revenue generation potential of infrastructure assets in the country.

### Rs.2.5 trillion expected to be monetised through InvITs in next one year

	<b>Sponsors:</b> NHAI, Cube, Shrem, CDPO, Roadstar etc. <b>Pipeline:</b> ~Rs.345 bn in next one year and Rs. 400-500 bn in five years thereafter		<b>Sponsors:</b> GAIL <b>Pipeline:</b> ~Rs.60 bn in next one year
	<b>Sponsors:</b> Virescent Renewable, Tata Power, Vector Green etc. <b>Pipeline:</b> ~Rs.425 bn in next one year		<b>Sponsors:</b> Power Grid, Adani, Sterlite, Essel, Kalpataru etc. <b>Pipeline:</b> ~Rs.700 bn in next five years
	<b>Sponsors:</b> Digital Fibre Infrastructure Trust <b>Pipeline:</b> ~Rs.1758 bn in next one year		<b>Others:</b> Misc. Tower infra etc. <b>Pipeline:</b> Rs.50-100 bn in next five years

Source: ICRA Research





## Indian Financial markets – A Global View

A vibrant financial market plays an important role in the economic development of the country. The financial markets provide an intermediation to channelize the domestic and international resources for creation of productive assets for the growth of the economy.

While the domestic credit market largely remains driven by banks, on an incremental credit flow basis to the corporate sector, the debt capital market has seen a promising growth. Apart from domestic sources, Indian corporates have also increasingly tapped into the overseas market for commercial borrowing, though in the backdrop of the pandemic and competitive funding rates in domestic markets, the external commercial borrowings have seen a decline in FY2021.

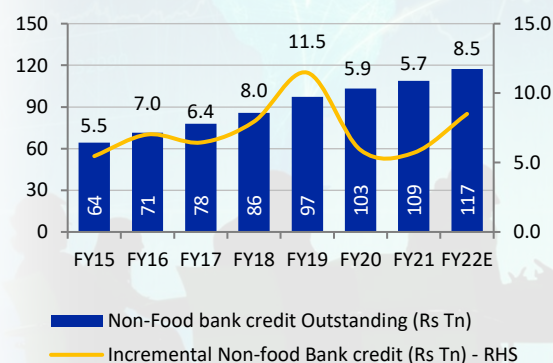
India's equity capital markets are relatively more developed with increasing participation from institutional as well as retail investors. The participation of foreign investors as well as assets under managements (AUMs) of Mutual Funds (MFs) has kept increasing at a healthy pace, providing more avenues for corporates to raise funds from the primary equity markets. This apart, foreign direct investments (FDI) has also been increasing steadily over the last years, providing domestic corporate sector with requisite equity capital funds.

### Indian Banking sector

**Banks continue to be largest provider of credit:** The Indian financial system includes banks, non-banking financial companies (NBFCs) and debt capital markets as the primary source of credit. Within these three sources, the banks are the primary institutions for providing credit with ~70% share in the overall credit supplied by banks and NBFCs.

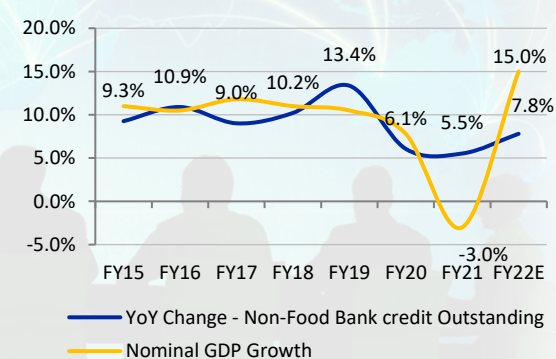
The non-food bank credit of the Indian banking sector rose by Rs. 5.70 trillion (exhibit 1) during FY2021 (YoY growth of 5.5%) and stood at Rs. 109 trillion as on March 31, 2021. The growth in the bank credit during recent years has been much lower than in the past and with the improvement in expected GDP growth during FY2022, the YoY bank credit growth is expected to improve to 7.8%. However, despite improvement, this is still likely to remain below the potential of 10-12% growth in bank credit because of muted credit demand from the industrial segment.

**EXHIBIT 1: Non-food Bank Credit Outstanding and Incremental Credit Growth**



Source: RBI, ICRA Research

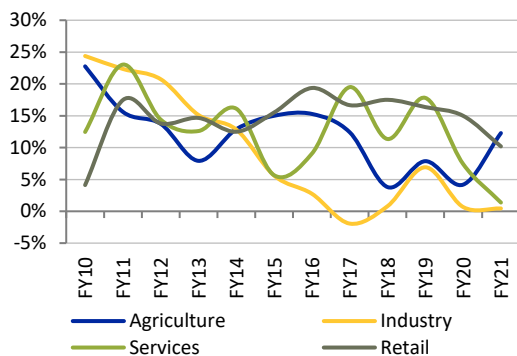
**EXHIBIT 2: Credit Growth to Improve in FY2022, But Still Remain Below the Desired Potential**



Source: RBI, ICRA Research

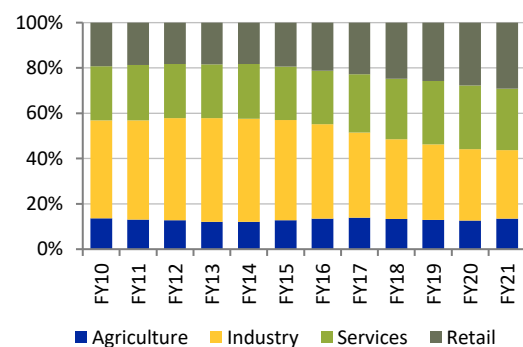
**Share of credit to corporate sector from banks has declined steadily:** The credit growth to the industrial segment had declined substantially from over 15% on YoY basis in FY2014 to a contraction in FY2017 and stood flat during FY2020 and FY2021 (Exhibit 3). With credit growth in other sectors such as retail, agriculture and services, the share of bank credit to the industrial segment has consistently been declining, reaching multi-year lows of 30% by March 2021, compared to 44% in March 2010 (Exhibit 4). The decline in share of credit to the industrial sector has been driven by a decline in credit demand from corporates for capital expenditure as well as the deleveraging exercise undertaken by corporates amid the slowing economic growth as well as reduced risk appetite of the lenders in the backdrop of rising non-performing advances in the sector.

**EXHIBIT 3: Non-food Bank Credit Outstanding and Incremental Credit Growth**



Source: RBI, ICRA Research

**EXHIBIT 4: Credit Growth to Improve in FY2022, But Still Remain Below the Desired Potential**

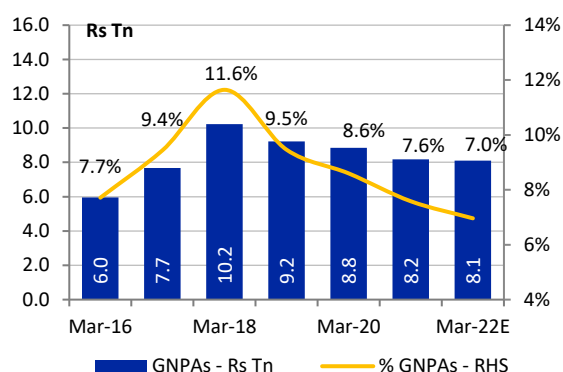


Source: RBI, ICRA Research

The credit growth to the services sector, which includes credit to the trading sector, non-banking finance companies (NBFCs) also has been on a decline during FY2020 and FY2021, driven by slower growth for NBFCs. The credit growth of NBFCs, however, was high in FY2019 as many of the NBFCs shifted from the debt capital market to banks for their funding requirements as debt investors became risk averse after default by few large NBFCs. Moreover, with high growth in the NBFC sector in the past, the banks' exposure to the NBFCs has also risen to 8-9% of bank credit in FY2021 from 4% at the end of FY2017.

**Credit growth likely to improve in FY2022, however, revival of corporate demand critical for higher credit growth:** While slowing growth of industrial and services segment has resulted in an overall decline in credit growth in FY2020, the impact of Covid-19 also impacted the growth of the retail credit in FY2021, which otherwise was growing at a healthy pace of 15-18%, prior to the pandemic. Despite the second wave of Covid during Q1 FY2022, ICRA expects credit growth to improve in FY2022 because of better ability of borrowers to assess the impact on cash flows in the absence of a moratorium on debt servicing as was announced in the first wave. However, the credit growth of 10-12% or higher is likely to be achieved only when the corporate credit demand starts picking up. The capacity expansion cycle in major capital-intensive sectors like power, steel, roads, ports, hotels, healthcare etc. will be the key to growth in credit demand, which in turn will be driven by sustained recovery in demand. The promoters have also become risk-averse and have been on a deleveraging spree after they saw loss of control of their companies driven by lenders regaining control under insolvency and bankruptcy code 2016. Improved risk appetite of corporates / promoters will also be critical for the growth in demand for credit from the corporate sector.

**High NPA levels in corporate sector increases risk aversion of lenders:** The banking sector has gone through a severe asset quality pain since FY2016, which was largely driven by the stress in asset quality of the corporate segment.

**EXHIBIT 5: Gross NPAs of the Banking sector**


Source: Aggregate of 13 PSBs (including IDBI Bank) and 18 private banks, ICRA Research

As can be seen from Exhibit 5, the gross NPAs for the banking sector increased sharply to 11.6% by March 2018. Within the corporate sector, the infrastructure segment, such as roads, thermal power plants and telecom were the key sources of stress for banks. This apart, the metal sector, especially steel also added to the stress for the banking sector. Apart from the time and cost-overruns, the slowing economic growth, changes in policy environment were also some of the factors for stress in these sectors.

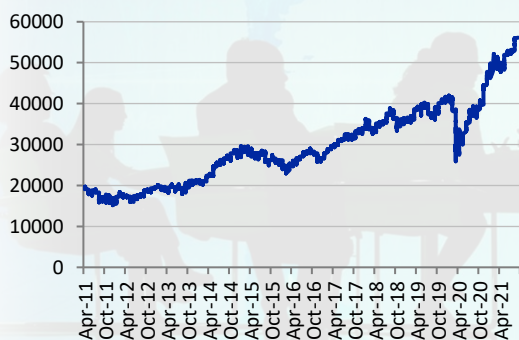
While it appears that the asset quality pressure from the corporate sector is largely over by the end of FY2020, the Covid-19 induced stress on retail asset quality of and the MSME segment has continued to inflict some stress on banks.

Despite the elevated stress on asset quality, on the positive side, the banks have aggressively made provisions on their legacy stressed loan portfolios and hence are well-positioned to absorb the incremental asset quality stress from their operating profits. Unlike five consecutive years of losses (FY2016-2020), public banks reported profitable operations for the first time in FY2021, which is expected to continue in the coming years.

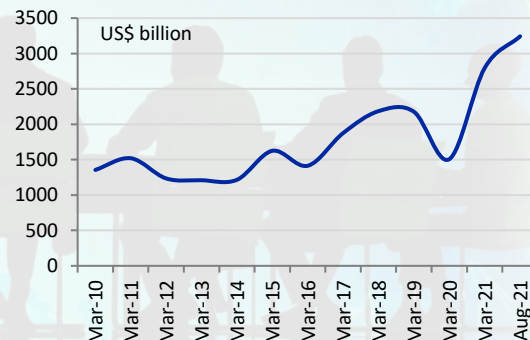
Despite a steady increase in the share of private banks in the banking system, the public banks still account for 2/3<sup>rd</sup> of bank credit. With consolidation of public banks and their better capital position, these banks are relatively better placed to push for credit growth and will be the key to supplying bank credit as and when the demand rebounds.

## Equity capital markets

**India's equity capital markets are among the largest in world:** The Indian equity capital markets witnessed a remarkable performance from the recent lows witnessed after the nationwide lockdown announced post Covid-19 in March 2020. The Indian equity markets delivered more than 100% returns since then and have more than doubled with market capitalisation of over US\$3.2 trillion in August 2021 compared to US\$1.5 trillion March 2020 (refer Exhibit 6 and 7).

**EXHIBIT 6: BSE Sensex**


Source: BSE

**EXHIBIT 7: Market capitalisation of Indian stock market**


Source: BSE, ICRA Research



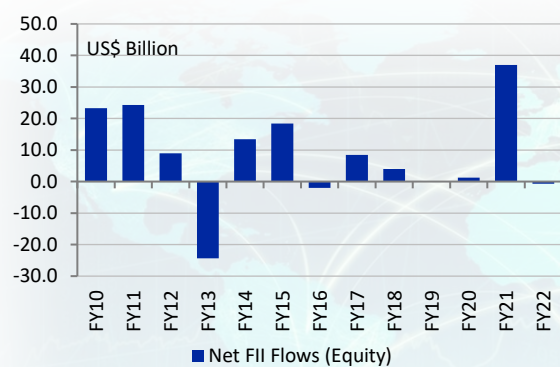
India's equity capital markets are one of the most well-developed being among the top 10 exchanges in the world in terms of market capitalisation. Though the share of informal sector in the overall GDP of the India is high at over 50%, however, the market capitalisation of India is estimated to be over 115% with the recent rally in the equity markets (10-year average of 79%). According to World Bank data for 2019, the market capitalisation to GDP on an average stood at 114% compared to 99% for India, 83% for China and 158% for the United States and hence despite a high share of informal sector, the market capitalisation of India compares well with many developing and developed countries.

The key sectors which constitute the major portion of the market capitalisation includes the financial sector (banks), information and technology companies, the oil & gas sector, the fast-moving consumer goods sector, automobiles sector and the building material sector.

**Increased retail participation helps counterbalance the high influence of FII flows on equity markets:** While foreign investors continue to have a dominant share of holding in India's equity capital market at ~18% (Exhibit 9) of the overall market capitalisation of India's equity capital market, the share of retail investors has steadily increased during the last decade through increased direct and indirect participation through MFs. The direct and indirect participation of the retail segment is estimated to be over 15% of India's market capitalisation.

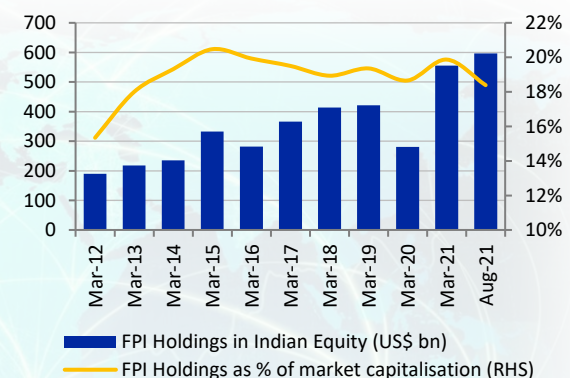
Historically, the trend in FII flows have determined the directions for the markets in India's stock exchanges, however, with increasing retail participation in equities, the retail investors have been a strong counterbalancing force for the FII flows. This is also reflected in trends during FY2022, whereby on an on-a-net basis, the FII flows have remained negative for the year, however, the market indices continue to reach an all-time high, driven by increased retail participation.

**EXHIBIT 8: FII flows in the equity segment**



Source: NSDL, ICRA Research

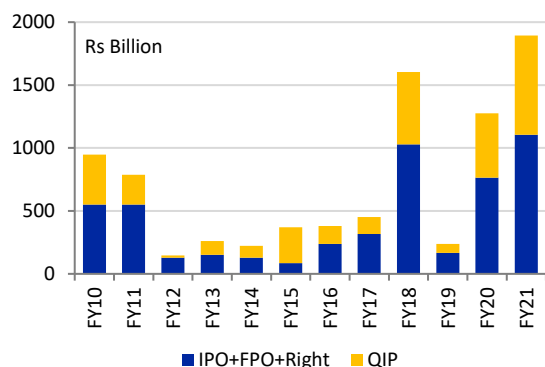
**EXHIBIT 9: Share of FII holding in India's equity markets**



Source: BSE, ICRA Research

During the last decade (FY2012-FY2021), the FII flows in the India's equity markets stood at US\$65 billion of which more than 50% or US\$37 billion was received during FY2021. The currency (INR) and the global interest rate environment / liquidity plays a very important role in determining the direction of FII flows. After witnessing a steep outflow in FY2014 following the taper tantrums, the FII flows were positive in FY2014 and FY2015, as the hopes from the new Union Government for driving strong economic growth attracted FII flows. Thereafter the inflows remained muted and turned positive in FY2017 as the formalisation of the Indian economy, led by demonetisation, rekindled the hopes of an economic growth. Thereafter slowing economic growth led to muted FII flows in subsequent years. The onset of the pandemic resulted in huge liquidity injection by various central banks across world with near zero interest rate environment across most of the countries, thereby resulting in a surge in FII flows during FY2021.

### EXHIBIT 10: Equity Capital Raise Through primary markets



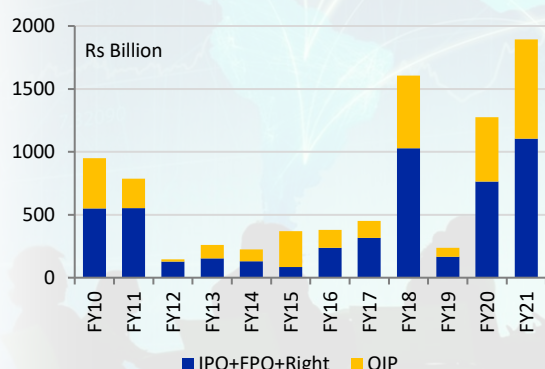
Source: Prime database, ICRA Research

Many of the banks and non-banks raised capital to strengthen their balance sheets as the uncertainty on asset quality for lenders increased. Similarly, some corporates also raise capital to offset the cash losses seen in sectors such as hospitality, retail, entertainment, and travel.

Unlike the past, the recent IPOs have also been driven by relatively higher share of offer for sale by exiting investors at the record-high levels for the capital markets. Strong investor sentiments provide a good opportunity to the early stage private equity investors to exit at attractive valuations.

Apart from the equity, the monetisation of assets through investment trusts with rent-yielding commercial real estate or steady cash generating infrastructure assets have also become an attractive vehicle for the corporates and investors to raise capital and partially monetise their investments. The REITs and InvITs have raised ~US\$10 billion during the last few years and have been one of the key drivers of the primary capital raise during the last few years. With a national monetisation pipeline of US\$80 billion planned for FY2022-25, we can expect increased activity in the InvITs space in the coming years.

### EXHIBIT 11: Foreign Direct Investments



**FDI significantly higher than the FII inflows:** Unlike the relatively muted FII flows, the foreign direct investment (FDI) equity inflows have remained strong with inflows of US\$320 billion during the last seven years (FY2015-FY2021) (Exhibit 11). The FDI equity investments during the last 21 years (FY2001-FY2021) stood at US\$530 billion of which ~60% was received during the last seven years, reflecting the significant liberalisation of investment policies and limits by the Government of India across various sectors.

This apart, an improvement in the Ease of Doing Business rankings from 142<sup>nd</sup> position in 2014 to 63<sup>rd</sup> position in 2020 also aided the FDI flows into the country. Being more stable than FII flows, fresh inflow of money for primary investments, the FDI inflows are relatively a more preferred source of long-term capital for investments into the economy.

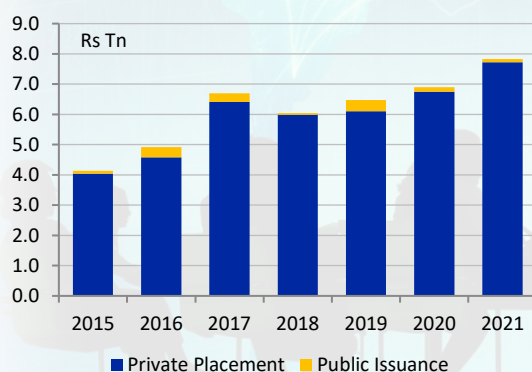
The services sector, including banks, insurance and other services segments have been the largest recipient of the FDI at US\$87 billion or ~16.5% share in overall FDI inflows. After the services sector, the information technology companies accounted for US\$71 billion of FDI inflows or 13.4% of the overall FDI inflows. The telecom sector saw inflows of US\$38 billion or 7.1% of the total FDI inflows into the country. Cumulatively, these three sectors accounted for almost 1/3<sup>rd</sup> of the FDI inflows into the country during the last two decades. With launch of the production-linked incentive (PLI) scheme, the FDI inflows into the manufacturing sector can be expected to increase, apart from the continued inflows in the services sector, driven by inflows in the start-ups and the insurance sector.

## Debt Capital Markets

**India's corporate debt market is relatively smaller because of higher dominance of banks:** Unlike the equity capital market, which has market capitalisation of over US\$3.2 trillion, the value of corporate debt outstanding is estimated to be relatively lower at US\$0.48 trillion (Rs. 36 trillion) (Exhibit 13). At Rs. 36 trillion, the corporate bond market is smaller than Rs 54 trillion of bank credit to the industrial and the services segment. The annual debt issuance has largely remained steady at Rs. 6-7 trillion during the last few years, even though these touched an all-time high of over Rs. 7.7 trillion FY2021 in a year of pandemic (Exhibit 12). The growth in debt issuance during FY2021 was driven by huge liquidity surplus conditions in the domestic financial markets, which in turn was driven by policy interventions in the backdrop of the pandemic. Apart from surplus liquidity conditions, which resulted in a sharp decline in bond yields, the policy measures to support the bond-issuance like targeted long-term repo operations (TLTRP) and partial credit guarantee (PCG) scheme also supported the bond issuances in FY2021.

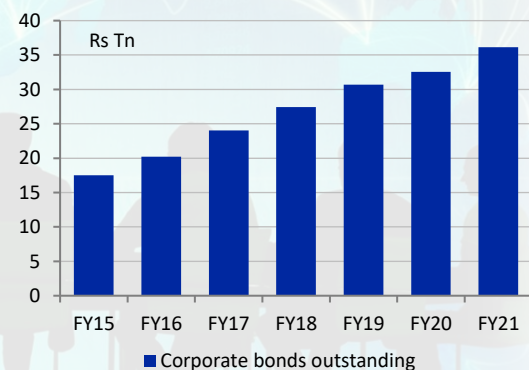
**Debt capital markets are largely skewed towards high rated issuers:** Despite a huge growth in equity market capitalisation, the value of corporate debt capital market remains relatively small as banks continue to remain as key suppliers of credit in the economy. The lending rates of the banks for the borrowers in *A category and below* remain much more competitive, compared to the lending rates in the debt capital markets and hence most of the borrowers in these categories continue to rely on banks for their borrowings. Because of the investment guidelines for various investors or their preference to invest in highly rated papers, the debt capital market is largely skewed towards the issuers, who are rated in the AAA and AA rating category. As a result, the borrowing rates for these borrowers, from the debt capital markets, are relatively more competitive than bank credit.

**EXHIBIT 12: Corporate bond issuance**



Source: SEBI, ICRA Research

**EXHIBIT 13: Corporate bond outstanding**



Source: SEBI, ICRA Research



Various regulatory measures to develop the corporate bonds markets have largely resulted in relatively smaller gains than initially anticipated as the investors in this segment continue to remain risk averse. The relatively slower resolution process upon a default and low recoveries from the resolution process have also been a deterrent for the investors, thereby limiting their preference to highly rated borrowers. As per ICRA's estimates more than 85% of the bond issuances in value terms are from the issuers rated in the AAA and the AA category, thereby reflecting limited preference of investors for bonds in the lower rating category.

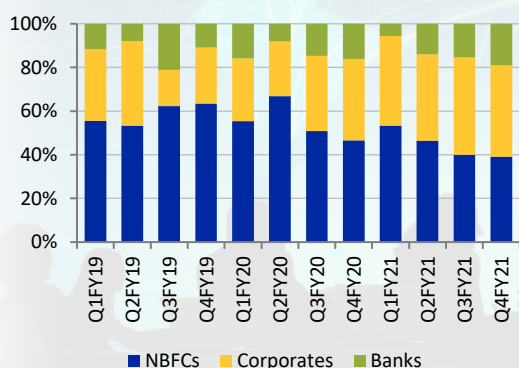
**Liquidity in the corporate bond market is still low:** This apart, unlike the highly liquid equity capital markets, the domestic bond market continues to remain illiquid despite the growing secondary market volumes in the debt capital market. This is also because of the typical characteristics of the market, which is largely skewed towards private placement of debt, which entails a limited set of institutional investors during the primary issue, which then tends to hold these papers till maturity. While the electronic book-building platform (EBP) for private placements has been introduced for private placement of debt, smaller issuance size, limited size of issuance under a particular ISIN, also limit the liquidity in debt market.

The banks which mobilise the largest pool of domestic savings continue to prefer the loan structure than a bond structure for disbursing the credit. In contrast to bank loans, the bonds require a mark to market system which could result in losses for banks in a scenario of upward movement in bond yields.

**NBFCs have typically remained the largest issuer segment, however share of public sector in overall issuances on the rise:** Within the issuer segment, as seen in Exhibit 14, the NBFCs (including housing finance companies – HFCs) have remained the largest issuers in the debt capital markets. However, with recent defaults by a few high-rated private sector NBFCs, the risk appetite for the investors towards the NBFC segment has declined, which can be seen in a steady decline issuance from the NBFC sector and a decline in issuance from the private sector (Exhibit 15).

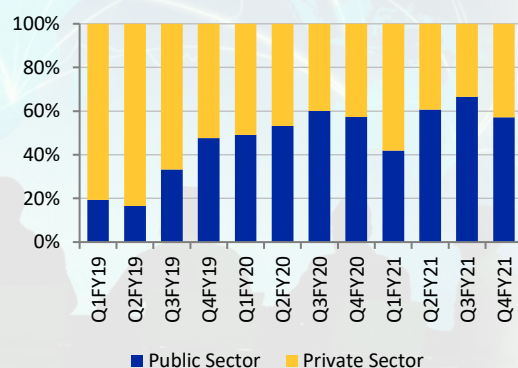
The NBFC sector has largely relied on banks and debt capital market for their liability funding and with increased risk aversion of debt investors, these NBFCs have largely relied on bank funding in the last three years (FY2018-FY2020). With the onset of Covid-19 and relatively higher presence of NBFCs in the retail and the MSME sector, the NBFCs have also curtailed their growth, thereby limiting their incremental funding requirements. Further, portfolio buyouts and co-lending have been gaining more traction as a funding source for NBFCs, thereby limiting their on-balance sheet funding requirements, thereby driving muted issuances from the sector.

**EXHIBIT 14: Mix of corporate bond issuance**



Source: Bloomberg, ICRA Research

**EXHIBIT 15: Mix of corporate bond-issuance**



Source: Bloomberg, ICRA Research

The share of issuances from the corporate sector, however, witnessed an improving trend in FY2021 as many better-rated corporates, which otherwise rely on external commercial borrowings, shifted to domestic debt

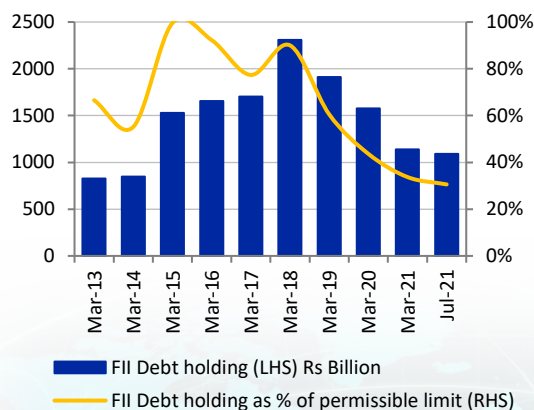
capital markets for their funding requirements. This was driven by the surplus liquidity conditions and consequent low interest rates domestically, which prompted them to raise debt capital domestically.

Because of the lack of liquidity in the secondary markets and a huge volatility in interest rates, most investors do not prefer long-tenure bonds to avoid liquidity and interest rate risks. As a result, more than 80% of the issuances are skewed towards 3-5 years maturity and largely on fixed rate structures. With expectations of rising interest rates during FY2022-2023, the floating rate structures are likely to increase, however, market preference continues to tilt towards fixed rates.

#### FII holding in debt minuscule in relation to Indian equities and has been declining steadily over last few years:

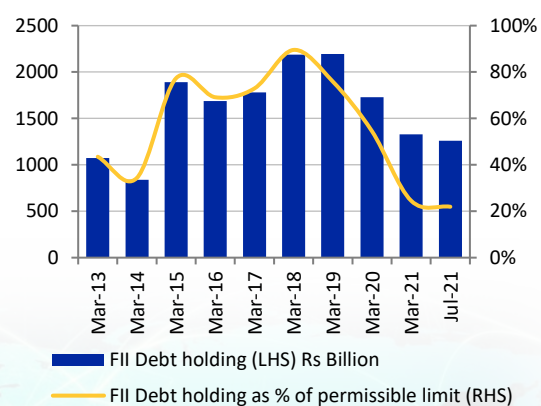
In contrast to the huge participation of FIIs in the equity capital markets with holding of over US\$550 billion, the FII investments in the debt capital market remain minuscule and has been declining over the last few years. The FII holding in the Indian Government bonds stands at US\$15 billion and that for the corporate debt at US\$17 billion, thereby totalling the FII investments in bonds to US\$32 billion only.

**EXHIBIT 16: FII debt holding in Central Government Bonds**



Source: NSDL, ICRA Research

**EXHIBIT 17: FII debt holding in Corporate Bonds**



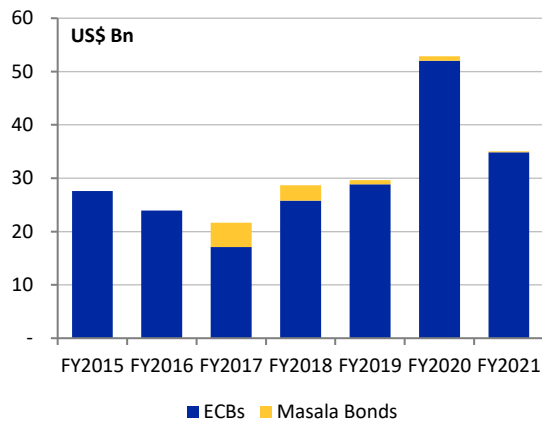
Source: NSDL, ICRA Research

The FII participation in the corporate debt was gradually rising after a sell-off in FY2014, following the taper tantrums. The stable outlook on the currency and attractive yields resulted in improved FII inflows in the debt market, resulting in increased FII holdings in both Government and corporate bonds till March 2018. As the FII flows are subject to investment limits to prevent volatility in interest rates as well as currency, the FII investment limits almost got fully utilised during the year FY2018.

**Steady decline in debt holding of FIIs:** To address the constraints of FII flows in debt securities, the RBI announced a medium-term framework for FII for their investments in Government and corporate bonds. The investment limits were made dynamic and linked to the stock of bonds outstanding with half yearly revision based on the stock of outstanding bonds. The limits for FII investments in Central Government bonds was gradually increased to 6% of the outstanding stock, 2% of outstanding stock for the state Government bonds and 15% of the outstanding stock for corporate bonds. As a result of steady growth in the volume of bonds outstanding, the permissible limits stand revised upwards, however, this has not attracted the FII flows.

From a peak level holding of Rs 2.4 trillion of Government bonds in January 2018 and Rs. 2.3 trillion of corporate bonds in August 2017, the FII holdings in these segments have declined to Rs. 1.1 trillion and Rs. 1.3 trillion respectively in August 2021. Even though the yield on Indian debt remains attractive when compared to the zero or negative interest rate environment globally, the depreciation of the INR and wider expectations of rise in bond yields in the coming quarters have dampened the investor sentiment in the INR-denominated bonds.

### EXHIBIT 18: External Commercial Borrowings - Approvals



Source: RBI, ICRA Research

**Foreign currency-denominated external commercial borrowings larger than FII holding of Indian Debt** As against FII holding of ~US\$17 billion in the on-shore INR-denominated corporate debt, the domestic corporates have been raising US\$20-30 billion annually through off-shore external commercial borrowings (ECBs) (exhibit 18). To address the currency risk for Indian corporates borrowing overseas, the RBI also allowed Indian corporates to raise INR-denominated bonds in the offshore markets, popularly known as *Masala bonds*.

However, after the initial traction seen during FY2017 and FY2018 in masala bonds, which was also driven by strong INR movement against the USD, the masala bonds failed to be a popular instrument for raising ECBs. As the currency risk in masala bonds is borne by the investor, steep depreciation of the INR reduced the popularity of this instrument among the investors.

Within the overall ECBs, onward lending dominates the overall borrowings and the borrowings with almost 25-30% of overall ECBs being raised for this purpose. This apart, capital expenditure for domestic as well as imported capital goods accounts for the second largest purpose of ECBs. With risk aversion of domestic banks to NBFCs and tighter liquidity conditions prior to onset of Covid, the borrowings of domestic NBFCs through the ECB route expanded in FY2020, resulting in sharp growth in ECB to over US\$50 billion. However, with improved liquidity conditions and decline in domestic funding costs, the share of the ECBs declined in FY2021. The ECB volumes are likely to see an upward trend in FY2022 and could marginally increase to US\$35-40 billion (US\$35 billion in FY2021), driven by increased issuances of additional tier I bonds by commercial banks.





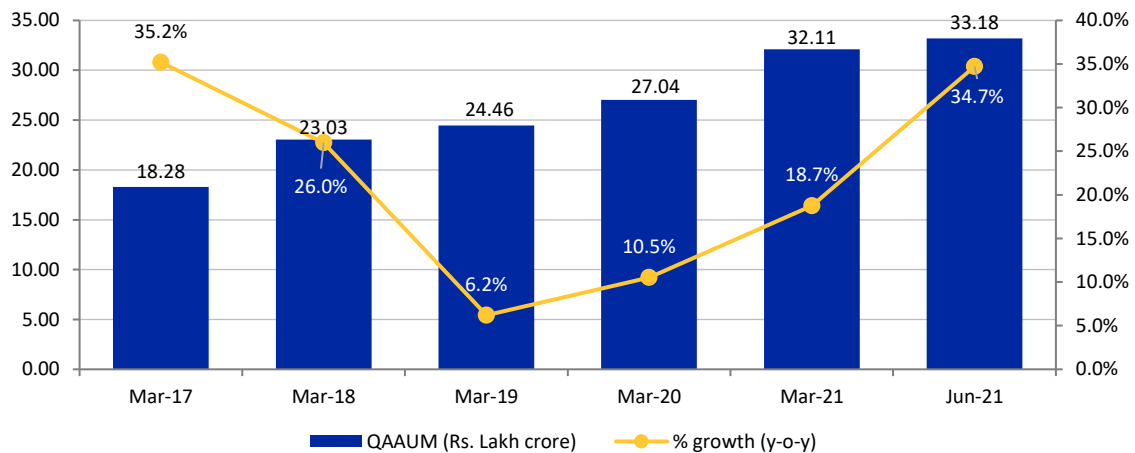
# Mutual Funds

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## Mutual funds – Growth in AUM and segment-wise AUM

**Exhibit 1: Trend in the Quarterly Average Assets under Management**

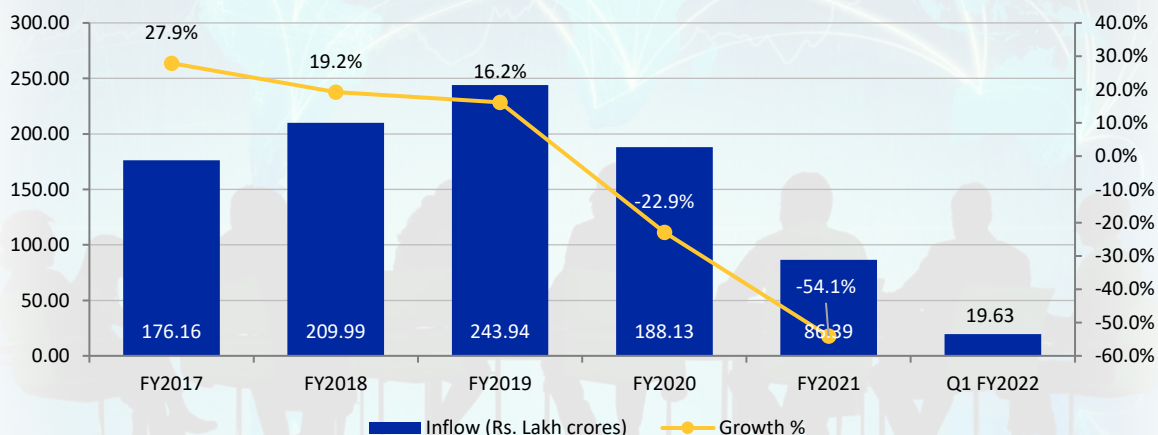


Source: AMFI, ICRA Research

The AUM of the mutual fund industry has steadily increased over the past five years with the Quarterly Average Assets under Management (QAAUM) increasing to Rs. 32.11 lakh crore in quarter ending March 2021 with a 5-year CAGR of 18.9%. Despite the Covid-19 pandemic, the growth remained steady and crossed the Rs. 30 lakh crore mark in FY2021. The QAAUM further increased by 35% in Q1 FY2022 to Rs. 33.18 lakh crore. The growth in AUM over the years has been supported by increased investor awareness, strong equity market performance and favourable macro-economic environment.

The fresh investment for the industry was lower in FY2021 at Rs. 86.39 lakh crore compared to Rs. 188.13 lakh crore in FY2020. Adjusting for redemptions, however, the net inflows stood at 2.15 lakh crore, higher than Rs. 0.87 lakh crore in FY2020, largely due to the net inflows of Rs. 1.96 lakh crore in the debt schemes. The redemptions have been high for equity-oriented schemes as investors looked to book profits on account of the double-digit returns resulting in net outflows of Rs. 0.39 lakh crore.

**Exhibit 2: Trend in the Inflows**



Source: AMFI, ICRA Research

### Exhibit 3: Segment-wise Net Inflows

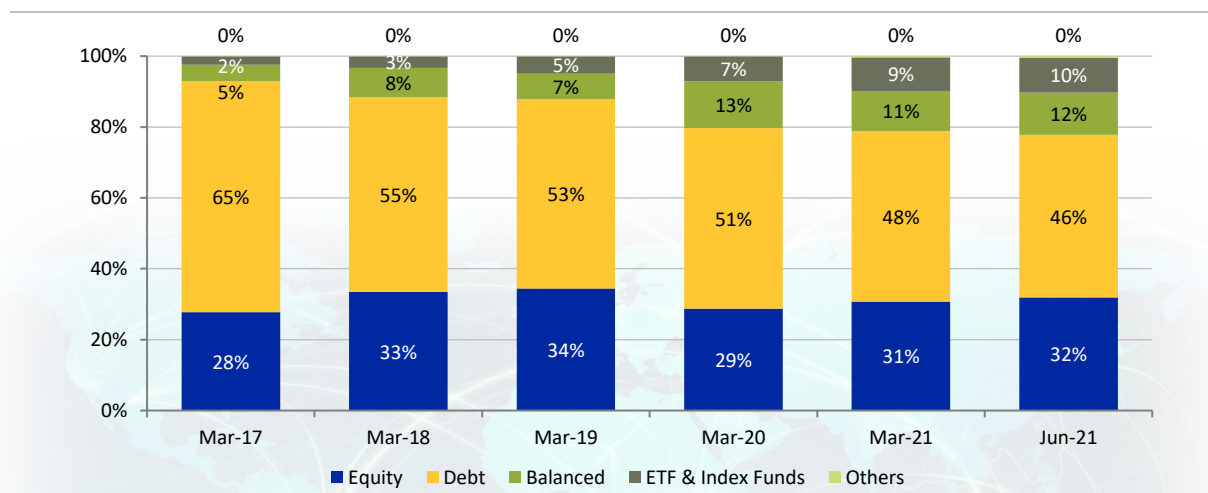
	FY2017	FY2018	FY2019	FY2020	FY2021	Q1 FY2022
Debt	2.13	(0.12)	(0.48)	(0.40)	1.96	0.06
Equity	0.70	1.71	1.08	0.82	(0.39)	0.16
Balanced	0.37	0.90	0.07	(0.21)	(0.01)	0.27
ETFs & Others	0.23	0.23	0.43	0.67	0.59	0.20
Total	3.43	2.72	1.10	0.87	2.15	0.70

Source: AMFI, ICRA Research

### Segment-wise AUM

As seen in the Exhibit below, the share of debt MFs has been on a declining trend while the balanced funds and Exchange-Traded Funds (ETFs) have seen a sharp increase. While debt MFs have been the preferred category historically, with increased individual participation there has been an increase in interest in equity, balanced funds and ETFs. The growth in equity in FY2021 has also been led by the strong equity market performance during the year.

### Exhibit 4: Segment-wise QAAUM

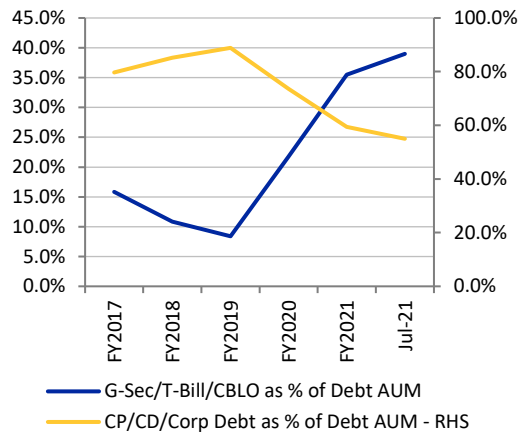


Source: AMFI, ICRA Research



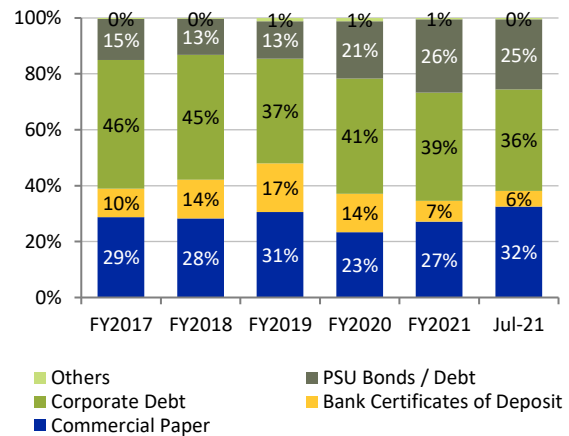
## Mutual funds – Participation in corporate bonds/share of corporate bonds in AUM

**Exhibit 5: Debt MF investment share across instruments**



Source: SEBI, ICRA Research

**Exhibit 6: Breakdown of CP/ CD/ corporate debt**

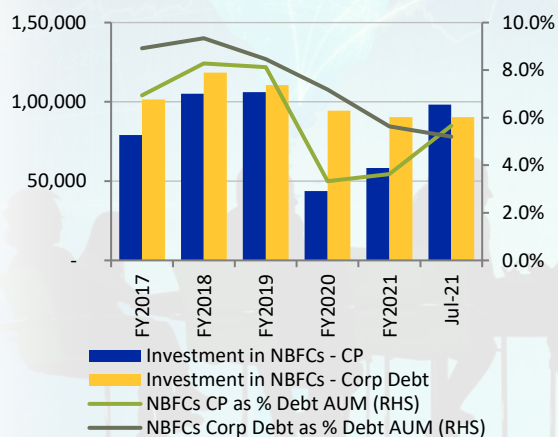


Source: SEBI, ICRA Research

The mutual fund industry remains one of the largest fund suppliers in the system with ~42% of the funds being deployed in the financial services industry as on March 31, 2021. ICRA notes the change in the investment mix of the debt mutual fund industry over the last few years, with the share of G-sec/ T-bill and CBLO instruments increasing while the share of CP/ CD and corporate debt instruments reduced. The share of G-sec/ T-Bill and CBLO instruments increased to ~39% of total debt assets under management (AUM) in July 2021 from ~16% in FY2017.

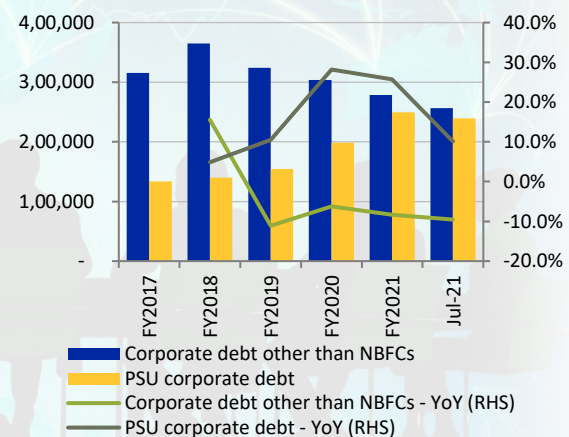
Further, the share of CP/ CD and corporate debt declined to ~55% in July 2021 compared to a high of ~89% in FY2019. The share of CP/ CD and corporate debt instruments declined in the last couple of years due to corporate defaults in FY2020, which resulted in redemptions in the mutual fund industry and subsequently a flight to risk-free instruments such as G-secs, T-Bills and CBLO.

**Exhibit 7: Investment in NBFCs CPs and corporate debt**



Source: SEBI, ICRA Research; Amount in Rs. crore

**Exhibit 8: PSU corporate debt and Corporate debt other than NBFCs**



Source: SEBI, ICRA Research; Amount in Rs. crore

The mutual fund investments in the commercial paper (CPs) of the non-banking financial companies (NBFCs) declined sharply in FY2020 compared to FY2019, driven mainly by asset quality woes and asset-liability mismatch (ALM), resulting in risk averseness of the investors. The mutual fund investments in the CPs issued by NBFCs have been on an improving trend from FY2020 but its investment in the NBFCs corporate debt remained lower compared to FY2019 levels.

ICRA notes that the mutual fund investment in the NBFC space is largely to companies with strong parentage or ownership by the Government of India. Further, the mutual fund investment in corporate debt, other than the NBFCs, declined to Rs. 2,56,436 crore in July 2021 compared to Rs. 3,15,624 crore in FY2017. While, during the same period the investments in PSU corporate debt increased to Rs. 2,39,460 crore in July 2021 compared to Rs. 1,33,561 crore in FY2017, indicating that the mutual funds are increasingly investing funds in risk-free investments such as Government securities and PSU debt.





# Insurance

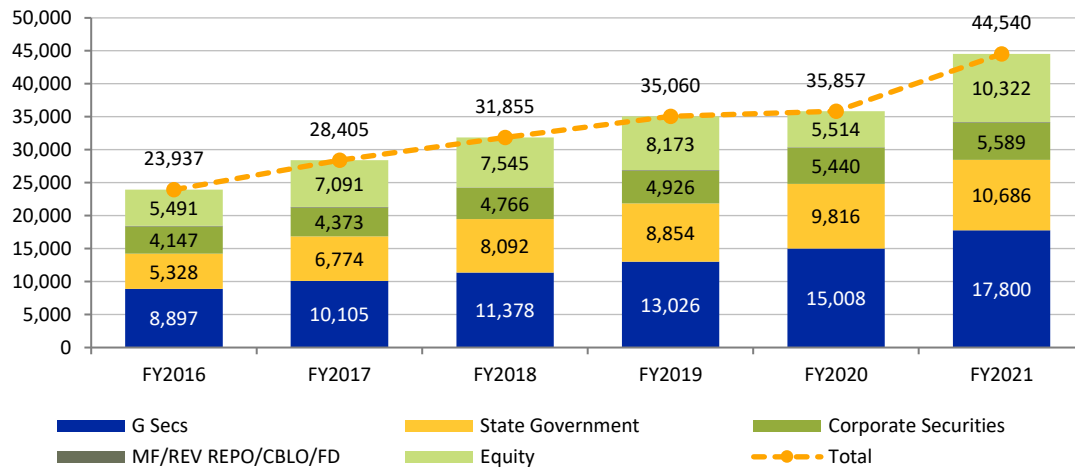
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## Life Insurance<sup>1</sup>

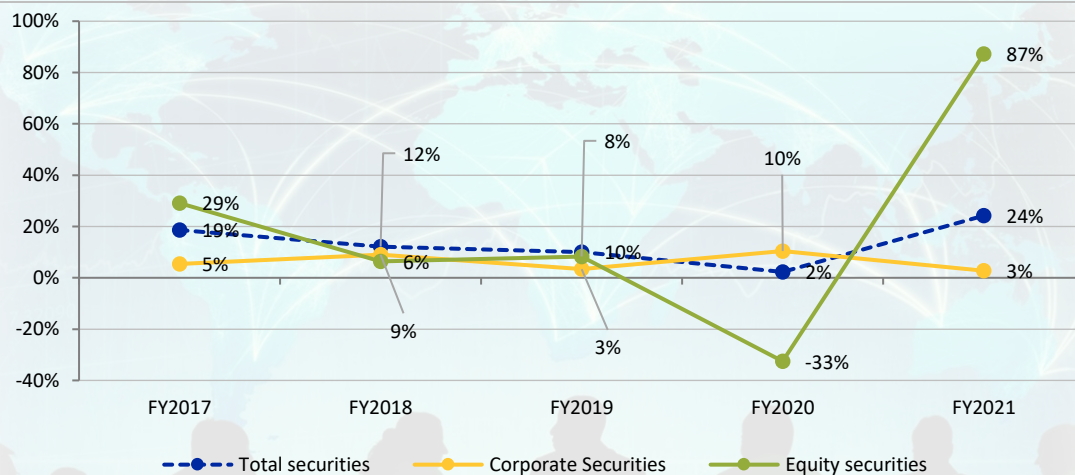
**Exhibit 1: Trend in the investments in the life insurance industry**



Source: Public disclosures, ICRA Research, figures in Rs. Billion

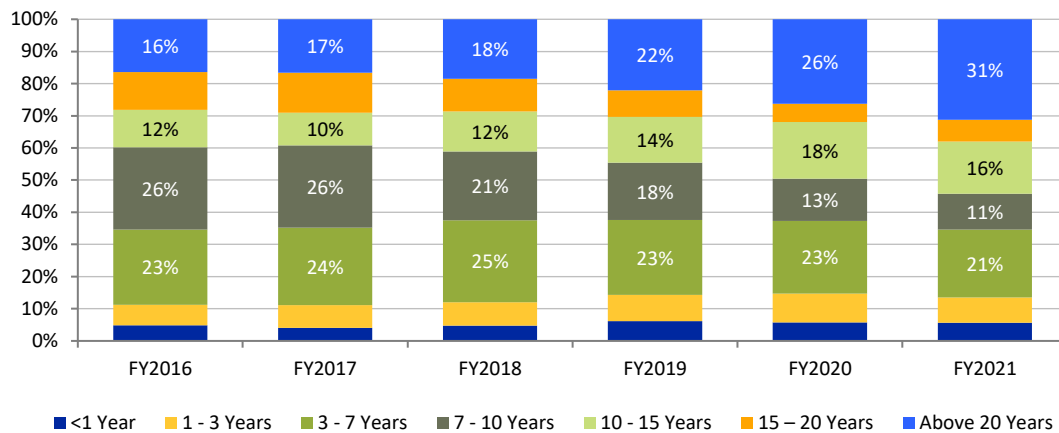
The total investment portfolio of the Life Insurance Sector had increased to Rs. 44.5 trillion in FY2021. A part of the increase was due to higher investments in the equity investments (aided by MTM gains, and a buoyant ULIP market in FY2021). The corporate securities portfolio had seen a marginal increase over the last five years, despite a consistent improvement in the total AUM for the life insurance industry. The growth rate in the corporate securities started declining in 2019, post the various defaults of higher rated instruments, while equity investments growth had increased sharply in FY2021 on the back of an improving equity capital market.

**Exhibit 2: Trend in the growth rate of securities**



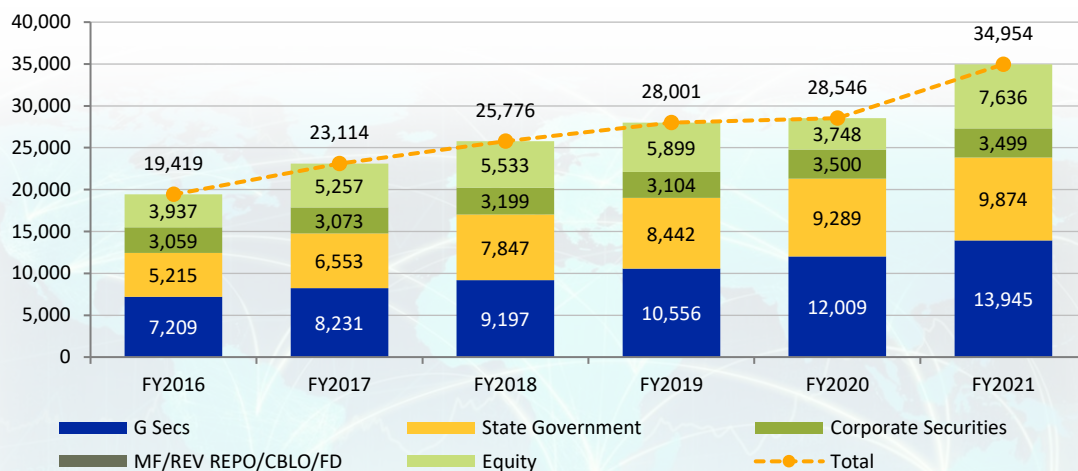
Source: Public disclosures, ICRA Research

<sup>1</sup> The investment book details are sourced through the public disclosures of 16 Life insurance players, of which 15 are from private sector and 1 from public sector (LIC). These collectively form over 95% of the business volume of the life insurance industry

**Exhibit 3: Trend in maturity profile of the investments in life insurance sector**


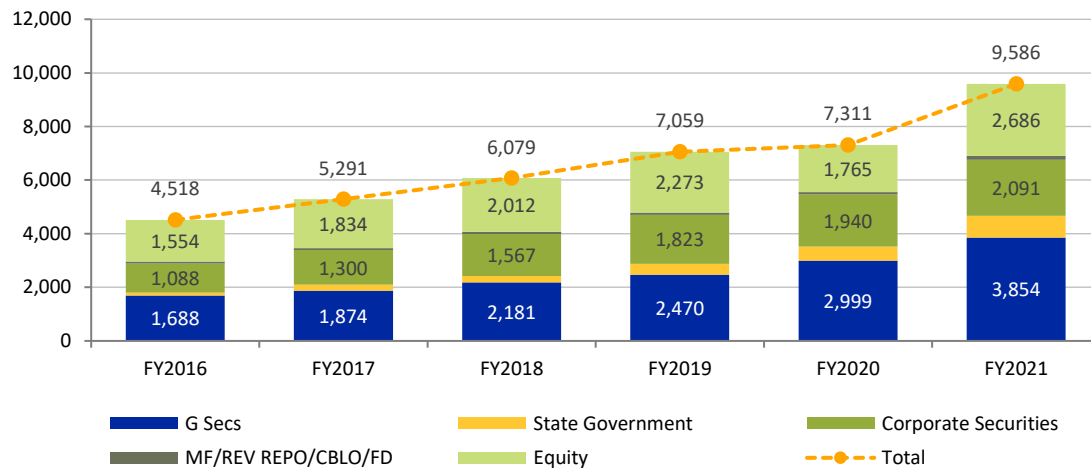
Source: Public disclosures, ICRA Research

With high growth witnessed in longer term protection and non-PAR products in the life insurance industry, the reliance on longer term securities has increased. These are primarily through Government securities, witnessed in primarily over 20-years securities. LIC has a higher share in the longer tenor securities in its portfolio compared to the private sector.

**Exhibit 4: Trend in the investment profile for LIC**


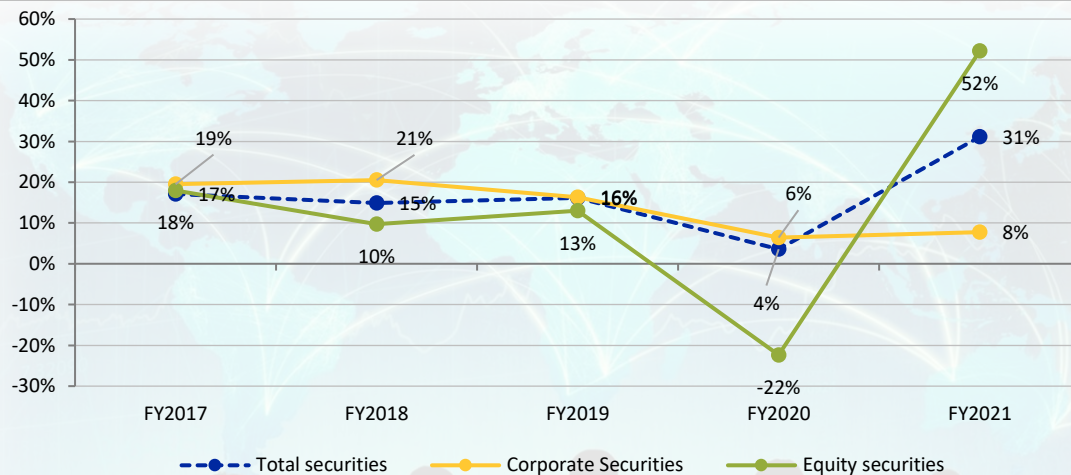
Source: Public disclosures, ICRA Research, figures in Rs. billion

LIC has seen a slower growth in its investment book compared to the private sector, but it forms the majority of the book in the life insurance sector (78% in FY2021 compared to 81% in FY2016). The growth in the corporate securities had been far slower, as LIC opted to increasingly look at Government and state government securities. The equity securities composition remained steady in the 20-22% range over the last five years (apart from FY2020, when it had declined due to a broader equity market correction).

**Exhibit 5: Trend in the investment profile for the private sector**


Source: Public disclosures, ICRA Research, figures in Rs. billion

The private sector had recorded a marginally higher rate of growth compared to LIC in the last three years with the composition of equity securities at 28% in FY2021, reduced from 34% in FY2016. The higher equity composition in the private sector is attributable to the ULIP products sold predominantly by the large private sector players. Corporate securities' composition has been relatively higher in the private sector compared to LIC (22% in FY2021), while the share of state government securities was much lower in the private sector. The growth rate of the corporate securities had tapered from 2019 due to defaults in the higher-rated corporate securities in the time frame.

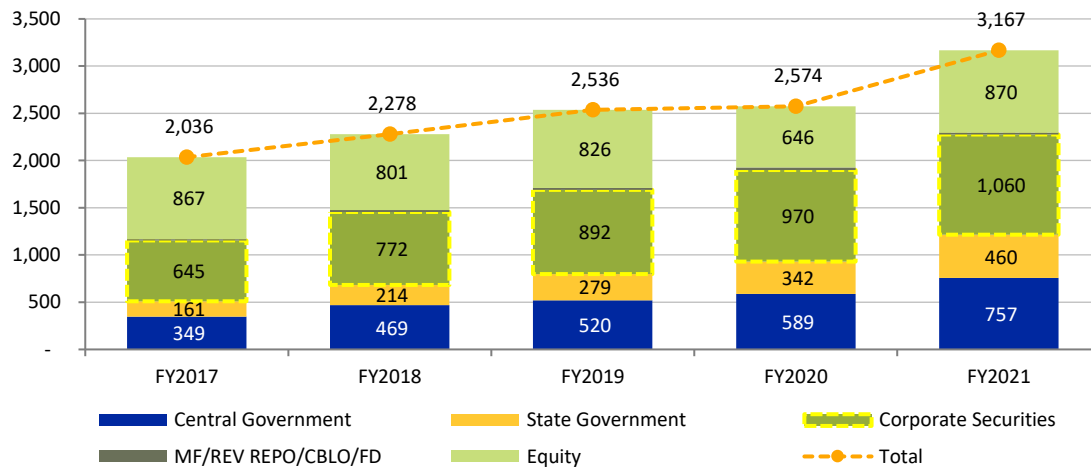
**Exhibit 6: Trend in the growth rate for the private sector**


Source: Public disclosures, ICRA Research,



## General Insurance<sup>2</sup>

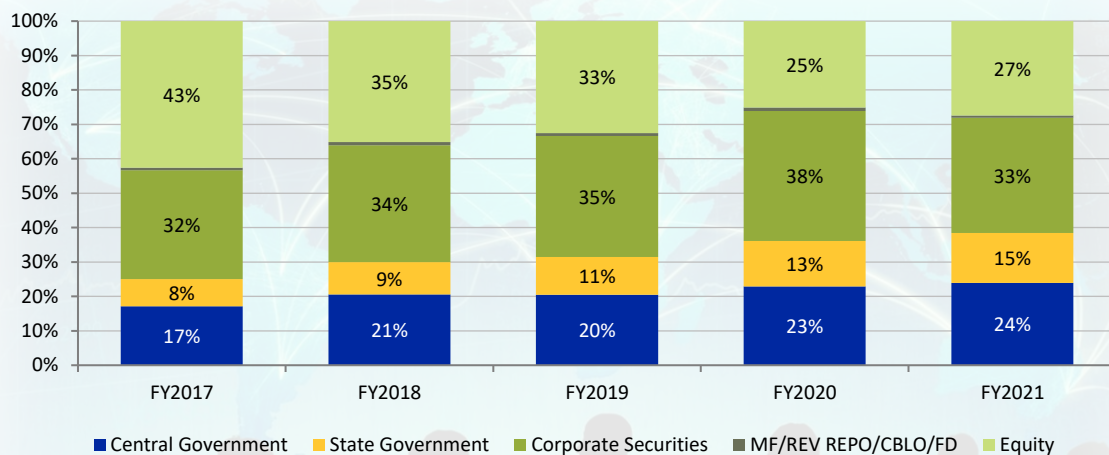
**Exhibit 7: Trend in the investment portfolio in the general insurance industry**



Source: Public disclosures, ICRA Research, figures in Rs. billion

The total investment portfolio in the general insurance sector had increased 23% to Rs. 3.1 trillion in FY2021. The increase in investments was partly driven by MTM gains in the equity portfolio (pre-dominantly in the PSU sector), and higher business underwritten in the private sector. Equity securities which comprised ~43% in FY2017, had reduced to 27% of the book in FY2021, while the share of G-secs and state government securities had increased in the interim.

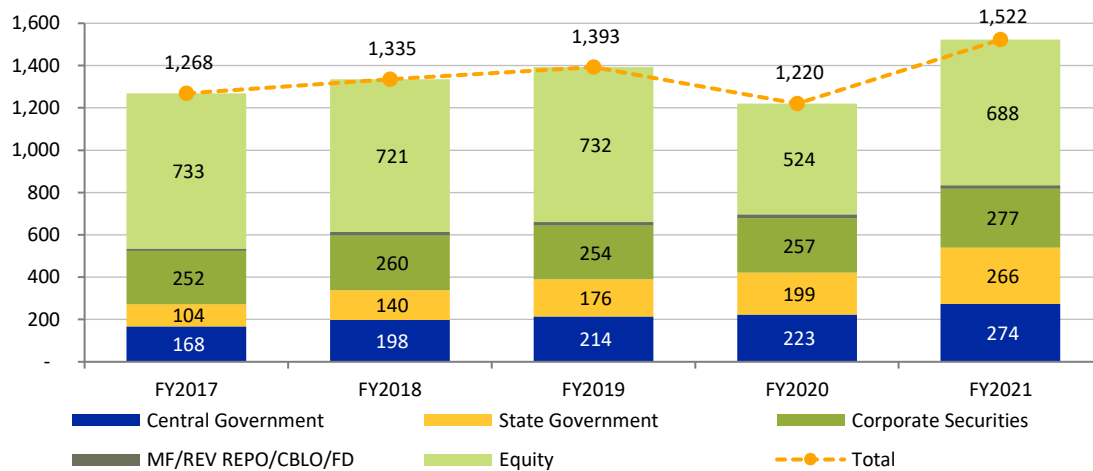
**Exhibit 8: Composition of securities in the general insurance industry**



Source: Public disclosures, ICRA Research,

<sup>2</sup> The investment details are sourced from the public disclosures of 17 general insurance entities. 4 of which are public sector entities, and 13 of which are private sector entities. These collectively form over 90% of the business volumes.

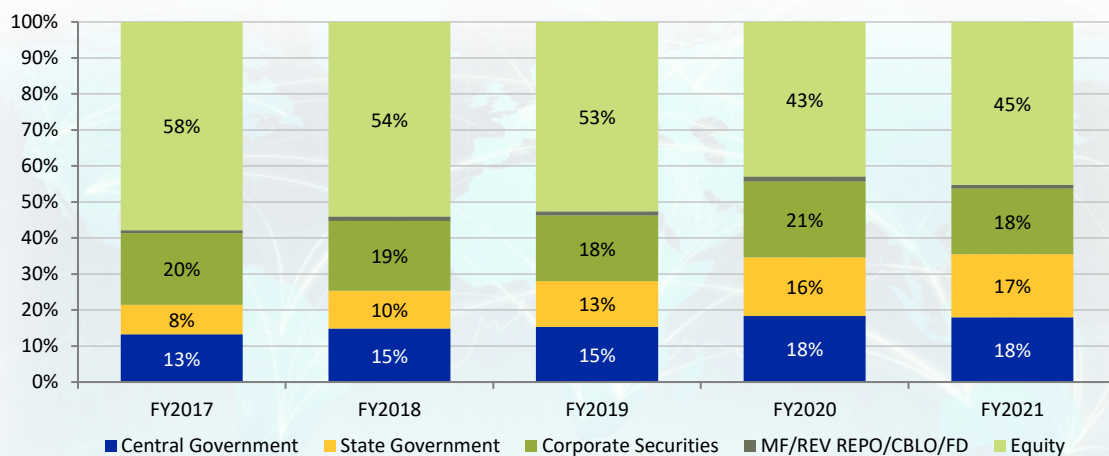
**Exhibit 9: Trend in the investment portfolio of the PSU sector**



Source: Public disclosures, ICRA Research, figures in Rs. billion

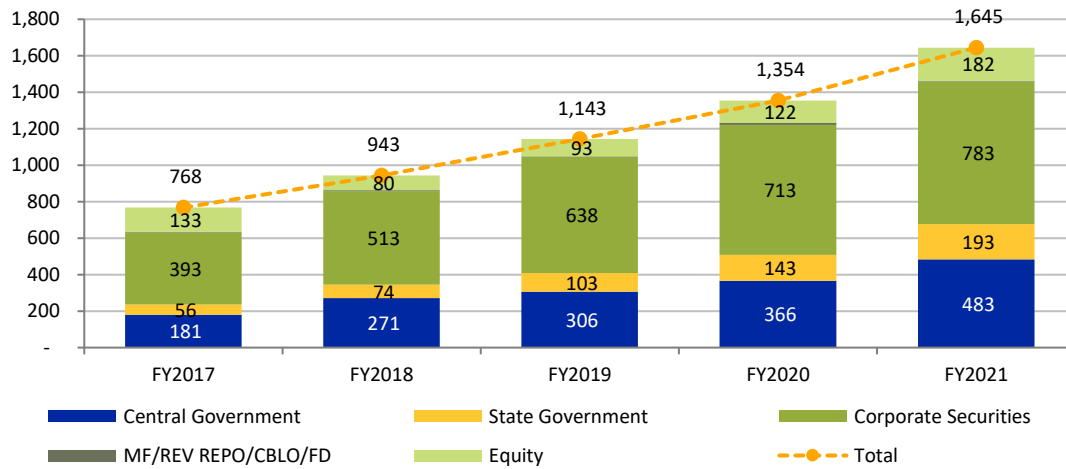
The investments in the PSU sector have a higher composition in equity investments. These are legacy investments made earlier and carry a high fair value gain on the books of accounts for these companies. The reduction in FY2020, and consequent increase in the portfolio in FY2021 is due to the sharp movements in the equity market, as well as higher business underwritten by the PSU players. Equity securities form the majority of the portfolio, but its composition has reduced over the last five years. The G-Secs and state government securities' composition has increased over time.

**Exhibit 10: Trend in the composition of portfolio in the PSU sector**



Source: Public disclosures, ICRA Research,

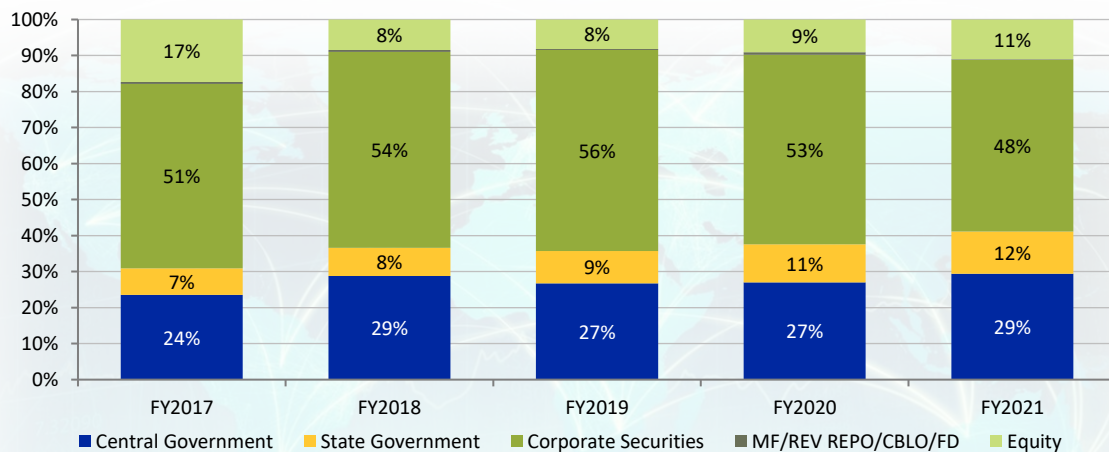
**Exhibit 11: Trend in the investment portfolio of the Private sector**



Source: Public disclosures, ICRA Research, figures in Rs. billion

The investment portfolio of the private sector general insurance industry has seen a consistent increase over the last five years. The composition is predominantly corporate securities, and very less equity securities. For the private sector players similar to the PSU entities, the share of G-secs and state government securities have been increasing over the last few years. The composition of state government securities, though increasing, has been conspicuously lower when compared to its PSU peers.

**Exhibit 12: Trend in the composition of investments in the Private sector**



Source: Public disclosures, ICRA Research,





# Alternative Investment Fund

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## Alternative Investment Fund Overview

Alternative investment refers to investment in any form or security apart from the traditional forms of investments. The definition and purview of both traditional as well as alternative investments varies across economies. As per the Securities and Exchange Board of India (SEBI), alternative investment funds (AIF) are defined as any fund established or incorporated in India in the form of a trust or a company or a limited liability partnership or a body corporate, which is a privately-pooled investment vehicle, which collects funds from investors, whether Indian or foreign, for investing in it in accordance with a defined investment policy for the benefit of its investors. AIFs, which came into existence in India in 2012, are regulated by the SEBI (Alternative Investment Fund) Regulations 2012.

### Types of Alternative Investment Fund

In the Indian context, AIFs can be broadly categorised under three types, namely, Category I, Category II and Category III AIFs, based on their investment criterion. The different classes of AIFs are described below.

**Category I AIF:** The Category I AIFs invests in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the Government or regulators consider as socially or economically desirable. Some notable examples of this class of AIFs include venture capital funds, SME Funds, social venture funds, infrastructure funds and such other Alternative Investment Funds. This category includes funds which are generally perceived to have a positive spill-over effect on the economy and for which incentives and concessions may be provided by the Government of India (GoI), SEBI or other regulators. Category I AIFs are not allowed to borrow funds directly or indirectly or engage in any leverage except for meeting temporary funding requirements for not more than thirty days, on not more than four occasions in a year and not more than ten per cent of the investable funds.

**Category II AIFs:** This category includes the funds which do not fall in Category I and III. Notable examples for this category include, real estate funds, private equity funds, debt funds, distressed assets funds etc. As per SEBI guidelines, Category II AIFs shall invest primarily in unlisted companies directly or through investment in units of other AIFs. Category II AIFs may not borrow funds directly or indirectly and shall not engage in leverage except for meeting temporary funding requirements for not more than 30 days, not more than four occasions in a year and not more than ten per cent of the investable funds. Category II AIFs are close-ended funds with a tenure of three years. It can invest in investee companies or on the units of Category I or other Category II AIF.

**Category III AIFs:** This category includes funds which employ diverse or complex trading strategies and may employ leverage, including through investment in listed or unlisted derivatives. Hedge Funds, private investment in public equity (PIPE) funds, or funds which trade with a view to make short term returns or such other funds which are open ended and for which no specific incentives or concessions are given by the Government or any other Regulator shall be included. Category III AIFs could be either open or close-ended while the tenure is not defined unlike the other two categories of AIFs. Furthermore, Category III AIFs are allowed to engage in leverage or borrow subject to consent from the investors in the fund and subject to a maximum limit permissible by SEBI. These AIFs, however, shall disclose information regarding the overall level of leverage employed, the level of leverage arising from borrowing of cash, the level of leverage arising from position held in derivatives or in any complex product and the main source of leverage in their fund to the investors and SEBI, as prescribed by the regulator.

**EXHIBIT 1: Snapshot of various AIFs**

	Category I	Category II	Category III
<b>Asset Classes</b>	Start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the Government or regulators consider as socially or economically desirable	Others which does not fall in Category I and III	Capital market securities
<b>Examples</b>	Venture capital funds, SME Funds, social venture funds, infrastructure funds	Private equity funds or debt fund	Hedge funds
<b>Leverage / Borrowings</b>	No, except for meeting temporary funding requirements (capped at 10% of investable funds for not more than 30 days, not more than 4 occasions in a year)	No, except for meeting temporary funding requirements (capped at 10% of investable funds for not more than 30 days, not more than 4 occasions in a year)	Yes, subject to consent from the investors in the fund and subject to a maximum limit, as may be specified by SEBI
<b>Open / Close ended</b>	Close ended	Close ended	Open or Close ended
<b>Tenure</b>	Minimum of 3 years; can be extended up to 2 years <sup>3</sup>	Minimum of 3 years; can be extended up to 2 years	NA
<b>Minimum investment amount</b>	Not less than Rs. 1 crore. In case of investors who are employees or directors of the AIF or employees or directors of the Manager, the minimum value of investment shall be Rs. 25 lakh.		
<b>Sponsor Contribution</b>	Continuing interest of not less than 2.5% of the corpus or Rs. 5 crore, whichever is lower		Continuing interest of not less than 5% of the corpus or Rs. 10 crore, whichever is lower

Source: ICRA Research

**AIF AUM Trends**

While the AIF guidelines were finalised in May 2012, the Indian AIF industry gained traction post FY2017. As of March 2021, there were 732 AIFs registered with SEBI compared to 641 AIFs registered the previous year. Category II AIFs form a predominant share of the AIF landscape with 409 AIFs registered in India as of March 31, 2021 compared to 348 as of March 31, 2020.

**EXHIBIT 2: Number of registered alternatives investment funds**

Category	Mar-20	Mar-21
Category I -Total	164	178
Infrastructure Fund	16	16
Social Venture Fund	14	14
Venture Capital Fund	119	133
SME Fund	15	15
Category II	348	409
Category III	129	145
<b>Total</b>	<b>641</b>	<b>732</b>

Source: SEBI, ICRA Research

As can be seen in the adjacent exhibit, after a slow start, the industry AUM picked up pace from FY2017 onwards. The total quantum of commitments raised by AIFs increased from Rs. 1,437 crore as of March 2013 to Rs. 4,51,216 crore indicating increased interest in alternative investments over the eight years of these, the total funds raised by AIFs has increased from Rs. 530 crore as of March 2013 to Rs. 2,30,015 crore as of March 2021,

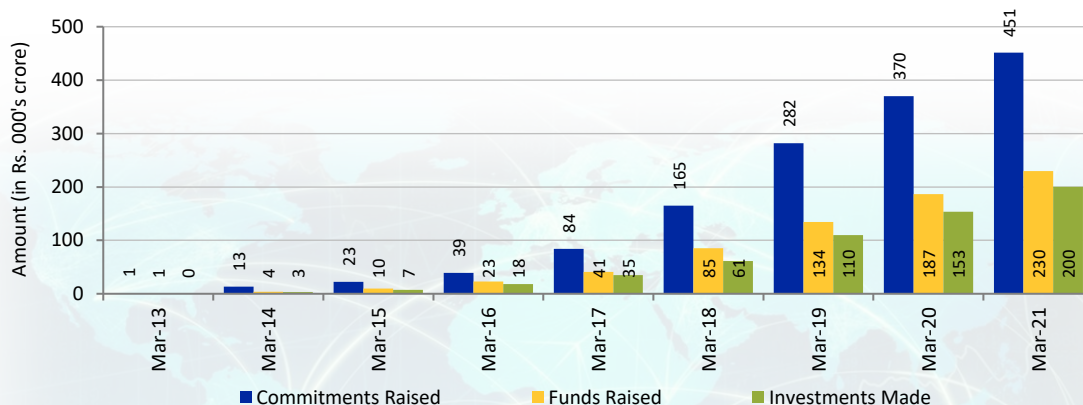
<sup>3</sup> subject to approval of two-thirds of the unit holders by value of their investment in the AIF; In the absence of consent of unit holders, the AIF shall fully liquidate within one year following expiration of the fund tenure or extended tenure



which indicates substantial amount (49%) of committed capital yet to be raised and deployed. The amount of investments made by AIF increased from Rs. 361 crore to Rs. 2,00,484 crore for the same period.

The AIFs have seen steady growth in the past few years. Category II AIFs has traditionally been the most popular class of AIFs, attributing to lion's share of industry AUM. As of March 2021, Category II AIFs formed a majority (70%) of the funds raised as of March 31, 2021, followed by Category III AIFs (19%) and Category I AIFs (11%). During the initial years, Category II AIFs attribute to nearly 80% of the investments (78% as of March 2014). During the period 2014-2018, Category III AIFs registered a strong growth supported by increasing investor interest, coupled with favourable capital markets; the growth rate appears higher given the lower base. The share of Category III AIFs increased to 31% of total investments as of March 2018 from 15% as of March 2014, while the share of Category II AIFs moderated to 55% of total investments in the same period. In the following years, Category II AIFs picked up pace (Category II AIFs accounted for 77% of the total AIF funds raising during FY2019 to FY2021) supported by increased investment opportunities as non-banks slowed down disbursements to wholesale segment following the liquidity crises in September 2018, banks too have been increasingly looking at retail assets in the recent past. This created an opportunity for AIFs. The share of Category II AIFs increased to 70 % of total investments while that of Category III moderated to 21% as of March 2021. However, in the past fiscal, Category III funds have performed well, owing to the favourable market conditions and, therefore, it is gaining interest from investors (despite not having a pass-through status unlike Category I and II) who prefer diverse, unique and complex trading strategies and propositions like pre-IPO funds, arbitrage funds, merger and demergers.

### EXHIBIT 3: Trend in AIF Inflows and Investments Made



Source: SEBI, ICRA Research

### EXHIBIT 4: Details on Category-Wise Fund Flow of AIFs

Period	Mar-20	Mar-21	Period	Mar-20	Mar-21
Category	Commitments raised	Funds raised	Category	Commitments raised	Funds raised
Category I	38,745	18,472	Category I	38,745	18,472
Category II	282,013	124,524	Category II	282,013	124,524
Category III	49,230	43,527	Category III	49,230	43,527
<b>Total</b>	<b>369,988</b>	<b>186,523</b>	<b>Total</b>	<b>369,988</b>	<b>186,523</b>

Source: SEBI, ICRA Research

As of March 2021, AIF invested 39.2% of the total funds in unlisted equity shares/equity-linked instruments/LLP interest followed by 30.3% in debt/securitized debt instruments, 19.3% in listed equity. Top three instruments form 88.78% of total deployment as of March 2021.

#### EXHIBIT 5: Instrument Wise Deployments of Funds by AIFs

Instrument	Mar-20	In %	Mar-21	In %
Unlisted Equity Shares/ Equity Linked Instruments/LLP Interest	61	40%	78	39%
Listed Equity (excluding Listed/to be Listed on SME Exchange)	32	21%	39	19%
Debt/ Securitized Debt Instruments	39	26%	61	30%
Units of other AIFs	2	1%	4	2%
Liquid Funds	5	3%	7	3%
Listed/ to be Listed Securities on SME Exchange	0	0%	0	0%
Others	13	9%	12	6%
<b>Total</b>	<b>153</b>	<b>100%</b>	<b>200</b>	<b>100%</b>

Source: SEBI, ICRA Research, Amount in Rs. 000's crore

#### Regulatory Framework

The SEBI (Alternative Investment Funds) Regulations were introduced on May 12, 2012 and there have been various amendments to the regulations in the subsequent years. These were mostly geared towards fostering a more conducive industry environment by providing easing streamlining processes, provide greater flexibility while also improving reporting transparency.

The regulatory changes in the AIF aims to create more transparency from the AIFs which would pave way for more investor interest in these products. The success of the AIFs would continue to depend on favourable regulations and display of superior performance compared to the traditional investment products.

#### EXHIBIT 6: Key Developments in Regulations

Period	Topic	Comments
March 2021	Amendments in SEBI (Alternative Investment Fund) Regulations, 2021	i) Provided definition of start-up as specified by Government of India for the purpose of investment by angel funds ii) Changes to the scope of venture capital undertaking wherein Category I AIFs can invest in companies not listed on a stock exchange (thereby helping Category I AIFs to invest in NBFCs and VCs in fintech space which would help the fintech industries in raising capital) iii) Allowed AIFs, including fund of AIFs, to invest in units of other AIFs and directly in securities of investee companies subject to certain conditions.
	Investment Committee and Code of Conduct for AIFs	i) Provided clarity on scope of responsibilities of managers and members of Investment Committees ii) Prescribed a code of conduct for AIF, trustee and directors of the trustee/designated partners/directors of the AIF, manager, members of Investment Committee and key management personnel of AIF and manager.
October 2020	Qualifications and Experience criteria for Members of Key Investment Team	SEBI defined 'relevant professional qualification' and provided that the qualification and experience criteria of the investment team may be fulfilled individually or collectively by personnel of key investment team of the manager.
	Investment Committee	Finalised regulations on investment committees (ICs), who have the power to approve decisions of AIFs as opposed to earlier regulation of investment decisions of AIF thus widening the ambit of ICs, liability of ICs to be linked to the decisions taken by IC and ensuring those decisions to be in compliant with the AIF regulations as opposed to equating the responsibility of the ICs with the investment decisions of the investment manager.
June 2020	Collection of stamp duty on issue, transfer and sale of units of AIFs	Provided guidelines on collection of stamp duty on issue, transfer and sale of units of AIFs and AIFs were mandated to appoint registrar and transfer agents (RTAs) for the necessary services. Also, RTAs had been designated as 'collecting agent' for the purpose of collecting stamp duty on creation and transfer of AIF units

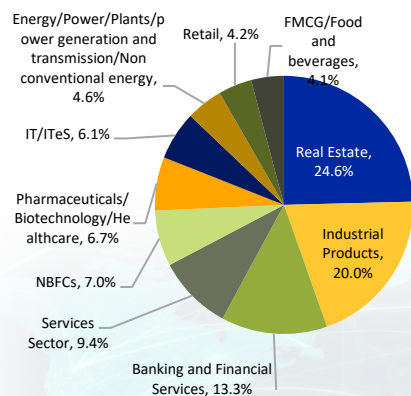
Period	Topic	Comments
February 2020	Standardisation and audit of private placement memorandum	SEBI circular to ensure that a minimum standard of disclosure is made available in the private placement memorandum (PPM) in a simple and comparable format and to ensure compliance of the AIF with the same. It was issued on disclosure standards for AIFs standardisation of PPM, audit of terms of PPM for AIFs and performance benchmarking for AIFs. PPM is a primary document in which all the necessary information about the AIF is disclosed to prospective investors.

Source: SEBI, ICRA Research

## Why are AIFs preferred?

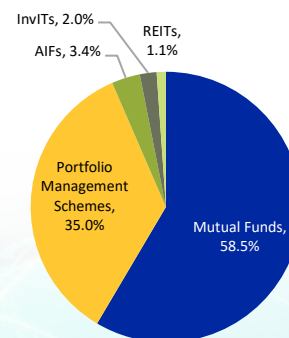
The AIF, which was introduced in FY2013, is a relatively new segment in the pooled funds investment vehicle domain. Despite the recent vintage, the AIFs have registered a strong growth and is on the path to become an alternative source of capital to corporate India. As of March 31, 2021, the AIFs had deployed a major portion of the funds in real estate (24.6%), followed by industrial products (20%), banking and financial services (13.3%), the services sector (9.4%), NBFCs (7%), pharmaceuticals/biotechnology/healthcare (6.7%), and IT/ITeS (6.1%). The top six sectors accounted for around 67% of total deployment of funds by AIFs as of March 2021.

**EXHIBIT 7: Sector-Wise Deployment of Funds by AIFs**



Source: NSE, BSE, ICRA Research

**EXHIBIT 8: Snapshot of Fund Management in India**



Source: NSE, BSE, ICRA Research

The AIFs have the potential to serve as long-term source of capital and draw the advantage of flexibility of investments which can provide it with an edge over other established sources of funding. For instance, the AIFs can invest in different forms of securities (equity or debt or even provide loans) across sectors as long as the AIFs are owned and controlled by Indian citizens/residents. Investment by foreign portfolio investors (FPI) investment, also regulated by SEBI, in the debt segment faces greater constraints in terms of minimum maturity period for corporate debt instruments, investments in listed NCDs with few exceptions, non-availability of corporate bonds limits. Foreign direct investment (FDI) faces capital instrument restrictions like investment in equity/convertibles while external commercial borrowings (ECBs) have a financing route is constrained by end use restriction.

AIFs provide an alternate avenue or an alternate asset class as compared to traditional routes like direct equity / debt or even mutual funds. As of March 2021, the AIFs contributed to 3.4% of the overall fund management activities in India. SEBI has put in place an enabling regulatory framework for all fund management activities and has been instrumental in the development of the industry as well as protection of the interest of the investors. Although the share of the AIFs remains limited, from a higher ticket size to the smaller segments of the market, increasing investor interest and recent regulatory developments are likely to be an added positive.



The AIF investment products are more suitable for a more sophisticated and mature investor segment as the investment strategies are more complex, compared to traditional products. The minimum investment quantum (from investors) of Rs. 1 crore makes it a niche product catering to high net worth individuals (HNI) and ultra-high net-worth individuals (UHNI) segment as opposed to the retail segment. The AIFs also have a higher risk profile as compared to mutual funds (although AIFs provides inculcation of hedging plans which is absent in mutual funds) and thus operate in the high risk– high return segments, including high yield debt, early stage equity or debt funding etc, to maximize the expected internal rate of return (IRR) on the funds deployed, which otherwise would have been difficult on an individual capacity. The SEBI has come up with regulations from time to time for the AIFs which is expected to bring in additional investor interest.

### AIFs and NBFCs

The Indian non-banking financial companies (NBFC), which have been instrumental in providing corporate lending, including real estate lending in the past decade, have been finding it difficult since September 2018, to raise funding owing to liquidity crunch in the market (following the NBFC issue) coupled with adverse sentiment of investors towards non-banks, particularly wholesale-oriented entities. Concerns regarding the build-up of portfolio stress, given the slowdown in key underlying asset classes further aggravated issues. Consequently, the NBFCs and the HFCs have increasingly moved towards fund structure and/or partnered with international funds for long structured corporate or real estate loans. The rationale behind floating AIFs is that funding a wholesale portfolio requires long term flexible capital, wherein the manager and investor /partner has deep understanding of nuances of the sector. This also helps the NBFCs to continue catering to the wholesale segment while trying a balance-sheet light model in the process of shoring up profitability.

In the AIF structure, the NBFCs would focus on origination, due diligence on the projects while the investors or partners bring in most of the capital to fund the projects. This allows the AIFs to invest in debt instruments of the corporate borrowers, as this helps them raise long-term flexible capital and mitigate the asset liability management/liquidity as well as the asset quality issues by providing customised debt to the real estate developers, depending upon the cash flow generation of the developers. In the AIF structure the capital investment is through a senior tranche while in the case of the NBFC it is through a junior tranche. These structures provide the wholesale projects with long term patient capital, with the NBFCs' expertise to turn around the projects and rid it of liquidity pressures and provide an attractive risk-adjusted return to the investor.

### Role of AIFs in India's growth ahead

The Government of India (GoI) has a vision of making India a \$5 trillion economy and a global economic powerhouse in the coming years. To support this, the Government has focused on various packages, enhanced ease of doing business and series of rapid reforms which have been unveiled during the course of the past few years. The critical component of this mission would be high level of involvement of the private sector in terms investments, which will create opportunities for the AIFs. The Government has also been proactive in setting up the AIFs like the Special Window for Affordable and Mid-Income Housing (SWAMIH) fund, a Rs. 25,000-crore real estate fund for completion of stalled projects in the affordable and middle-income housing segment and Ubharte Sitaare an Rs. 250 crore with a green shoe option of Rs. 250 crore AIF for export-oriented small and mid-sized companies.

The AIFs can play a pivotal role as they can provide long-term and high-risk capital to a broad array of sectors including start-ups or early stage ventures, infrastructure, real estate funds, private equity funds, debt funds, distressed assets funds. Increased participation of private players in early stage, social ventures could also help in reducing the dependence on government channels for funding. The financial sector has undergone challenges in terms of liquidity and increased challenges in resource mobilisation, stemming from risk-averse sentiment of

investors towards non-banks, particularly wholesale oriented entities in the past few years and the AIFs could help fulfil the demand going forward. As per the Chartered Alternative Investment Analyst (CAIA) association, alternative investments represent approximately 12% of the global investible market and by 2025, CAIA Association members expect the industry to grow to 18-24% of the global investible market.

In India, the AIF industry has grown at a rapid pace in the last eight years to Rs. 4,51,216 crore (committed amount) and forms a minuscule portion of the global alternative industry market. Going forward, demand potential for AIFs in the country is expected to remain favourable supported by a favourable atmosphere created by the Government coupled with investment opportunities. Currently the low penetration of investments in AIFs, increasing the share of HNIs, coupled with increasing awareness levels, would help support fund raising. With strong demand and supply side drivers, the AIFs are poised to grow at a rapid pace. The pace of growth, however, would also depend on more favourable regulations and transparency, creating awareness on the AIFs and the ability to demonstrate superior performance compared to traditional products.





# Stock Broking



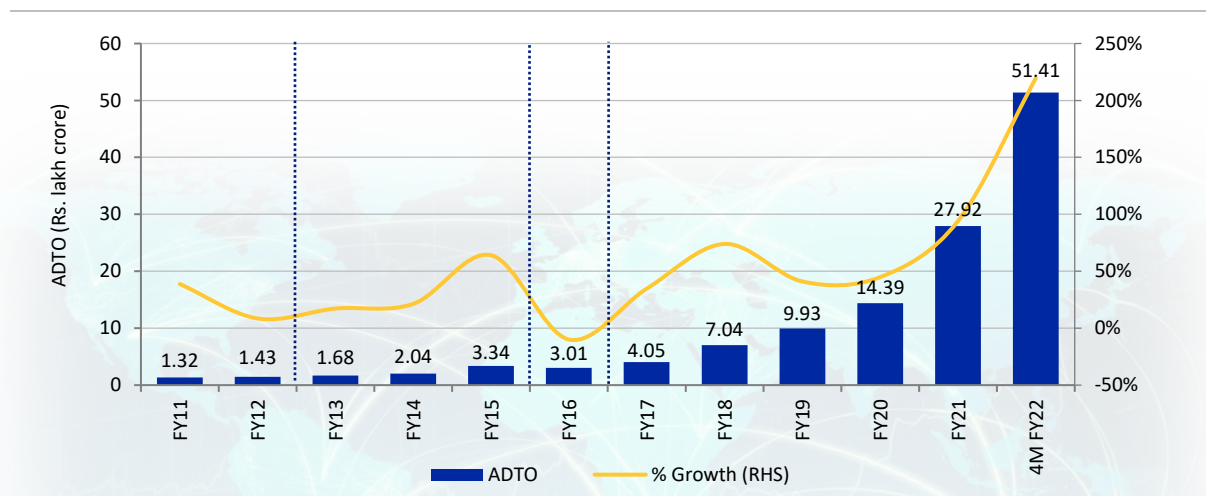


## Stock Brokers - A Vital Cog in the Wheels of Indian Capital Markets

**Indian capital markets on an upward trajectory:** The Indian capital markets have come a long way in the past decade. The total transaction volumes increased to Rs. 6,951 lakh crore in FY2021 from Rs. 336 lakh crore in FY2011, registering a compounded annual growth rate (CAGR) of 36%. The average daily turnover (ADTO) increased to Rs. 27.92 lakh crore from Rs. 1.32 lakh crore in the same period. The capital markets' journey in the past decade can be broken down in four stages. The first one being the early part of this period, that is 2010-12, which was characterised by subdued performance with the markets reeling under the impact of a spill-over of global financial crises and weak macro-economic outlook (ADTO of Rs. 1.43 lakh crore in FY2012, a tepid growth of 9% year-on-year). The second stage refers to the gradual recovery over 2013-15 with the markets registering a steady performance (ADTO improved from Rs. 1.68 lakh crore in FY2013 to Rs.3.34 lakh crore in FY2015).

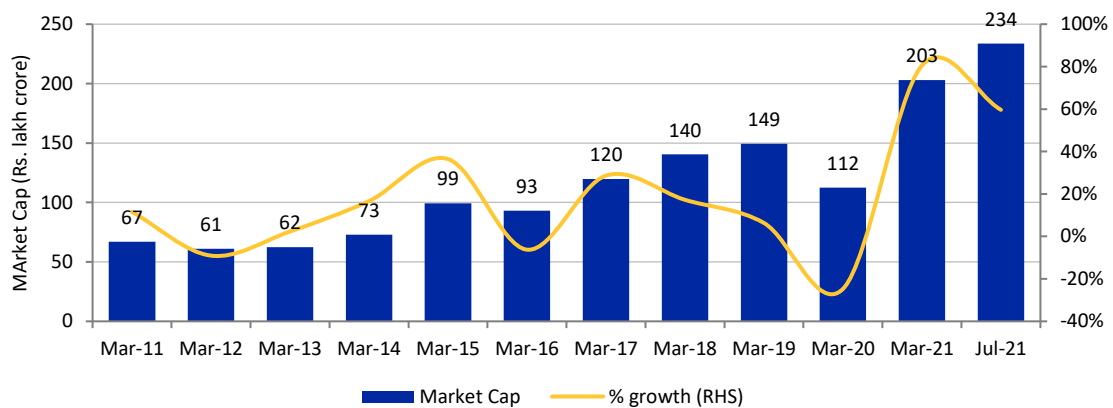
This was followed by a bearish stage in 2016, with declining activity as well as valuations, amidst challenging global cues (ADTO of Rs. 3.01 lakh crore). The market performance since then has been steady with an upward rally albeit with periods of volatility and correction. The Indian capital markets continued on the upward trajectory in FY2021, reporting a stellar performance, despite the concerns regarding the pandemic. The ADTO increased to Rs. 27.92 lakh crore in FY2021 from Rs. 14.39 lakh crore in FY2020, registering an annual growth of 94%. Transaction volumes continue to remain strong in the current fiscal, with the markets clocking an ADTO of Rs. 51.41 lakh crore in 4M FY2022 (April to July).

**Exhibit 1: Trend in Equity Market ADTO**



Source: NSE, BSE, ICRA Research

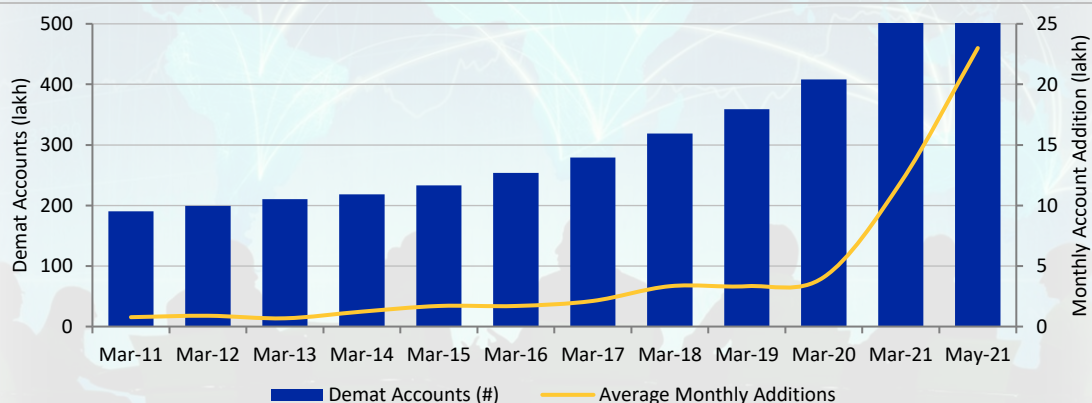
The total market capitalisation for listed entities has also registering a strong growth over the past decade. For instance, market capitalisation of entities listed on the National Stock Exchange (NSE) increased to Rs.202.95 lakh crore as of March 2021 from Rs. 67.02 lakh crore as of March 2011. As can be seen in Exhibit 2, market capitalisation has been in an upward trajectory since FY2017, barring the decline in FY2020 owing to corrections during end of the fiscal.

**Exhibit 2: Trend in Market Capitalization (NSE)**


Source: NSE, BSE, ICRA Research

The steady decadal performance has also been supported by increasing investor base. As per the Securities Exchange Board of India (SEBI), the total number of demat accounts have increased to 551 lakh as of March 2021 from 190 lakh as of March 2011. A key theme that emerged in the recent capital markets rally is the surge in new retail client participation, which can be evidenced by new account opening. The industry added an average of 11.92 lakh new clients per month (on a net basis) in FY2021, nearly three times the new addition of 4.08 lakh per month in FY2020 (monthly addition was steady at 3.33 lakh per month in FY2018 and FY2019). Total number of demat accounts increased to 597 lakh as of May 2021 (551 lakh in March 2021) from 409 lakh as of March 2020.

Additionally, there has also been a broadening of the investor base with increasing participation from tier 2 / 3 cities. Anecdotal evidence suggests that the equity markets have emerged as an unlikely beneficiary of the pandemic, with the work-from-home option and limited investment in other opportunities driving investor interest to the capital markets. The increased market traction coupled with influx of first-time investors underscores the relevance of stock-brokers for smooth functioning and further deepening of the capital markets in the country.

**Exhibit 3: Trend in Demat Accounts**


Source: SEBI, ICRA Research

**Changing landscape of Indian stock brokers:** Stock brokers or stock brokerage houses are important capital market participants that facilitate transaction of securities in the secondary market. Regulated by SEBI, stock brokers act as an intermediary between the exchange and the clients and buy or sell securities on behalf of their

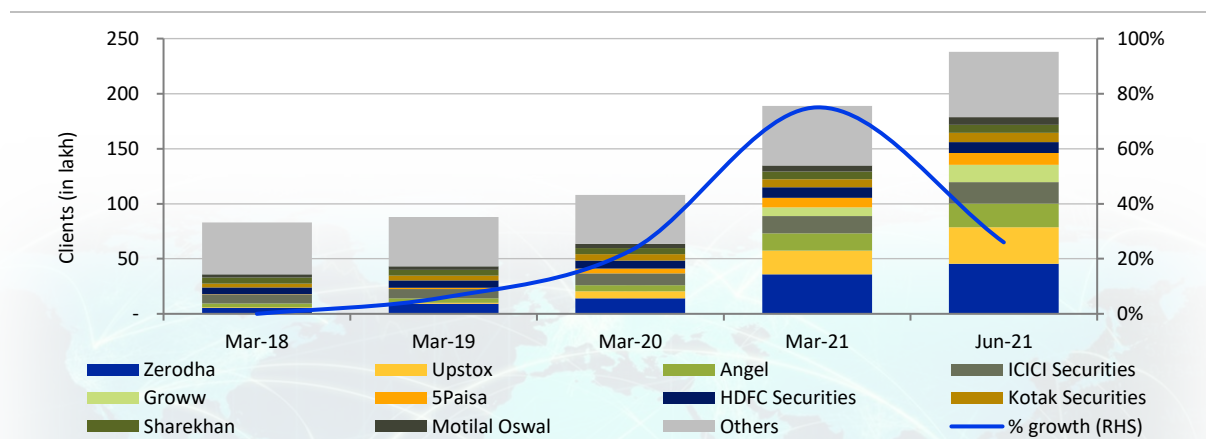
clients on the exchange. Stock brokers thus play an important role in developing a capital market structure that is fair and stable, by providing access to the capital markets to diverse array of investors, while also providing adequate liquidity to the market.

In the Indian context, the stock brokerage industry can be segmented into three broad categories based on the ownership and the service offering, namely, bank-brokerage houses, full-service brokerage houses and discount brokerage houses. Until recently, the market was dominated by the first two categories of brokerage houses. However, there has been a significant change in the industry landscape in recent times brought around by the increase in the prominence of discount brokerage houses.

The industry has witnessed significant compression in yields over the past decade in the light of the competitive pressure with the advent of discount brokerage houses. However, as seen from the below exhibit, the shift in the industry has been more palpable over the past two years with discount brokerage houses emerging as the broker of choice amongst new clients.

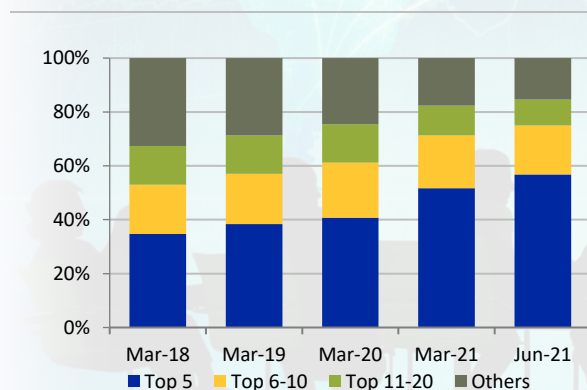
An analysis of top entities in terms of active clients further illustrates this trend. For instance, as of June 2021, four out of the top five brokerage houses, in terms of active clients, were discount brokerage houses. In a stark contrast to this, the top five entities as of March 2018 comprised four bank-brokerages and one traditional full-service brokerage house.

**Exhibit 4: Trend in Active clients for Prominent Brokerage Houses (active clients)**



Source: NSE, ICRA Research

**Exhibit 5: Trend in Market Share (active clients) on NSE**



Source: NSE

Another trend that has emerged along with this is the increasing pace of consolidation in the industry. Based on data sourced from the NSE, top 20 brokerage houses together attributed to about 85% of total active clients as of June 2021 (82% as of March 2021) up from 75% as of March 2020 (57% as of Mar-19).



**Evolving value proposition:** Stock brokerage houses have augmented their value proposition over the past few years in a bid to support their earnings and offer greater value to clients in light of the low-cost alternative being offered by discount brokerage houses. These additional services offered include financial planning / advisory or adjacent services, technology-based advisory platforms like robo advisory, distribution of financial products, particularly mutual funds, amongst others. Brokerage houses, particularly the larger and more established entities, are increasingly looking at fund-based services, like margin funding or loan against shares (LAS). While the core broking service would continue to form a predominant share of total revenues over the near to medium term, broking companies continue to explore other such services, leveraging their technology platform. Domestic brokerage industry would continue to have a mix of physical and digital model.

**Systemic relevance of stock-brokers:** In addition to acting as a medium or conduit for equity market transactions, stock brokers also perform an important role in the industry value chain. For instance, stock-brokerage companies conduct the entire client onboarding and compliance verification (know your customer KYC check<sup>4</sup>) for the client. As per SEBI guidelines, *a broker shall continuously satisfy itself about the genuineness and financial soundness of the client and investment objectives relevant to the services to be provided.*

The stock broker is also responsible for transfer of funds / securities and thereby completion of transaction within prescribed timelines. As per SEBI guidelines, *the stock broker shall make pay-out of funds or delivery of securities, as the case may be, to the Client within one working day of receipt of the pay-out from the relevant Exchange where the trade is executed unless otherwise specified by the client and subject to such terms and conditions as may be prescribed by the relevant Exchange from time to time where the trade is executed.*

In addition to this, stock brokers are also responsible for collecting and monitoring client margin and ensuring top-up in case of shortfall due to mark-to-market fluctuations. Thus, stock brokerages provide an additional layer of risk management between the clients and the exchange. Stock-brokerage houses have also been instrumental in adding breadth and depth to the equity investor base, supported by their technology-enabled platforms and focus on relatively untapped markets (tier 2 and beyond). Stock-brokers thus remain a critical constituent of the industry value chain providing trading infrastructure, risk management system and customer support services to lakhs of individual retail clients.

**Overhaul of regulatory framework to strengthen industry structure:** Given the fiduciary duty of brokers, given the access to client securities and funds, the integrity of their operations remains paramount. Over the past few years instances of broker default have come to light largely stemming from misuse or misappropriation of client securities. In light of the same, SEBI has taken several steps to strengthen the regulatory framework for broking entities to protect investor interest and enhance monitoring of stockbrokers.

In September 2016, SEBI issued its circular on – ‘Enhanced Supervision of Stockbroker / Depository Participants’ which standardised the monitoring guidelines for stockbrokers and depository participants, with an emphasis on the usage of client funds and effective monitoring of the financial strength of stockbrokers. This circular, which came into effect from April 1, 2017 and implemented for the period from April 2017 to July 2017, sought to curb misuse of client funds and also enhance processes and reporting standards for stock-brokers. This was followed by circulars on prevention on unauthorised trading (September 2017, November 2017 and March 2018) and handling of client securities (June 2019) which further tightened the guidelines for use of client funds and securities.

SEBI also amended the guidelines regarding collection and reporting of margin in the cash segment to bring down leveraging in the industry (November 2019) and also introduced pledge / repledge of securities to be given as margin (February 2020) as a preventive mechanism to further avert the misuse of client securities by brokers.

<sup>4</sup> KYC process is a requirement for opening a demat account which is to be conducted by the depository participant or the broker as per SEBI prescribed norms

Stricter norms pertaining to the use of client securities resulted in an increase in funding requirements for brokers to maintain adequate margins at the exchanges as well as restricted their ability to raise funds. This, coupled with the standardisation of the cash segment margin, is expected to limit the brokers' ability to offer additional value propositions like flexible payment terms, credit, etc. to its clients.

The increased regulatory oversight, coupled with the cost of implementing the processes, may also act as a deterrent for smaller brokerage entities and is expected to result in consolidation in the industry. Larger and well-established brokerage companies are expected to garner market share. Over the long term, the stronger regulatory framework is expected to strengthen the industry structure and improve financial discipline, which is critical, given the fiduciary duty of broking entities. With violations in the use of client securities coming to light in the recent past, stricter terms for brokerage houses would also help strengthen investor confidence.

**Path ahead:** Going forward, new client additions in the industry are expected to remain healthy supported by the large untapped market in the retail segment. While there has been a significant uptick in new account additions over the past two years, the demat penetration (when looked at in context of the entire population) remains low, compared to developed economies. The low share of wallet of financial products like equities and mutual funds in total household savings also points towards ample market opportunity. Household savings data, compiled by the Ministry of Statistics and Programme Implementation, shows that Indian households have traditionally favoured gold and real estate as a means of investment, with a meagre 2% of their gross household savings being parked in equities and mutual funds.

Favourable demographic profile with a young working population, greater adoption of technology, rising financial literacy and increasing smartphone/internet penetration would provide further impetus to growth. Stock brokers would continue to remain an integral part of the capital market. While both physical and digital models would continue to co-exist, stock brokers would continue to leverage technology to increase their reach and enhance their value proposition. The trend of consolidation is expected to continue with smaller entities expected to cede market share to their larger and well-established counterparts.





## Fintech & AI

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## The role of Fintech and AI in digitisation of financial services

The impact of technology on the financial services sector is more profound today than it was a decade ago, the trend being no different than what has been witnessed in other sectors. While this has been called as a disruptor by some, it is more of a natural extension of sorts, as an enabler. The influence of technology had always been on a gradual rise in the financial services sector over the past few decades but if one were to look at the recent context, it has gained a much wider acceptance and momentum gaining acceleration post the pandemic.

As the world got engulfed in the pandemic, the established way of carrying on business, financial transactions were disturbed, impacting cash flows and access to various financial services and this led participants operating across the financial spectrum to fasten tech adoption in areas including **payments, credit services and other financial services**. In the given scenario, digitalisation was the only way out as it ensured contactless and cashless delivery of financial services during the pandemic and facilitated financial inclusion or targeted delivery.

### Exhibit 1: Fintech landscape



Source: RBI, various industry and media reports

**Fintechs** are new age entities which leverage technology in a major way to ensure seamless, and efficient delivery of various financial services. These entities typically facilitate consummation of conventional financial

transactions in the digital mode. The transactions are not only faster but also cost effective for service providers as well as the customers. Some of the key technologies used by Fintechs include the following:

#### Exhibit 2: Key technologies used by Fintechs

<b>AI (Artificial Intelligence) &amp; ML (Machine Learning)</b>	<ul style="list-style-type: none"> <li>IT systems that can perform functions that would otherwise require human intervention. ML entails computers learning from data without human intervention</li> </ul>
<b>API (Application Programming Interface)</b>	<ul style="list-style-type: none"> <li>APIs comprise a set of rules and specifications that software programmes use to communicate with each other. They allow new applications to be built on top of others</li> </ul>
<b>Big Data</b>	<ul style="list-style-type: none"> <li>Involves analysis of voluminous amounts of structured or unstructured data that has been generated; by utilising digital tools and information systems</li> </ul>
<b>Biometrics</b>	<ul style="list-style-type: none"> <li>It is the study of distinctive and measurable human characteristics like finger or iris scan which can be used to categorise and identify individuals, protect valuable data</li> </ul>
<b>Blockchain</b>	<ul style="list-style-type: none"> <li>A system of recording a sequence of information, which would can be made difficult to change or alter</li> </ul>
<b>Cloud computing</b>	<ul style="list-style-type: none"> <li>A very much in thing, cloud computing is the use of an online network ('cloud') of hosting processors to increase the scale and flexibility of computing capacity thereby generating significant cost savings.</li> </ul>
<b>Mobile technology and applications</b>	

Source: RBI, various industry and media reports

Banks and other financial institutions are increasingly adopting AI and blockchain applications either directly or via tech partners for their own operations – for functions including credit assessment, monitoring, delivery of financial services and overall risk management. With lenders automating their product deliveries, confidence in the investor and tech developer community has improved which would spur further innovation in this space. Thus, the segment is expected to remain competitive, as lenders would prefer to ride the wave.

**Table 1: Telecommunication and internet subscriber base in India**

	Mar 2011	Mar 2014	Mar 2016	Mar 2021
<b>Total Telephone Subscribers (in crore)</b>	<b>86</b>	<b>93</b>	<b>106</b>	<b>120</b>
Urban (in crore)	57	56	61	66
Rural (in crore)	29	38	45	54
<b>Wireless Telephone Subscribers (in crore)</b>	<b>83</b>	<b>90</b>	<b>103</b>	<b>118</b>
Urban (in crore)	55	53	59	65
Rural (in crore)	28	37	44	54

	Mar 2011	Mar 2014	Mar 2016	Mar 2021
<b>Teledensity (%)</b>	<b>73</b>	<b>75</b>	<b>83</b>	<b>88</b>
Urban %	159	146	154	141
Rural %	34	44	51	60
<b>Broadband Subscribers (in crore)</b>	<b>1</b>	<b>6</b>	<b>15</b>	<b>78</b>
Wireless (in crore)		5	13	76

Source: TRAI

The sharp increase in the telecom subscribers, largely wireless/mobile and internet users has led the digital drive in the country. Amongst the various modes, mobile phones have emerged as the leading digital enablers over the last decade, helped by the deepening penetration of smartphones, with about 39% of the people using smartphones in FY2020 vis a vis 15% in FY2015. It is estimated that India added 50+ crore new smartphone users during the period and further, given the higher affordability, reducing smartphone costs (average smartphone cost being less than US\$ 150) and availability of greater variety of value smartphones, this number of smartphone users is expected to reach 80-85 crore by FY2026. [Source: PayTM DRHP]

As per TRAI, the data usage per data subscriber rose to 141 GB in 2020 from 3 GB in 2014 whereas, data cost declined to Rs 10.9/ GB in 2020 from Rs 269 / GB. This has led to India having the highest data consumption per user in the world with monthly data consumption of 13.5 GBs per user, much ahead of the US (~7 GBs per user) and China (~8 GBs per user). [Source: recent DRHPs]

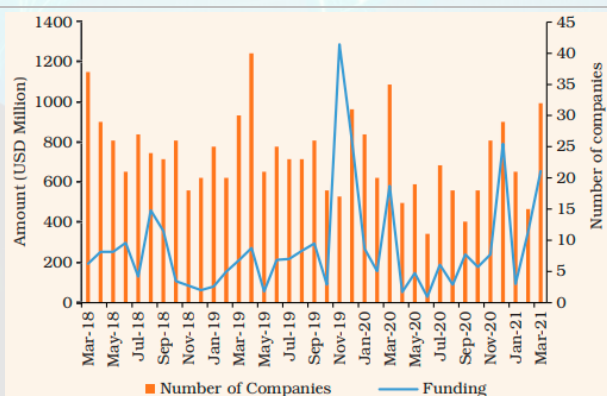
The overall digital drive in the financial services space have also been supported by steady augmentation in various other support structures, as can be seen by the sharp increase in the POS, ATMs and the credit and debit cards.

**Table 2: ATM, POS and cards statistics**

	March 2012	March 2014	March 2016	March 2021
<b>ATM ( Nos in Lakh)</b>	0.95	1.60	1.99	2.13
<b>POS (Nos in Lakh)</b>	6.61	10.66	13.85	47.20
<b>Credit Card (Nos in Lakh)</b>	76.53	191.81	245.05	620.49
<b>Debit Card (Nos in Lakh)</b>	782.83	3944.21	6618.24	8982.02

Source: RBI

**Exhibit 3: Fintech funding in India**



Source: Tracxn, 2021; RBI



Recent research data from Tracxn 2021 indicate that, notwithstanding the pandemic, worldwide US\$ 56.1 billion were invested into the Fintech sector during FY2021 (April-March), as compared with US\$ 84.8 billion in 2019 and US\$77.8 billion in 2018. The leading investment destination for Fintechs were the US and Canada, they continue to be the leading geographies for new companies, followed by Europe.

As for the India Fintech firms, they attracted investments of around US\$ 3.0 billion in FY2021 (approximately US\$ 4.5 billion last year), indicating decrease in investor sentiment due to the economic slowdown. Notwithstanding this, recent monthly trends indicate a revival of investor sentiment as the economic shock of the pandemic wears off. [Source: RBI]

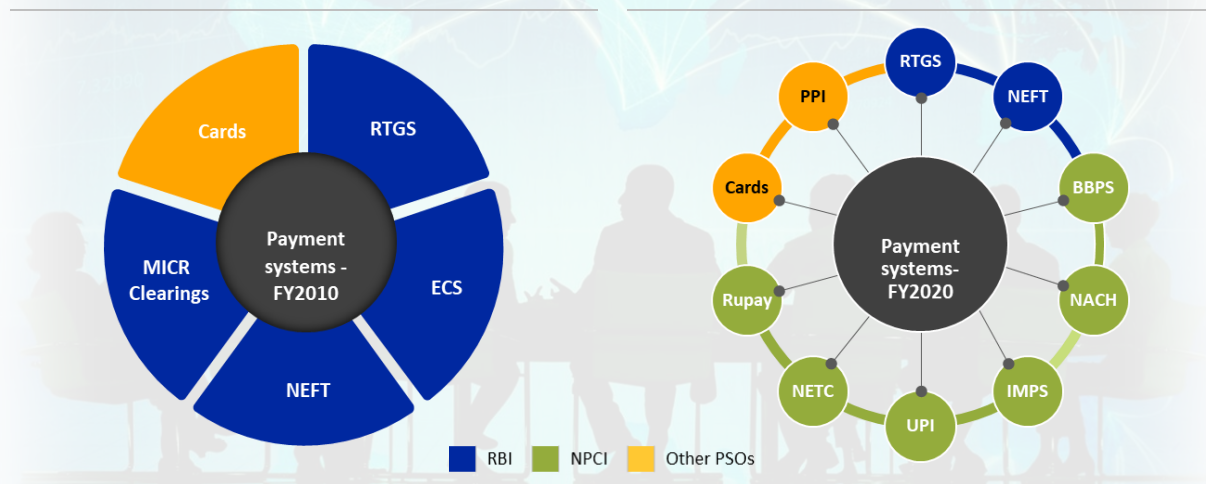
Fintechs could facilitate financial inclusion and this could widen access of financial services to low-income and rural borrowers and, small businesses. This could also help in efficient and effective implementation of various Government initiatives for the socially and economically weaker segments in the society. Fintechs could support growth and employment and also reduce the gap in the access of various financial services by the different segments of the society.

On the flip side, rapid growth of digital financial services makes the financial system prone to various risks, including cybersecurity, data theft, phishing etc. Therefore, robust regulatory policies and supervision governing these entities and provision of adequate safeguards would be the key. Regulators and policymakers would also have to keep up their pace, considering the highly dynamic nature of this segment, to ensure that the regulations are commensurate with the risks. It is also pertinent to ensure that they have an optimal balance while devising regulations to ensure that the segment fosters in an orderly manner without creating any challenges or risks to the overall financial system.

## Payment systems

The Indian payment systems have grown noticeably in the last decade, having transformed through sizeable digitalisation of the overall process. There has been a change in the user behaviour and entry of new players offering digital solutions. This transformation was well supported by the various Government initiatives and regulatory supervision which fostered innovation. The driving factors has been interoperability, ease, security and cost efficiency, which coupled with a well supervised settlement system has induced reliability for the users. The setting up of the National Payments Corporation of India (NPCI) in 2008 and the advancement made by it by introducing new products has revolutionised retail payments in the country.

### Exhibit 4: Payment Systems in India



Source: RBI

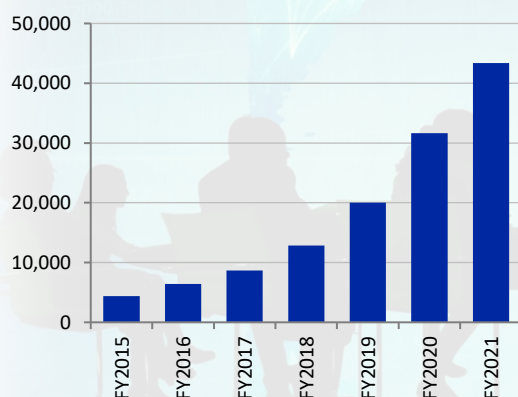
Payments System Operators (PSOs) in India include PPI issuers, Cross-border Money Transfer Service Scheme operators, White Label ATM (WLA) operators, Trade Receivables Discounting System (TReDS) platform operators, ATM networks, Instant Money Transfer Service providers, Card Payment Networks and Bharat Bill Payment Operating Units (BBPOUs), besides Clearing Corporation of India Ltd. (CCIL) and NPCI. [Source: RBI]

Authorisation of Payment System Operators (as at end-March)			
			In Number
Entities	2019	2020	2021
<b>A. Non-Banks – Authorised</b>			
PPI Issuers	47	43	36
WLA Operators	8	8	4
Instant Money Transfer Service Providers	1	1	1
BBPOUs	9	9	8
TReDS Platform Operators	3	3	3
Cross-border Money Transfer Service Scheme Operators	9	9	9
Card Networks	5	5	5
ATM Networks	2	2	2
<b>B. Banks – Approved</b>			
PPI Issuers	61	62	56
BBPOUs	39	39	42
Mobile Banking Providers	490	540	566
ATM Networks	3	3	3

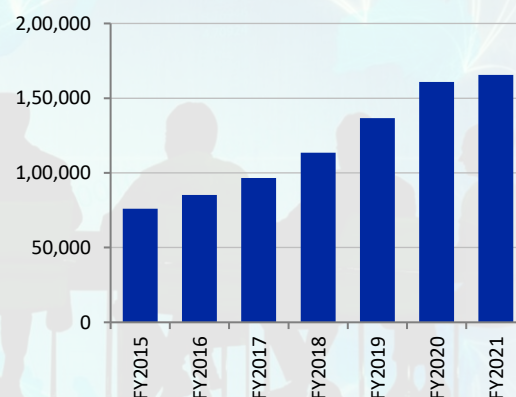
Source: RBI

The UPI, Aadhar enabled, QR-code based payments have significantly eased retail transactions; retail payments grew by about 10x in volume terms and more than 2x in value terms over the over the last seven years. Significant increase in the volumes indicate the surge in the smaller ticket transactions. Detailed below is the trend for the last seven years

**Exhibit 5: Retail payment volumes (in Million)**



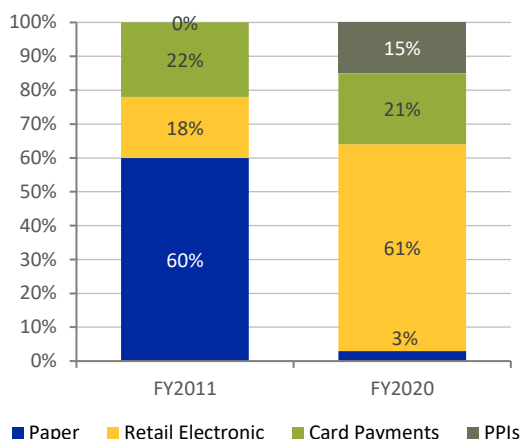
**Exhibit 6: Retail payment value (in Rs Billion)**



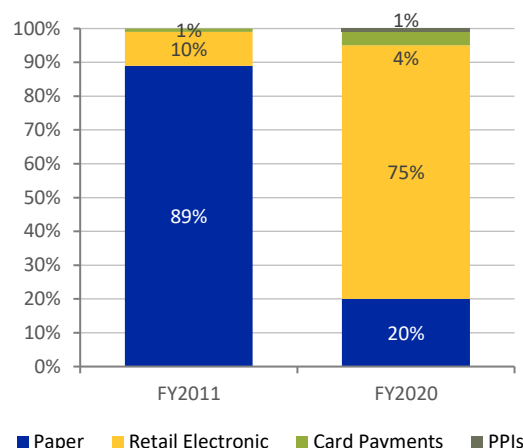
Source: NPCI

The transformation witnessed in the payment systems is also supported by the fact that payment preference over the last 10 years has moved enormously and the volume of paper clearing, which accounted for 60% of total retail payments in FY2011, shrunk to just 3% in the FY2020. What also made this shift possible were the real/near-real time fund transfers and access to simple yet innovative retail transactions modes-IMPS, UPIs, PPIs, NETC all of which helped in easy shift and adoption by the users.

**Exhibit 7: Retail Payment System Break-up (Volume)**

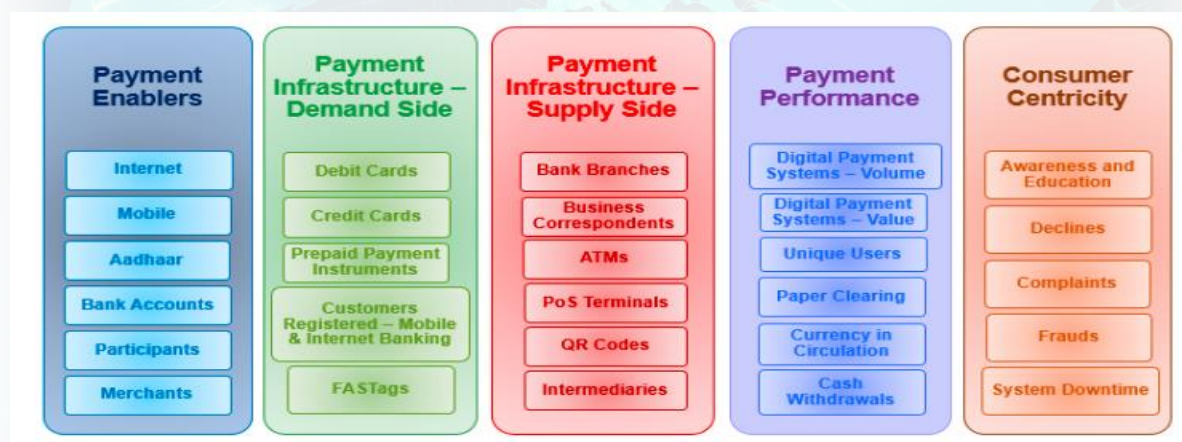


**Exhibit 8: Retail Payment System Break-up(Value)**



The RBI has not long ago constructed a composite Digital Payments Index (DPI) to capture the extent of digitisation of payments across the country. The RBI-DPI comprises five broad parameters that enable measurement of deepening and penetration of digital payments in the country over different time periods. Each of these parameters have sub-parameters which, in turn, consist of various measurable indicators.

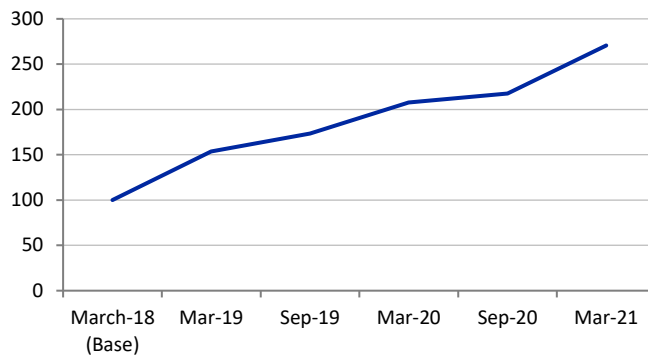
**Exhibit 9: RBI payment index-parameters and sub-parameters**



Source: RBI



**Exhibit 10: RBI-DPI index trend**



The RBI-DPI index has demonstrated significant growth in the index indicating that the adoption digital payments across the country in recent years, has been rapid and deep. The index series since its inception is as under:

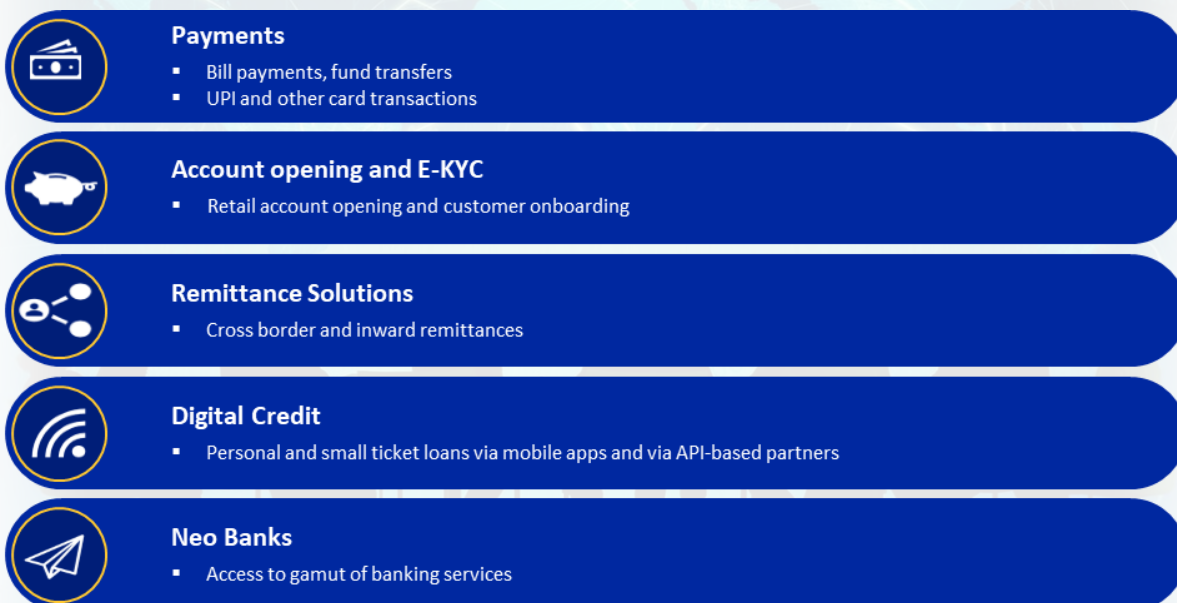
Source: RBI

## Banks and non-bank collaboration with Fintech

Banks and non-banks have adapted to the changing customer needs and have embraced the technological evolutions as part of their product and service delivery. Entities have investing heavily in augmenting their technology to keep-up with the fast-changing requirements; some have partnered with Fintechs for some of their key operational functions. While this is expected to increase their scale and revenues, entities are also diversifying to new product offerings including insurance, wealth management etc, support by new-age financial technologies.

The relationship between Fintechs and banks/non-banks is quite synergetic; while banks have the access to a large customer base and, to liquidity and capital for growth, Fintechs supplement with their tech-based product delivery and new ideas to increase the bank' wallet share with their customers. In a nutshell, banks and Fintech firms have distinct comparative advantages and a strategic collaborative partnership between the two would enable them to focus on their respective core competencies. [Source: RBI]

**Exhibit 11: Key areas of Fintech-Banking collaboration**



Source: ICRA Research, bank investor PPTs

## Insurtech and wealth-tech

One more category of Fintech is Insurtech which allows users to choose their desired policy online and all the other processes including payment, renewal and claims process being digitalised. This segment would include insurance companies, companies involved in aggregation of insurance policies and entities in the business of claims management and settlement.

Entities leverage on a range of tech including AI, block chain, risk analytics etc for their decision-making and also provide the user with various options while choosing an insurance company or while going through the subsequent process of managing policies or claim settlement. There are 100+ entities operating in this space in the country at present.

Another Fintech area is Wealth-tech, which includes offering personal finance management services (aggregator model), investment platforms that offer 'end-to-end digitisation' of the investment process which entails a customer self-on boarding, investing as well as redeeming digitally and, Robo-advisory, which provides algorithm-based advisory to investors tailor-made as per their individual needs. As per media reports, there are close to 500 entities in this space right now in the country.

To sum up, it goes without saying that the Fintechs have played a very significant role in transforming the financial services sector over the past decade and their presence and role is set to only intensify and grow in the years to come.

*Note: This write-up is prepared basis the public information available in various DRHPs, RBI and media reports*





# Environmental Social Governance

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## ESG Compliance and Value Creation for Stakeholders

### Overview

The environmental, social, and governance (ESG) factors are increasingly becoming mainstream considerations for investors, issuers, and various other stakeholders and are no longer relegated to the periphery of decision-making. Alongside the significant political and technological shifts that the world is experiencing, the environmental, demographic, and consumer behaviour wiring too is showing profound changes that has material implications for corporates, economy, and financial stability.

**Environment:** Research published by the International Panel on Climate Change (IPCC) indicates that each of the last four decades has been successively warmer than any decade that preceded it since 1850; and that the observed increases in well-mixed greenhouse gas concentrations, since around 1750, are unequivocally caused by human activities. In recognition of the potentially irreversible threat to the planet from climate change, many countries around the world had adopted the Paris Agreement in December 2015, the central aim of which includes *“holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels”*.

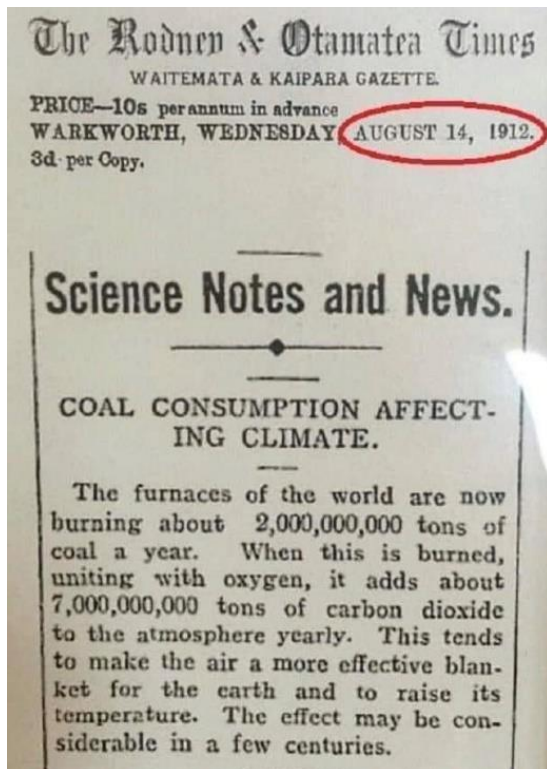
The pre-industrial period is defined as the period between 1850-1900. Given that global temperature is currently rising by 0.2°C (±0.1°C) per decade, human-induced warming had reached 1°C above the pre-industrial levels around 2017 and, if this pace of warming continues, it could reach 1.5°C by around 2040. These numbers refer to the average global temperatures. There are already regions that have experienced warming in at least one season that is greater than 1.5°C above the pre-industrial levels. This has grave ramifications and has the potential to incite the ogre of heatwaves, heavy rainfall events, flooding, rising sea levels amongst other adverse impacts on societies and ecosystems.

**Social:** As for social risks, events like the Syrian Civil War or the Arab Spring suggest how some seemingly trivial events could spur political upheaval and cause regional instability. While these events were region-specific and may give an impression that the need for devoting urgent attention on a global scale is not an imperative, but the highly globalised context of today and the inter-connected supply chains imply that social risks have the potential to create widespread economic reverberations. In general, investors and consumers are becoming increasingly aware of the impact prosperous and failing communities have on businesses (and vice versa). The Covid-19 pandemic has further highlighted the importance of sustainable development and the need to redirect capital flows towards sustainable activities to make our economies and societies, including our health systems, more resilient against such shocks.

**Governance:** Unlike the environmental and the social considerations that are driven by external factors such as regulation or demographic change, governance considerations are largely entity-driven. Notwithstanding the above, there have been instances in the past where investor risk aversion has increased across the sector following the coming to light of fraudulent accounting practices followed by select entities in the sector. These events have tended to snowball into wider sector-related funding challenges which underpins the importance that sound governance practices hold from a sustainability perspective.

With this context, this article attempts to touch some of the strands of ESG-related interventions in the world and in India, while highlighting both the challenges as well as the urgency in galvanising capital to support sustainable finance.

## Evolution of the global commitment towards ESG



The accompanying piece is from a 1912 newspaper publication which indicates that scientists have known for more than a century that coal consumption can have adverse repercussions for the climate. This piece originates from a March 1912 article in the magazine [Popular Mechanics](#) titled, “Remarkable Weather of 1911: The Effect of the Combustion of Coal on the Climate – What Scientists Predict for the Future.” While it is not necessary to invoke history to convey the climate change risks that the world faces, what this piece indicates is that the scientific community has been sensitive to the ill-effects of CO<sub>2</sub> emissions for a long time. In comparison with the estimated 7 billion tonnes of CO<sub>2</sub> emissions in 1912, the year 2019 is estimated to have seen about 43 billion tonnes of CO<sub>2</sub> emissions from human activities. If this pace of emissions were to continue, the adverse effects are likely to be non-linear. This could have an acute global impact on political and financial stability, migration trends, and food and water security.

The ESG issues were first explicitly referred to in the 2006 United Nation’s Principles for Responsible Investment (PRI) report<sup>5</sup>. The [six principles](#) for responsible investment that are laid down in the PRI aim to outline the possible actions for incorporating ESG issues into investment practice. Later, in 2015, at the United Nations Framework Convention, the Paris Agreement was born; and at the United Nations General Assembly, the 17 Sustainable Development Goals (SDGs) were formulated – to be implemented by 2030<sup>6</sup>. Several global reporting and accounting frameworks have also taken shape over the years to encourage higher disclosures by corporates and investors (*more on this later*).

Investor capital to support sustainable activities and projects has also been growing rapidly. As global corporations and financial institutions gear towards upping their ESG quotient, the issuance of bonds to raise money for climate-related or social projects, or linked to sustainability targets, is set to surpass USD 1 trillion in 2021<sup>7</sup>. In India, last year, 10 Indian companies raised USD 4.6 billion worth of ESG bonds, compared with around USD 1.3 billion in the year prior<sup>8</sup>. While these numbers are still small in relation to the total volume of capital issuances (and would also perhaps have the stains of ‘greenwashing’/ ‘sustainability washing’), the broader trends in capital flows towards sustainability are unambiguous. In fact, ESG investing has been accelerating, buttressed by studies that show that good corporate sustainability performance is associated with healthy financial market returns.

<sup>5</sup> It must be conceded that ESG was born out of actions in the global community over several decades that culminated into our modern understanding of ESG. Pointing at a single moment in time is, therefore, not fully informative.

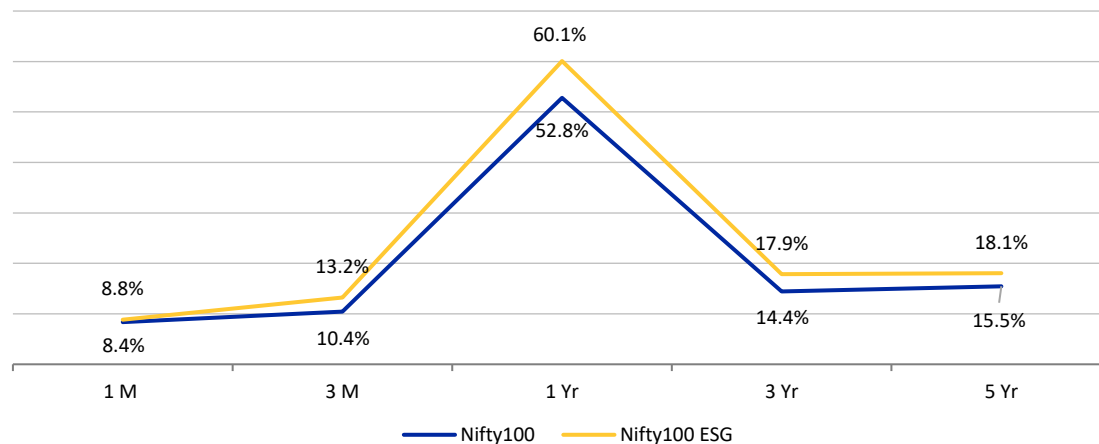
<sup>6</sup> The SDGs succeeded the Millennium Development Goals.

<sup>7</sup> For perspective, the total global bond issuances are to the tune of USD 27 trillion.

<sup>8</sup> For perspective, the total bond issuances in India are to the tune of USD 100 billion.



### ESG indices (In India) have outperformed other broader indices



Source: [NSE](#), Index Dashboard, Aug 2021

### Global ESG reporting and disclosure standards

One of the barriers to eliciting investor interest towards sustainability finance has been the lack of adequate sector-related or entity-level data, and the absence of reliable and verifiable tools to measure ESG performance.

As the adage goes, 'What gets measured, gets managed'. Disclosure by firms on the various ESG dimensions, including the mitigation and adaptation measures, thus holds the potential to encourage a virtuous circle of policymaker understanding, better analysis and use by investors in their decision-making. Towards this aim, a large variety of frameworks for sustainability reporting and disclosures have emerged across the world. In some ways this is overwhelming, but this is possibly a natural progression of developments in an area where there could be multiple pathways to achieving the desired outcomes. Among the many frameworks, the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP), the Sustainability Accounting Standards Board (SASB), the Taskforce on Climate-Related Financial Disclosures (TCFD), and the Workforce Disclosure Initiative (WDI) are the salient ones in vogue today.

These disclosure standards are intended to usher in the desired consistency, comparability and reliability of data published by entities. These are designed to be used by organisations to report their impacts on the economy, environment, and/ or society, among other things.

At the same time, various service providers like MSCI, Sustainalytics, Vigeo Eiris etc. use the data available through the aforesaid disclosures, supplemented with their proprietary data to provide ratings and reports that aim to measure the contribution of entities to the sustainability agenda and their degree of alignment with the SDGs. These are often accompanied by ESG scorecards/ ratings, besides other bespoke analysis. Each of these service providers follow their own methodologies, which on one hand is desirable as it allows a diversity of opinions; but on the other, it poses decision-making challenges for investors because of the potential for a wide divergence in views. The number of service providers is only expected to grow over time with a concomitant improvement in the quality and the expansion in the volume of data and disclosures.

What the plethora of reporting standards and ESG rating agencies implies for the global corporates is (particularly for those in the European Union where ESG reporting is relatively ahead of the curve) that they need to contend with answering multiple questionnaires from financial investors and ESG rating agencies. This raises compliance costs and is resented more by the small and the mid-sized companies. Unsurprisingly, there have been voices around the world for taking steps towards harmonisation of the ESG standards. The efforts being



made by the IFRS Foundation lately to prepare a set of internationally recognised sustainability reporting standards, if implemented and adopted, would do well to address today's fragmented landscape.

### Regulations

**European Union:** The EU's legal framework has been developed under two regulations: The Sustainable Finance Disclosure Regulation (SFDR) [adopted in 2019] and applies to the financial market participants such as asset managers and financial advisors. Further, the ESG disclosure requirements flow from the Taxonomy Regulation [adopted in 2020].

**United States (US):** Compared with the EU, the focus on ESG is relatively lesser in the US financial regulations. Further, the SASB standards are voluntary and differ from the EU disclosure requirements with focus on 'simple materiality' as opposed to the 'double materiality' focus of the EU regulations.

**China:** The China Securities Regulatory Commission (CSRC) issued a set of risk disclosure rules in June 2021 which require publicly listed companies to disclose procedures for preventing pollution of air, water, and soil, plus methods for managing waste as well as reporting environmental incidents, especially if any penalties are associated with them. Like in the US, these are only a voluntary set of disclosures.

## Regulatory landscape, reporting and the state of disclosures in India

**SEBI regulations and the Business Responsibility Reporting:** Clause 34 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 ([LODR](#)) stipulates that the top one thousand listed entities based on market capitalisation, should include in their annual reports, a business responsibility report (BRR) describing the initiatives taken by the entity from an ESG perspective. The format of the report is specified by SEBI and entails a five-section format in the annual report, encompassing:

**Section A:** General information about the company, including the locations where the business activities are undertaken

**Section B:** Financial details, including the total spending on CSR

**Section C:** A checklist indicating whether the entity has any subsidiaries and whether they too (and what proportion of the subsidiaries) participate in the BR initiatives of the parent entity; likewise, whether the entity's suppliers, distributors etc. participate in the BR initiatives of the entity (and what proportion)

**Section D:** Details of the Directors responsible for the implementation of the BR policies; a checklist seeking information on the governance norms relating to the implementation of the nine principles of the National Voluntary Guidelines (NVGs); count of the Board meetings held during the year to assess the BR performance of the entity

**Section E:** Disclosures around the performance of the entity in implementing the NVGs— mostly in the form of a checklist, accompanied by some qualitative commentary

While Sections A to D of the BRR largely cover the general facts about the entity and the governance standards followed for implementing the BR policies, **Section E** provides a perspective on the performance of the entity in implementing the nine NVGs. Yet, these might not be sufficient by themselves in bringing to the fore the primary ESG risks that an entity may be facing, and the associated mitigants.

Section E of the BRR covers information like:

- *Extent of reduction in the usage of resources like energy and water per unit of the product (but this disclosure is optional)*
- *Steps taken to improve the capacity and capability of local and small vendors*
- *Percentage of recycling of waste*
- *Percentage of employees given safety and skill upgradation trainings during the year*
- *Monetary contribution to community development projects*

On a reading of the BRR, one might find it difficult to clearly establish the key ESG risks that the entity faces. While the BRR does provide a broad perspective on the efforts being taken by the entity in the areas identified by the NVG, it is difficult to link this information to the possible financial risks that the entity faces.

**SEBI regulations and the Business Responsibility and Sustainability Report:** In May 2021, an amendment was made in clause 34 of the LODR with the objective of further enhancing the ESG disclosures. As per the amendment, with effect from 2022-23, the top 1000 listed entities by market capitalisation need to publish a business responsibility and sustainability report (BRSR) in a SEBI-specified format. Even during 2021–22, the top 1000 listed entities may voluntarily publish the BRSR in place of the mandatory BRR.

The BRSR lays considerable emphasis on quantifiable metrics to enable easier measurement and comparability across companies, sectors and time periods. Further, the disclosures on climate and social (employees, consumers and communities) related issues have been significantly enhanced and made more granular. The disclosures under the BRSR are segregated into essential (mandatory) and leadership (voluntary) indicators. The BRSR also provides for inter-operability of reporting i.e. the entities which prepare sustainability reports based on internationally accepted reporting frameworks (such as the GRI, SASB, TCFD, Integrated Reporting) can cross-reference the disclosures sought under the BRSR to the disclosures made under such frameworks.

#### **Salient enhancements in the BRSR disclosures useful from a risk assessment perspective**

The BRSR disclosures are going to be a considerable enhancement over the BRR disclosures. Some of the additions are outlined below:

- *The entities are required to indicate, up to three, high priority responsible business conduct and sustainability issues pertaining to the ESG matters that present a risk or an opportunity to the business. Also, the entities are required to outline the approach being taken to address them.*
- *More granular details on material environmental risks are required to be disclosed as per the format below:*

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- More granular details on material environmental risks are required to be disclosed as per the format below:*

Environmental component	Risks identified	Mitigation measures adopted
Land use		
Emissions		
Water		
Energy		
Biodiversity		
Others		

- Likewise, air emissions and liquid discharges per unit of production for the top three facilities are to be disclosed.

Parameter/ Unit (Sox, NOx, SPM etc. specified by MoEFCC, CPCB, SPCBs etc.)	Performance	Financial Year
	Permissible Limit	For Plant 1, Plant 2, Plant 3
	Actual Measured Value	
	Permissible Limit	
	Actual Measured Value	

- In a similar vein, quantitative disclosures are specified for solid waste generated, carbon emitted per unit of production, percentage of renewable energy consumed to the total energy consumed etc.
- On the social dimension, specifically relating to communities, disclosures are to include the details of Social Impact Assessments undertaken for the various projects, information on projects for which ongoing rehabilitation and resettlement is being undertaken.
- About social risks that could arise from the customers' side, disclosures are to be made on the number of complaints received in respect of data privacy breaches, advertising, restrictive or unfair trade practices etc.

The above disclosures are more granular, and hold promise to provide a more wholesome perspective to the analysts and investors on the ESG risks that an entity faces, deviations (*if any*) from the regulatory norms, besides providing a perspective on the risk of loss of reputation in the eyes of the community or customers.



## Role of credit rating agencies

There are often demands that the credit rating agencies (CRAs) should play a bigger role in supporting the cause of sustainability assessments. There is a view that the methodologies followed by the CRAs to assign ratings should be suitably amended to provide a place for explicitly factoring-in the ESG risks that a rated entity faces. However, these demands seem to conflate the purpose of credit ratings and that of sustainability assessments. It is important to distinguish between these two because they are designed to achieve different objectives and provide information on different characteristics of a debt instrument or an issuer, to investors.

- Credit ratings are forward-looking opinions on the relative credit risk of the rated debt obligations or the issuers and are meant to express the issuer's ability and willingness to repay its obligations in a timely manner. The underlying credit analysis is conducted using proprietary published rating methodologies and is communicated on a rating scale. Credit ratings do not seek to measure the green, sustainable or ethical credentials of a financial instrument or an issuer, but do consider how ESG factors, where material, impact creditworthiness.
- In contrast, ESG assessments or sustainability assessments measure the extent to which an issuer integrates, manages and discloses key sustainability factors in its activities.

The ESG factors may be considered as part of a credit rating, however, their consideration does not imply that the credit rating can be construed as providing an opinion on the sustainability of an issuer. Lenders and investors value the independent opinion on credit risk that CRAs provide and it would be erroneous to adjust the credit ratings to reflect considerations, including ESG issues, where those considerations have no material impact on the credit risk of the issuer or issuance.

That said, while undertaking credit assessment of entities, the CRAs seek to incorporate all relevant credit considerations into their rating decisions, while taking a forward-looking view on the risks and the mitigating elements. The relevant credit considerations include (sometimes overtly, sometimes covertly) the E&S factors that could affect the rated entity/ transaction. While the analytical approach may not always disaggregate these risks to assess their impact on the rating, these risks are often assessed broadly, if not precisely. Further, it is not always feasible to fully or precisely disaggregate the sub-components of E&S risks in credit analysis since these considerations often tend to overlap<sup>9</sup>.

That said, the materiality of the E&S risks and the time horizon over which they are expected to crystallise differs widely across sectors and entities. In some cases, while the E&S risks could be material, their effect on the credit profile may be muted because of other fundamental strengths of the entity. In other cases, the adverse impact of the E&S risks is expected to play out in the distant future, and hence these considerations do not necessarily weigh on the rating today—with the expectation that the rated entity would possibly adapt itself by realigning its business model in the distant future when these risks become more apparent.

While evaluating the E&S risks, the objective is only to assess the direct and indirect risks that an entity faces and how it already is or is intending to mitigate the impact of such risks on its credit profile. As an example, the assessment only involves whether an entity is exposed to physical climate risks (e.g. a rice mill that is dependent on the paddy crop and hence faces direct climate risks), or carbon transition risks such as those arising from changes in regulations (e.g. an auto ancillary that makes parts for gasoline engines facing the risk of electrification of cars) or other environmental and social risks; and seeks to understand the various mitigation and adaptation approaches that the entity is implementing to mollify these risks. Notwithstanding the above, as an example, it is possible that even if an entity A has a higher carbon footprint than entity B, it does not materially

<sup>9</sup> For example, carbon-reduction measures by an entity would have positive implications for the health and well-being of the community (an S factor) as well as for reducing greenhouse gas emissions (an E factor).

affect the credit opinion on entity A. This is because the credit opinion on an entity considers a wide gamut of credit-relevant factors and the E&S factors are only one among those.

That said, given the increasing importance of ESG considerations and their potential impact on credit risk, efforts to enhance data-related transparency would be the most helpful for credit analysis. This includes both issuer-specific information and the possible creation of a common, publicly accessible environmental data portal for the companies' ESG information.



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## Notes:



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## About CII

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

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