HDFC MF Yearbook 2021

A New Dawn Beckons !

2020: The Black Swan Year!

It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change **----- Charles Darwin**

Year 2020 was another year when humans across the world showed tremendous resilience and fought the pandemic. We salute and commend the great efforts put in by our front-line Covid-19 warriors and all those who contributed towards the fight against the pandemic.

HDFC group pledged Rs150cr contribution to the PM CARES Fund to provide relief and rehabilitation measures towards the Covid-19 pandemic. Our Group Chairman, Mr. Deepak Parekh remarked “These are uncertain and trying times for all of us. The HDFC Group’s support to the PM CARES Fund is to commend the exemplary efforts of the Central & State Governments, armed & paramilitary forces, local police, healthcare professionals and sanitation workers across the country working tirelessly to fight the pandemic. He also added that “I am certain we will emerge a stronger, more conscious & compassionate nation” in the aftermath of Covid-19.

Source: Media articles published in April 2020

Contents

Refer disclaimers on slide 98

Global Economy and Markets

We are quick to forget that just being alive is an extraordinary piece of good luck, a remote event, a chance occurrence of monstrous proportions.. – Nassim Nicolas Taleb

HDFC MUTUAL FUND BHAROSA APNO KA

Brief Introduction

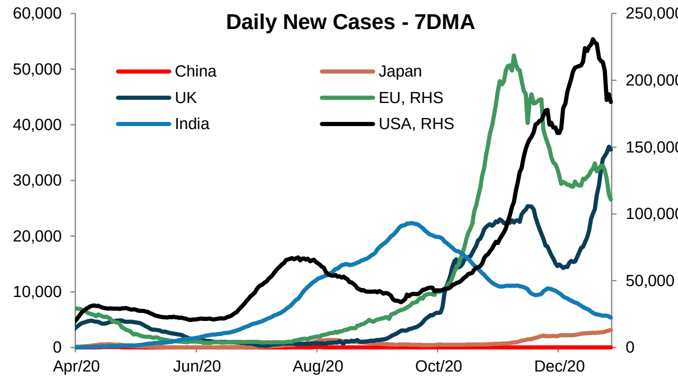
- Covid-19 is a virus belonging to coronavirus family like SARS, MERS, etc.
  - Widely believed to have originated in Wuhan, China. It quickly spread to other countries and was declared a global pandemic by WHO in Mar 2020

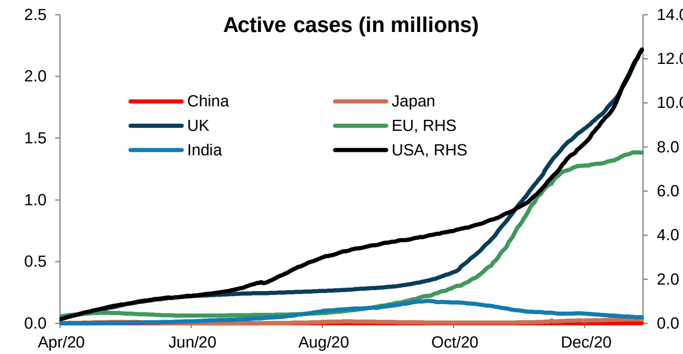
Current Status

- As on 27 Dec 20, it has infected over 80 mn across ~200 countries
- Few countries are experiencing a 2nd wave of Covid -19 infections with higher intensity and higher number of cases than the first wave
- Active cases trending higher in US, UK and EU but falling in India, China, etc.

Vaccine development and Herd immunity

- Vaccine is a substance used to actively acquire immunity against a particular infectious disease
- Herd immunity is achieved when a sufficient proportion of a population has become immune to an infection. Two alternatives to achieve herd immunity
  - 50-60% of population is infected
  - Vaccinate and immunize >70% of population*
- Vaccines for Covid-19 were developed in a record time of less than one year as against a typical development time of ~10 years
- Developed markets (DMs) likely to achieve herd immunity by CY21 and Emerging Markets (EMs) by CY22/23





Country	Estimated doses for herd immunity (60% of population) (mn)	Estimated doses to vaccinate 100% of population (mn)	Total doses via supply contracts (mn)
US	400	665	1,010
EU	535	890	1,100
UK	80	135	340
Japan	155	250	540
India	1800	3000	400

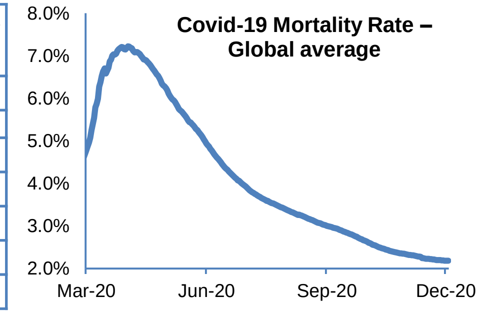
Source: Morgan Stanley, JM Financials, Updated till 27 Dec 2020

*assuming 90% efficacy of vaccine

Covid-19 : A Black Swan event

- While the symptoms of Covid-19 are similar to that of common flu, mortality rate is nearly 10 times higher. Mortality rate is even higher for elders and people with co-morbidities

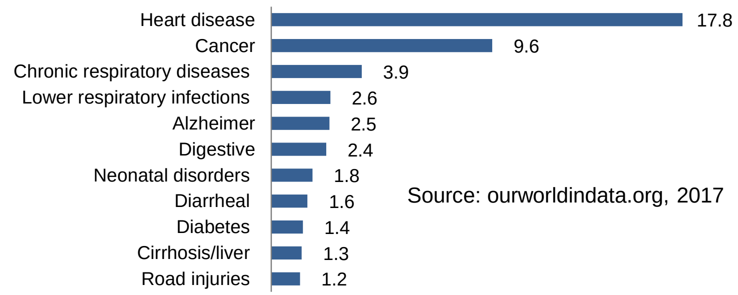
Age	Covid Mortality Rate*
<29	0.1%
30 to 39	0.4%
40 to 49	1.0%
50 to 59	2.4%
60 to 69	6.7%
70 to 79	16.6%
>80	28.7%



*Mortality Rate = Deaths/infections; Source: ourworldindata.org; statista.com

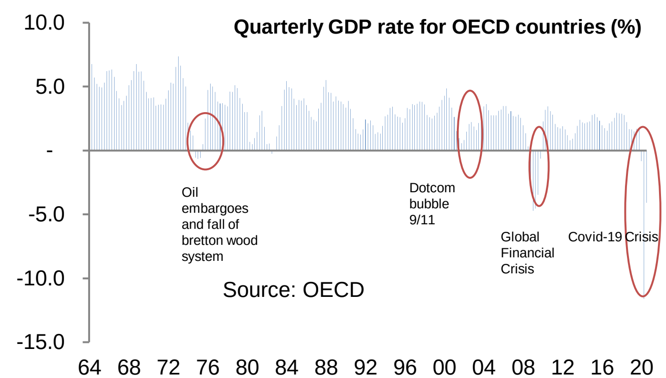
- Total deaths in the world in 2019 were 55.4 mn (~0.8% of the world population); Covid-19 caused ~1.8 mn deaths^ in 2020 i.e. ~3% of total deaths or ~0.02% of the world population

Number of Deaths by causes (in mn) in a year



Source: ourworldindata.org, 2017

- Though Covid-19 resulted in a low proportion of deaths, its short term economic impact was high
  - Q2CY20 experienced the highest decline in GDP in the past 50 years !
- Covid-19 induced recession is the deepest since World War II and over twice the intensity of global financial crisis (GFC)



Source: OECD

^ as on 31 December 2020

Year 2020 : Initial disruption in Growth followed by a strong recovery

Global growth

- Varying degree of lockdowns impacted growth significantly in Q2CY20 but recovery was strong in Q3CY20
- Global GDP growth likely to rebound in CY21 aided by base effect, vaccines rollout, fiscal & monetary measures
- New wave of infections, delay in vaccine rollout & its efficacy, etc. are key risks

United States (US)

- Unprecedented fiscal and monetary stimulus supported revival
- Agenda of new President suggests that fiscal stimulus is likely to remain at an elevated level; US Fed likely to remain accommodative
- Base effect, increase in savings, favourable fiscal and monetary stance likely to support recovery
- Unwinding of fiscal / monetary stimulus, rise in trade tensions with China, etc. are key risks

Euro Area

- Entered the crisis with slowing growth
- Fiscal and monetary stimulus post outbreak has supported recovery; 2nd wave has led to reimposition of lockdown and thus can impact growth

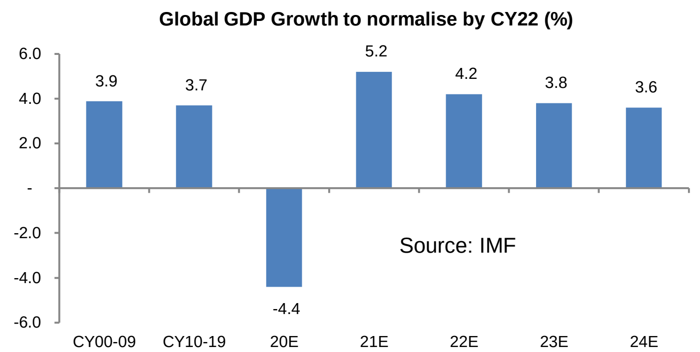
China

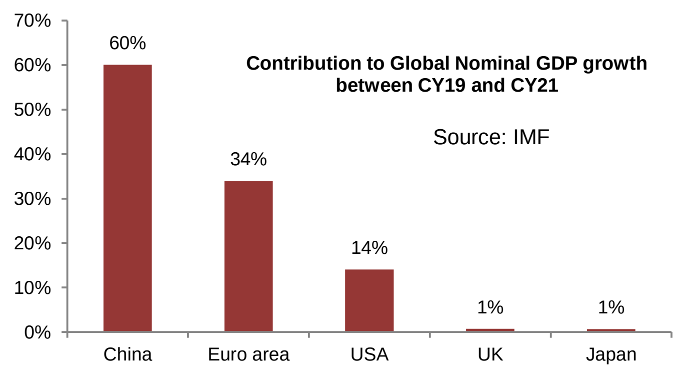
- Efficient control of spread and unlocking have helped in economic rebound with majority of indicators near pre-covid or higher levels
- Only major economy not expected to register de-growth in CY20. Growth likely to improve sequentially
- Estimated to contribute ~60% to world GDP growth between CY19 and CY21

Quarterly Real GDP Growth, YoY%

	Mar-20	Jun-20	Sep-20	Dec-20E	Mar-21E	Jun-21E
World	2.0	-9.0	-2.4	-0.7	4.0	12.5
US	0.3	-9.0	-2.9	-2.3	0.0	12.2
China	-6.8	3.2	4.9	6.1	19.6	8.0
Japan	-2.0	-10.2	-5.8	-3.3	-2.6	6.9
UK	-2.1	-21.5	-9.6	-12.4	-8.7	18.3
India	3.1	-23.9	-7.5	3.5	4.2	27.9

Sources: Morgan Stanley





Global Economy normalising : Manufacturing leads the recovery

- Economic indicators are stabilizing at a fast pace aided by unprecedented measures taken by major Central banks and Governments

- Industrial Indicators are pointing at a fast pace of recovery
  - Steel Demand is growing at healthy pace; oil demand lags

- Services indicators are normalising at a slower pace
  - Divergent trend across services; contact intensive and discretionary services are recovering at a slower pace

- Sources of uncertainty
  - With rise in virtual meetings, outlook on aviation / transportation
  - Impact on incomes and job creation due to accelerated automation and aggressive cost cutting

Macro Indicators	Unit	Pre-Covid-19	Trough	Latest
US 10Y Yield	%	1.92	0.53	0.93
10Y German bunds yield	%	-0.19	-0.63	-0.55
Global Trade Index	YoY	0.20%	-18%	-2%
Oil Prices	USD/bbl	66	24	51
Commodity Price Index	YoY	3%	-32%	-2%
FAO Food Price Index	YoY	9%	-3%	6%

Manufacturing Indicators	Unit	Pre-Covid-19	Trough	Latest
Developed Markets IIP	YoY	-2%	-19%	-5%
Emerging Markets IIP	YoY	3%	-6%	1%
Manufacturing PMI	Index	50	39.6	53.7
PV sales^	YoY	-11%	-43%	-2%
Steel Production	YoY	4%	-13%	7%
Oil Consumption	YoY	2%	-20%	-6%
US Mortgage application	Weekly YoY	-13.2%	-29.4%	0.8%

Services Indicators	Unit	Pre-Covid-19	Trough	Latest
Services PMI	Index	52	23.7	52.2
US Consumer spending	YoY	0-1%	-32%	-2%
Global total flights	Weekly, 000s	190	64	145
Aviation Revenue per KM	YoY	-7%	-93%	-77%
US Hotel Occupancy	%	66.4	21	37.4
No. of seated diners (World)	YoY	NA	-100%	-62%

Sources: JM Financials, Bloomberg, CEIC, ^Includes: Germany, France, US, UK, China, India, Japan, Russia and Brazil
For the purpose of the Pre-Covid-19 data, average or data point for Dec 2019 is taken. Latest data is for month for which latest data is available as on 24 Dec 2020

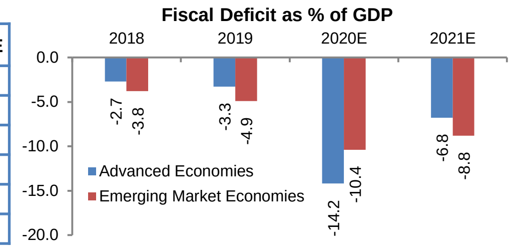
Recovery aided by unprecedented fiscal and monetary stimulus

HDFC MUTUAL FUND
BHAROSA APNO KA

- In response to the pandemic, countries unleashed unparalled fiscal and monetary stimulus to cushion its economic impact

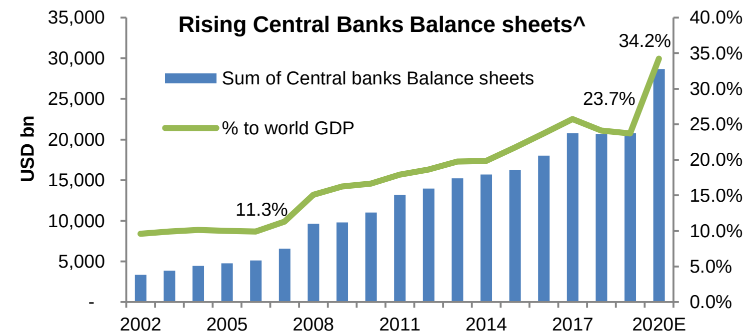
- Fiscal deficits (FD) are set to widen across board on back of lower revenues and fiscal stimulus

FD (% of GDP)	2018	2019	2020E	2021E
United States	-5.8	-6.3	-18.7	-8.7
Euro Area	-0.5	-0.6	-10.1	-5..0
Japan	-2.5	-3.3	-14.2	-6.4
UK	-2.2	-2.1	-16.5	-9.2
China	-4.7	-6.3	-11.9	-11.8
India	-6.3	-7.9	-13.1	-10.9



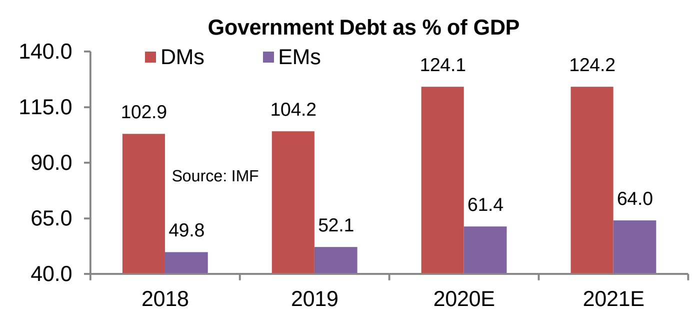
Source: IMF World Economic Outlook October 2020

- Central Banks also aggressively unveiled liquidity easing measures
  - Policy rates were reduced to near all-time lows
  - Aggregate balance sheet size of 6 largest Central banks rose ~40% YoY
  - Helped ease G-sec yields and credit spreads



Source: Bloomberg; JM Financials

- Public debt to GDP is at record levels
  - Sovereign debt likely to jump by ~20% from pre-covid levels
  - Fiscal consolidation is likely over the next couple of years
  - DMs likely to add more debt in CY19-21 than in last 9 years

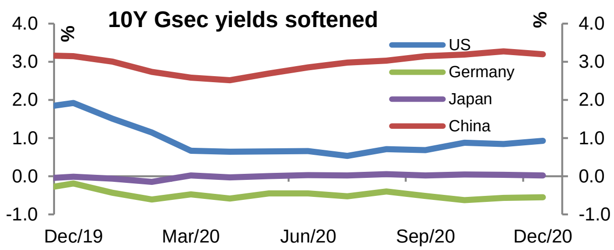


Our inability to look beyond the latest news cycle could be one of the most dangerous traits of our generation
--- Richard Fisher, Ex-President and CEO of the Federal Reserve Bank of Dallas

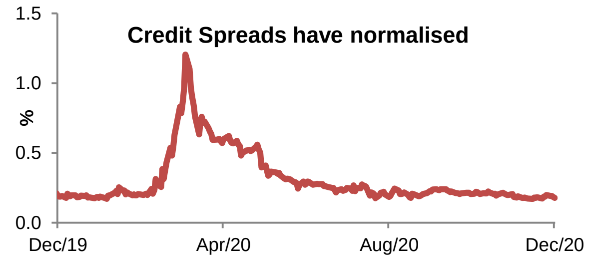
^Summation of Central Banks balance sheet size of US, ECB, China, UK and Japan

Lower yields and spreads, higher savings and unemployment

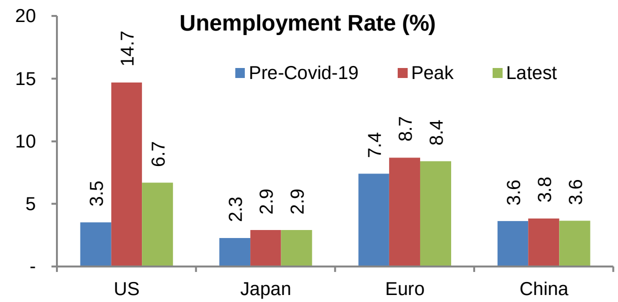
- Gsec yields moderated driven by risk off sentiments and huge monetary stimulus across geographies



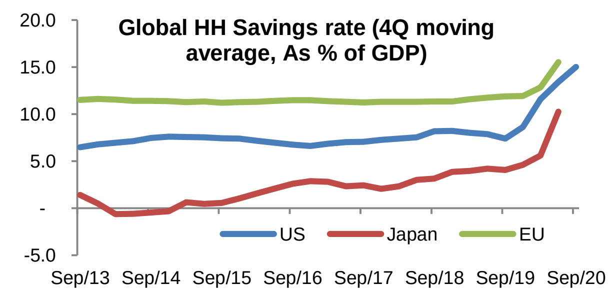
- Credit spreads^ that spiked in March 2020 have largely normalised



- Unemployment rates, that rose in aftermath of pandemic, have improved but are still higher than pre-covid levels except in China



- Household (HH) savings rate rose sharply due to limited avenues to spend and fiscal stimulus to support employment, especially in DMs. Will higher savings lead to more spending next year as normalcy returns remains to be seen

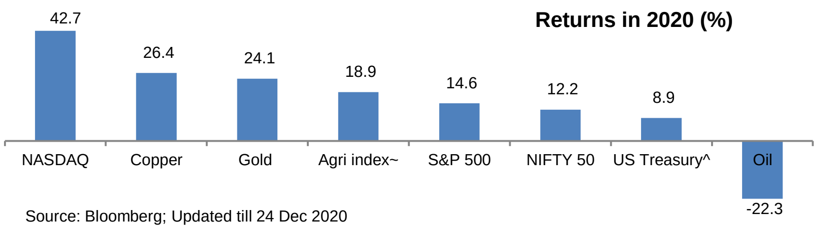


^Credit spreads - Difference between Bloomberg Barclays US Aggregate 1-3 years index and US 2 Year Govt Bond Yield

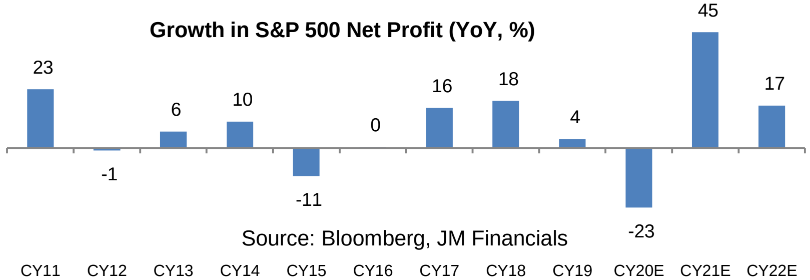
Source: Bloomberg, JM Financials; Data updated till 24 December 2020

Covid-19 Paradox : Economy down, Asset prices Up

- Though Covid-19 impacted economy and life adversely, most asset classes witnessed significant appreciation driven by
  - Lower cost of capital and high liquidity
  - Low impact of one year GDP decline on intrinsic values of assets (for more on this, refer Slide 57)
  - Lower than expected impact on corporate profits and expectation of strong growth



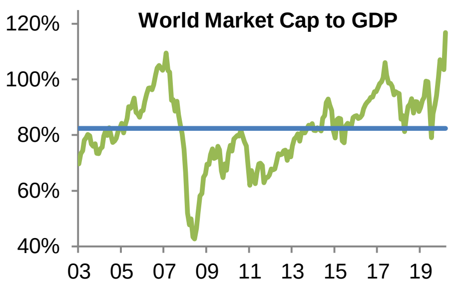
Source: Bloomberg; Updated till 24 Dec 2020
~Bloomberg Agri Index, ^ Bloomberg Barclays US treasury TR Index

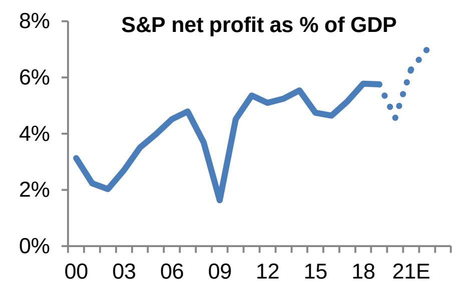


- World market cap / GDP is significantly above long term average
  - Based on CY21 GDP, World Market cap to GDP is ~110%

Average (%)	5Y	10Y	15Y
World Market cap to GDP	93	85	83

  - Net profit / GDP ratio of S&P 500 companies is also likely to be near all time high based on CY22E





Source: Bloomberg, IMF Estimated GDP for CY 2020 used; Updated till 24 Dec 2020

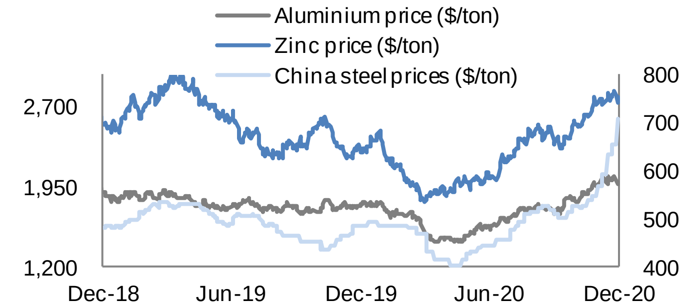
> If you look at P/Es, they're historically high. But in a world where the risk free rate is going to be low for a sustained period, the equity premium which is really the reward you get for taking equity risk, would be what you'd look at. And that's not at incredibly low levels, which would mean that they're not overpriced in that sense. Admittedly P/Es are high but that's maybe not as relevant in a world where we think the 10-year treasury is going to be lower than it's been historically from a term perspective
>
> **–Jerome Powell, Chairman, US Fed Reserve^**

^ speaking at a Press Conference on 17 December 2020

Commodities : Sharp rebound in prices in 2020

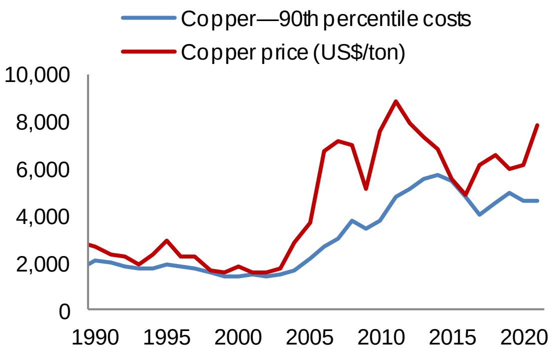
- **Metals prices saw a sharp rally in 2020**
  - Metal prices witnessed a sharp rebound after easing of lockdowns—prices are now higher than Pre-Covid-19 levels for base metals / steel
- **Multiple factors driving price rally:**
  - Rebound in demand post easing of lockdowns especially in China which is further fueled by large stimulus and infrastructure spending
  - Supply disruptions in many countries due to regional lockdowns, logistics and labor availability issues
  - Fall in interest rates and USD weakness (*refer slide 13)*
  - Structural under-investment in supply of most of commodities due to a decade of poor returns. Last decade (2008-2018) saw under-investment in capital intensive sectors including metals & mining *(refer to slide 18)*
- Spot prices trading higher than 90th percentile for base metals & iron-ore

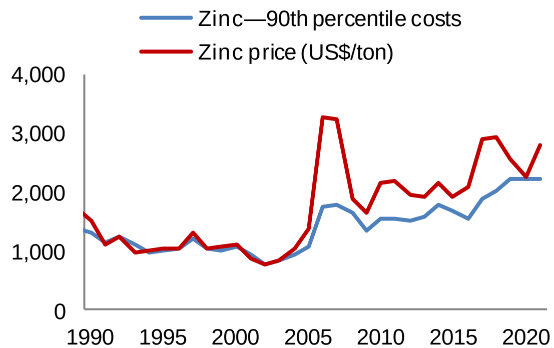
Metal prices rebound sharply in 2020 & cross Pre-covid levels

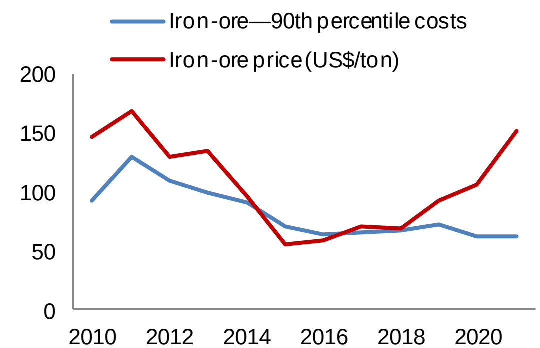


Strong China demand / less export drive steel prices

Spot base metal and iron ore prices are trading higher than 90th percentile cost curve





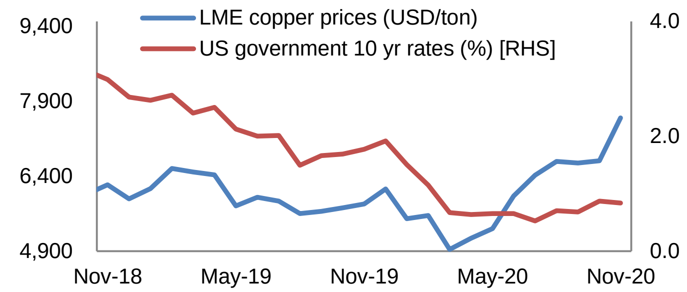


Source: Macquarie Capital Securities, Bloomberg

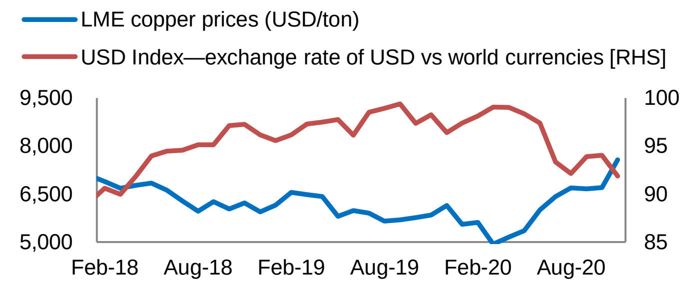
Commodities : Interest rates, USD, etc also impact prices

- **Investment demand and impact of lower interest rates:** Interest rates also impact commodity prices directly through investment demand:
  - Lower interest rates help in investment demand by reducing the carrying cost of inventories. If interest rates are low, large global traders and investment banks are able to hold commodities inventory at low carrying costs and sell it in futures market at a premium (contango)
- **Weakening USD supports commodity prices:** Costs of commodities are in currencies of producing countries and strengthening of these currencies against USD is price inflationary in USD terms
- **Cost curve: metal prices have tracked cost curves**
  - Prices of metals have generally hovered around 90th percentile of global cost curves—essentially meaning prices settle at levels where ~90% of metal producers globally are cash positive and only ~10% who are high cost producers are incurring losses
  - However, there are distortions—for example in aluminum in past 30 years, on an average 27% of time prices have been +10% higher than 90th percentile of global cost curve and 17% of time prices have been +10% lower than 90th percentile. *But, prices tend to revert to the mean i.e. 90th percentile eventually*
  - At present, prices are trading higher than 90th percentile for most of the base metals

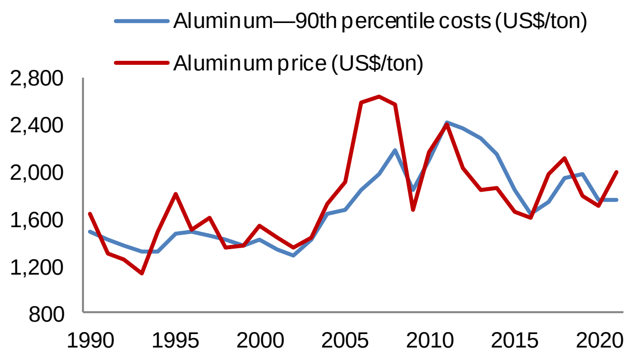
Lower interest rates aid commodity prices via investment demand



Weakening USD is inflationary for commodities



Aluminum prices and 90th percentile of global cost curve



Source: Macquarie Capital Securities, Bloomberg

Crude Oil - Peak Demand or Peak Supply - Which comes first ?

Factors affecting Demand

- EVs are a key headwind; transportation is 55% of oil demand
- Non-transport demand (45%) is likely to continue to grow
- Even with ~10% EV fleet penetration, peak oil demand could be ~107mn bpd* vs. 2019 at ~100mn bpd

Factors affecting supply

- The natural decline of conventional oil reservoirs is 5-7% p.a
- 2020 oil capex is down ~30% due to lower oil prices
- World has consumed ~1550bn bbls over past 150years; even with peak demand in 2030, current 1P reserves (1123bn bbls) are insufficient, implying need to find/develop another ~680bn bbls requiring substantial investments over next 10-20 years*

Lesson from history of mercury prices

- Mercury demand peaked in 1970 and declined ~80% by 2012
- During 2004-12 despite lower demand, prices spiked ~11x and 2012 value of production was almost equal to peak in 1965-70 !
- Key lesson is that if supply declines faster than demand due to underinvestment etc. prices can surprise on the upside

Chart 1: Composition of Oil Demand

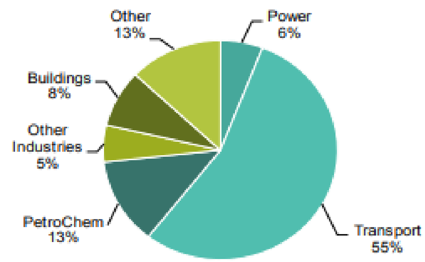


Chart 2: Peak oil demand in 2030?

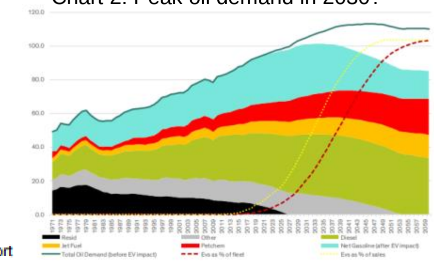


Chart 3: E&P capex is down ~30%

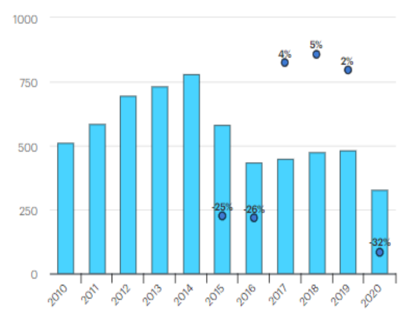


Chart 4: World still needs more oil

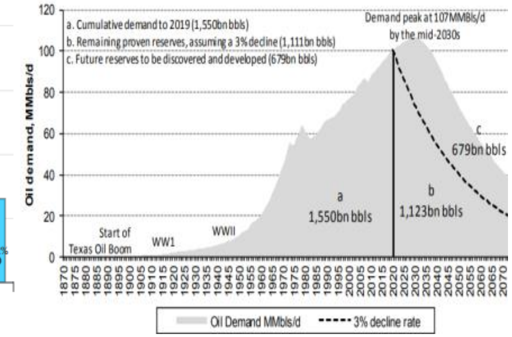
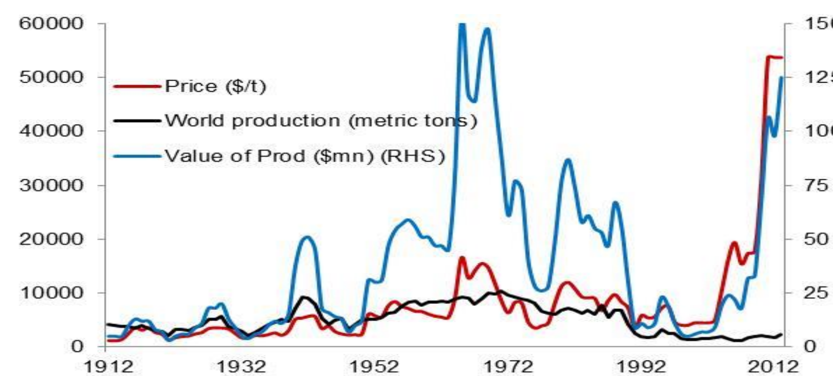


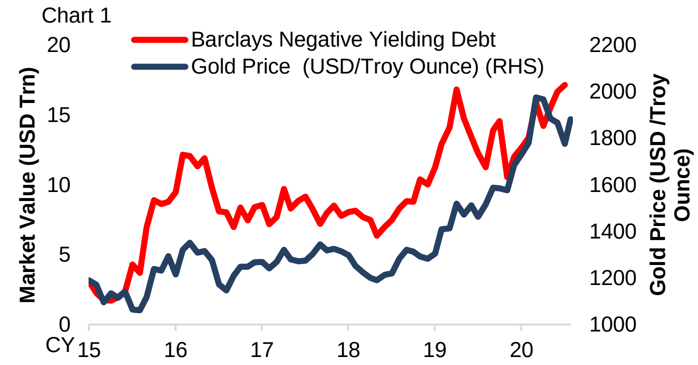
Chart 5: History of Mercury prices and production

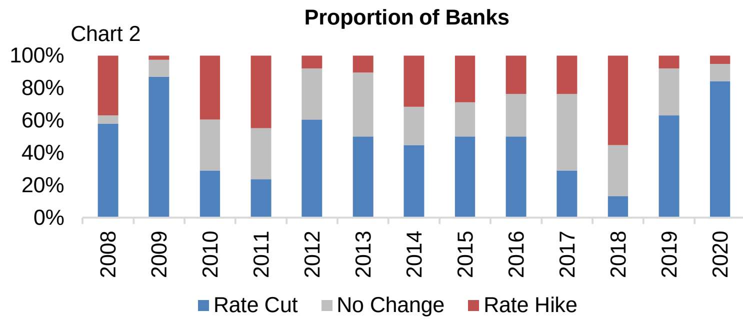


Note: * Bernstein Research report

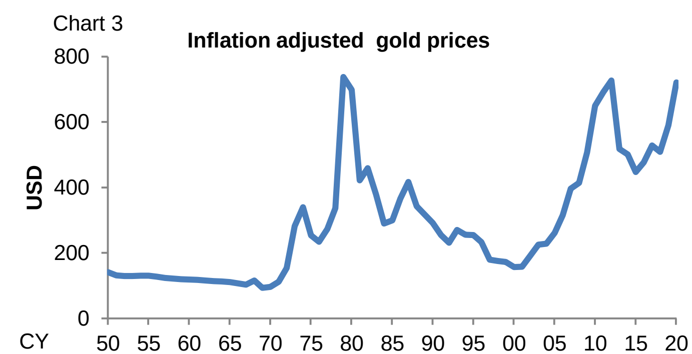
Sources: IEA, USGC, Bernstein Research reports

- Gold prices have increased significantly in 2020 driven by following factors
  - Global economic slowdown and uncertain environment increased the popularity of Gold as a safe haven
  - Sharp reduction in policy rates and large monetary stimulus; 87% of major central Banks have cut policy rates in 2020 –highest level since GFC (Chart 2)
  - Increase in negative yielding debt and negative real rates
  - Large fiscal stimulus and USD depreciation





- Inflation adjusted gold prices are near all time highs and hence the outlook for gold prices remains uncertain



Did You know?

Indian households are holding highest amount of gold in the world which is around 24,000 tonnes and is worth more than USD 1.5 trn*

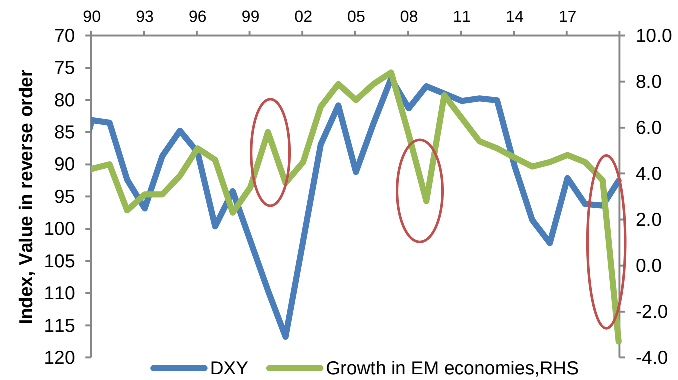
Source: Bloomberg, BIS; Data updated till 24 Dec 2020
*https://www.financialexpress.com/market/commodities/shining-bright-indias-household-gold-reserves-touches-25k-tonne-over-40-of-gdp/1583058/
https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/majority-of-largest-gold-miners-booked-higher-all-in-sustaining-costs-in-q1-20-58888306

Global currencies movement

- In 2020, currencies of DMs appreciated against the USD, while EM currencies (excluding China) depreciated driven by
  - massive fiscal and monetary stimulus by US
  - uncertainty resulting in risk off sentiments
  - weak global trade impacting export oriented economies
- In the last decade, except China and Korea, most major currencies have depreciated against USD
- Depreciation in DXY Index^ tends to result in higher growth in EMs as commodity prices tend to rise and capital flows improve but this relationship tends to break, albeit temporarily, during crises as experienced during dotcom bubble, GFC and now Covid-19

vs USD \ CAGR (%)*	2020*	5 Year	10 Year	Cumulative in 10 years
Pound	2.2	-1.7	-1.4	-15.1
Canadian Dollar	1.0	1.5	-2.6	-28.9
Japanese Yen	4.6	2.9	-2.5	-27.8
Australian Dollar	7.6	0.8	-3.0	-34.7
Euro	8.0	2.3	-0.9	-9.8
South Korean Won	4.6	1.3	0.2	2.1
Russian Ruble	-19.3	-0.4	-9.2	-142.1
Mexican Peso	-5.0	-2.9	-4.9	-61.0
Indonesian Rupiah	-2.4	-0.6	-4.7	-57.8
South African Rand	-4.4	1.1	-8.2	-120.4
Chinese Yuan	6.2	-0.1	0.1	1.2
Indian Rupee	-3.0	-2.1	-5.1	-64.5
Brazilian Real	-29.6	-5.7	-12.1	-214.0

Sources: Bloomberg. MFI Explorer; Updated till 24 Dec 2020
* +/- means appreciation / depreciation respectively against USD

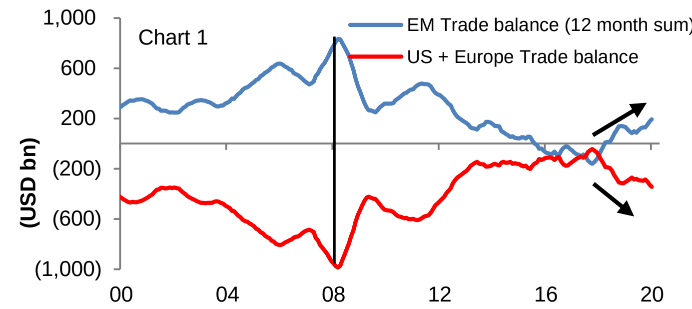


Strong USD in last decade, despite large monetary/fiscal stimulus and persistent current account deficit is counter intuitive. The key reasons are de-facto reserve currency status of the USD and US being the world's largest economy.

^ U.S. dollar index (DXY) is a measure of the value of the U.S. dollar relative to the value of a basket of currencies of the majority of the U.S.'s most significant trading partners. Increase in index value represent USD has appreciated against the basket of currencies and vice versa
Sources: Bloomberg, IMF

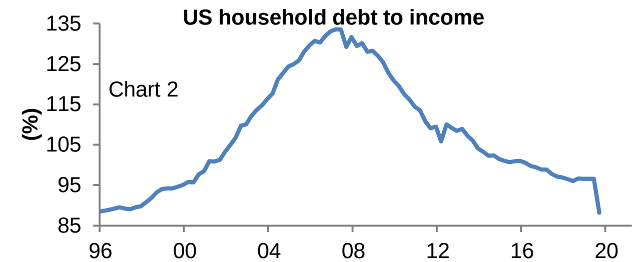
Golden decade ahead for EMs ?

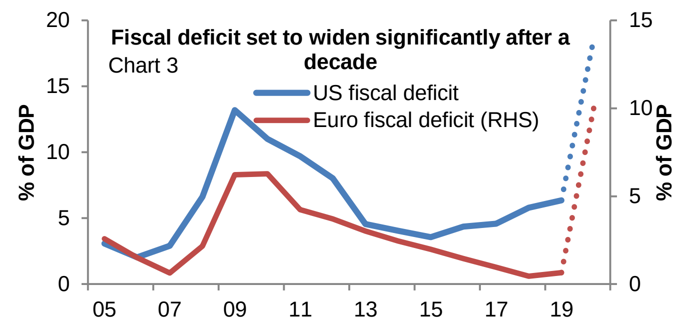
- Widening fiscal deficit, current account deficit and higher leverage in DMs bodes well for the growth of EMs as they are typically net exporters to DMs
- Post GFC, DMs fiscal deficit, current account deficit and Households (HHs) leverage declined (Chart 2) for ~10 years



Are things set to improve post-Covid-19 for EMs ?

- Driven by fiscal and monetary stimulus, trade deficits and fiscal deficits have widened for DMs (Chart 1 & 3)
- HH savings have also improved significantly supported by income transfers and leverage also remains near historic lows (Chart 2)
- Possible implications for EMs including India
  - Exports can see a strong growth driven by higher consumption / capital spending by DMs
  - Icing on the cake is accommodative monetary policy which bodes well for capital flows to EMs





Accommodative monetary policy, widening of fiscal deficits and room to increase HHs leverage in DMs bodes well for growth outlook of and capital flows to EMs including India

Source: Edelweiss Financial Services

Issues to ponder : Inflation and Risk of unwinding

Risk of Inflation

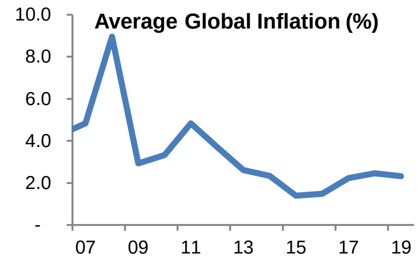
- Global inflation is near decadal lows driven by build up of excess capacities pre-GFC, technology driven productivity and benign commodity prices
- Last decade witnessed underinvestment in capital intensive sectors (oil & gas, shipping, mining, etc.)
- Covid-era is characterized by
  - High cash transfers to lower income groups where proportion of commodity intensive consumption is higher
  - Loose monetary policy and near all-time high fiscal deficits

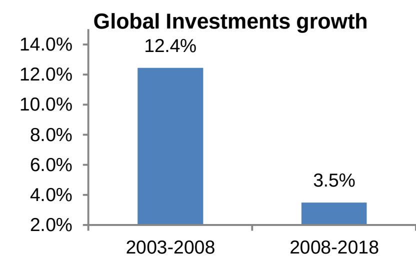
Things to watch out for

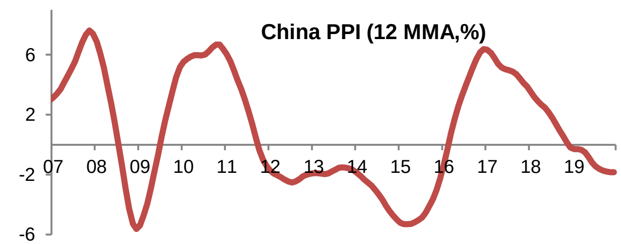
- Growth in major economies and higher consumption can increase demand for commodities; Supply may lag due to under investments
- Rise in food prices driven by weakness in USD, rising energy costs, drought in few major countries (US, Brazil, etc.), etc.
- China's PPI is near lows of past range and has room to increase

Risk of fiscal / monetary unwinding

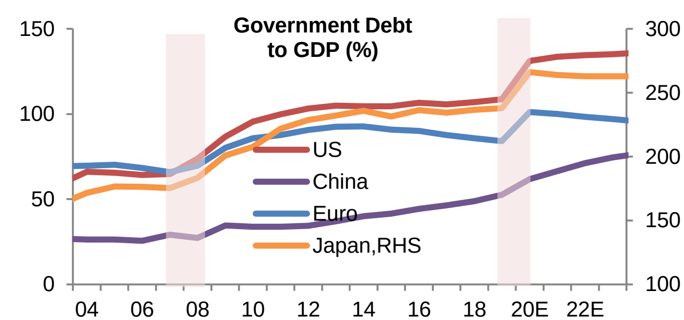
- Sovereign debt to GDP and size of Central Banks balance sheets are close to all-time high after Covid-19
- Sharp moderation in fiscal & monetary stimulus, especially if inflation picks up, can have significant impact on growth and asset prices







			Change over (%)		
CAGR (%)	Unit	CMP	1Y	5Y	10Y
Iron Ore	USD / ton	167	79.0	30.8	-0.4
Steel prices	USD / ton	754	36.6	19.7	0.8
Zinc	USD / ton	2,818	23.6	12.1	1.4
Aluminium	USD / ton	2,026	13.7	6.2	-1.9
Copper	USD / ton	7,771	26.4	10.6	-2.1
Brent Crude	per barrel	51.3	-22.3	6.6	-6.0
CRB Index	Index	165.5	-10.9	-1.2	-6.7
Bloomberg agri	Index	317.9	18.9	5.5	-2.6



Source: IMF, World Bank, Bloomberg, JM Financials; Data updated till 24 Dec 2020
12MMA = 12 months moving average; PPI = Producer price index

Incredible India

- India is an intriguing and a unique country. It is a melting pot of different cultures, multitude of religions and languages
- India is full of paradoxes
  - One of the most ancient civilization but a young democracy
  - One of the largest IT work force but a large population does not have access to internet
  - 2^{nd} largest pool of scientists and engineers but 23% illiteracy
- Few interesting facts about India
  - World's largest democracy & has the longest written constitution of any sovereign state (145,000 words)
  - Sanskrit is still used for daily communication in Mattur, a village in Karnataka
  - India is 6^{th} largest economy in nominal terms (3^{rd} in PPP terms); Likely to become 5^{th} largest by 2022
  - Coal India is the largest coal-producing company in the world
  - Bhadla Solar Park in Rajasthan is the world's largest
  - Only country to successfully launch a mission to Mars in first attempt
- Starting with this edition of Yearbook, we will endeavour to highlight some unique aspects of India showcasing its heritage, diversity and richness of its civilisation

Picture credit: esamskriti.com, Suchit Nanda

> Whatever you can rightly say about India, the opposite is also true.
> **-Joan Robinson , British economist**

Sources: IMF, CIA factbook, NSO Survey, article published on timesofindia.com published on 8 Sep 2020, publicly available information

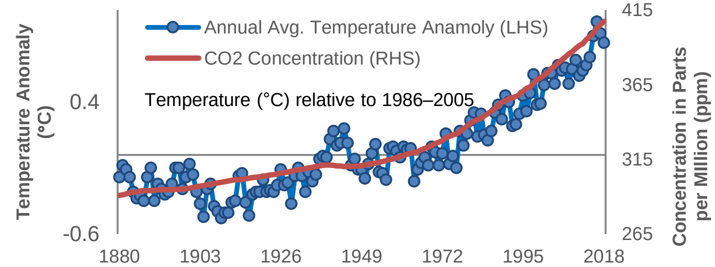
Key Future Trends

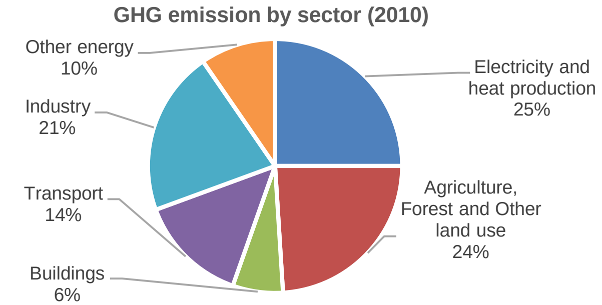
1. Climate change, Renewables and Conventional power
2. Indian Defence manufacturing – Coming of age
3. EVs / Hydrogen powered vehicles
4. Increasing Digitalization and Changing Banking landscape

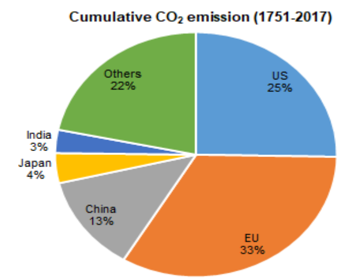
Refer disclaimers on slide 98

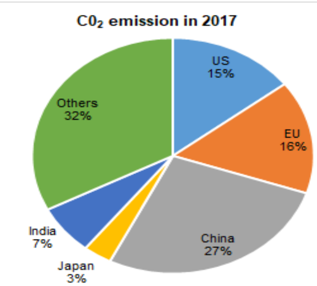
Climate change, Renewables and Conventional power

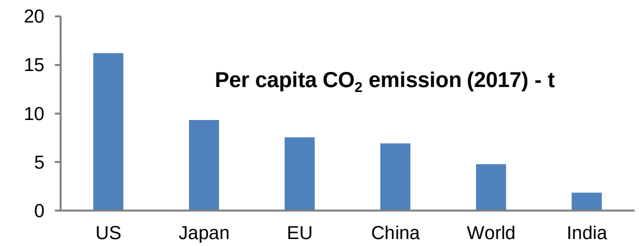
- Earth is presently in an interglacial period that began ~10,000 years ago
  - In the earlier Interglacial period which was 118000 to 125000 years ago, sea levels rose at up to 3 meters per century, far exceeding the roughly 0.3-metre rise observed over the past 150 years
- The pace of emissions has been accelerating over the last few decades; It is widely believed that rise in GHG emissions is amongst the key causes for rise in global temperature
- GHG emission has increased from 27Gt (CO_2 equivalent) in 1970 to 49Gt in 2010
  - It is believed that rising GHG emission should increase the temperature and sea level significantly by end of this century
- While power (~25%) and transport (~14%) get the headlines, Agriculture etc. (~24%) and Industry (~21%) are also major sources of GHG
- On a cumulative basis, US and EU combined represent ~58% of total CO_2 emissions. However, on an incremental basis, the largest contributor to CO_2 emissions is China
  - India's CO_2 emissions both on flow and stock basis are low
- On a per capita basis, the US continues to be largest CO_2 emitter











Source: IPCC, Climate Change 2014

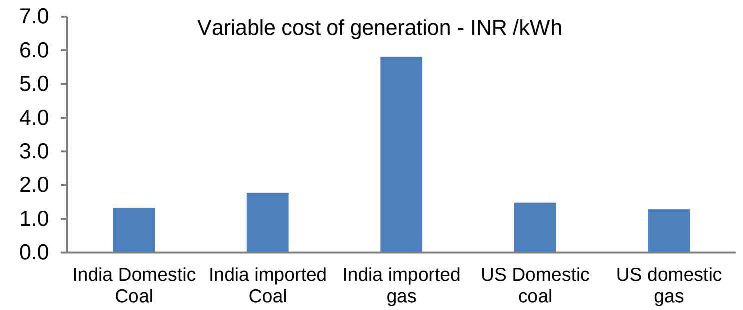
Energy – emissions vs. economics

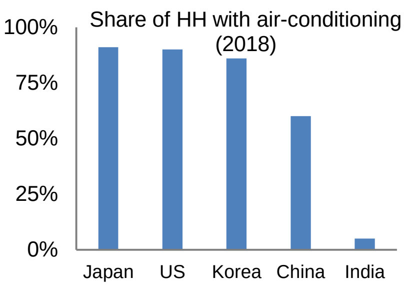
- Emissions of carbon dioxide to produce electricity is higher in coal vs natural gas / diesel. Carbon content is highest in coal ($C_{137}H_{97}O_9NS$) followed by diesel ($C_{12.3}H_{22.2}$) and natural gas (CH_4)
- Share of natural gas in power generation has increased in advanced economies
  - US : Driven by shale boom, improving availability and reducing costs
  - EU : Aided by climate policy and lower natural gas prices
- US and EU also have a healthy share of generation from nuclear
- India, unlike US, has cheap coal and not gas. Cost of power based on imported gas is more than twice than that of domestic coal
- India's per capita electricity consumption is one-third of the global average. Household air-conditioning penetration is just 5%

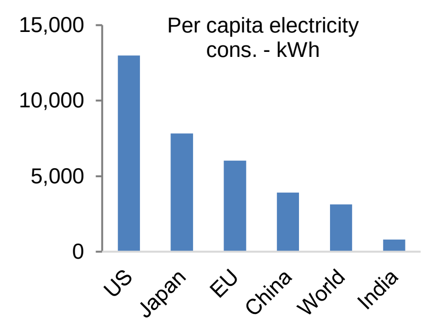
The core issue is emissions vs. economics. Sources of energy, costs, affordability and energy consumption vary significantly across nations.

CO_2 per million Btu of energy	Lignite	Coal	Diesel	NGas
kg	98	93	73	53

% of electricity generation	US		EU		India	
	2014	2019	2014	2019	2014	2019
Gas	28	39	15	19	5	5
Coal	39	24	26	17	75	73
Hydro	6	6	16	16	11	10
Nuclear	19	19	25	23	3	3
Solar + Wind	5	9	9	15	3	7
Others	3	3	8	9	3	2







Source: World Bank, EIA, BP Energy Statistics

Thermal Power in India

- India has a high electricity demand growth (per capita consumption is just 1/3rd global average), unlike EU and US. Renewables alone cannot meet such high demand growth

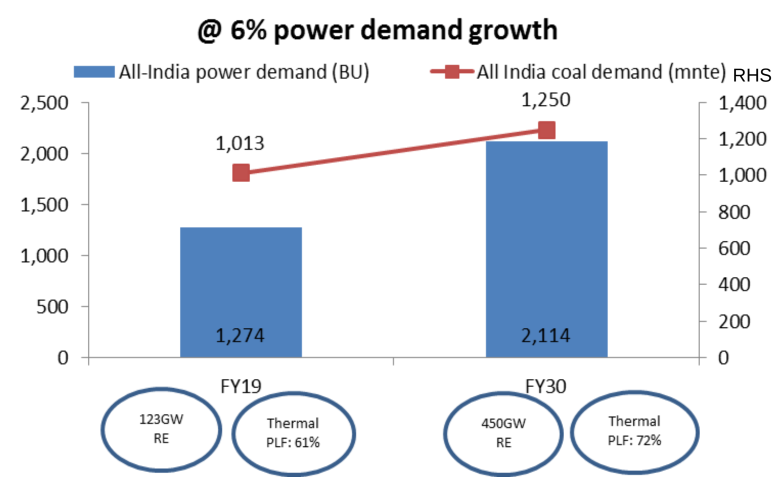
- India's load curve is peculiar, peaking in the evening when solar is not available. Conventional generation plants will be required to meet the peak load

- Cost of storage is high and unproven for scale and duration requirement of India

- Domestic gas availability is limited. Imported LNG is costlier to domestic coal. Coal has significant cost advantage vs LNG for India *(unlike US)*

- CEA, the technical arm of the government, estimates that if electricity demand grows by ~6% CAGR and even if renewable capacity *(solar + wind)* increases to 430GW by FY30 *(FY20: 72GW)*, most economical solution would require India's coal demand by power sector growing by ~3% CAGR over the period *(as per a Jan 2020 report).* Interestingly, if electricity demand CAGR is higher by 1%, the CAGR in coal demand by power sector will be ~5% *(as per ICICI securities estimates)*

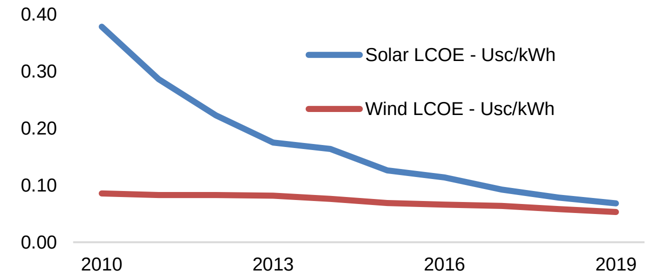
Typical All India Load Curve



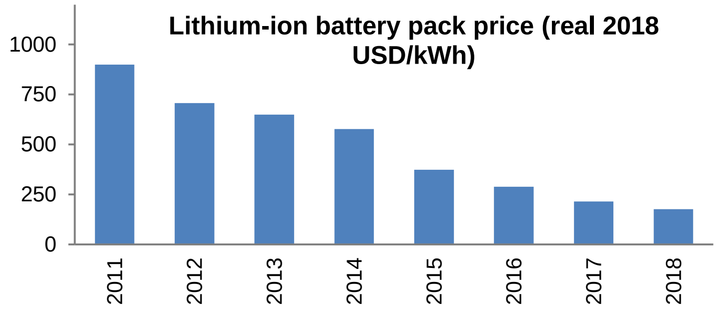
Source: Coal India presentation, CEA: The Central Electricity Authority of India

Solar + Battery vs. Thermal – Can India do without Coal ?

- Cost of wind and solar generation has declined sharply. However, the quoted price of solar/wind does not consider some associated costs like transmission, cost of backing down thermal generation etc. that make solar/wind costlier than thermal power
- Solar and wind generation also has limitations
  - Power demand peaks between 5-9pm when solar is not available; hence, thermal capacities will still be needed to meet the peak demand (refer chart on slide 24)
- Real bottleneck of solar energy is storage costs. Cost of battery storage (lithium-ion based) has fallen sharply over the years, but it is still high at INR 7-10/kWh. It will take a while for battery storage to become economical
- India is blessed with high irradiation and exposure to sun for 365 days. Solar is likely to gain market share in India's generation mix. But given expectation of demand growth, limitation of solar/wind and high cost of battery storage, thermal generation is likely to remain an important part of India's generation mix for long



	INR/kWh
Bid price of solar (incl. BCD + trading margin)	2.5 – 2.6
Inter-state transmission	0.9 – 1.2
Backing down thermal plant	0.5 – 1
Effective cost of solar	**3.9 – 4.8**
Variable cost of thermal power	**2 – 3**



NISE has estimated the potential of solar power to be around 750 GW (FY20 capacity was 34GW)

* Link to CEA's report: https://cea.nic.in/wp-content/uploads/notification/2020/09/Optimal_mix_report_2029-30_FINAL.pdf
Source: IRENA, Bloomberg, POSOCO, Coal India. NISE is National Institute of Solar Energy, BCD - Basic customs duty & LCOE - Levelized cost of energy

Indian Defence manufacturing – Coming of age

Defence – Focus on Domestic Manufacturing

- Global military spend at USD 1.9 trillion in 2019 was 2.2% of the world GDP
- Five biggest defence spenders are the US, China, India, Russia and Saudi Arabia
  - US alone accounts for 38% of global military spending
- India is the 2nd largest arms importer after Saudi Arabia and accounts for 9.2% of global arm imports
- **Government is encouraging private and foreign players to increase domestic production**
  - 100% FDI is allowed in Defence industry; wherein ownership upto 74% is allowed under automatic route
  - Paved the way for foreign OEMs to enter into strategic partnerships with Indian companies
- **Initiatives to strengthen the domestic capabilities**
  - Formulation of the industry-friendly Draft (Defence Procurement Procedure)-**DPP 2020** to promote domestic production by the public and private sectors and MSMEs. It aims to increase the defence production to INR 1.75 Lakh crore by 2025
  - Development of defence industrial corridors in UP and Tamil Nadu
  - 101 defence items will be banned for imports in a staggered manner; List includes warships / various types of missiles / fighter aircrafts / helicopters

Defence Spending in CY19 (USD bn)	
USA	732
China	261
India	71
Russia	65
Saudi Arabia	62

Biggest arms exporters in CY19 (USD bn)	
USA	107.5
Russia	47.1
France	33.6
China	14.2
Germany	12

Source-Sipri, OEM - Original equipment manufacturer

Defence Manufacturing– Coming of age!

- India has developed a wide range of complex weapon systems. Many of these products have an export potential
- A Defence export strategy has been formulated with a view of facilitating Defence PSUs and private players in exploring business opportunities abroad
- Key domestic products

LCA: The Tejas is an Indian single-engine, fourth-generation, multirole light fighter designed indigenously for Indian Army and Navy.

Pinaka Multi Barrel Rocket Launcher: This system saw the DRDO co-operate extensively with the privately owned industrial sector in India. In 2016, the Pinaka Mk1 system, with rockets of up to 40 km striking distance, were successfully inducted in the Indian Army. The Pinaka Mk2 program with rockets of up to 60 km in range, has cleared trials and now orders for these have been placed as well

Dhanush Gun: A 155 mm, 45-calibre towed artillery gun with a range of 36km. It will be replacing the existing 155m, 39 calibre Bofors FH 77 gun

AKASH Weapon System - An indigenously developed, an all - weather, air defence weapon system, uses a high explosive, pre-fragmented warhead that can engage multiple threats simultaneously

Light Combat Helicopter: The Light Combat Helicopter is a multi-role attack helicopter designed and manufactured domestically. It is the world's lightest attack helicopter and its flight ceiling is the highest among all attack helicopters

Sources: Official websites of HAL, Bharat Dynamics Limited and Brahmos
DRDO - Defence Research and Development Organisation

LCA Tejas

Pinaka Missile

Dhanush Gun

Akash Weapon System,

Light Combat Helicopter

Defence Products being developed by Indian companies

- **Brahmos Success Story (JV between India and Russia)**
  - Brahmos are supersonic cruise missiles considered most formidable and capable of getting launched from land/air/surface ships/submarine platforms
  - Several versions of Brahmos have been developed and deployed and newer longer range versions are under development as well

- **Drones**
  - Drones are now emerging as a capable battlefield platform apart from surveillance systems
  - India is now taking steps towards making all types of drones via private sector as well as PSUs/DRDO

- **Hypersonic weapons**
  - **India is one of the four nations globally developing hypersonic weapons**
  - These weapons-travel at 5-6x the speed of sound
  - India has recently tested hypersonic missile developed indigenously

Brahmos

Rustom Drone

Shaurya hypersonic missile

Export target of INR 35,000 crores by 2025 (FY19 : ~INR 11,000 crores)

Sources: Official websites of HAL, Bharat Dynamics Limited and Brahmos

EVs / Hydrogen powered vehicles

HDFC MUTUAL FUND
BHAROSA APNO KA

Life comes a full circle - EVs back in focus again!

1769
Nicolas Joshep invented steam car

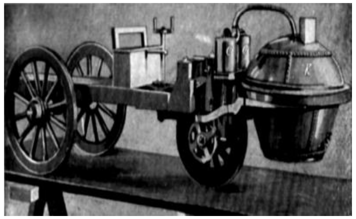


Exhibit at New York Museum of Science and Industry

1885
Karl Benz invented gasoline car

Kept at Mercedes-Benz Museum, Stuttgart

1890
William Morrison developed first EV

1903-08
Henry Ford developed Model T to mass produce

"You can have it in any color you want, as long as it is black"
- Henry Ford

Model T dealt a heavy blow to EV market (33% share in early1900s)

Emission regulations brought focus back on EV again

2006
Tesla launched first EV Roadster (Sports Car)

2015
Toyota launched highest selling FCEV* car Mirai

FCEV – Hydrogen Fuel Cell Vehicle

2017
Tesla launched Model 3 (Largest selling EV model)

2021
Strong buzz on Ford EV SUV of Mustang Mach-E

Electric Vehicles (BEVs) penetration growth at an inflection point…

- Global EV penetration rose faster than expectations due to heavy lifting by Europe and China
  - Gasoline/diesel cars to be phased out by 2030 in UK, Israel, Netherlands Sweden; by mid-2030s in Japan and China and by 2040 in France and Canada
- Tesla continues its leadership in EVs with a new plant announced in Berlin (Germany) and Austin (USA) after fast ramp-up of China plant
  - Berlin plant to double its capacity in 2022 to ~1.1mn
- Battery cell costs likely to fall below USD 100 kWh, for major manufacturers, in next 2-3years
- Population of ICE cars should continue to grow till 2030 as
  - ICE and BEV PV to achieve cost parity by 2024/2025
  - Delayed adoption in developing economies due to delay in cost parity
  - Shift in US is slow with ~2.4% of new vehicle sales being EV in 2020
  - Replacement demand is over 70% in DMs which are large markets

ICE - Internal Combustion engine; PV - Passenger vehicle; ASP - Average selling price

EV penetration rate has been faster than forecast in 2020

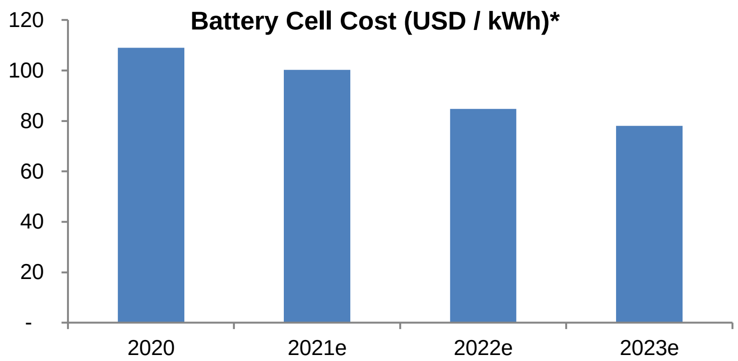
Table 1: % of new car sales

	2015	2017	2019	2020E	2021E	2025E
China	1.0	2.3	4.3	4.3	6.1	20.1
US	0.7	1.2	1.9	2.4	3.3	11.8
Europe	1.0	1.4	2.7	8.1	14.7	34.4
World	0.6	0.8	2.5	4.0	6.3	17.4

Source: UBS

Table 2: Global automakers' 2025 EV ambition

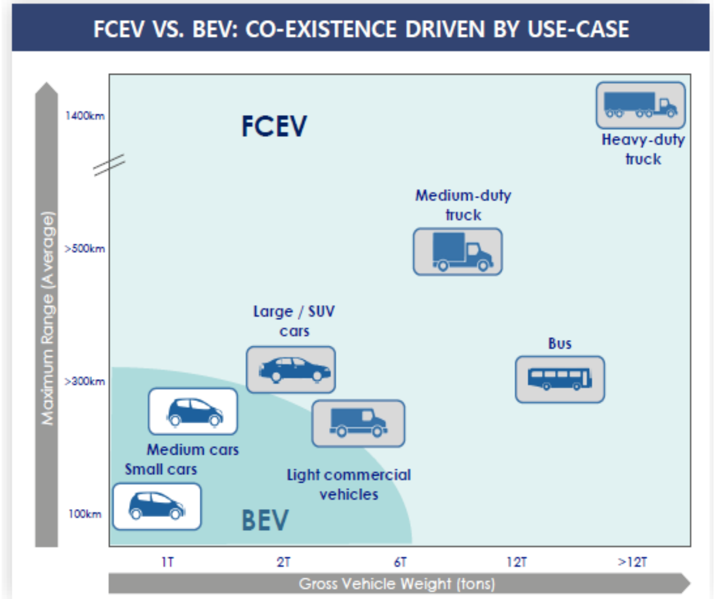
Car makers	EV sales target (mn. units)	Sales mix (% of total)
Volkswagen	3.0	25%
Renault-Nissan-Mitsubishi	2.5	25%
Tesla	2.0	25%
Hyundai-Kia	1.7	20%
Toyota	1.0	10%
GM	1.0	10%
Ford	1.0	20%
Daimler	1.0	25%
BMW	0.8	20%
Volvo	1.0	50%



Source: UBS, Macquarie Securities; * For LG Chem

….however eye on another clean technology - Hydrogen Fuel Cell (FCEV)

- **What is Hydrogen Fuel Cell?** FCEVs burn hydrogen stored in a specifically designed vehicle tank with oxygen from the air to produce electricity, with water vapour being the emitted by-product
- Opinions are divided on FCEV being cleaner fuel v/s BEV due to energy intensive and costly Hydrogen extraction process from natural gas / water
- CVs, SUVs and off-highway vehicles are likely to follow Hydrogen fuel cell (FCEV) route due to range, weight and short refueling time advantage
  - Hyundai has launched its hydrogen powered Xcient heavy-duty trucks
  - Korea has introduced fuel subsidies for commercial FCEVs starting 2022
- Total Cost of Ownership (TCO) parity between FCEV and BEV for heavy-duty trucks is likely to be achieved before 2030, while for light-trucks it may happen post 2030
- **Key developments in FCEV space**
  - Hyundai & Toyota to develop FCEV powertrains across segments
  - PSA and RENAULT to commercialize light commercial vehicle
  - Volvo and Daimler forming JV to produce large scale fuel Cells
  - GM to produce pick-up trucks in partnership with Nikola. CNH/ IVECO to produce trucks in EU in partnership with Nikola too
  - Bosch licensed in Powercell technology and Cummins acquired Hydrogenics



Source: Faurecia investor presentation

It's a Fool SELL. Using hydrogen to store energy can never be as efficient as storing electricity in a battery **- Elon Musk on Fuel Cell Tech**

Hyundai Xcient HD Truck launched in 2020

EV story in India – Largest lead acid based 3W & 2W market in the world

- **How are EVs evolving in India?** Indian quasi-EV market is proliferated by Lead Acid based low speed *(25km/hr speed limit)* 3W/2W that do not require registration or license. Spread of Lead Acid based 3W/2W has been across regions as cost effective public transport
- Intra-city buses likely to shift first due to government incentives, easy charging solution at depots and battery swapping feasibility
- Central and few state Governments have drafted lithium based EV policies for fast switchover with maximum incentives allocated to Bus / 2W / 3Ws
- **Key developments in Indian EV space**
  - Bajaj, Ather and TVS have launched their high speed Li based 2Ws
  - Ola has announced INR 2400 crore 2W EV plant in Tamil Nadu recently
  - M&M launched Lithium based 3W; Bajaj to follow suit shortly
  - Tata, M&M, MG and Hyundai have launched EV cars
  - Tesla is likely to start selling EVs in India in 2021

Likely sequence of BEV adoption in India

Buses → 2Ws / 3Ws → PVs / LCVs → CVs

Lead-Acid e-3W (L) and lithium based M&M 3W Treo (R)

Tata Nexon EV

Hyundai Kona Electric

Bajaj Chetak (Electric)

Ather 450x

Increasing Digitalization and Changing Banking landscape

Evolution of Payment Mechanism

Barter System Pre-3000 BC → Cowry Shells 1200 BC → Metal money 500-1000 BC → Leather 120 BC → Paper 600-800 AD → Cheques 1600 AD → Cards 1900s → Online / Mobile / UPI

Transaction journey from physical to multiple digital options

Cheque
- Needs a/c number of payee and access to cheque leaves (fee-based)
- Long settlement cycle with high human intervention
- Low on privacy as account/cheque details disclosed

Debit cards
- Needs ATM access for cash transaction
- Online transfer needs payee pre-registration and authentication
- Low security as debit card/ac no. is disclosed and prone to cloning

IMPS
- 24X7 fund transfer
- Easier to integrate with banking apps
- Better than debit card but needs payee ac no. for registration

UPI
- 24X7 fund transfer; interoperable across banks
- On the go - only needs registered mobile number of payee

QR Code
- Interoperable payment system for POS transaction
- Aimed at driving Person-to-Merchant transactions
- Merchant pays zero MDR

AePS
- Aadhaar-based cash withdrawal or fund transfer
- Uses Biometric for authentication

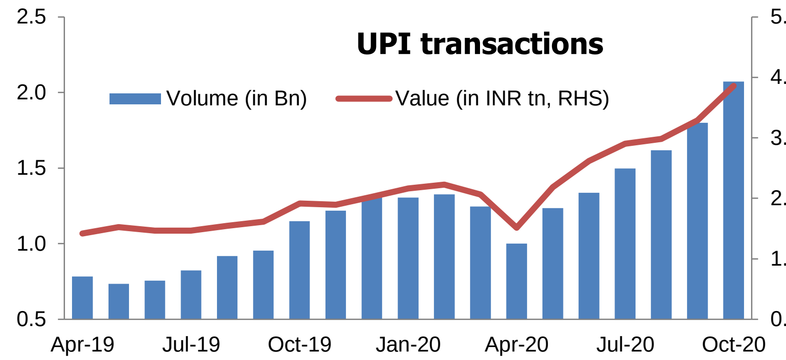
Did You know?
- First paper money was created in China 1,400 years ago
- In India, cheque was first introduced by Bank of Hindostan in 1770
- First ATM was set up almost 200 years later in 1987

A rare 1794 silver dollar believed to be one of the first -- if not the first -- to be struck by the US Mint; It was sold for USD 10 mn in 2013 and is considered the most expensive coin sold

Source: bankrate.com, hostmerchantservices.com, publicly available information
IMPS - Immediate Payment Service, UPI - Unified Payment Interface, QR - Quick Response, AePS - Aadhaar Enabled Payment System

Rapid digitalization trend has changed transactions landscape

- India is at the forefront of technology in transaction banking, even ahead of advanced economies
- UPI a unique India first platform – has accelerated the pace of digital transactions through
  - mobile to mobile transactions,
  - instant reflection in bank account, 24X7 and
  - at zero cost (NO MDR)
- Technology penetration has resulted in share of digital transactions rising to over 52% in FY20 (FY14: 6%) while transactions through cheques have fallen from 78% to 33%
- Interestingly, despite multiple digital payment options, cash withdrawals from ATMs have remained largely stable
- India's digital tech prowess – Share of digital transactions is now similar to that of US



India - Trend in Retail payment	FY14	FY20
Cheques	78%	33%
Digital banking / NACH / ECS / cards	6%	52%
Cards - ATM	16%	15%
Total Retail Payments	100%	100%

Retail payment composition	India	US	India	US
	FY14		FY20	FY19
Cheques	78%	53%	33%	43%
Digital banking / NACH/ Cards	**6%**	**45%**	**52%**	**56%**
ATM - Cash withdrawal	16%	1%	15%	1%
Total	100%	100%	100%	100%

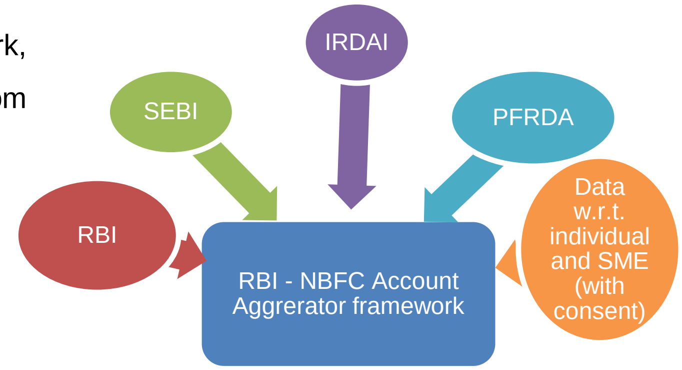
"India's digital finance approach a global model" – Bill Gates^

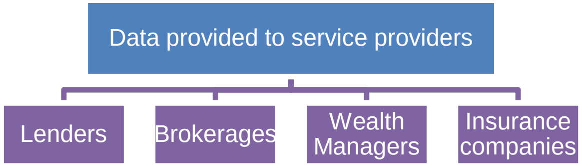
Comparable data for the US for FY20 is not available
Source NPCI, BIS, CITI, Investec
^ Speaking at Singapore Fintech Festival

MDR - Merchant discount rate

Digitalization to change lending landscape : From Physical to "Phygital"

- Digitalization of transactions has improved the data availability significantly in India.
- In this backdrop, RBI has introduced Account Aggregator frame work, that would pool data of Individuals and SMEs, with their consent, from multiple sources, digitally on a single platform
- Different sources of data, which can be pooled are
  - Income tax data, GST, Bureau score
  - Transaction history (Bank a/c , UPI, POS)
  - Investments – holding of stocks / bonds / MF
  - Insurance details (Life & General Insurance)
- **This framework will improve data access for the lenders, especially with respect to unorganized sector, encourage small ticket lending at lower costs and faster speed.**
- Implications for the sector / economy
  - Technology will be the key differentiator; Banks and other lending institutions with agile technology platforms will have an edge
  - Retail & SME lending will become data driven & digital
  - Increase in credit penetration & formalization of economy





Data asymmetry would reduce…
leading to higher competition in lending…

Information + Transparency + Competition = Win-Win for lenders and borrowers

Incredible India : Kailasa Temple, Ellora, Maharashtra

- Kailasa Temple complex is a single rock complex which has been uniquely carved from top to the bottom
- Started by Rashtrakuta king Krishna I (757-773 A.D.), it is estimated that it took ~150 years to complete the complex
- Temple was excavated by cutting away more than 50 million tonnes of rock from the sloping hill
- Three sides of the hill were cut vertically and rock had been excavated to obtain a mammoth rock structure and then the sculptors chiseled the rock from the top to the bottom to create a gigantic temple complex

Sources: Publicly available information

Indian Economy

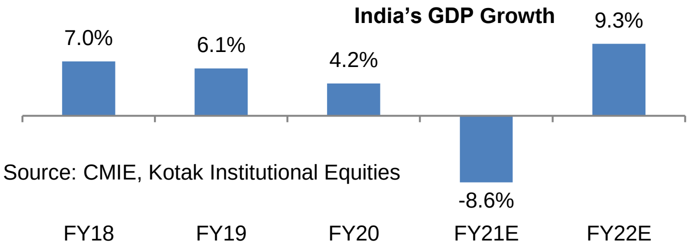
There has never been a better time to invest in India

---Narendra Modi, Prime Minister, India*

*Speaking at Aditya Birla Group's golden jubilee celebrations in Bangkok in July 2020

Covid-19 does the unthinkable : Indian economy shrinks after 40 years !

- Indian economy, which grew even in periods of Wars, Asian Crisis, Dot com bubble, GFC, etc., contracted for first time in last four decades in 2020! (*Before Covid-19, highest contraction in GDP since 1950 was 5.2% in 1980)*
- Pre-Covid growth was already decelerating, lockdown made matters worse



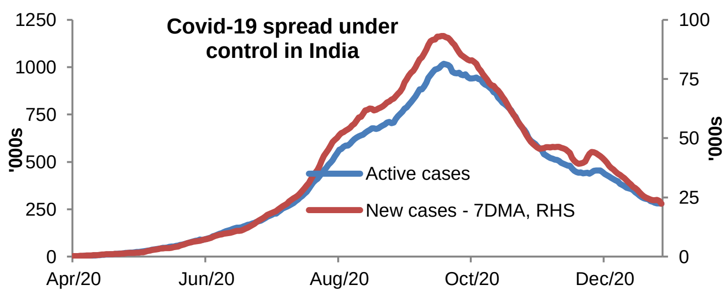
Source: CMIE, Kotak Institutional Equities

- Post opening up, economic recovery has been strong and high frequency activity indicators are normalizing at a fast pace supported by unlocking, fiscal & monetary measures, pent up demand, etc.

YoY Growth (%)	Apr-20	Jun-20	Sep-20	Dec-20
Railway tonnage movement	-35.2	-7.8	15.3	8.6
Power demand	-24.0	-10.5	4.6	5.0
Average E-Way bill generated	-83.6	-12.7	9.6	13.2
Manufacturing PMI@	27.4	47.2	56.8	56.3
Services PMI@	5.4	33.7	49.8	53.7
Gross GST collections	-71.6	-9.0	3.9	11.6
Unemployment	25.0	11.7	8.5	8.8
PV registration	-90.2	-26.3	31.9	34.6
2W registration	-75.9	-37.8	-11.0	14.5
Tractor registration	-84.2	6.9	88.1	42.8

@ - Diffusion index; Values higher than 50 represent expansion & vice versa; PMI data is for Nov-20. Source: RBI, CMIE, Kotak Institutional Equities

- FY22^ : A year of double digit GDP growth ?
  - High growth to be driven by base effect, absence of lockdown, income normalization, low interest rates, reforms, etc.
  - For FY22 GDP to reach a level just 3% higher than FY20 levels, GDP growth should be in double digits (~13%) in FY22; (*Highest growth since 1950 was 9.6% in 1989)*

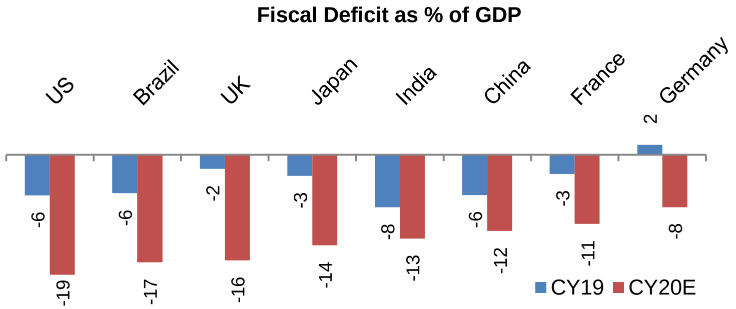


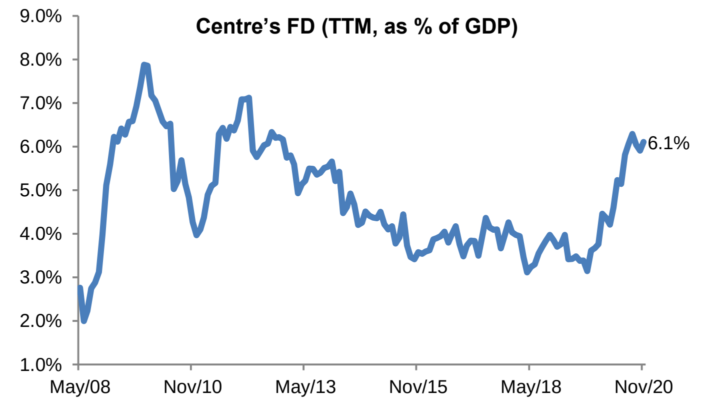
Source: JM Financials

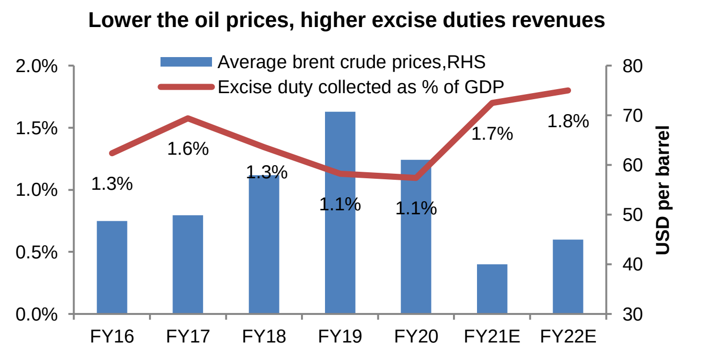
^The information herein is based on the assumption that Covid-19 would be behind us by March 2021 and the economy would bounce back by FY22. However, if impact of Covid-19 continues after March 2021, various scenarios presented in this document may not hold good.

Fiscal Position: A temporary blip ?

- Amongst major economies, India's aggregate (States + Centre) Fiscal Deficit (FD) is likely to see a relatively low widening
- Centre's FD is likely be ~7% of GDP in FY21, up from 3.5% in FY20
  - Impact on economic activity and loss of incomes due to lockdown resulted in significantly lower revenue collections
  - Fall in revenues was partially offset by increase in duties on petrol & diesel, judicious spending and controlled fiscal stimulus
- Lower oil prices to the rescue of Fiscal Deficit
  - Duties on petrol & diesel rose by ₹10 & ₹13 /liter in FY21
  - Each ₹1/litre increase in excise duty on auto fuels results in additional revenue of ₹ ~120 bn p.a.
  - Share of excise duties in gross revenue is likely to rise to ~18% in FY21 (FY20: 12%)
- Driven by strong economic growth next year, higher excise duties on fuels (if sustained), fiscal deficit can moderate meaningfully in FY22

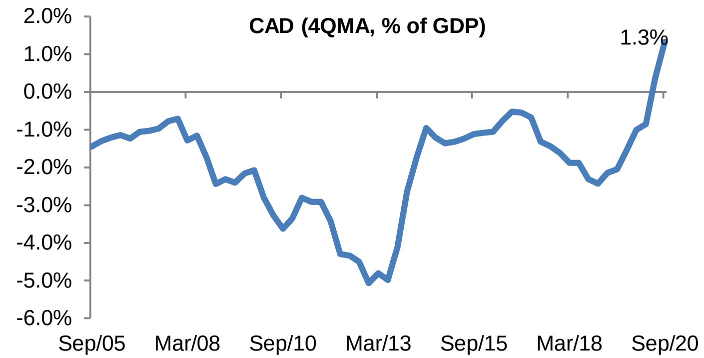




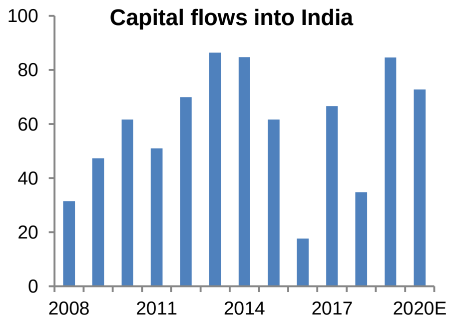


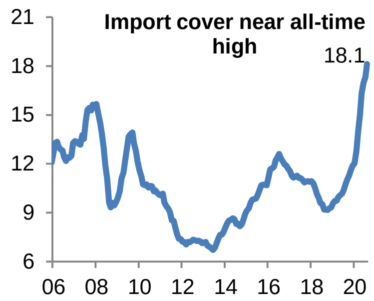
Source: IMF, CMIE, Kotak Institutional Equities

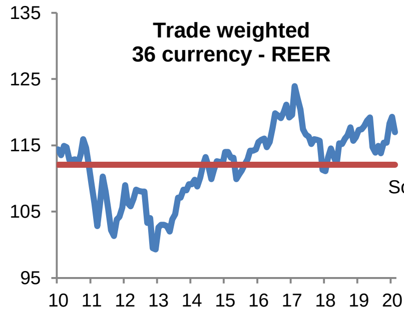
- Counter intuitively, Covid-19 turned out to be a blessing for the external sector due to weak oil prices, low interest rates & weakness in imports
- Current account likely to be in surplus in FY21, a first after 16 years !
- Lower oil prices improved trade deficit and saved foreign exchange
  - Oil accounted for 1/4th of import bill and over 100% of CAD in FY20
  - A USD 10 / bbl fall in oil prices saves USD ~12 bn annually
- Low Interest rates and capital flows
  - Low global yields improve access to long term and cheaper capital
  - Cost of servicing existing stock of external debt falls
- Foreign exchange reserves are at an all-time high
- Factors supporting strength of INR are sharp improvement in current account, strong capital flows and weakness in DXY. However, INR has still depreciated due to strong intervention by RBI (refer slide 89)
- Rangebound oil prices and sustained capital flows are supportive of INR and vice versa

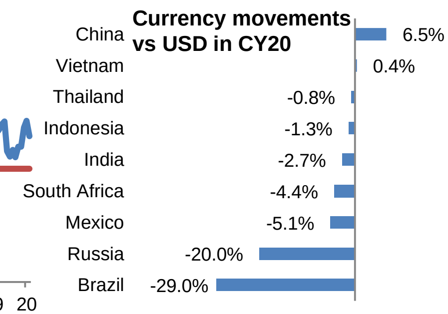


4QMA = four quarters moving average









Sources: Bloomberg, JM Financials, Kotak Institutional Equities, CMIE
Capital flows – sum of FPI, FDI, NRI deposit and ECB in each year

Import cover = Foreign exchange reserves / Average TTM of imports
CAD - Current Account Deficit

Crises and Emergencies – Trigger to big reforms ?

- **Several big reforms in the world were triggered by large crisis / emergencies**

Period	Crises / Emergency	Reforms
1789-99	French revolution	End of monarchy in France
1861-65	Civil war in the US	End of slavery in US
1929-33	Great Depression	3R - Relief, Recovery & Reform Program
1939-45	World War II	Creation of peace keeping institutions like United Nations
1945	Destruction in Japan during World War II	Rapid move towards Industrialization
1970s	High inflation during 1970s	Inflation focused monetary policy
1997	Asian Crisis	Macro prudential and other regulatory policies
2008	Global Financial crisis	Dodd Frank Act, Regular stress testing of Banks (CCAR & DFAST)

- **India has been no different……**

Period	Crises / Emergency	Reforms
1950s	Lack of manufacturing ability post independence	5 year plans, Setting up of PSUs in core sectors
1960s	Food / Milk shortage in 60's	Green revolution, White revolution
1991	Balance of Payment (BoP) crisis	Liberalization in 1991
1992	Securities scam	Dematerialization of stocks, electronic trading
2007	Coal and 2G Scam	Transparent auctioning of Natural resources
2012-13	Double digit inflation	Inflation targeting by RBI
2015-17	Weak asset quality of Banks	Insolvency & Bankruptcy Code (IBC)
2020	Covid-19	Focus on domestic manufacturing, Atma Nirbhar Abhiyaan

In the midst of every crisis, lies great opportunity

- **Albert Einstein**

Sources: Publicly available information

Covid-19 : A "Reformist" Period

India used the Covid-19 period to implement wide ranging structural reforms

Boost for Domestic manufacturing

- PLI scheme for select 13 sectors with an aim to boost the competiveness of domestic manufacturing; total budget of INR 2 trillion
- Raising import tariffs on select products to incentivise domestic manufacturing

Labour reforms

- 29 labour laws amalgamated into 4 labour codes – Wages, Social security, Industrial Relations and Occupation safety
- Incentivises scaling up of manufacturing operations, reduces procedural and bureaucratic hurdles, lowers compliance burden etc.

Agriculture Reforms

- Amendment to Essential commodities act to deregulate many agricultural items
- Law for barrier free trade for agriculture produce, e-trading of agriculture produce, contract farming etc.
- Launch of financing facility of INR 1 lakh crore for funding Agriculture Infrastructure projects

Push towards Privatization of CPSEs

- Private sector allowed to participate in all sectors; PSUs operating in non-strategic sector to be privatised / divested in due course
- Power Discoms in Union territories to be privatised and Ordnance factory board to be corporatised
- Push to improve defence exports and reduce imports dependence in defence

Land Reforms

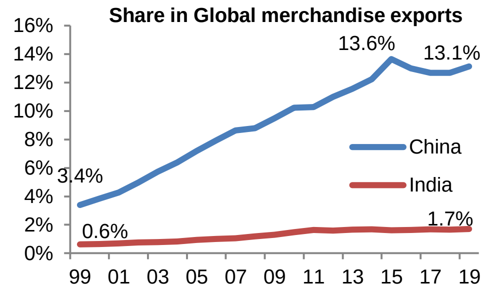
- Creating land banks and speeding up land obtaining process for industrial projects
- Moving purchase process online via a land information system, ensuring higher transparency etc.

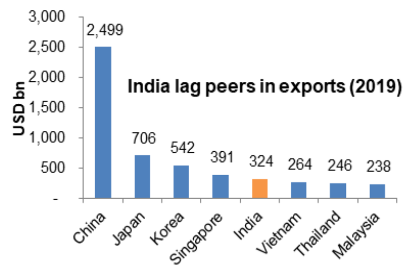
PLI - Production Linked incentives; CPSEs - Central Public Sector Enterprises

Manufacturing : An Idea whose time has come !

- India missed the manufacturing opportunity to China in 2000s

Merchandise exports (USD bn)	CY98	CY19
China	183	2,499
India	33	324
Difference	**150**	**2,175**





- After years of consistent gain in share of global merchandise exports, share of China moderated due to rising wages and environment compliance costs in last few years

- Over dependence on Chinese supply chain and disruption caused in it by Covid-19 have brought a sense of urgency to reduce dependence on one source

- Size of global manufacturing opportunity is large and even a 0.3% average annual gain in share of global merchandise exports (~USD 65 bn) can push India's GDP by over 2% annually. Interestingly, China gained share of ~0.7% each year, on an average, in global merchandise trade between 1999 to 2014

- India could be a beneficiary of this shift in manufacturing from China due to following reasons
  - a large domestic market & improving ease of doing business
  - skilled human resources available at competitive costs
  - concessional corporate tax rate (15%) for new manufacturing units set up before March 2023
  - India using tariff and non-tariff measures to aggressively support manufacturing in India

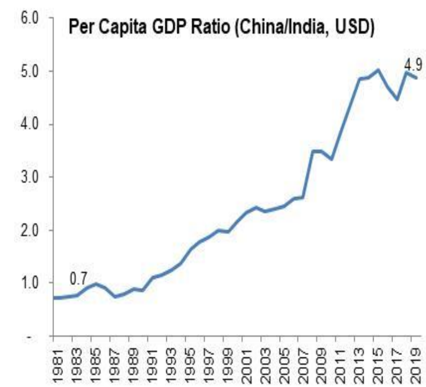
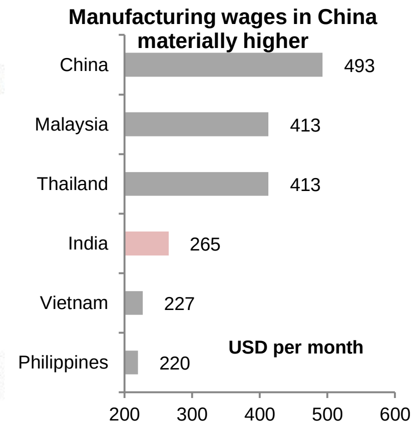


Chart 5



Steps taken to boost domestic manufacturing
Production Linked Incentive Schemes for select industries to promoter import substitutions and increase exports
Raising duties under Phased Manufacturing Programme to strengthen domestic manufacturing and discourage imports
Rationalization of Labour Laws
Agriculture reforms to remove bottlenecks and improving market access
Reduction in Corporate tax rates
Opening up defence sector and banning imports of select items
Revision of MSME definition to incentivise scaling of operations

Source: Morgan Stanley; Publicly available information

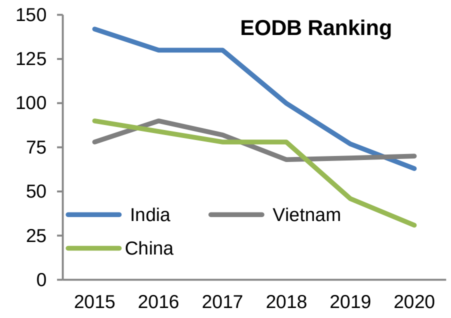
Sources: Kotak Institutional Equities, JM Financials, Bloomberg, JETRO, World Bank

It's getting easier to do business in India

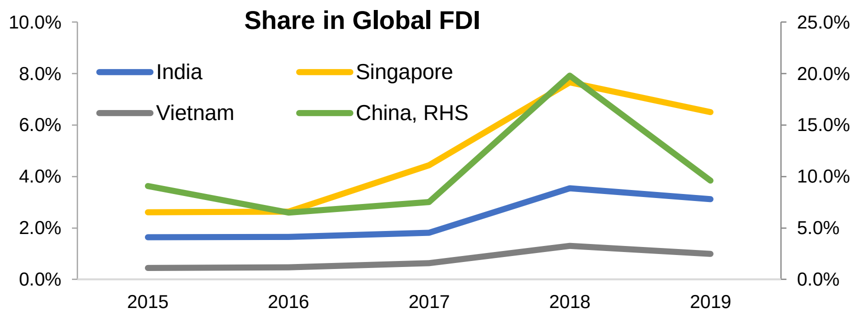
- India's Ease of Doing Business (EODB) rankings were historically low creating a weak environment for FDI / Investments
- India's FDI flows are low both relative to its size and as share of global FDI flows
- India's ranking in the EODB has improved between 2015-2020 from 142 to 63. This is likely to improve investments and FDI flows into India
- Interestingly, during Jan-Oct 20 which was marred by Covid-19, FDI grew by 30% YoY
- Areas of further improvement are Starting a Business, Registering Property, Enforcing contracts, etc.

India aims to be in Top 50 in EODB rankings

Source: World Bank Group, Invest India, National Infrastructure Pipeline



USD bn	India	Vietnam	China	Singapore
GDP-2019	2,869	262	14,343	372
FDI flows	51	16	156	105
As % of GDP	1.8%	6.2%	1.1%	28.4%



EODB Criterias and India's ranking

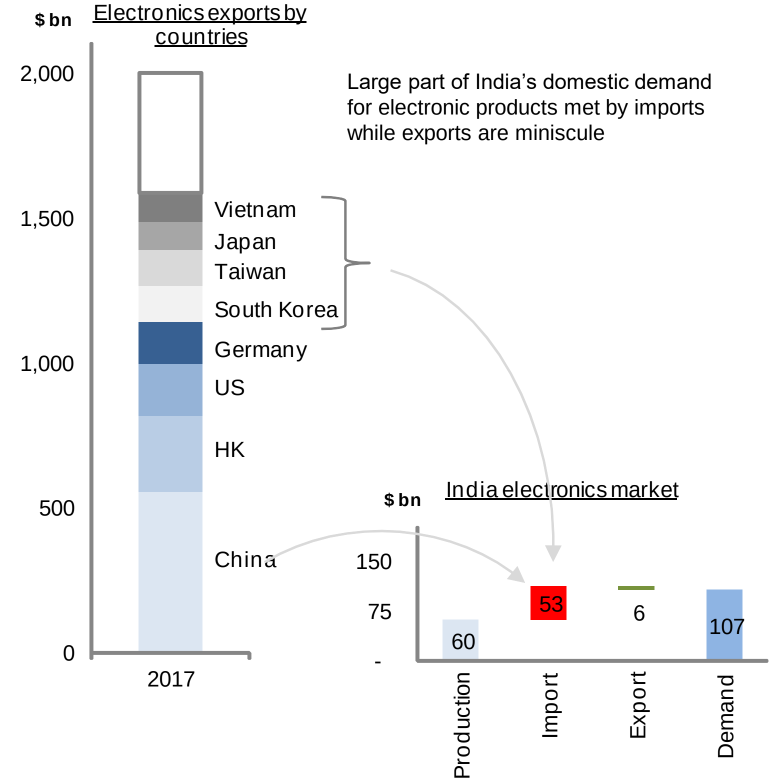
Particulars	2015	2020	Remarks/Initiatives
Large improvement seen in			
Construction permits	184	27	Decline in procedures/time for permits
Getting Electricity	137	22	Takes 53 days, 4 procedures for connection
Trading across borders	126	68	Export/Import procedure simplified
Resolving insolvency	137	52	Recovery rate improved to 71.6%
Getting credit	36	25	Credit bureau coverage to 63.1% adults
Areas of improvements			
Starting a business	158	136	Working on single window clearances
Registering property	121	154	Linking property with Judicial Data Grid
Paying taxes	156	115	Corporate tax lower, compliance simplified
Enforcing contracts	186	163	Restrict adjournments to 3
Minority investors	7	13	Initiatives taken by SEBI/authorities

Production linked incentive scheme (PLI) : Timed to perfection

- **PLI:** To capitalize on large global manufacturing opportunity, **Indian government for the first time is providing financial incentives to private enterprises** through PLI scheme that should boost domestic manufacturing and can attract large investments

- **What was the need for PLI?**
  - In Electronics, India's production was only USD 60 bn (2017) while imports were ~USD 53 bn. India's electronics exports are miniscule compared to countries like China, Vietnam and South Korea
  - **Lack of level playing field** : Indian companies suffered cost disadvantage of 8-10% due to inadequate infrastructure, supply chain & logistics issues, high financing cost, inadequate availability of quality power, limited design capabilities, R&D, skill development, scale, etc.
  - **China +1 strategy** : Outbreak of Pandemic is encouraging diversification of supply chain; companies increasingly looking at strategically placing supply chains outside China.

- **Key steps/progress**
  - GoI announced PLI of INR 2 lakh crore covering 13 sectors to help achieve economies of scale and make Indian manufacturers competitive
  - In mobile phones manufacturing, 10 companies have already been selected of which 5 are international companies including 3 of Apple iPhones manufacturers



PLI Scheme approved for 13 key sectors (INR bn) - Incentives			
Mobile phone	410	Telecom & Netwrkg. Prod.	122
Drug Intermediaries, APIs	69	Textile: MMF segment/tech.	107
Medical Devices	34	Food products	109
Advance Chem./Cell Battery	181	HE Solar PV Modules	45
Electronic/Technology Prod.	50	White Goods	62
Automobiles & Auto Comp.	570	Speciality Steel	63
Pharmaceuticals drugs	150	**Total**	**1,973**

Source: Ministry of Electronics and Information Technology, International Trade Center, Ministry of Finance, PIB

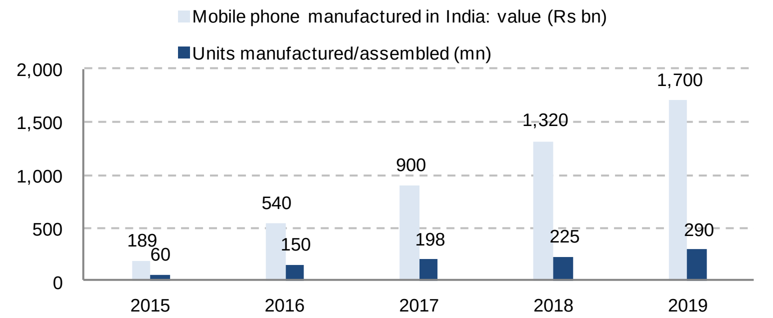
Mobile phones: A recent example of success in local manufacturing

- **Mobile phones manufacturing in India has seen a large increase**
  - Launched in 2016, Phased Manufacturing Program (PMP) led to increase in import duties on mobile handsets; duties on parts and components were exempt
  - Mobile handset production increased to 290 mn phones in 2019 *(2015: 60 mn)*; 268 manufacturing units set up in last 3-4 years
  - Value addition in India is still low *(~15-20%)* due to lack of component ecosystem

- **PLI to further increase mobile phones manufacturing in India**
  - Under Mobile phones PLI, government will provide financial incentive of 4-6% on increment sales for 5 years which is tied to incremental investment by companies
  - Likely to increase value addition to ~35-40%, help in tapping export markets, aid in creation of component ecosystem and jobs

- **PLI for Electronics: outcomes expected**
  - National Policy of Electronics targets increasing production to USD400 bn by 2025 *(2018: USD 59 bn)*
  - Special emphasis on increasing exports to USD 150 bn and domestic value addition

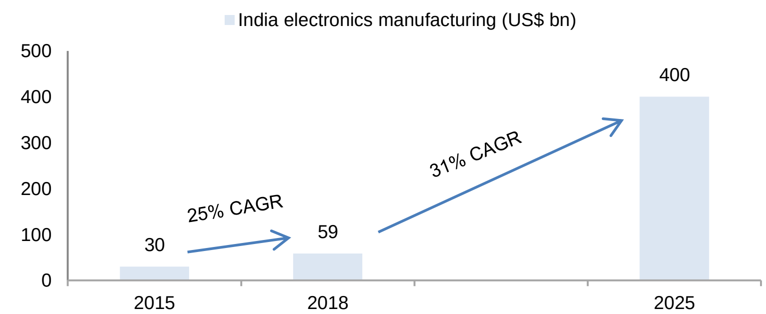
Mobile phone manufacturing saw large increase in India led by PMP



10 companies selected for Mobile handset PLI scheme	
International companies	**Domestic companies**
Samsung	Lava
Foxconn Hon Hai^	Bhagwati (Micromax)
Rising Star	Padget Electronics
Wistron^	UTL Neolyncs
Pegatron^	Optiemus Electronics

^Apple iPhones manufacturers

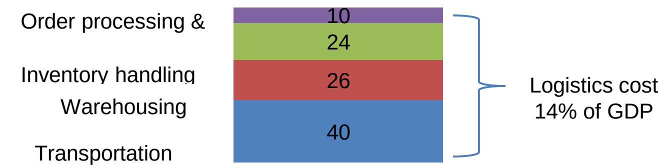
Manufacturing boost through Government schemes such as PLI and PMP can help increase electronics manufacturing to USD 400 bn by 2025



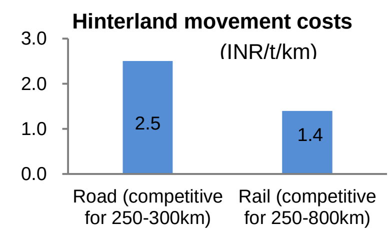
Source: Ministry of Electronics and Information Technology, Ministry of Finance, PIB

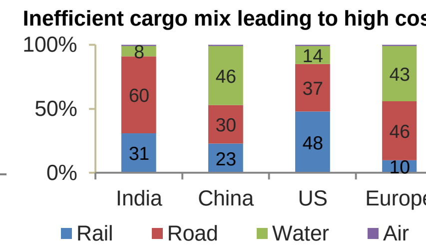
Logistics – India's Achilles' heel

- India is plagued with high logistics cost driven by high transportation and inventory handling costs
  - This reduces exports competitiveness

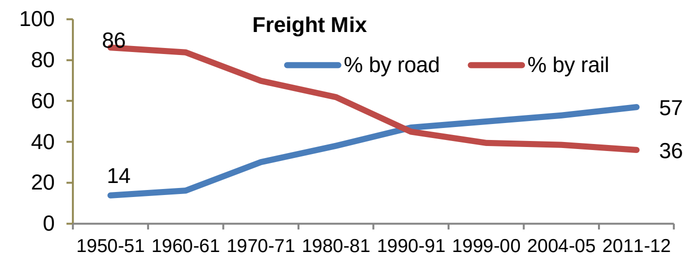


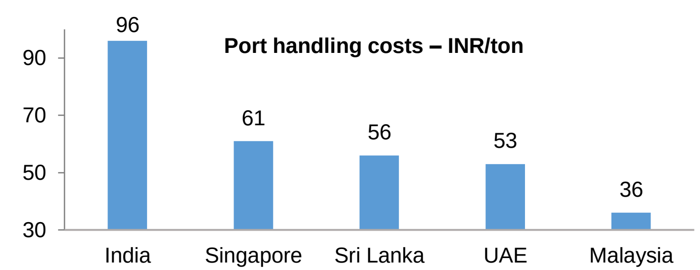
Logistics Cost	US	China	India
As a % of GDP	8	15	14
As a % of Manufacturing GDP	49	45	62





- Primary reasons for the high logistics costs / logistic inefficiencies are
  - High road freight costs vs rail
  - Higher share of road in freight mix
  - Higher transit times in rail due to congestion and priority given to passenger trains over goods trains
  - High dwelling time at ports and high waiting time on roads due to tolls
  - Higher port handling costs vs. Global ports





Source: Antique Research, Livemint, Niti Aayog

Key policy initiatives to reduce logistics costs

- Construction of dedicated freight corridors (DFC) across Eastern and Western India to drive avg 2.1x improvement in turnaround time)

- Introduction of direct port delivery (DPD) at major ports to reduce dwelling and intermediary costs

- Introduction of Fastags at toll booths

India will become toll plaza free in next two years

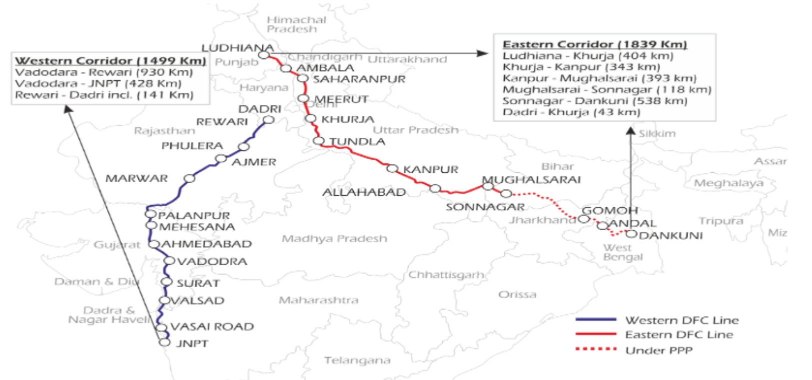
– Nitin Gadkari, Union Minister of Road Transport & Highways

- Doubling / tripling of rail network

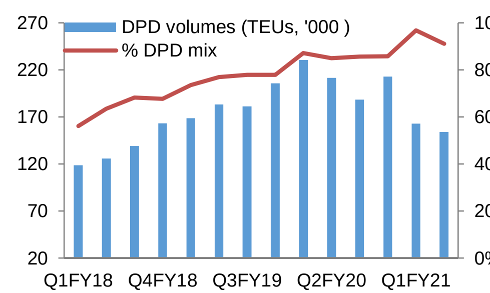
- Four laning of National Highways to reduce congestion

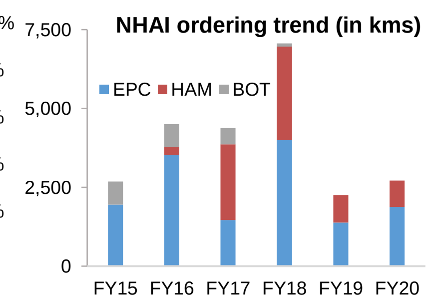
- Electrification of rail network to reduce cost of operations

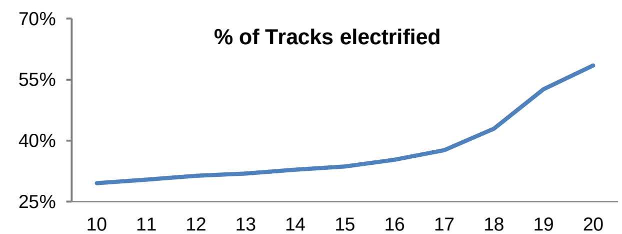
Government intends to reduce logistics costs as % of GDP to below 10% led by various initiatives including few mentioned above



Particulars	DFC's scale benefit over IR network
Train height & width dimension	1.1-1.7x
Train length	2.1x
Train load	2.4x
Train average speed	2.8x







Source: Antique Research, NIIP, Indian Railways, JNPT

HDFC MUTUAL FUND
BHAROSA APNO KA

- **Favourable demographics** with a high proportion of educated, English speaking young population and **low penetration of consumer goods** are structural growth drivers

- **Large unmet infrastructure** needs and investment potential in roads, ports, railways, power, public transportation, etc. are also key enablers of growth

- **Low global interest rates and ample liquidity** improve access to cheap long term capital, especially for infrastructure sector

- **Shift underway in Global manufacturing** has the potential to meaningfully increase economic growth rates

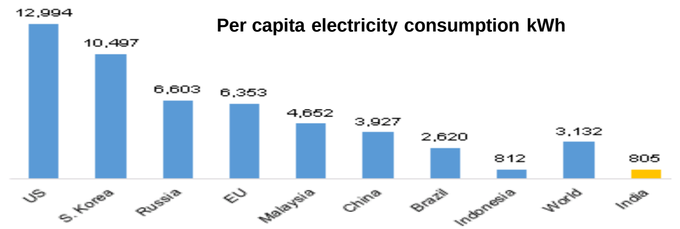
- **Improving EODB and wide ranging reforms** have improved business climate

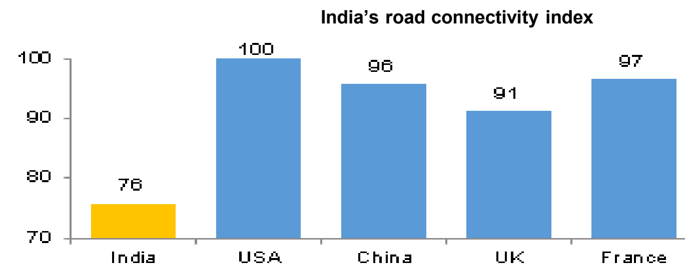
- **Best real estate affordability in 25 years** due to low interest rates, higher incomes and moderation in prices bodes well for this key sector that has strong economic linkages

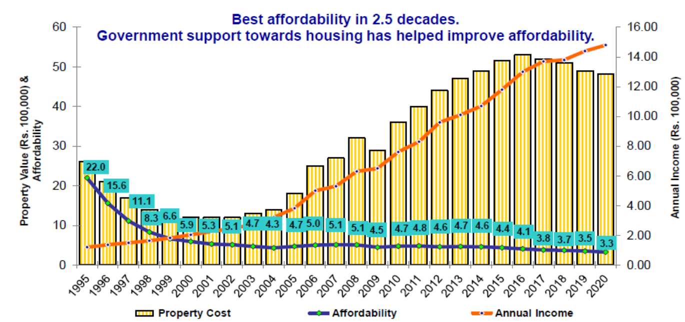
- **Rising fiscal & trade deficits, low Household (HH) leverage and rise in savings** in DMs should support growth in EMs including India

Consumer goods penetration relative to other EMs					
%	Refrigeration	Home Laundry	Room AC	2W	4W
India	37.0	15.8	5.5	54.6	9.7
China	95.0	91.9	109.3	44.9	51.7
Brazil	98.5	66.9	n.a.	26.4	49.4

Room AC, 2Wheeler & 4 Wheeler data is for 2020E; rest are 2019E







Source: World Bank, HDFC Limited (Nov-20 Presentation), WEF Global Competitiveness Report, Transport Competitiveness Report, World Development Indicators-World Bank, IR Yearbook 2018

Incredible India : Konark Sun Temple, Orissa

Picture courtesy esamskrati.com; eSamskriti is a website wherein wisdom, history and culture of India are made available through over 1,934 articles & 17,000 photographs

- Constructed by King Narasimhadeva I of the Eastern Ganga Dynasty in 13th century is dedicated to Sun God Surya
- The name Konark derives from the combination of the Sanskrit words Kona (corner or angle) and Arka (the sun)
- The temple complex has the appearance of a 100-foot (30 m) high chariot with immense wheels and horses, all carved from stone
- The 12 stone-carved wheels represent the 12 months of a year and 7 horses represents 7 days of a week; The exact time of the day can be calculated seeing the shadow cast by the wheels
- Doors are also aligned with the movement of the sun. The front and back doors get the sunrays on equinox days and the two side doors get the first rays during the northern and southern movement of the sun

Source: Publicly available information

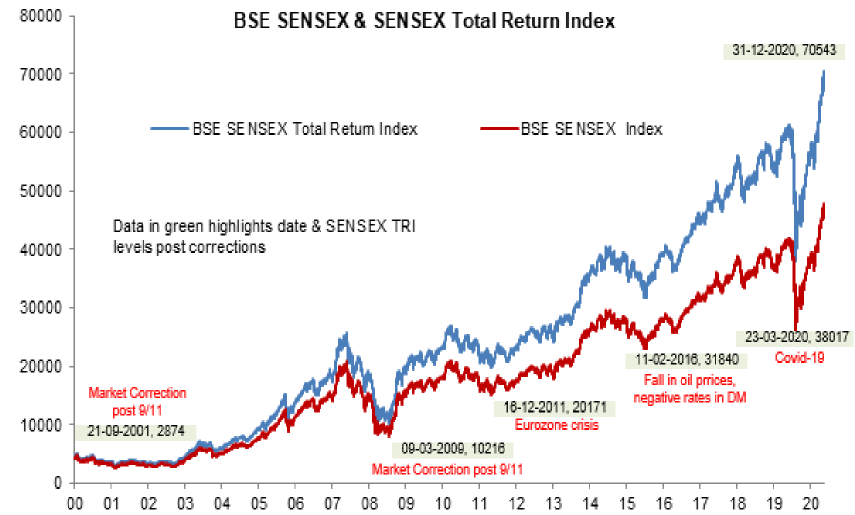
Equity Markets

Refer disclaimers on slide 98

Indian Equities – The big picture

- BSE Sensex TRI (SENSEX TRI) has compounded at 15% CAGR vs average inflation of 6% over last 20 years. Rs 100 invested in 1999 has become ~Rs 1650 in nominal terms & ~Rs 560 in real terms.
- To achieve this, all that was needed was patience to stay invested for 20 years and through events like 9/11, GFC, Eurozone crises, Brexit, Covid-19 etc.
- However, chances are that most would have traded several times in this period driven by news, views, emotions of fear & greed etc & that most would have earned lower returns

Time in the market beats timing the market – Old Adage



- It is interesting to note that over this period SENSEX witnessed occasional deep corrections. Investments made around these times delivered higher CAGR returns. This is one way to improve long term returns *(refer adjacent table)*

Date	SENSEX TRI Level post corrections	SENSEX TRI Level (31st Dec, 2020)	CAGR %
21-09-2001	2,874	70,543	18.0%
09-03-2009	10,216	70,543	17.8%
16-12-2011	20,171	70,543	14.8%
11-02-2016	31,840	70,543	17.7%
23-03-2020	38,017	70,543	86% YTD

Source: Bloomberg

You make most of your money in a bear market, you just don't realize it at the time – Shelby Cullom Davis

- 2020 market correction offered one more such opportunity. However not many made the best out of this as headlines made them fearful. Investment decisions were therefore driven by emotions / short term thinking instead of rationality / long term thinking

The definition of insanity is doing the same thing over and over again, but expecting different results" – Albert Einstein

Since inception in 1979, SENSEX TRI has delivered a return of 16% CAGR for 41 years. Rs 100 has become Rs 70,500*

A great outcome with minimal effort.

* Actual number would be higher as the starting point of SENSEX TRI is in August 1996 & dividends received prior to this are not accounted

Making Equities work

Stock market is a device to transfer money from the impatient to the patient – Warren Buffet

- As holding period increases, return profile improves *(refer adjacent table)*
  - Adjacent table represents distribution of daily rolling returns of SENSEX Total Return Index (since 1996) over different holding periods

CAGR (%)	1 Year	3 Years	5 Years	10 Years	15 Year	20 Year
more than 14%	48%	38%	37%	64%	70%	30%
more than 12%	53%	47%	52%	71%	97%	95%
more than 10%	56%	55%	62%	83%	100%	100%
more than 6%	63%	74%	79%	100%	100%	100%
more than 0%	72%	91%	95%	100%	100%	100%
less than 0%	28%	9%	5%	0%	0%	0%

Source: Bloomberg

On an average, 90 percent of the variability of returns and 100 percent of the absolute level of returns is explained by asset allocation – Roger G. Ibbotson

Asset Allocation is a key driver of wealth creation over long term

- Many underestimate their risk taking ability due to fear of volatility & short term thinking. This results in below optimal allocation to equities impacting long term wealth creation
- Debt–Equity allocation makes a bigger difference to wealth over long periods than timing

Initial investment of Rs 100		Value at Year 20	CAGR (%)
Equity %	Debt %		
100	0	1374	14.0
80	20	1177	13.1
60	40	979	12.1
40	60	782	10.8
20	80	584	9.2
0	100	387	7.0

For illustration purposes only. For calculation purpose CAGR returns for equities has been taken as 14% CAGR and for debt as 7% CAGR

Diversification is an established tenet of conservative investment – Benjamin Graham

- Maintain discipline to remain diversified or invest through mutual funds which are diversified by design
- In every bubble it has been observed that many forget this golden rule of diversification and portfolios become concentrated. TMT (Technology Media Telecom) stocks in 2000, Power and Real estate in 2007, Small / Mid caps in 2017 are few such instances

A lot of people with high IQs are terrible investors because they've got terrible temperaments. You need to keep raw, irrational emotion under control — Charlie Munger

Emotional Quotient (EQ) is more important than Intelligence quotient (IQ) while investing

- Emotional Quotient (EQ) is the ability to recognize emotions, to understand its effects & its impact on thinking and behavior
- Virtues like Patience, Aggression, Discipline which are key to successful wealth creation work based on person's EQ and not IQ

I will tell you how to become rich. Close the doors. Be fearful when others are greedy. Be greedy when others are fearful — Warren Buffett

C for Covid-19, C for Cost of Capital !

HDFC MUTUAL FUND BHAROSA APNO KA

Many are confused with the bounce back in the Equities, despite weak economic conditions.

The answer to this partly lies in Covid-19 induced lower cost of capital.

- Lower cost of capital reduces the discounting rate & thus increases the present value of future cash flows, i.e., DCF (Discounted Cash Flow)
- The impact of lower Cost of Capital on DCF is higher than the impact of lower cash flow of one year *(refer illustrative below table)*

	Assumed Future Cash Flows																			
	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	Cost of Capital	Terminal Value @ 10xFY34 Cash Flow	PV of Future Cash Flows	PV of Terminal Value	Fair Value	% Change (from S1)
S1	10.0	11.0	12.1	13.3	14.6	16.1	17.7	19.5	21.4	23.6	25.9	28.5	31.4	34.5	38.0	12.0%	380	126	87	213	
S2	10.0	5.0	12.1	13.3	14.6	16.1	17.7	19.5	21.4	23.6	25.9	28.5	31.4	34.5	38.0	10.0%	380	143	110	253	19%
S3	10.0	5.0	12.1	13.3	14.6	16.1	17.7	19.5	21.4	23.6	25.9	28.5	31.4	34.5	38.0	9.0%	380	153	124	276	30%

S1: Scenario 1 Assuming No Covid-19. 10% CAGR growth in Cash flow in FY21 & thereafter. Cost of Capital at 12%.

S2 : Scenario 2 Assuming Covid-19. 50% degrowth in Cash flow in FY21 & no change in cash flows after FY21. Cost of Capital is lower at 10%. **Fair value is higher by 19% in this scenario vs Scenario 1**

S3 – Scenario 2 Assuming Covid-19. 50% degrowth in Cash flow in FY21 & no change in cash flows after FY21. Cost of Capital is even lower at 9%. **Fair value is higher by 30% in this scenario vs Scenario 1**

> It all comes down to interest rates. As an investor, all you're doing is putting up a lump sum payment for a future cash flow – Ray Dalio
>
> Interest rates are like gravity in valuation. If interest rates are nothing, values can be almost infinite. If interest rates are extremely high, that's a huge gravitational pull on value – Warren Buffet

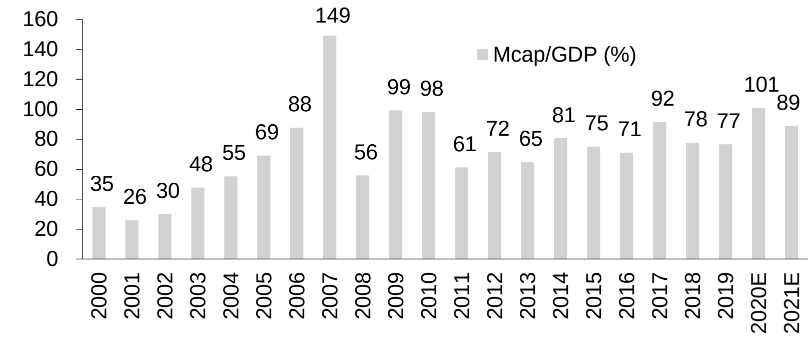
Sources : Calculations are internal & illustrative in nature, PV – Present Value

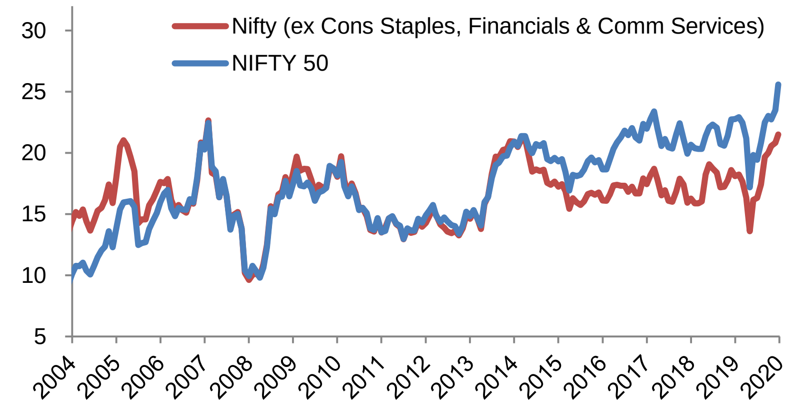
Refer disclaimers on slide 98

Factors that worked for Indian Equities in 2020

Markets bounce back has to be seen in the context of :

- Indian market capitalization is currently ~89% of GDP (based on CY 2021 GDP), which is reasonable. **At its bottom in March 20, it had fallen close to 48%** ***(based on CY 2021 GDP)***
- Even at current levels, 10 year & 15 year NIFTY50 returns of 9.9% & 12.6% CAGR respectively have marginally lagged nominal GDP growth of 12% & 13% CAGR respectively over same periods.
- NIFTY50 *(ex of consumer staples, financials & communication services)* is trading at reasonable valuations **especially in the context of lower cost of capital**
- Corporate results have generally been ahead of expectations led by cost savings achieved during lockdown





Low interest rates, reversion to normalcy, reasonable valuations, strong FPI flows have supported the Indian Equity Markets in 2020

Sources : Kotak Institutional Equities, Bloomberg, Publicly Available Information, Market cap to GDP as on 31st Dec, 2020, Returns as on 31st Dec, 2020
GDP CAGR is calculated based on FY20 Nominal GDP

However, market recovery has not been broad based

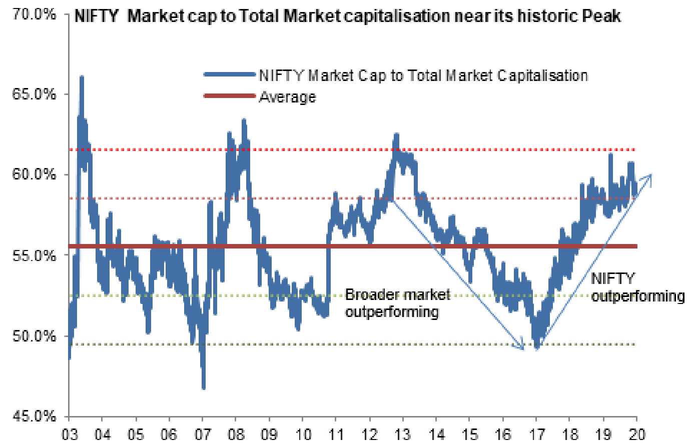
- Markets have been polarised with top 5 stocks contributing to bulk of returns in CY18, CY19 & CY20

- In the past, it has been observed that such a phase of polarised returns is followed by broader markets outperforming NIFTY 50. Broader market rallies have also been associated with higher overall returns. *(Table 1)*

- Further, since December 2017 the NIFTY50 has outperformed the broader markets with share of NIFTY50 in over all market capitalisation increasing to ~60% near historic highs.

Table 1

CY	NIFTY 50 Returns	Top 5 Contributors (%)
2005	39.1	48.9
2006	46.2	45.8
2007	57.1	47.7
2008	(51.2)	n.a.
2009	77.9	38.1
2010	19.5	53.5
2011	(23.6)	n.a.
2012	29.9	49.8
2013	8.5	102.3
2014	33.4	38.8
2015	(2.8)	n.a.
2016	4.5	72.8
2017	30.3	48.4
2018	4.6	152.2
2019	13.5	81.3
2020	16.1	81.7



Source: Bloomberg

Large vs Mid vs Small caps?

in %	CY14	CY15	CY16	CY17	CY18	CY19	CY20	5 Years CAGR	10 Years CAGR	15 Years CAGR
Nifty 50	32.9	-3.0	4.4	30.3	4.6	13.5	16.1	13.4	9.9	12.6
NIFTY 500	39.3	0.2	5.1	37.7	-2.1	9.0	17.8	12.7	10.1	12.2
NIFTY Midcap	57.9	7.6	8.3	49.3	-14.6	-3.4	23.0	10.4	10.3	13.0
NIFTY Smallcap	56.9	8.4	3.2	58.7	-28.4	-8.5	22.7	5.7	6.9	9.5

- The growth of the company is primarily a function of economic growth, maturity of the business & execution. Size on the other hand is normally a function of the nature of the business i.e., even the largest bearing company would probably be a midcap but an average car company would be a Largecap !
- Not surprisingly over long periods, Revenue and EBITDA growth are also similar for companies across market caps (adjacent table)
- However, there is a widely held belief that small caps grow faster. We believe that the same is not borne by data, at least for aggregates
- Over long periods, category average returns for large and mid caps are comparable. Small caps have in infact underperformed large / mid caps

Revenue CAGR	10 years ended FY 20	5 years ended FY 20
Large Cap	11.7%	7.7%
Mid Cap	12.9%	8.1%
Small Cap	11.1%	5.8%

EBITDA CAGR		
Large Cap	11.8%	10.3%
Mid Cap	12.8%	6.9%
Small Cap	13.0%	11.0%

How much to allocate in Largecap and Small / Midcaps ?

In our judgment, 2/3rd to 3/4th allocation to Large caps and 1/3rd to 1/4th allocation to mid / small cap is a sound strategy for a typical investor

This strikes a balance between stability of large caps and potential of mid / small caps mainly driven by stock selection by the Fund Manager

Sources: MFI Explorer, Bloomberg, For revenue and EBITDA CAGR working, NIFTY 500 Data as on 31st Dec, 2020 has been taken on Bloomberg and bifurcated into Large (First 100). Mid (Next 150) and Small (Next 250) and their Revenue and EBITDA growth has been considered over 5 and 10 years by pulling data from the Bloomberg

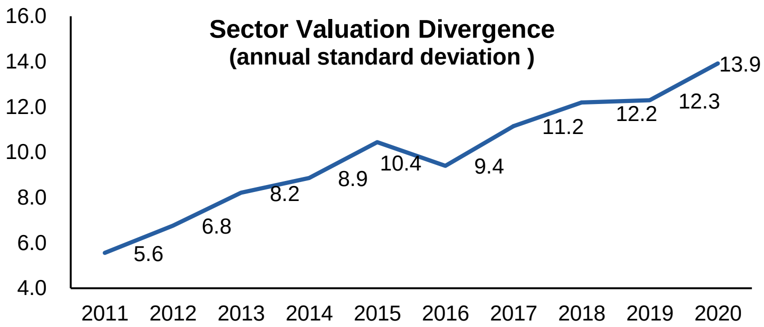
Refer disclaimers on slide 98

Current sector valuations vs long term averages

Sector Valuations P/E	Auto	Consumer staples (ex tobacco)	Consumer Discretionary	Oil and gas	Cement	IT services	Pharma	Pvt Banks P/B	Metals & mining	Tobacco	PSU Banks P/B	Electric utilities
Current	28.5	55.7	65.1	15.8	29.2	23.3	25.3	2.6	9.2	17.0	0.7	7.0
10 year Average Valuations	15.4	33.5	41.1	10.9	21.3	17.6	22.0	2.5	10.4	24.1	1.1	11.4
Current premium / discount to LT avg	85%	66%	58%	45%	37%	32%	15%	3%	-11%	-29%	-38%	-39%

Source: Kotak Insti Equities. Stocks are stocks part of Kotak Inst Equities universe. Automobile and Oil & Gas valuations are high due to one company. Excluding of these, the multiples are 24x for Auto & 7.5x for Oil & Gas vs 10 year average multiple of 18x & 9x respectively.

- Polarised market returns are also visible in significant divergence in valuations across sectors *(refer table above)*
- Divergence in sector valuations as reflected in standard deviation has been rising and is now at a decadal high *(refer adjacent chart)*
- Time will tell whether these polarized valuations are a new normal or not ?



Universe excluding Financials. Source: Kotak Institutional Equities

Reversion to the mean is the iron rule of the financial markets - John C. Bogle

Cut Your Losses and Let Your Profits Run – Old Adage

The dilemma is whether to let the profits run or expect mean reversion

NIFTY50 Profit growth : Finally back on track ?

Profit Growth %	CAGR		CAGR
Sector	**FY14-20'**	**FY20-21E**	**FY20-23E**
Consumer Discretionary	-13%	14%	45%
Consumer Staples	10%	3%	11%
Corporate Banks & Financials	-2%	95%	43%
Energy	-1%	7%	18%
Health Care	-2%	32%	25%
Industrials	15%	-36%	6%
Information Technology	8%	5%	10%
Materials	8%	33%	30%
Retail Banks & Financials	18%	-8%	11%
Telecommunication Services	na	na	na
Utilities	6%	0%	9%
Total	**4%**	**11%**	**23%**

Last few years NIFTY50 profit growth got impacted due to :

- Higher provisioning on NPAs due to significant stress in steel, power & infra sectors by Corporate Banks
- Provisioning for AGR (Adjusted Gross Revenue) dues by Telecom companies
- Extraordinary write-offs by one large auto company
- Energy companies got impacted by inventory write-offs in FY20
- Healthcare companies got impacted by weak pricing cycle in the US

Profit growth to be driven by :

- With falling slippages and increasing resolution of NPAs provisioning costs are expected to fall sharply resulting in sharp increase in profitability of Corporate Banks
- Healthcare companies to benefit from new launches & stability in pricing in the US
- Sharp rise in commodity prices
- Lower interest rates, Recovery in demand & Cost control post Covid-19-19
- No large extraordinary provisioning / write-offs expected

Surprisingly, NIFTY50 earnings are likely to grow in FY21

Source: Kotak Institutional Equities, E – Kotak Institutional Equities estimates; For detailed sectorwise view / outlook refer slides 70 to 84.

Strong FPI flows ! History repeats ?

		FPI Flows Rs crs				
Year	Date	90 days rolling	next 360 days	% Return next 360 days	India Total Market cap (Rs crs)	FPI outflows as % of India total Market Cap
2006	11-Aug-06	-4,758	95,307	33%	2,848,873	-0.2%
2008	29-Oct-08	-30,428	111,664	85%	2,818,624	-1.1%
2011	13-Dec-11	-12,680	200,042	23%	5,579,621	-0.2%
2013	1-Oct-13	-6,938	171,914	38%	6,364,376	-0.1%
2015	18-Dec-15	-30,179	73,552	5%	9,809,791	-0.3%
2016	29-Feb-16	-26,497	93,963	28%	8,594,780	-0.3%
2017	8-Feb-17	-30,414	44,457	23%	11,609,256	-0.3%
2018	9-Nov-18	-38,872	68,564	13%	14,171,044	-0.3%
2020	5-May-20	-50,000	220,201 crs- YTD till 30th Dec	52%-YTD till 31st Dec	12,500,113 as on May 5th, 2020	-0.4% as on May 5th, 2020

Source – Edelweiss, Bloomberg; Maximum outflow on a 90 days rolling period

- During the Covid-19 crisis, FPIs sold more than Rs 50,000 crs as on 5th May 2020 on a 90 day rolling basis. In our mid year outlook published in July 20, we had highlighted that in the past, periods of major FPI selling were followed by periods of sizeable FPI inflows. We had also highlighted that historically, corrections in Indian markets triggered by global events have been followed by good returns in medium term
- As highlighted in the same note, this is due to the fact that Indian economy is uniquely structured and the impact of global developments on it is low over the medium term
- FPI inflows since 5th May 2020 *(when FPI outflows peaked on a 90 days rolling period)* have been close to 4 times the maximum outflow *(refer table above)* & NIFTY50 has delivered close to 52% returns since then

Negative local flows – EQ (Emotional Quotient) is the culprit

Data for the month	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Total SIP Flows #	8,532	8,513	8,641	8,376	8,123	7,917	7,831	7,792	7,788	7,800	7,302
SIP Flows (Equity) $	8,105	8,087	8,209	7,957	7,717	7,612	7,494	7,435	7,413	7,395	6,903
Non SIP	-409	1,871	3,135	-2,927	-3,824	-10,285	-14,876	-13,491	-10,492	-14,696	-25,165
MF Net Flows in Equity (Rs crs)	7,696	9,958	11,344	5,030	3,893	-2,673	-7,382	-6,056	-3,079	-7,301	-18,262
Equity AUM (Rs crs)	1,109,847	1,060,160	825,500	929,482	914,871	976,912	1,019,942	1,058,011	1,044,954	1,058,235	1,160,037
MF Net flows as % of AUM	0.70%	1.00%	1.50%	0.60%	0.50%	-0.30%	-0.80%	-0.60%	-0.30%	-0.70%	-1.70%
Monthly SENSEX return %	-1.3%	-6.0%	-23.1%	14.4%	-3.8%	7.7%	7.7%	2.7%	-1.5%	4.1%	11.4%

SIP - Systematic Investment Plan

While SIP flows have been largely stable, non SIP flows have witnessed rising outflows *(refer table above)*

- The sharp fall in the markets & NAVs, scary headlines spooked many investors
- As is typical of such events, fear led to outflows, especially as markets recovered
- However, as a percentage of total equity AUM, outflows are minimal

After a stock market decline, people may perceive more risk than before when, in fact, the decline may have taken some of the risk out of the market – Robert Shiller

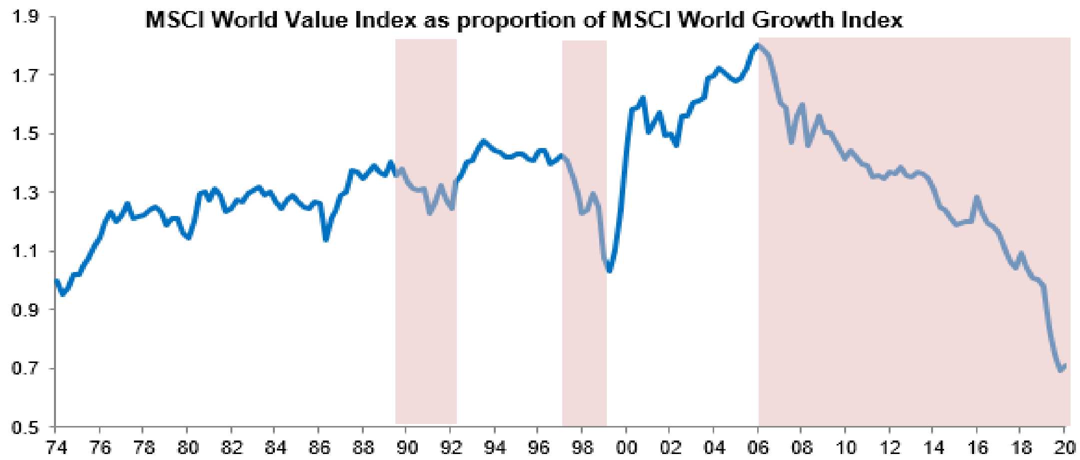
Logically opposite should have been done as:

- It was reasonable to believe that impact of Covid-19 was temporary
- Falling interest rates were positive for equities

There seems to be some perverse human characteristic that likes to make easy things difficult – Warren Buffet

Source AMFI: Includes all products, Equity AUM & Equity Inflows has equity and hybrid categories (equity oriented - BAF/Multi Asset/ Equity Savings/Retirement solutions (all plans))
$ SIP Inflows from the period June 20 onwards, hybrid categories includes all categories under hybrid; including conservative hybrid/ arbitrage. Prior to June 20, SIP inflows has been taken 95% of the total flows as breakup of the same is not available.

Value vs. Growth - What does history tell us ?



Sources: Bloomberg, MSCI, Data updated till December 18, 2020

- Simply put, Value Investing is investing in stocks / assets that are currently underpriced relative to their true intrinsic value. Conversely, Growth Investing is investing in stocks / assets that have potential for higher business growth in future
- MSCI World Value Index as a proportion to MSCI World Growth Index is currently at an all time low
- Value investing broke in 2007, and hasn't recovered since
- Current cycle of underperformance by value has been for longest duration of 12-13 years compared to past when the same was around 2-4 years *(shaded above)*

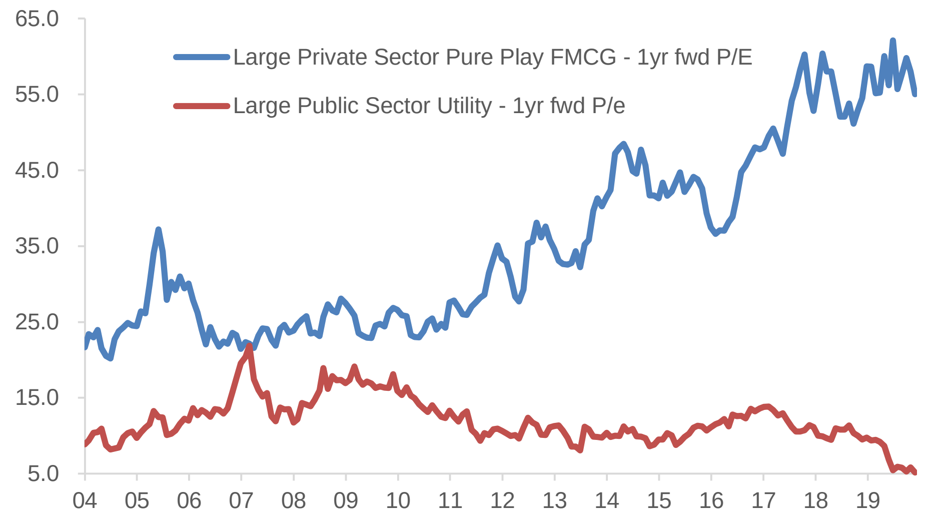
Value investing is the discipline of buying securities at a significant discount from their current underlying values and holding them until more of their value is realized. The element of a bargain is the key to the process – Seth Klarman

All intelligent investing is value investing, acquiring more than you are paying for. You must value the business in order to value the stock. – Charlie Munger

Price is what you pay; value is what you get – Ben Graham

Is this the New Normal ? or Will there be mean reversion ? Watch this space in subsequent editions for the answer

Mirror, mirror on the wall – Which is the better investment of all ?



Utilities – Large Public Sector Utility

- Reasonable growth visibility (around 13% CAGR for next 3 years)
- Improving RoE (around 2.5% improvement expected between FY20 & FY23) strong balance sheet, competitive borrowing cost
- Lowest ever valuation at 6xFY22E P/E, 0.8x FY22E P/BV, with FY22e dividend yield of approx. 7%

Consumer Staples – Large Private Sector Pure Play FMCG company

- Revenue growth rates have come down in the last 5 years (around 6% CAGR between FY16-20 vs 10% CAGR between FY10-16)
- PAT growth at 14% CAGR between FY16-20 vs 12% CAGR between FY10-16 is led by higher margins due to fall in prices of raw materials, cost control, GST implementation, etc.
- Near all time high valuations at 60x FY22 P/E, dividend yield of ~ 1.5%

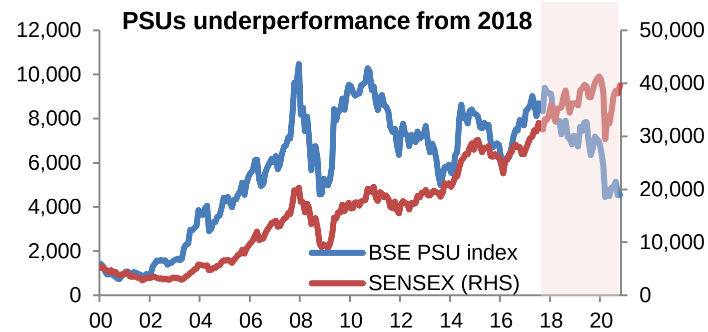
"We cannot see the future so every decision is a risk, only time will tell if it was a risk worth taking."

Source: Bloomberg, Kotak Institutional Equities, ICICI Securities, E - Estimate

PSUs : Value or Value Trap ?

- A majority of market participants believe that PSUs have been perpetual wealth destroyers
- It is interesting to note that BSE PSU Index returns were in line with BSE Sensex between 2000-2017. Underperformance by PSUs is from 2018 onwards
- Divestments through CPSE ETFs (Exchange Traded Funds) was likely a key reason as it led to regular supply of PSU shares at successively lower prices & at discounts. This eroded confidence of long term shareholders & encouraged short sellers

PSUs underperformance from 2018



- Financial Performance of PSU stocks has actually been in line with broader market
  - PSUs in sectors like utilities, defense, large banks & mining have sustainable competitive advantage of scale, lower cost of funds, good mines & trust

Financial Performance of PSU stocks vs Broader Market

Rs crores	Domestic Companies PAT	PSU (ex PSBs) companies PAT
End FY15	4,48,700	91,419
End FY20	3,45,828	91,847
% growth	-22.9%*	0.5%

*Adjusted for one time AGR liabilities in FY20, this number is 4%

Source: Bloomberg

- DIPAM secretary with reference to PSUs recently stated that:
  - ETF's and frequent OFS of the same company would not be conducted
  - PSUs to focus on asset monetization, stronger asset turns, RoCE & ROE and frequent dividends
- While opinion is divided, let time provide the answer. There have been similar instances in the past when a theme that was out of favor became the best performer over time i.e. old economy in 2000, FMCG in 2007, Largecaps in 2017 etc.

ETF utility as disinvestment tool on the decline: Pandey

PRASANTA SAHU
New Delhi, February 3

THE UTILITY OF exchange-traded funds (ETFs) as a principal means for disinvestment might be on the wane as large-scale strategic sales being planned would reduce the availability of stocks for such baskets, department of investment and public asset management (Dipam) secretary Tuhin Kanta Pandey said on Monday. The government has mobilised a record ₹45,080 crore which was more than half of its FY19 disinvestment receipts via two ETFs — ₹26,350 crore from a CPSE ETF and ₹18,730 crore from Bharat-22 fund. In FY20, ₹30,868 crore was mopped up via the two ETFs.

Pandey, who is steering the government's augmented privatisation drive, critical to achieving its all-time high non-debt capital receipts target of ₹2.1 lakh crore in FY21, however, discounted the feasibility of the Economic Survey 2019-20 proposal that a mechanism similar to Singapore's Temasek be set up to maximise disinvestment receipts.

"The idea (Temasek model) needs to be debated. The existing model for India is anyway competent to achieve the objective of strategic sales as well as sales of stocks in baskets via ETF."
— TUHIN KANTA PANDEY, DIPAM SECRETARY

Continued on Page 2

Source: Economic Times dated February 3, 2020

> Whenever you find yourself on the side of the majority, it is time to pause and reflect – Mark Twain

> You pay a very high price in the stock market for a cheery consensus – Warren Buffett

> The time to buy is when there's blood in the streets – Baron Rothschild

Equity Markets Summary

- Covid-19 is a black swan event. While it impacted the economy adversely in 2020, the bigger change for equities was the lower cost of capital (refer slide 57)

- Equity markets have recovered sharply on back of normalizing economic activity, low interest rates, reasonable valuations, strong FPI flows etc. (refer slide 58)

- However the rally has not been broad based. Divergence in valuations across sectors is high, standard deviation of sector valuations is at a 10 year high (refer slide 59 and 61)

- NIFTY50 profits are expected to grow in FY21 ! Further, strong growth likely in FY22 / FY23 driven by lower interest rates, recovery in demand & cost control post Covid-19 (refer slide 62)

- Currently, despite the recent rally, Indian market capitalization is ~89% of GDP (based on CY 2021 GDP), which is reasonable (refer slide 58)

- Markets look promising from a medium to long term view especially given the low cost of capital

Incredible India : Unakoti, Tripura

Picture courtesy esamskrati.com; eSamskriti is a website wherein wisdom, history and culture of India are made available through over 1,934 articles & 17,000 photographs

- Lying 178 km to the north east of Agartala, Unakoti hill literally means one less a koti (a crore i.e. 10 million); it is said that these many rock cut carvings are available here
- Dating back to 7^{th}-9^{th} century, if not earlier, there are rock carvings and murals in their primitive beauty located in a forest
- The images found at Unakoti are of two types: rock-carved figures and stone images. Among the rock-cut carvings, the central Shiva head and gigantic Ganesha figures deserve special mention

Sources: Publicly available information

Sector Overview

1. Automobile OEMs
2. Banking & NBFCs
3. Capital goods
4. Cement
5. Consumer durables
6. Consumer staples (FMCG)
7. Indian IT services
8. Infrastructure & Construction
9. Media
10. Metals & Mining
11. Oil & Gas
12. Pharmaceuticals
13. Telecom
14. Utilities

Sector Overview : Automobile OEMs

Background / Characteristics	• Consists of varied sub-segments like 2W, 4W, CVs, tractors and suppliers to them. Sector is estimated to contribute ~3-4% of GDP • 2W and 4W are relatively less cyclical in India whereas CVs demand has higher linkage with economic growth & existing fleet • Technology & capital intensive sector with high barriers to scale up
Recent Business performance / developments	• Commencement of BSVI transition at March end followed by onset of COIVD-19 led to disruption in production supply chain. Volumes for 4W and 2W segments fell leading to 15-20% cumulatively • Wholesale volume witnessed improvement supported by depleted channel inventory filling and pent-up demand • Growth in tractors and rural mobility categories (2W / entry SUV) turned positive and likely to sustain as rural income has been positive on back to back 2-3 crop cycle • While LCVs showing early signs of recovery, MHCV remains weak
What's changing ?	• Shared mobility segment in both 3W and 4W (Ola/Uber/Taxi) has been impacted due to WFH and social distancing norms. Recovery likely to be slow and take time • Led by new launches, share of UV has reached 38% in FYTD-21 • Increasing preference towards online shopping, if sustains, can dilute network/reach advantage if OEMs digital response time is fasts
Prospects / Key Drivers / Risks	• Broad-based economic recovery and mass Covid-19 vaccination will drive volumes in 2021 but likely to remain below peak of 2018 • Infrastructure push to support economy augurs well for MHCV segment and likely to have 2nd derivative impact on 2W/4W demand • Globally, EV transition has accelerated during pandemic as benefits of low emission were visible during global lock-downs • Battery prices are still prohibitive for India EV market adoption, governments nudge towards EV will continue
Valuation	• Valuation has reverted or exceeded from pre-covid-19 level as broader consensus on personal mobility growth persists • Valuations of 4W and tractor companies are high while 2W companies valuations are largely in line compared to last 3-4years

Chart 1

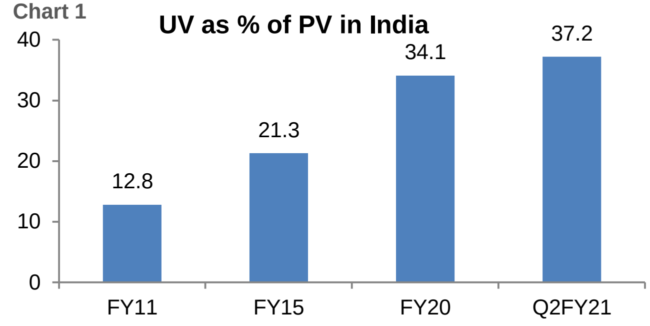


Chart 2

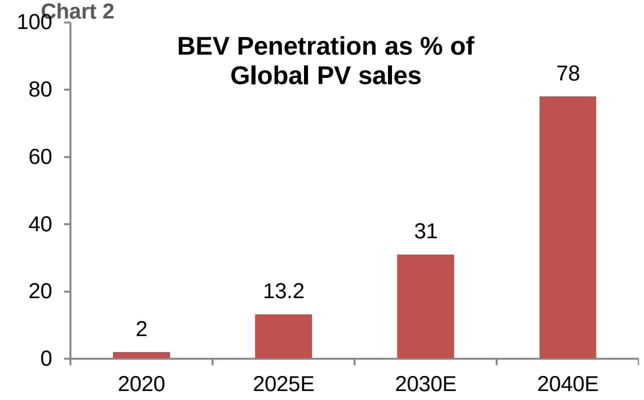
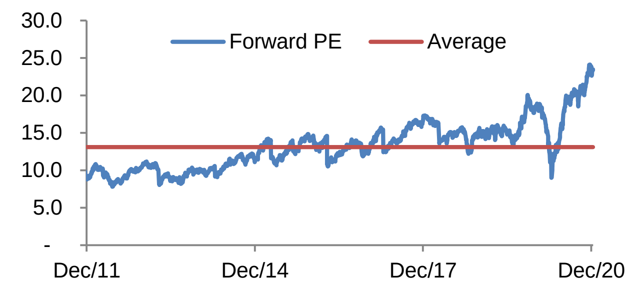


Chart 3



Sources – SIAM, UBS, Kotak Institutional Equities

2W – 2 Wheelers; 4W – 4 wheelers; PV – Passenger vehicles; UV – Utility vehicles; BS – Bharat Stage emission standards; OEM – Original Equipment Manufacturer
WFH – Work from Home; MHCV – Medium and Heavy Commercial Vehicles

Sector Overview : Banking & NBFCs

Background / Characteristics	• Banking is a capital intensive sector – over the years the regulatory requirement of capital has increased significantly (CET I from 4.5% to 8% over the last decade) • Liability franchise, asset quality, costs & technology are key drivers for profitability • Asset quality is cyclical & industry growth is linked to GDP growth
Recent Business performance / developments	• Banks are entering the cycle with strong balance sheet – High capital adequacy, floating provision for Covid-19 and declining net NPA (Chart 1). • Resolution of NPA's has seen some delay due to Covid-19 • Bank's NIM has remained stable over the years (Chart 2) • Banks technology platform & cost structure are key differentiators
What's changing ?	• Expect GDP growth and credit growth to improve in FY22 • Sector is consolidating –banks with lower capital are losing market share • Digitization of processes and payments is the new theme. Retail and SME lending is seeing paradigm shift • Large NBFCs/HFCs are able to access liquidity at reasonable costs. Smaller ones moving to co-originate loans for banks
Prospects / Key Drivers / Risks	• India's Banking credit to GDP at 52% (Chart 3) is low compared to developed markets • Retail credit growth particularly unsecured credit growth has been high; yet to experience a credit cycle
Valuation	• Sector valuations are lower than long term averages – however retail banks are trading at a premium to corporate banks

Chart 1

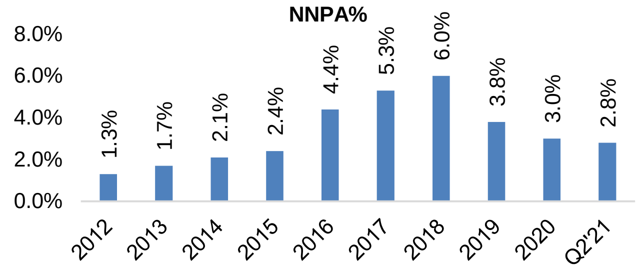


Chart 2

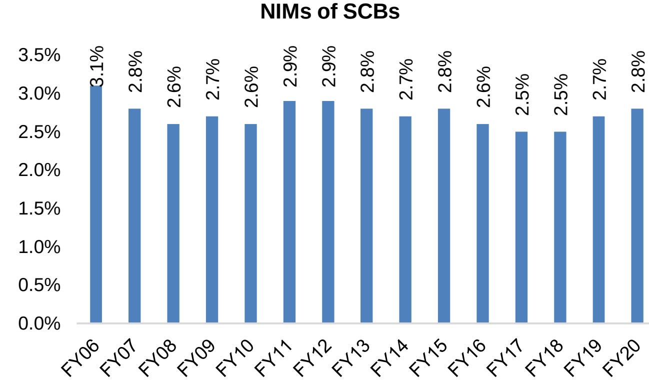
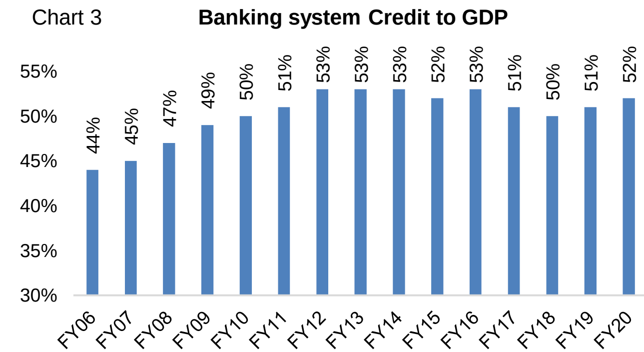


Chart 3



NIM – Net interest margin; SCBs – Scheduled commercial banks

Sources: Investec, RBI, IBBI

Background/ Characteristics	• Cyclical sector dependent on capex outlook. Capacity utilization of underlying industries a key driver for capex (Chart 1) • Certain core sectors in India have overcapacity while in other sectors capacity is more balanced. Thermal power has overcapacity while capacity utilization for metals, cement, oil & gas, etc is more balanced with better capex outlook • MNCs with access to technology have competitive advantage in industrial automation, smart infrastructure, etc
Recent Business performance / developments	• Growth has been muted since 2014 due to subdued capex in core industries (Chart 2) • Higher focus on sustainability, efficiency—Flue-gas-desulfurization (FGD), Waste Heat Recovery, Automation, etc is gaining acceptance
What's changing?	• Government's Production Linked Incentive (PLI) Scheme should provide much needed impetus to manufacturing in India and can aid multi-year uptick in capex cycle (Table 3) • National Infrastructure Pipeline (NIP) with total outlay of USD 1.8 tn over FY2019-25 should aid strong growth in infrastructure spending
Prospects / Key Drivers / Risks	• Successful implementation of PLI and NIP can aid demand for capital goods led by improved capacity utilization across industries • Key risks include weak implementation of PLI, NIP scheme and lower investments in core industries resulting in weak capex cycle
Valuations	• Current valuations are higher than long term average

Sources: RBI, Bloomberg, BSE-500 companies, Universe – Companies have been selected based on market cap

Chart 1

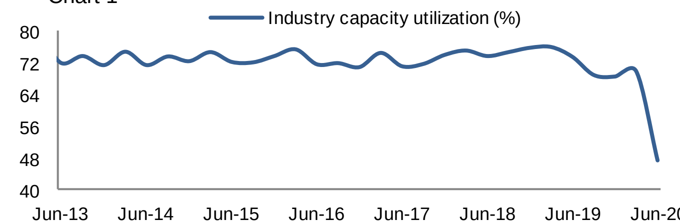


Chart 2

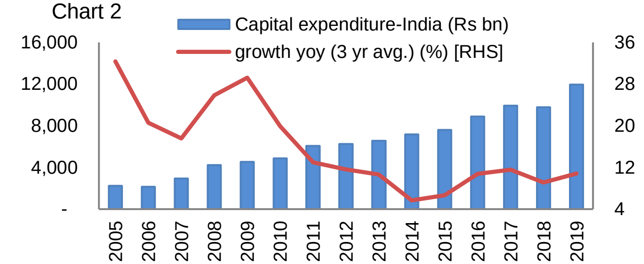
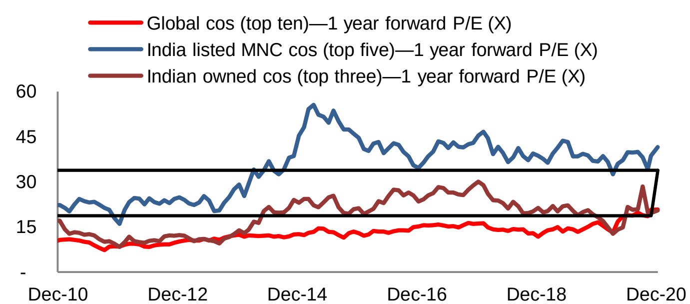


Table 3

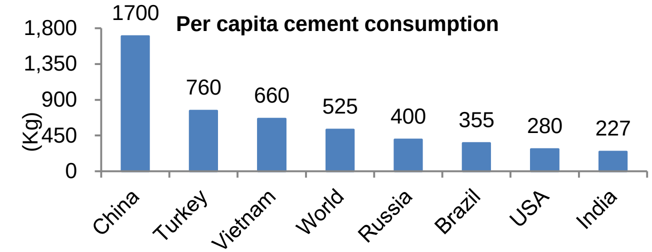
PLI scheme for 13 sectors	Incentive (Rs bn)		Incentive (Rs bn)
Mobile phone	410	Telecom & Netwrkg. Prod.	122
Drug Intermediaries, APIs	69	Textile: MMF segment/tech.	107
Medical Devices	34	Food products	109
Advance Chem./Cell Battery	181	HE Solar PV Modules	45
Electronic/Technology Prod.	50	White Goods	62
Automobiles & Auto Comp.	570	Speciality Steel	63
Pharmaceuticals drugs	150	**Total**	**1,973**

Chart 3

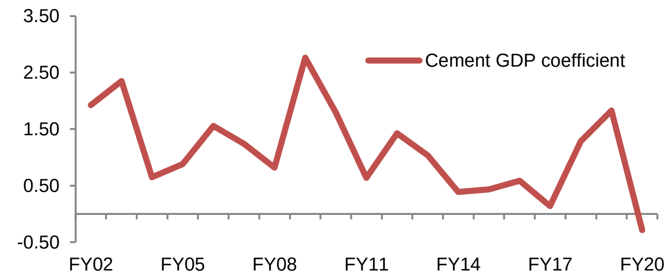


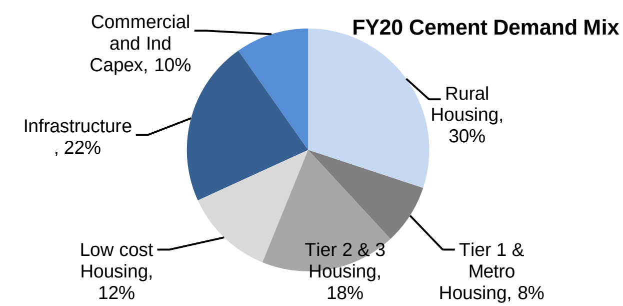
Sector Overview : Cement

Background / Characteristics	• Cement demand is largely driven by Housing & Infrastructure capex. However the demand is both seasonal and cyclical • India's per capita cement consumption is less than half of world (Chart 1) with significant divergence across regions (Chart 2) • Barriers to entry are high due to access to limestone, land and high capital investment coupled with low ROCE for new investment • Due to lower value and high freight cost, large imports not possible • South has significant overcapacity while North and Central regions have high utilisation and better pricing power • Pricing is also driven by production discipline in the industry
Recent Business performance	• Historically, cement demand growth has been ~1.2x GDP growth (Chart 3) but this has changed since FY14 as housing & private capex lagged • FY18 & FY19 demand growth driven by infra and affordable housing; demand has been weak in FY20 and impacted by pandemic • Demand was impacted significantly during the initial phase of Covid-19 disruption. However over the last few months the recovery in demand has been strong • Led by strong pricing and lower cost, the industry had reported the best EBITDA/t in 1HFY21 • Capacity expansions skewed towards more split Grinding Units as players endeavour to reach new markets and reduce logistics cost
What's changing ?	• Increasing affordability of residential space should drive demand • Last few months positive surprise in demand has led most large players to announce more capacity expansion plans
Prospects / Key Drivers / Risks	• Demand expected to be led by housing (strong rural incomes, best affordability) and strong infrastructure pipeline • Slowdown in economy, fiscal constraints of government and weakness in jobs, etc. are key risks
Valuation	• Valuations vary widely with small and mid size cement companies trading at 20-50% discount to replacement costs while large ones trading at 100% - 250% of replacement costs



	North	Central	East	West	South	India
Rural Population	67%	75%	77%	53%	54%	67%
Per capita cement consumption (kg)	231	173	203	273	263	227
Housing shortage (Mn)	10	8	9	7	12	46
Road density (km/per lakh people)	294	244	307	469	401	358
Power Density (Kwh/Capita)	1233	700	820	1758	1461	1181





Sources – DIPP, Company presentations GDP coefficient = Cement sector demand growth by real GDP growth

Sector Overview : Consumer Durables

Background/ Characteristics	• India is one of largest growing consumer durables market globally. This sector constitutes (a) consumer electronics such as television, PCs, cameras, audio systems, (b) consumer appliances such as ACs, refrigerators, washing machines, fans, microwaves, etc. • Indian households have low penetration of durables versus other developed/developing nations and offers large growth potential • MNCs with superior technology and focused R&D have captured large market share in most segments. However, Indian company is a market leader in the ACs category.
Recent Business performance / developments	• Companies have reported a strong recovery in demand / earnings post weakness seen in 1QFY21 due to lockdowns • Organized companies are gaining market share at the expense of unorganized companies who are facing supply chain issues • E-commerce sales seeing customer shift and strong growth trends
What's changing?	• Government policy support to increase manufacturing / value addition in India through Phased Manufacturing Program (PMP), Production Linked Incentive schemes, etc
Prospects / Key Drivers / Risks	• Strong demand growth led by rising disposable incomes, easy consumer credit, growing working population and urbanization • Key risks include slowdown in the economy, weakness in job and real estate market, tighter consumer credit by banks / NBFC
Valuations	• Current valuations are higher than 10 year average

Chart 1

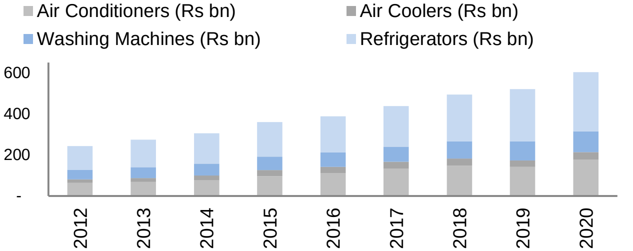


Chart 2

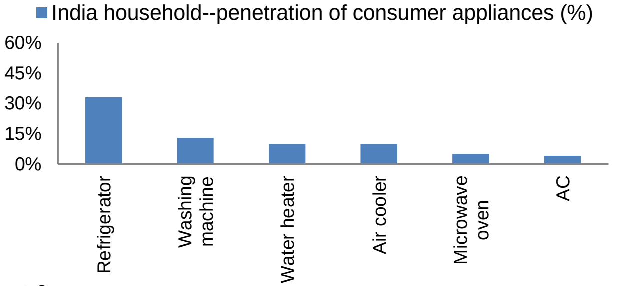


Chart 3

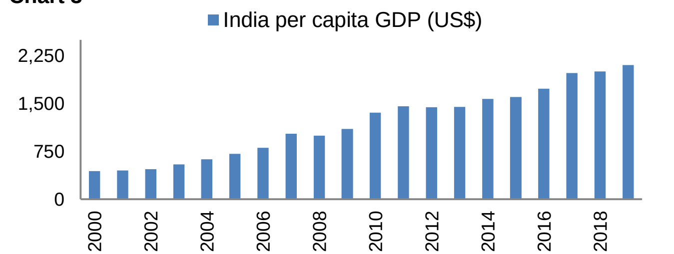
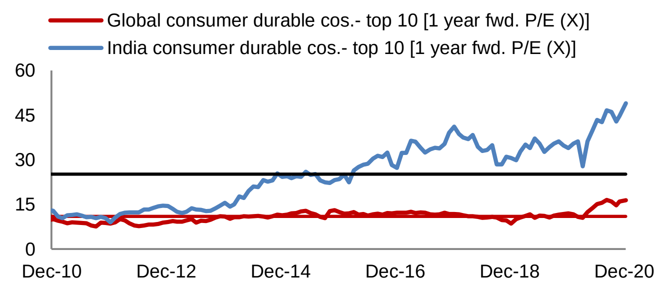


Chart 4



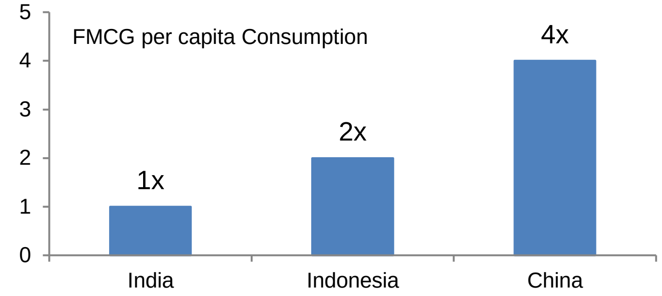
Sources: Bloomberg, Companies, Edelweiss, World Bank

Sector Overview : Consumer Staples (FMCG)

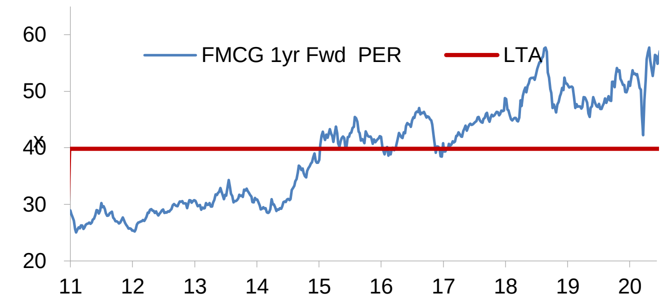
Background / Characteristics	• Products are goods of daily consumption • Relatively stable, predictable and profitable business. Less capital intensive • Barriers to entry are low, but barrier to succeed are high due to presence of established brands • Dominant market shares of leaders in many categories
Recent Business performance / developments	• Revenue growth recovered in 2QFY21 with distribution normalizing and in-home consumption going up. • Profit margins trends continue to be strong with benign raw materials , lower competitive intensity and cost savings initiatives.
What's changing?	• Market shares are consolidating with leading players gaining market share post GST from unorganized segment. • Distribution landscape is changing with online channel at an inflection point and entry of new players • Increasing popularity of natural / organic products.
Prospects / Key Drivers / Risks	• FMCG per capita consumption in India is much below Asian peers. Also, premiumization opportunities remain high • High penetration in large categories can lead to lower growth • Rising share of private label brands of modern trade and online channel are key monitorables
Valuation	• Current valuations are at all time high levels for the sector

FMCG Categories- High Penetration in large categories

Categories	Total Penetration levels
Hair Oil	92%
Household Insecticides	51%
Hair Colour	44%
Toothpaste	97%
Utensil Cleaners	52%
Toilet Cleaners	31%
Shampoos	62%
Soaps	98%
Biscuits	90%
Detergent - washing powder	92%



FMCG 1 yr fwd PER -Valuation remains at all time high levels



Sources: Bloomberg, Company presentations, Industry Sources

Sector Overview : Indian IT Services

Background / Characteristics	• A fragmented industry with consulting firms, niche vendors and offshore pure-plays. Top-10 companies have just 20-22% market share • Labor arbitrage and availability of skilled talent have historically provided an edge to India / offshore based players – Y2K gave the key fillip • Expansion in offerings, verticals & geographies helps drive growth – India heritage market share still reasonably low at 11.9% (Chart 2)
Recent Business performance / developments	• Industry saw flight to quality amidst Covid-19 benefitting larger players • Growth had moderated sharply in last 4-5 years (Chart 1) as India heritage vendors were slow to reskill employees on digital and expand go-to-market beyond the CIO organization – that is changing now which should lead to improved growth rates • Reskilling, localization, investments in sales & marketing - all drove a consistent pressure on profitability in the past few years. (Chart 3)
What's changing ?	• Covid-19 has ensured that digital is no longer discretionary but is a necessity. Need of enterprises to reach out directly to consumers (DTC) and hybrid/remote work will drive investments in initiatives like Omnichannel, mobility and workplace modernization • Protectionism will become less onerous under Democrats in the US • Industrialization of digital – digital is no longer about point solutions and projects but about running longer duration and larger programs • Cloud is seeing strong traction – Cloud shifts capex to opex as well as helps reduce the Total Cost of Ownership (TCO) for clients of managing the underlying Infra
Prospects / Key Drivers / Risks	• Vendor consolidation and captive buyouts as incremental growth opportunities – flight to quality should ensure bigger benefits to larger vendors • Macroeconomic weakness is driving cost pressures for clients creating opportunities for Indian IT vendors to help in that imperative through higher offshoring and automation • Cannibalization of existing on-premise revenue streams through migration of applications and workloads to Cloud is a key risk • Appreciation of INR against USD is a key risk to margins. Supply side pressures for niche digital skills may cause higher wage inflation for such skills as well thus impacting profitability
Valuation	• Valuations are higher than historical averages reflecting a lower cost of capital and improved competitive positioning and visibility (Chart 4)

Chart 1

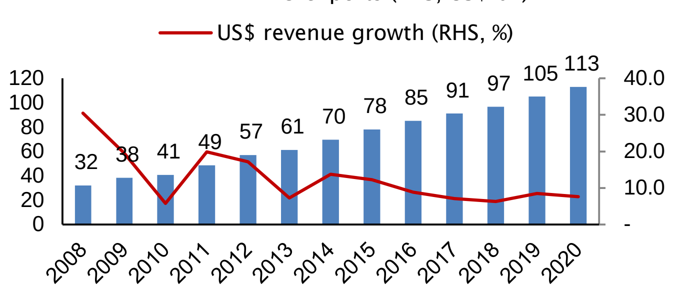


Chart 2

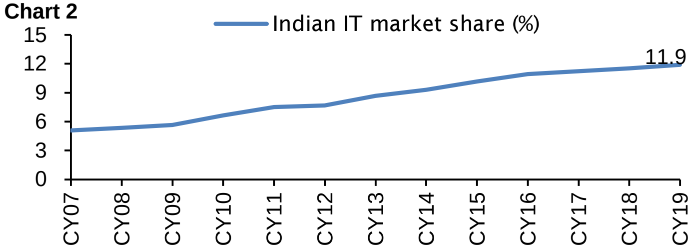


Chart 3

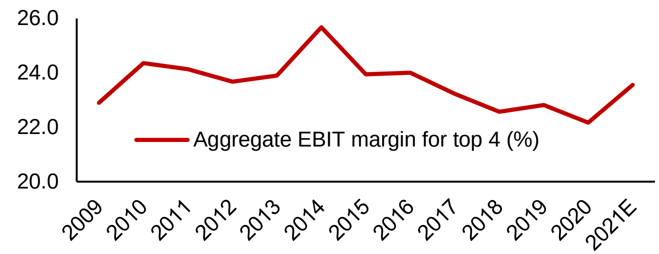
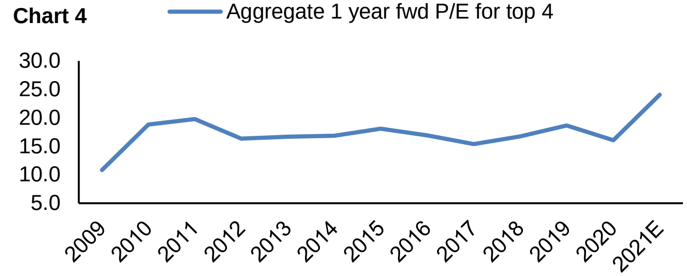


Chart 4



Source: NASSCOM, Kotak Institutional equities

Sector Overview : Infrastructure & Construction

Background / Characteristics	• Comprises of asset owners and construction companies of Roads, Railways, Ports, Metros, Affordable housing, Urban development etc. • Government dependency is high • Capital intensive both in terms of projects (for asset developers) and working capital (for construction companies) • Barriers to entry are low but execution, cost control and Balance Sheet strength are key to success • Market lacks presence of many large players • Asset ownership was opened to private participation in early 2000s; Many companies collapsed due to weak execution, weak balance sheet, aggressive bidding, regulatory challenges, delays etc.
Recent Business performance	• Post record awarding in FY18 by NHAI, awarding in FY19 and FY20 was moderate but FYTD21 has seen decent pick up despite Covid-19 • NHAI pipeline for next 3-4 year remains strong • Covid-19 led disruption, labour migration hit the execution in 1HFY21 • Govt focus on Housing for all remains strong and various schemes announced to boost housing demand
What's changing ?	• Govt. has announced massive thrust on Infra with doubling of planned project pipeline to 110 trillion over next 6 years vs 56 trillion spent in last 6 years ! • Asset acquisitions by foreign players, INVITs, other Infra PE funds has picked up significantly as global interest rates are low and global funds are seeking yields • De-leveraging of developers' balance sheet is positive
Prospects / Key Drivers / Risks	• Mix of Build-Operate-Transfer (BOT) and Hybrid Annuity Model (HAM) is rising, hence strong players should do well • State spending on irrigation is increasing while central govt scheme of 'Nal Se Jal' to give further impetus
Valuation	• Current valuations are significantly below the historical averages despite strong orderbook for most companies (Chart 4)

Chart 1

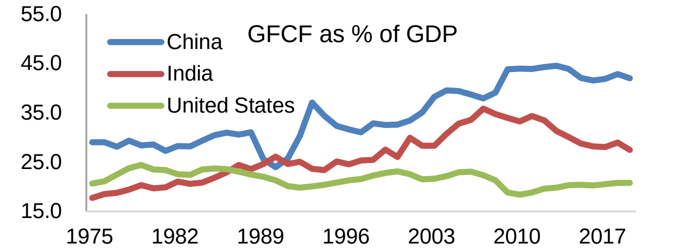


Chart 2

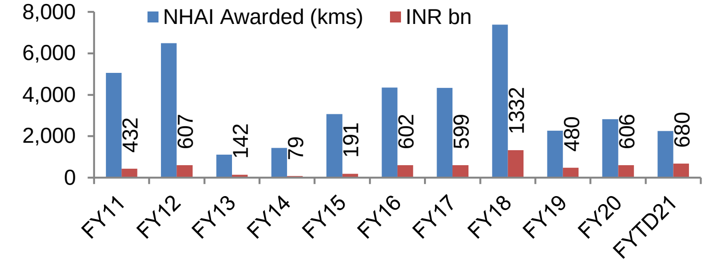


Chart 3

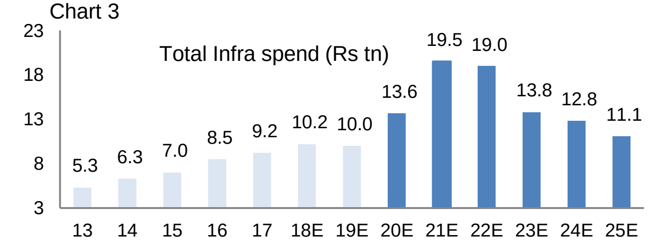
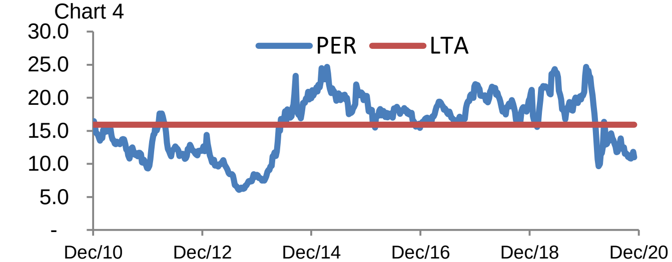


Chart 4



Sources – World Bank, NHAI, Ministry of Finance, Philips capital, Universe is represented by the PE of all the construction stocks (10) under Phillip Capital coverage including conglomerates

Background / Characteristics	• Discretionary spending for businesses; levered to economic growth • FMCG biggest advertiser in India (~50% of total spends) (Chart 2) • Like developed markets, advertising is shifting from print to digital even in India (Chart 1) • Relative price proposition of TV (USD 3 ARPU) vs OTT superior in India unlike markets like US where TV is considerably more expensive (USD 60 ARPU)
Recent Business performance / developments	• Covid-19 led economic slowdown has hurt advertising growth – TV advertising revenues will be down 17-18% in FY21 • TV subscription revenue to decline by ~5% as well in FY21 driven by migration of labour and closure of commercial establishments (including small shops) • Digital and OTT a key focus area of Broadcasters – Aaj Tak has 4.34Cr You Tube subscribers as an example and Disney+ Hotstar has ~27mn paid users
What's changing ?	• Digital Media is likely to overtake TV advertising in FY21 itself – Digital to comprise 39% of total advertising vs 38% for TV • Google, Facebook, You Tube and TikTok have gained share in advertisement spends and will likely continue to do so • 40mn OTT subscribers now across players (Hotstar, Netflix, Amazon Prime, MX Player etc.,) expected to increase to 57mn in FY22 – lower home broadband prices to drive accelerated traction
Prospects / Key Drivers/ Key Risks	• Overall digital subscription revenues are expected to increase from Rs31bn in FY21 to Rs46bn in FY22 as per KPMG • OTT putting pressure on broadcasters to improve production values – content inflation will likely go up pressuring margins • NTO 2.0 can potentially lead to lower subscription revenues in FY22
Valuation	• Media companies' valuations are lower vs. their own history as eyeballs move from traditional media to digital (Chart 3) • Current valuation looks optically high as fundamentals are recovering only gradually off of a bottom – full normalization expected by FY23

Chart 1 – Industry Ad Mix

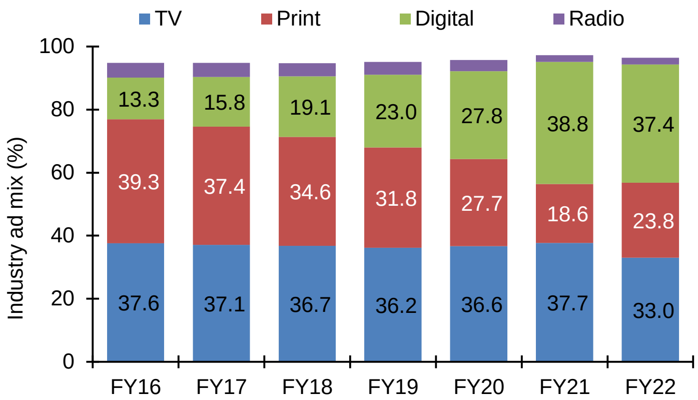


Chart 2 – Industry contribution to advertising spends

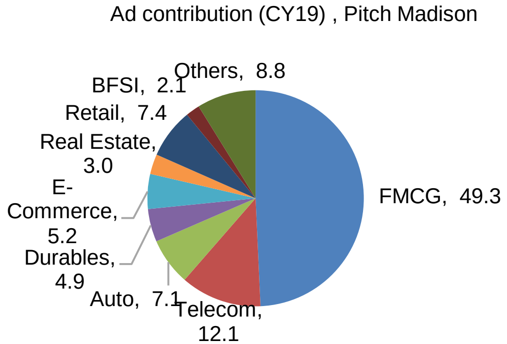
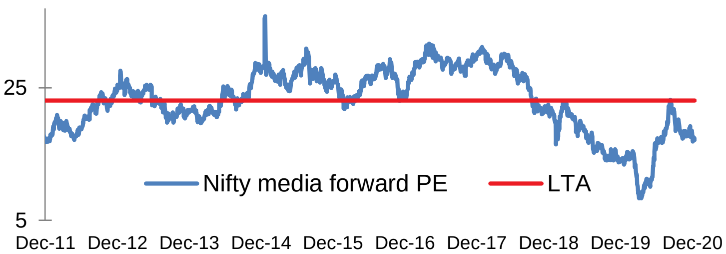


Chart 3 - Historical Forward P/E multiple



Sources– KPMG, Pitch Madison, Bloomberg

ARPU – Average Revenue per unit; NTO – New Tariff Order, OTT – Over the Top

Sector Overview : Metals and Mining

Background / Characteristics	• Cyclical sector dependent on global prices • China is the dominant producer/consumer and is a key influence • Cost competitiveness and good balance-sheet are key to growth • Homogenous products with little differentiation • Capital intensive with long gestation period for new projects • INR depreciation is a positive
Recent Business performance / developments	• Higher demand from infrastructure sector in China has led to strong recovery in metal prices • Steel spreads recovered led by strong China demand (Chart 1) • Base metal prices recovery reflect recovery in the Global PMI (Chart 2)
What's changing ?	• China steel exports sharply down in 2020 as it turned net importer (including semis) led by strong internal and weak external demand • India steel industry utilization improving (Table 1) • Green metal. Government policies (more so in Europe) leaning towards achieving low carbon emissions in metals production
Prospects / Key Drivers / Risks	• A softer stance by US on trade with China can be positive • Improvement in global PMI is positive for metal prices (Chart 2) • Government's push for Make in India can drive strong demand • Key risk is weakening of demand/higher production in China
Valuations	• Sector valuations are in line with long term average (Chart 3)

PMI – Purchasing Mangers' Index

Chart 1

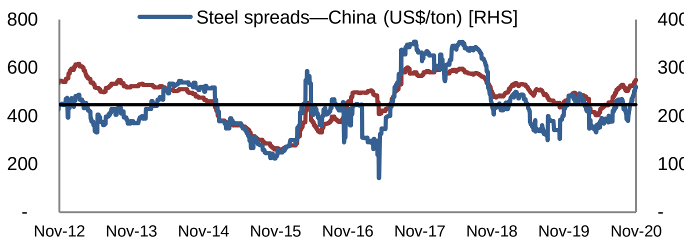


Table 1

(mn tons)	2016	2018	2020	2021E	2022E	2023E
India steel capacity	106	120	121	121	125	129
India steel production	74	92	102	95	103	112
Capacity utilization (%)	70	77	85	79	83	87

Chart 2

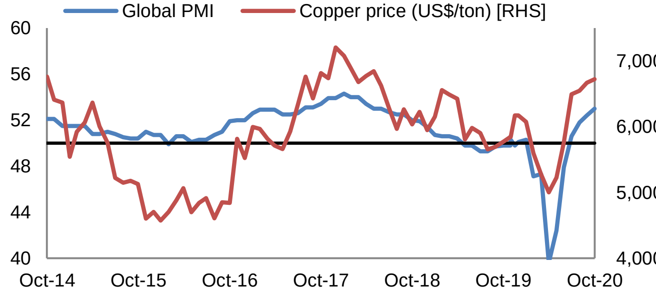
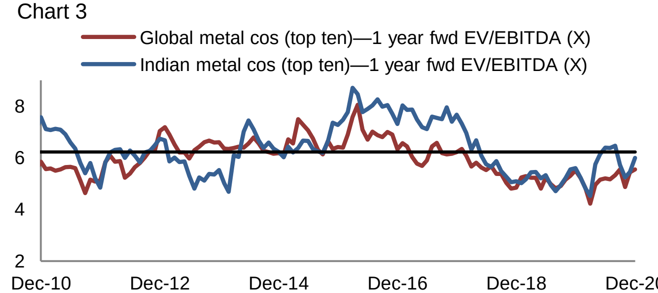


Chart 3



Sources: Joint Plant Committee, Bloomberg, Universe – Top 10 companies by market cap

Background / Characteristics	• While Upstream is about finding oil & gas, downstream is about global refining, retailing chemical margins and costs • Lowest cost producers and lowest cost processor wins • Very capital intensive; 4-7 years gestation for large projects • India is amongst the large pockets of demand growth for oil
Recent Business performance / developments	• Commodity price cycles have shortened (Chart 1) • Deregulation has helped downstream marketing margins • Large OMC's strategic sale process underway
What's changing ?	• Global oil demand likely to peak out in 5-10 years (Table 1) • As auto fuel usage declines, more oil will get converted to chemicals • Global oil producing companies are cutting their investments which is likely to affect future supplies • India putting thrust on natural gas consumption; developing infrastructure
Prospects / Key Drivers / Risks	• Competitive intensity is low in auto fuel retailing – margins have headroom to expand
Valuation	• The S&P BSE Oil & Gas Index is trading below its 10 year average 1-yr forward P/E (Chart 2)

Table 1 **Oil demand by various sources (mbpd)**

	1995	2000	2005	2010	2015	2019	2025	2030	2035	2040
IEA	70	76	84	87	93	98	100	104	104	104
OPEC	70	76	84	87	93	98	105	108	110	111
BP (BAU)	70	76	84	87	93	98	100	99	97	94
Total SA	70	76	84	87	93	98	103	103	100	95

Chart 1

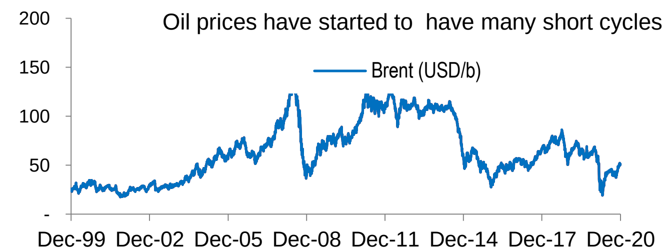
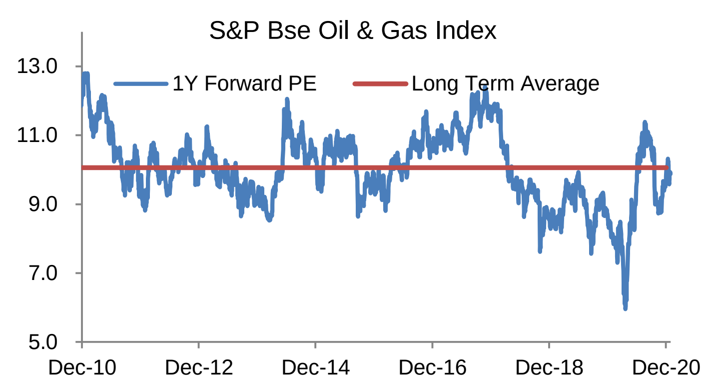


Chart 2



Sources – British Petroleum, IEA, Total, OPEC, Bloomberg

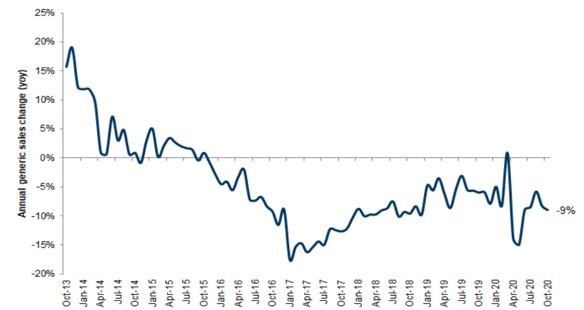
OMC – Oil Marketing Companies

HDFC MUTUAL FUND BHAROSA APNO KA

Background / Characteristics	• Indian pharma business is a branded business with limited capital need • India is world leader in supplying generic medicines but R&D spend on innovation drugs is limited, with acquisitions/in-licensing being the preferred source for innovative product strategy for the developed markets • Focus on exports with US & Europe being the key markets • Markets like US are highly regulated, have long gestation with upfront investments in manufacturing & development • India companies have >40% volume share of US generics
Recent Business performance / developments	• FY16-19 saw significant price erosion in US driven by faster US FDA approval rate for ANDA's and customer consolidation; 90% of US market is with 3 distributors now compared to 8-10 distributors a few years back (chart 1) • Active Pharmaceutical Ingredient (API) pricing for regulated markets was on uptrend, benefitting API players, though, this led to a squeeze for generic formulators in the US • Growth in Indian pharma business continues, albeit at a lower pace • Several companies cut costs significantly, including rationalizing R&D spend, to counter pricing pressure in the US
What's changing ?	• API pricing cycle remains strong, with significant benefit in FY21 from Covid-19 related disruptions • Price erosion is stabilizing in the US for base business products • Starting FY21, Indian generics are entering a wave of major product launches in the US after a gap of six years • Domestic market was disrupted with Covid-19 lockdowns in 1H21, though, now bouncing back to steady growth rates
Prospects / Key Drivers / Risks	• With different companies pursuing different markets and having different strategies, it is difficult to generalize • New launches of "difficult to make" generics are typically binary events with timing difficult to predict, and a layer of non-linearity to growth. Given expected launches, sector outlook is of strong growth in the medium-term, given the product launch wave. Longer-term, growth outlook remains moderate
Valuations	• Valuations are now 20% higher compared to 10-yr average

Source: Bloomberg, Company Presentations ANDA - Abbreviated New Drug Application

Chart 1 Generic price deflation stabilizing in the US



Source: Goldman Sachs Investment Research

Chart 2 US contribution declining as % of sales

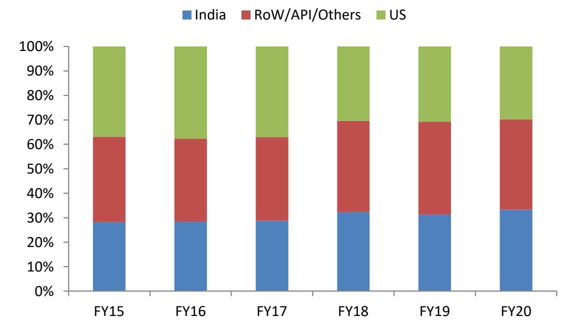
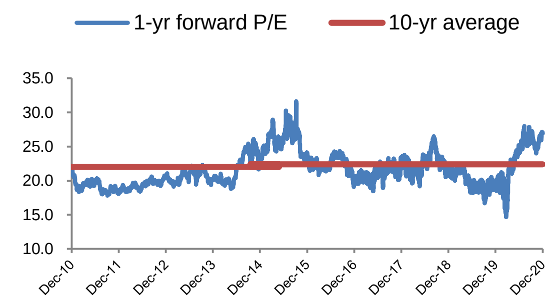


Chart 3 1-yr forward P/E multiples for the sector



Background / Characteristics	• Wireless communication has transformed daily life; India has cheapest wireless data pricing in the world (Rs4-6/GB) • Predictable and profitable business if market shares settle • Capital intensive with high entry barriers • Indian market is an oligopoly with three major players
Recent Business performance / developments	• AGR issue is settled; industry given 10 years to pay AGR dues removing a key overhang • After price hike in late 2019 , ARPUs moving higher
What's changing ?	• Smartphone penetration is increasing steadily • Industry size needs to increase further for industry's Return on Invested capital (RoIC) > Cost of capital • Data consumption post Covid-19 has increased by ~13% • WFH and acceleration of adoption of digital application in areas like education, healthcare, financial services to support 4G penetration
Prospects / Key Drivers / Risks	• Peak capex for the industry is behind (Table 1) • Industry revenues are still below normalized levels, leaving room for substantial growth in medium term
Valuation	• The leading player raised ₹1520bn by selling 33% stake in its subsidiary (telecom/digital business) implying FY23e EV/EBITDA of 11x, vs. that sector is at 7x -in line with its historical average

Chart 1

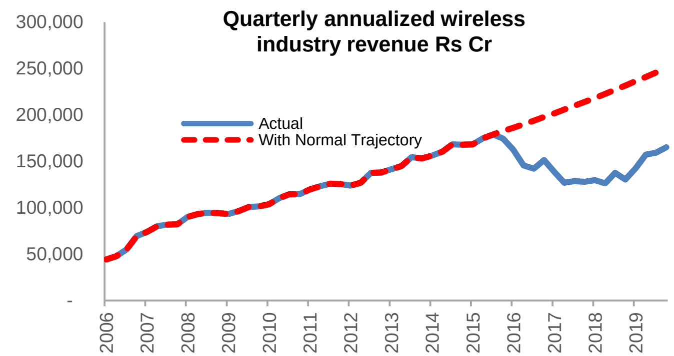


Chart 2

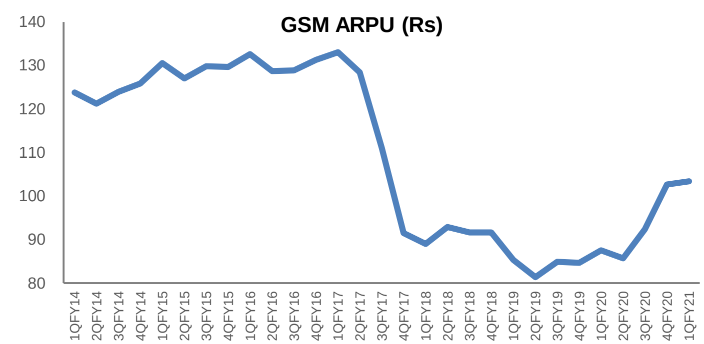


Table 1

Capex (Rs bn) excluding spectrum investment					
	FY16	**FY17**	**FY18**	**FY19**	**FY20**
Top 3 Companies by market share	454	681	695	1051	503

*India mobile only

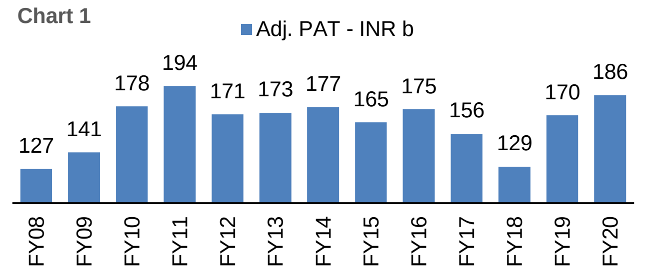
Sources: Company reports, Internal estimates, ICICI Sec research reports

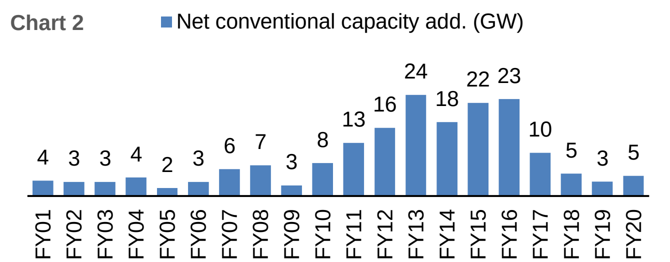
AGR - Adjusted Gross Revenue

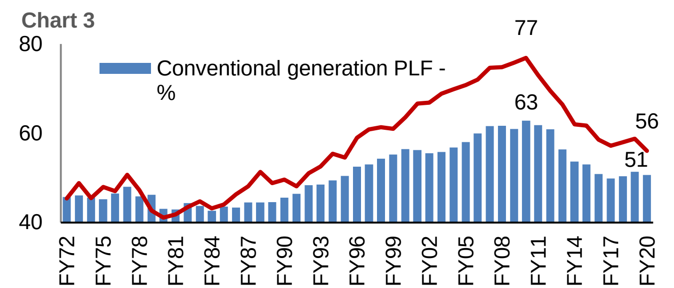
Sector Overview : Utilities

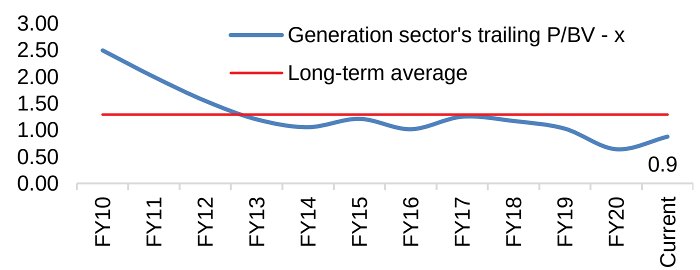
Background / Characteristics	• The utilities sector primarily operates on a cost-plus regulated return model. Earnings are fairly steady and predictable • The sector is highly capital intensive. Capex and capitalization are the key drivers of earnings • Execution and ability to source debt at lower costs are key
Recent Business performance / developments	• Earnings have been under pressure due to over-supply of power and weak health of state electricity boards, although have recovered from bottoms (Chart 1) • PSUs have performed better than private sector • Electricity generation (read demand) was weak in FY20 due to weather, weak industrial activity and financial health of distribution companies. Demand in FY21 is impacted due to Covid-19
What's changing ?	• New generation capacity addition has moderated while demand is expected to grow (Chart 2). PLF of coal-based plants is thus likely to bottom out (Chart 3) • Government is focusing on 24x7 power and Power for All • Reforms are being proposed to improve the financial health of distribution companies
Prospects / Key Drivers / Risks	• India's per capita electricity consumption is 1/3rd of global average. As economic activity improves, income levels increase, demand should grow. Long-term electricity demand to GDP is ~0.9x • Key drivers: Increase in share of manufacturing in GDP, industrial activity, sale of household appliances
Valuation	• Current valuation metrics are very low compared to past (Chart 4) as well as global peers. Dividend yield is more than cost of borrowings.

Source: MOFSL, Note: Universe is listed power generating companies collated by MOFSL.
PLF – Plant Load Factors; Conventional generation incl. coal, gas, nuclear and hydro









Incredible India : Chand Baori, Rajasthan

Picture courtesy: esamskrati.com; eSamskriti is a website wherein wisdom, history and culture of India are made available through over 1,934 articles & 17,000 photographs

- Named after a local ruler called Raja Chanda, it is a stepwell situated in the village of Abhaneri in Rajasthan
- Built in 9th century, its architecture and carvings are similar to the terraced temples of Paranagar and Mandore
- It consists of 3,500 narrow steps over 13 stories. It extends approximately 30 m into the ground, making it one of the deepest and largest stepwells in India; One side of the well contained a pavilion and resting room for the royals
- The structure of well was designed in a way to conserve as much water as possible
- This was constructed to get a dependable source of water in an arid region; its bottom remains 5-6 degrees cooler than the surface

Sources: Publicly available information

Fixed Income Markets

Identify as many monetary policy related terms as you can

Q	B	U	O	M	O	K	W	T
P	N	S	L	A	O	M	O	L
M	M	D	D	L	O	P	R	T
S	T	L	A	F	G	C	R	R
F	Z	R	J	F	A	C	T	O
S	G	P	S	L	I	K	T	Z
F	X	S	P	T	W	I	S	T
W	Y	L	T	R	D	M	O	S
K	R	E	P	O	G	I	N	M

Please refer next page for answers

Fixed Income markets terminology gets richer in CY20

Q	B	U	**O**	**M**	**O**	K	W	**T**
P	N	**S**	L	A	**O**	**M**	**O**	**L**
M	M	**D**	D	L	O	**P**	R	**T**
S	T	**L**	**A**	**F**	G	**C**	**R**	**R**
F	Z	R	J	F	A	C	T	**O**
S	G	**P**	**S**	**L**	I	K	T	Z
F	X	S	P	**T**	**W**	**I**	**S**	**T**
W	Y	L	T	**R**	D	M	O	S
K	**R**	**E**	**P**	**O**	G	I	N	M

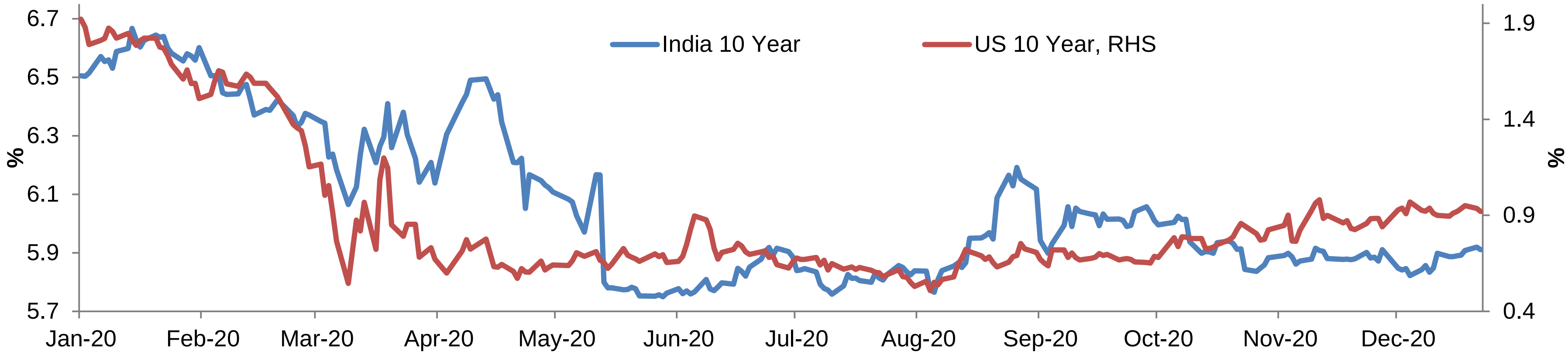
RBI Term	Full Form	Explanation
CRR	Cash Reserve Ratio	Deposits which Banks have to maintain in cash
LAF	Liquidity Adjustment Facility	A facility which enables banks to borrow / lend through repurchase agreements from/to RBI
LTRO	Long Term Repo Operations	A facility under which RBI provides longer term (one- to three-year) loans to banks at the fixed / floating repo rate.
MPC	Monetary Policy Committee	Committee responsible for setting benchmark policy rates
MSF	Marginal Standing Facility	A facility for banks to borrow from the RBI at higher rate than repo rate
OMO	Open Market Operations	Purchase of Government bonds by RBI in secondary market
PSL	Priority Sector Lending	Bank lending to few specific sectors classified as Priority sector by RBI
REPO	Repurchase Agreements	Rate at which RB lends money to the Banks
SDL	State Development Loans	Bonds issued by the state governments
SLR	Statutory Liquidity Ratio	Banks have to maintain specific proportion of deposits in the form of liquid assets like Gsecs, SDLs, etc, excluding the cash reserve ratio
TLTRO	Targeted Long Term Repo Operations	LTRO wherein borrowed funds have to be deployed in investment-grade corporate bonds, commercial paper, and non-convertible debentures.
TWIST	Operations twist	Simultaneous purchase of long term securities and sale of short term government securities

Rows highlighted are the tools which were used first time by RBI

In response to Covid-19, RBI introduced few unconventional tools in CY20

Source: RBI

2020– An action packed year for Fixed Income markets



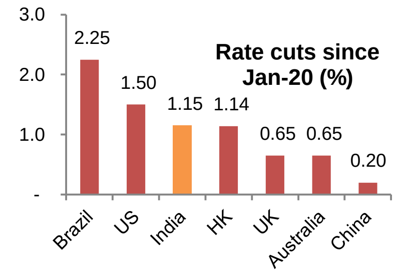
Average monthly corporate bond spreads over 3 year Gsec yield (%)												
	Jan-20	**Feb-20**	**Mar-20**	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**
AAA	0.5	0.6	0.9	1.4	1.7	1.2	0.5	0.2	0.3	0.4	0.3	0.2
AA	1.3	1.3	1.7	2.2	2.4	2.0	1.3	1.2	1.2	1.3	1.2	1.1

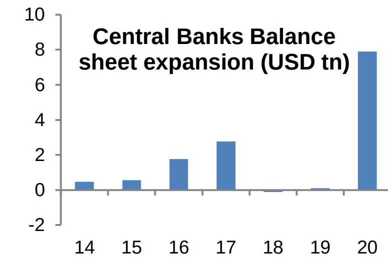
Jan to Mar	**Apr to Jun**	**Jul to Sep**	**Oct to Dec**
• Rising concerns over spread of Covid-19 • Withdrawal restrictions on deposits from Yes Bank • RBI cut repo rates by 75 bps • 21 day lockdown announced • Sharp FPI outflows	• FT wound up 6 debt schemes • Liquidity support steps announced • Atmanirbhar Package announced • RBI cuts policy rates by 40 bps • Fitch revises India outlook to negative	• Surge in Covid-19 cases • India- China border standoff • SC directed banks not to declare standard loans as NPA	• Biden wins US elections • Many vaccines found effective and approved • Lockdown in Europe • New strain of Covid-19 found in UK

Source: Bloomberg, Kotak Institutional Equities, FT = Franklin Templeton

With “growth” on top of mind, RBI acts in sync with global central banks

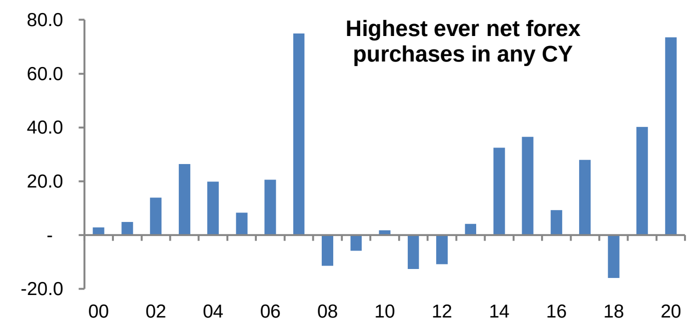
- Global Central banks unveiled a flurry of measures to counter slowdown
  - Rate cuts to near zero by DMs
  - Record liquidity infusion through facilities for purchasing bonds, commercial papers etc.





- RBI followed an ultra accommodative monetary policy too
  - Cut policy rates and widened the corridor between repo and reverse repo
  - CRR reduced by 1% for a year
  - Conducted LTRO and TLTROs of INR 2.5 lakh crores
  - On-Tap TLTROs of upto INR 1 lakh crore for on-lending purposes
  - Large OMO and forex purchases
  - Conducted OMOs for State Development Loans (SDLs)

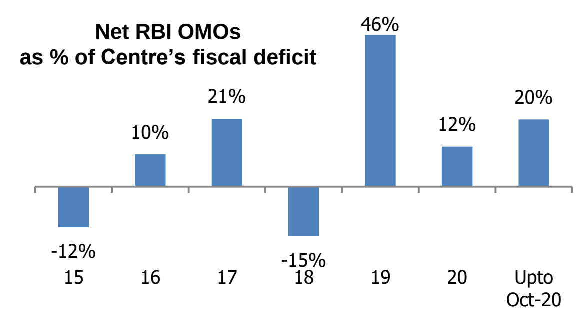
%	Feb-2020	Nov-2020
Repo Rate	5.15	4.00
Reverse repo rate	4.90	3.35
Cash Reserve ratio	4.00	3.00



Figures for CY20 updated till October 2020

- Regulatory Measures
  - Allowed moratorium of 6 months on term loans and interest on working capital facilities outstanding as on 1st March 2020
  - Allowed restructuring of loans given to borrowers impacted due to Covid
  - Increased the HTM limits for Banks from 19.5% to 22% of NDTL till FY22

- RBI OMOs as % of fiscal deficit has risen significantly since FY19
  - Net OMO purchases expected to further increase in H2FY21

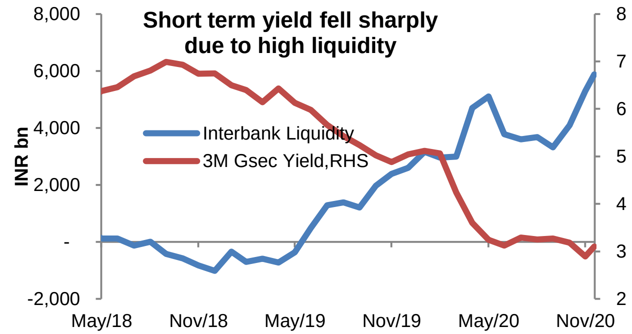


Source: Bloomberg, Kotak Institutional Equities, ICICI Securities, E – Estimate; Real Yield = 10Y Gsec Yield – CPI

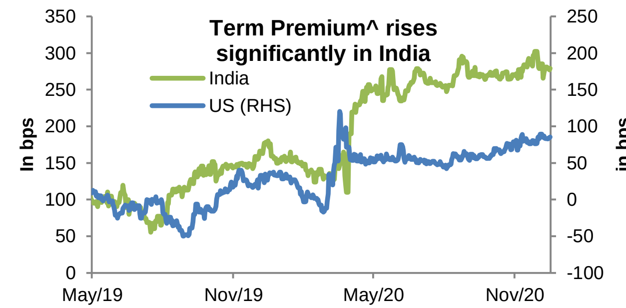
OMO – Open Market Operations; HTM – Held To Maturity; NDTL – Net Demand and Term Liabilities

Short end moderates at a faster pace; Term Premiums at a decadal high

- Aggressive monetary easing by RBI led to Gsec yields at short end falling sharply
  - Interbanking liquidity surplus increased significantly driven by OMOs & forex purchases by RBI, etc.
  - Over the past 2 years, 3M Gsec yields have fallen by ~4%

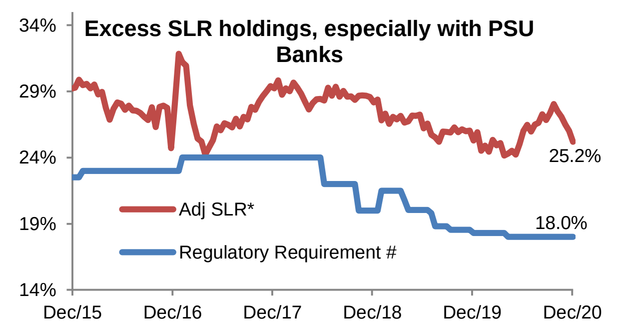


- While high liquidity moved yields lower at the short end, fall in 10Y Yield has been lesser, despite RBI using conventional and unconventional measures
  - Term premium at ~2.8% is significantly higher than 10Y average of 0.6%
- Factors driving high term premium
  - Widening of aggregate (Center+ State) FD resulting in large supply of Gsec & SDLs
  - Elevated inflation in recent past and improving growth outlook
  - Excess SLR investments by Banks impacting demand for Gsecs



^Spread between 10Y Gsec yield and 3M Gsec yields

- Factors likely to influence term premiums in future
  - Pace of normalisation of liquidity
  - FPIs debt flows
  - Pace of fiscal consolidation
  - Inflation and RBI policy measures



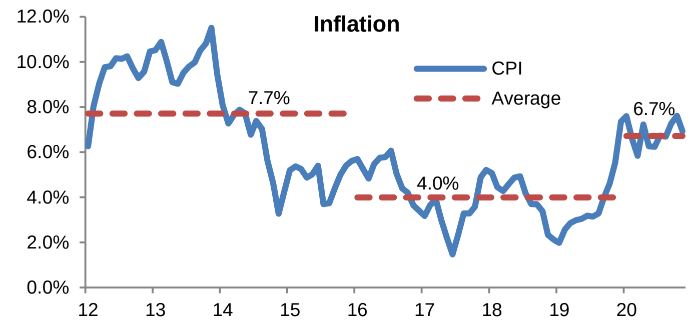
* Adj SLR = Investments in Statutory Liquidity Ratio (SLR) Securities adjusted for securities under LAF
# Regulatory Requirements = SLR + Liquidity coverage requirement requirements (~15-17% of NDTL) – carve out allowed from SLR
Sources: Bloomberg, RBI

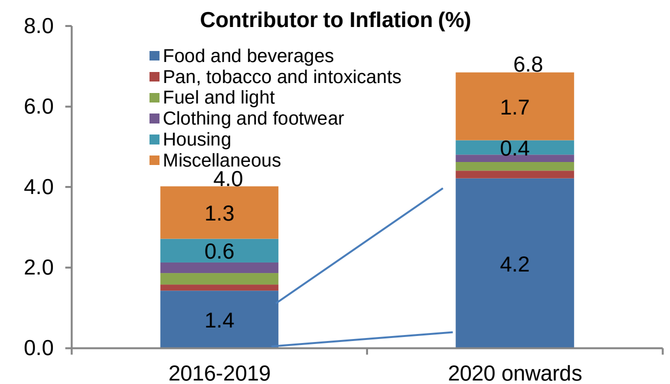
Inflation rising – Will it sustain ?

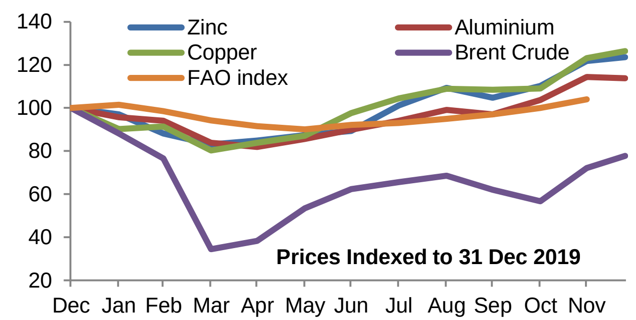
- For the first time since implementation of Inflation Targeting framework in 2016, average inflation in 2020 has breached the upper band of 6%

- Rise in inflation in CY20 has been driven by
  - Excess rainfall impacting vegetables production
  - Supply disruption and hoarding of food items during lockdown
  - Slow normalisation of supply post unlocking
  - Rise in duties on fuels; higher gold & silver prices

- Factors likely to influence inflation going forward
  - Accommodative monetary policy can result in sharp demand recovery
  - Low interest rates and reduced EMIs can provide fillip to housing sector
  - Rise in global commodity prices and food inflation
  - Strong recovery in domestic and global economic activity
  - Pace of supply normalisation and base effect
  - Record kharif production & Rabi sowing; Impact of agriculture reforms







Sources: Bloomberg, CMIE; Data updated till 25 Dec 2020
The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities

Interest Rates Outlook

- Direction of Interest rates will be primarily determined by pace of economic recovery and inflation
- Strong economic recovery and sustained inflation should result in short end yields rising, albeit with a lag
- Yields at the long end are likely to remain rangebound in the near term given the prevailing high term premiums; further, pace of fiscal consolidation, global interest rates, capital flows, credit growth, etc. are also key determinants

Factors supporting lower yields

- RBI and major Central banks likely to continue with accommodative stance and low rates
- Continued intervention by RBI through unconventional tools like Operation TWIST, LTROs, Targeted LTROs, increasing HTM limit, OMOs for State Development Loans, etc.
- Muted credit growth vs. deposits growth; Ample global and domestic liquidity
- Risk of 2nd / 3rd wave of Covid-19 which can impact the economic recovery

Factors opposing lower yields

- Large supply of dated securities by Central and State Governments
- Excess SLR securities holding of PSU banks
- Average inflation likely to remain above RBI's target of 4%
- Improvement in global growth outlook and rise in commodity prices
- Domestic economic activity has improved significantly and outlook remains optimistic

Long end yields are likely to remain rangebound in the near term while yields at short end could rise over time

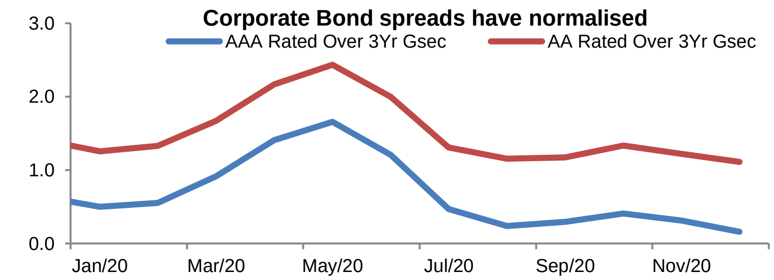
Credit Markets : All is well that ends well

- Since default of IL&FS in Sep 2018 Credit markets have witnessed significant volatility driven by series of events (adjacent table)

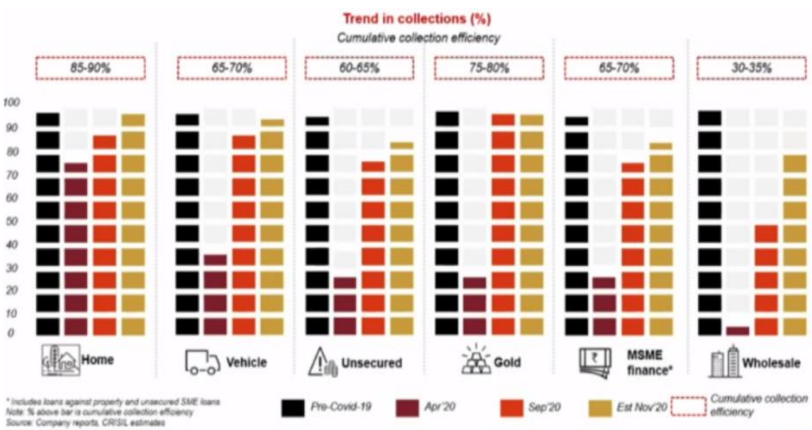
Month	Major Credit Events
Jan-19	Sharp correction in Zee Group Entities share prices leading to stress on LAS transactions
Feb-19	Default by Anil Ambani Group companies
Jun-19	Default by DHFL, Cox & Kings, Sintex Group
Jul-19	Promoter of CCD commits suicide due to financial stress in CCD
Sep-Nov-19	Default by Altico Capital and Simplex group
Jan-20	Franklin Templeton writes down and side pockets its exposure in Vodafone Idea to Zero
Mar-20	Write Down of Yes bank AT1 bonds
Apr-20	Wind-up of 6 Schemes of Franklin Templeton announced. Increase in Credit Spreads due to redemption pressures.
Nov-20	Laxmi Vilas Bank AT1 bonds written off; banks merged with DBS

Source: Publicly available information

- While corporate bond spreads were volatile over the past two years, they rose sharply post Covid-19 and announcement of winding up of 6 debt schemes by Franklin Templeton



- Spreads have moderated since with AAA bond spreads moderating at a faster pace driven by
  - Improved fund flows in non-credit risk debt schemes, deployment of TLTRO funds by banks and healthy system liquidity aided
  - Improvement in collection efficiency of Banks and NBFCs and are now hovering around pre-pandemic levels



Source: Bloomberg, CRISIL Research

Summing it up

- Covid-19 has infected over 80mn people across ~200 countries. Though Covid-19 resulted in a low proportion of deaths, its short term economic impact was high. Q2CY20 experienced the highest decline in GDP in the past 50 years
- Global growth was impacted significantly in Q2CY20 but recovery was strong in Q3CY20. Global GDP growth likely to rebound in CY21 aided by base effect, vaccines rollout, fiscal & monetary measures
- Economic indicators are stabilizing at a fast pace aided by unprecedented measures taken by major Central banks and Governments. Industrial Indicators are pointing to a fast pace of recovery
- Indian economy, which grew even in Wars, Asian Crisis, Dot com bubble, GFC, etc., contracted for first time in last four decades in 2020! Post opening up, economic recovery has been strong and high frequency activity indicators are normalizing at a fast pace
- India used the Covid-19 period to implement wide ranging structural reforms that include PLI schemes for boosting domestic manufacturing, labour reforms, agricultural reforms, push towards privatization of CPSEs and land reforms.
- NIFTY50 profits expected to grow in FY21. Further, strong growth likely in FY22 / FY23 driven by lower interest rates, recovery in demand & cost control post Covid-19
- Sensex TRI has compounded at 15% CAGR vs average inflation of 6% over last 20 years. Rs 100 invested in 1999 has become ~Rs 1,650 in nominal terms. "*Stock market is a device to transfer money from the impatient to the patien*t" – **Warren Buffet**
- Markets look promising from a medium to long term view especially given the low cost of capital. Despite the recent rally Indian market capitalization is currently ~90% of GDP (based on CY 2021 GDP), which is reasonable
- For fixed income it was an action packed year with global central banks unveiling measures to counter the slowdown with rates near zero in DMs and record liquidity infusion. Aggressive monetary easing by RBI led to G-sec yields at short end falling sharply
- Corporate bond spreads rose sharply post Covid-19 and announcement of winding up of 6 debt schemes by Franklin Templeton. However, spreads have moderated with AAA bond spreads moderating at a faster pace

Refer disclaimers on slide 98

Incredible India – Brihadesvara Temple, Thanjavur, Tamil Nadu

Picture courtesy esamskrati.com; eSamskriti is a website wherein wisdom, history and culture of India are made available through over 1,934 articles & 17,000 photographs

- Brihadishvara Temple, also called Rajarajesvaram or Peruvudaiyār Kōvil, is a Hindu temple dedicated to Shiva located in South bank of Kaveri river in Thanjavur, Tamil Nadu, India
- Made by Chola King Rajaraja I (985 to 1014 A.D.), it took 7 years to complete and has number of mural paintings
- It is one of the largest South Indian temples and is an exemplary example of Dravidian architecture
- Built out of granite, the vimana tower above the sanctum is one of the tallest in South India
- **On top of Vimana is Stone Sikhara that weighs 80 tons and it is still a mystery on how it was carried to such height**

Source; esamskriti.com, Publicly available information

Incredible India : Varanasi – One of the oldest cities in the world!

Picture courtesy esamskrati.com; eSamskriti is a website wherein wisdom, history and culture of India are made available through over 1,934 articles & 17,000 photographs

- Varanasi or Benaras or Kashi is amongst the oldest cities in the world
- It is regarded as the spiritual capital of India
- Interesting historical facts
  - Considered the holiest of the seven sacred cities (Sapta Puri) in Hinduism
  - Gautam Buddha gave his first sermon at nearby Sarnath, just 10 kms away
  - Varanasi is believed to be the birthplace of Parsvanath, the twenty-third Tirthankar of Jains
  - Known for several eminent personalities including Tulsidas, Kabirdas, Guru Ravidas, Ramananda, Munshi Premchand, Bhartendu Harishchandra, Bismillah Khan, Madan mohan malviya, etc.
  - Many reputed *gharanas* or schools of music developed in Varanasi including Senia (from the lineage of the illustrious Tansen) and mishra (Prasaddhu-manohar) gharanas in vocal music, Ramshay gharana in tabla, etc.
  - Dating back to 14th Century, there are ~100 ghats in the city which are used for performing religious rituals
- Interesting experiences / things to do
  - Watching “Ramleela” at Ramnagar, a 200 year old cultural event, is an exhilarating experience
  - Famous for gold and silver brocade or zari, fine silk and opulent embroidery sarees, also called *banarasi* sarees
  - Attending evening Aarti at the Dashashwamedh Ghat and a boat ride on ganges
  - Stroll in the lanes of the city and eating delicious local cuisines

Source; esamskriti.com, Publicly available information

Refer disclaimers on slide 98

Reminiscences of India's glorious past

HDFC MUTUAL FUND BHAROSA APNO KA

India is the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend and the great grand mother of tradition

Mark Twain, American Humorist & Writer

Indian surgery remained ahead of European until the 18th Century, when the surgeons of the East India Company were not ashamed to learn the art of rhinoplasty from the Indians

A. L. Basham, The Wonder That Was India, 1971

We owe a lot to the Indians, who taught us how to count, without which no worthwhile scientific discovery could have been made.

Albert Einstein, Noble Laureate & Physicist

If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life, and has found solutions, I should point to India.

Max Mueller – German Scholar

To other countries, I may go as a tourist, but to India, I come as a pilgrim

Martin Luther King, Jr.

If there is one place on the face of this Earth where all the dreams of living men have found a home from the very earliest days when man began the dream of existence, it is India

Romain Rolland, Nobel Laureate & French Philosopher

India was the motherland of our race and Sanskrit the mother of Europe's languages. India was the mother of our philosophy, of much of our mathematics, of the ideals embodied in Christianity... of self-government and democracy. In many ways, Mother India is the mother of us all.

Will Durant, Historian

I am convinced that everything has come down to us from the banks of the Ganges, astronomy, astrology, metempsychosis, etc. It does not behoove us, who were only savages and barbarians when these Indians and Chinese peoples were civilized and learned, to dispute their antiquity

Voltaire – French Enlightenment writer, historian, and philosopher

India – The land of Vedas, the remarkable works contain not only religious ideas for a perfect life, but also facts which science has proved true. Electricity, radium, electronics, airship, all were known to the seers who founded the Vedas.

Ella Wheeler Wilcox – American author and poet

Disclaimer & Risk Factors

This presentation dated 4th January 2021 has been prepared by HDFC Asset Management Company Limited (HDFC AMC) based on internal data, publicly available information and other sources believed to be reliable. Any calculations made are approximations, meant as guidelines only, which you must confirm before relying on them. The information contained in this document is for general purposes only and not an investment advice. The document is given in summary form and does not purport to be complete. The document does not have regard to specific investment objectives, financial situation and the particular needs of any specific person who may receive this document. The information/ data herein alone are not sufficient and should not be used for the development or implementation of an investment strategy. The statements contained herein are based on our current views and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. The information herein is based on the assumption that Covid-19 would be behind us by March 2021 and the economy would bounce back by FY22. However, if impact of Covid-19 continues after March 2021, various scenarios presented in this document may not hold good. Past performance may or may not be sustained in future. Stocks/Sectors referred in the presentation are illustrative and should not be construed as an investment advice or a research report or a recommended by HDFC Mutual Fund / AMC. The Fund may or may not have any present or future positions in these sectors. HDFC Mutual Fund/AMC is not guaranteeing / offering / communicating any indicative yield on investments made in the scheme(s). The data/statistics are given to explain general market trends in the securities market, it should not be construed as any research report/research recommendation. Neither HDFC AMC and HDFC Mutual Fund nor any person connected with them, accepts any liability arising from the use of this document. The recipient(s) before acting on any information herein should make his/her/their own investigation and seek appropriate professional advice and shall alone be fully responsible / liable for any decision taken on the basis of information contained herein.

Mutual fund investments are subject to market risks, read all scheme related documents carefully.

This is the third edition of yearbook by HDFC Mutual Fund

Compiled by Investments team of HDFC Mutual fund.

Key contributors

Sankalp Baid

Saurabh Patwa

Monish Ghodke

Sector Experts

Abhishek Poddar

Amit Sinha

Anand Ladha

Bhagyesh Kagalkar

Chirag Talati

Dhruv Muchhal

Kuldeep Koul

Praveen Jain

Priya Ranjan

Rakesh Sethia

Rakesh Vyas

While we have taken considerable care in compiling this yearbook, there can be some inadvertent errors, for which we would like to apologize.

We would love to have your feedback on our yearbook. Please send your feedback at yearbook@hdfcfund.com

HDFC MUTUAL FUND
BHAROSA APNO KA

نیا سال مُبارک ہو

নববর্ষের শুভ কামনা! নৱবৰ্ষৰ শুভেচ্ছা!

नवीन वर्षाच्या हार्दिक शुभेच्छा! નવા વર્ષની શુભકામનાઓ!

নৱবৰ্ষৰ শুভেচ্ছা! नव वर्ष की हार्दिक शुभकामनाएँ!

نیا سال مُبارک ہو ഏവർക്കും പുതുവത്സരാശംസകൾ !

নৱবৰ্ষৰ শুভেচ্ছা!புத்தாண்டு நல்வாழ்த்துக்கள்!

नव वर्ष की हार्दिक शुभकामनाएँ! ಹೊಸ ವರುಷದ ಶುಭಾಶಯಗಳು !

ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା! নববর্ষের শুভ কামনা!

নৱবৰ্ষৰ শুভেচ্ছা!
نیا سال مُبارک ہو
નવા વર્ષની શુભકામનાઓ!
নববর্ষের শুভ কামনা!
ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା!
نیا سال مُبارک ہو
নববর্ষের শুভ কামনা!

2021

নৱবৰ্ষৰ শুভেচ্ছা!
નવા વર્ષની શુભકામનાઓ!
নববর্ষের শুভ কামনা!
ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା!
ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ!
नव वर्ष की हार्दिक शुभकामनाएँ!
నూతన సంవత్సర శుభాకాంక్షలు !
नवीन वर्षाच्या हार्दिक शुभेच्छा!
نیا سال مُبارک ہو
नव वर्ष की हार्दिक शुभकामनाएँ!

नव वर्ष की हार्दिक शुभकामनाएँ! ಹೊಸ ವರುಷದ ಶುಭಾಶಯಗಳು !

ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା! নববর্ষের শুভ কামনা!

నూతన సంవత్సర శుభాకాంక్షలు ! نیا سال مُبارک ہو ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ!

નવા વર્ષની શુભકામનાઓ! नवीन वर्षाच्या हार्दिक शुभेच्छा!

ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା!

নৱবৰ্ষৰ শুভেচ্ছা! నూతన సంవత్సర శుభాకాంక్షలు ! نیا سال مُبارک ہو

புத்தாண்டு நல்வாழ்த்துக்கள்!

নববর্ষের শুভ কামনা! নৱবৰ্ষৰ শুভেচ্ছা!

نیا سال مُبارک ہو

Thank You