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HDFC MF

YEARBOOK 2023

Indian economy

An oasis in the desert

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Greetings,

This year, in line with the spirit of our ***#NurtureNature*** campaign, we have gone digital and avoided printing copies of the Yearbook. We encourage you to download and share the digital copy. If you do wish to read a printed version, please scan the QR code, fill in the requisite details and we shall arrange to send a printed copy to your registered address.

Hope you find this Yearbook interesting and insightful.
Wishing you a very happy and prosperous 2023!

Contents

The Year Gone By...

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2022 : A year of challenging returns

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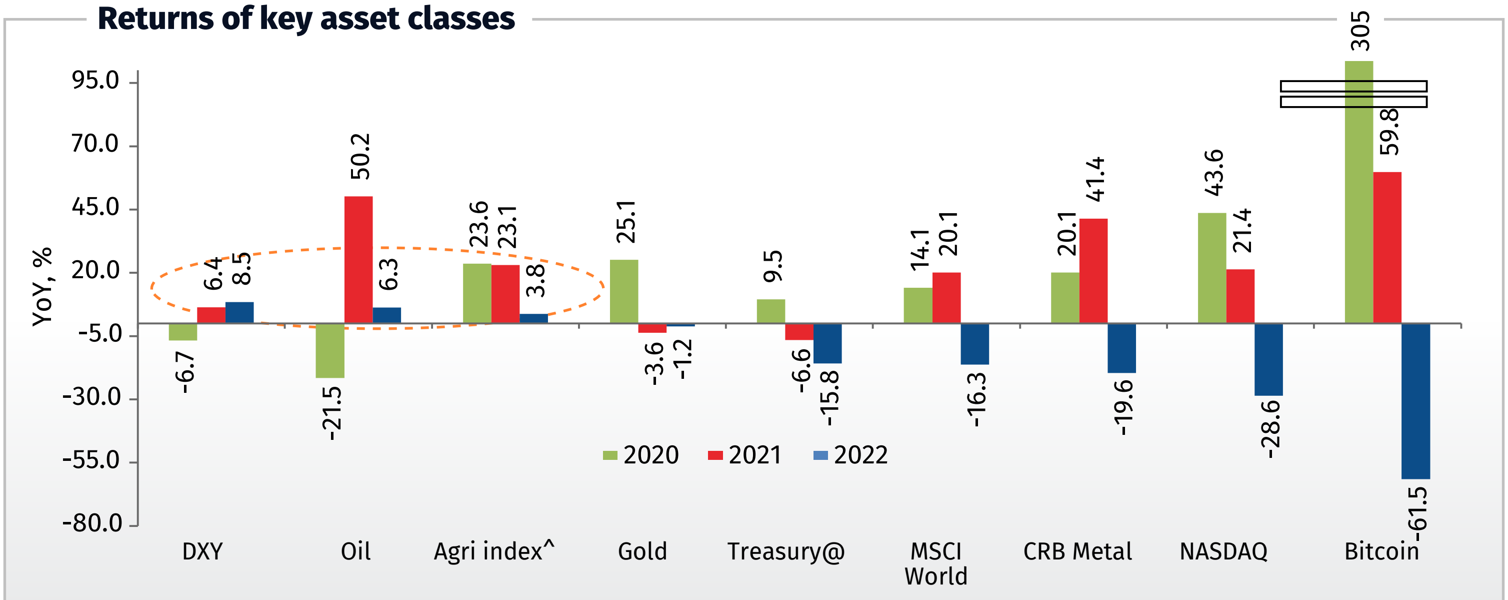
- Rising inflation and interest rates, growth concerns, roll back of monetary stimulus and geopolitical events weighed on returns
- Except USD, Oil and agricultural commodities, most asset classes delivered negative returns

Returns of key asset classes



Source: Bloomberg; Data updated till 31 December 2022; ^ Bloomberg Agri Index; @ Bloomberg Global Aggregate Treasury Total Return Index USD Unhedged
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Global equities : A challenging year, NIFTY outperforms most global indices

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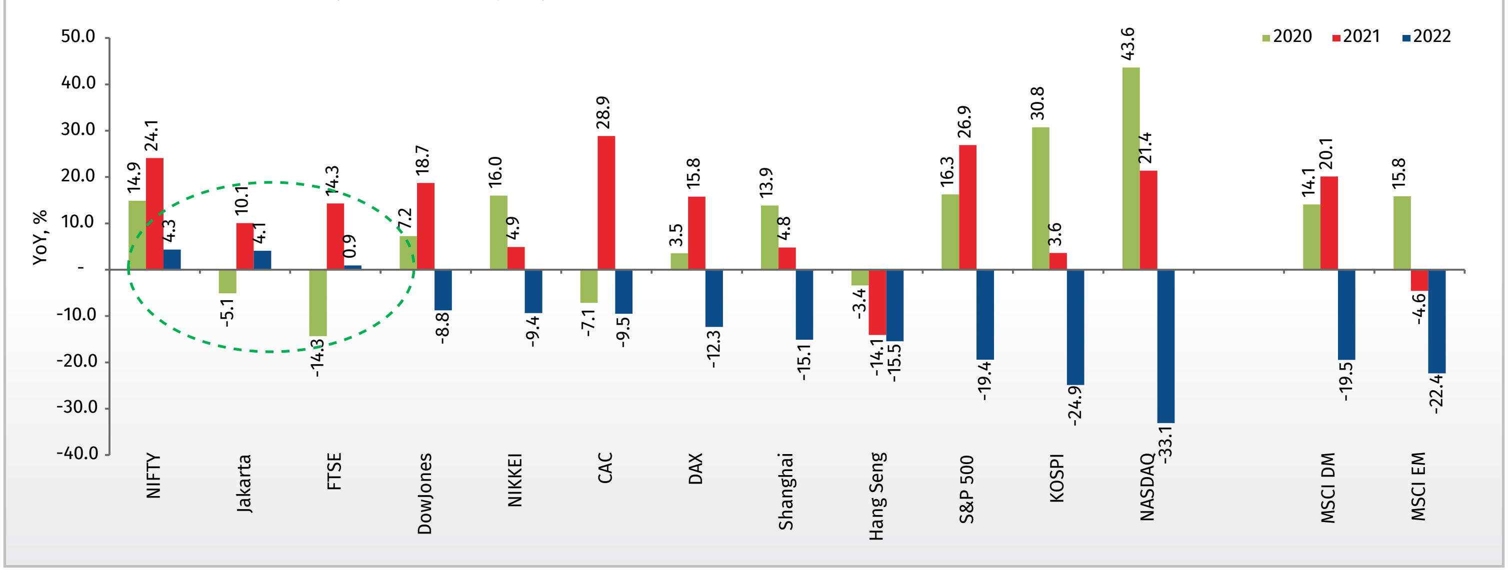
- After strong returns over the past 2 years, most equity indices declined on the back of rising rates and slowing growth outlook
- India and Indonesia were among the few markets to deliver positive returns

Return of Key Global Equity Indices



Source: Bloomberg; Data updated till 31 December 2022; All returns are in local currencies of respective country
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Currencies – The year of the Dollar

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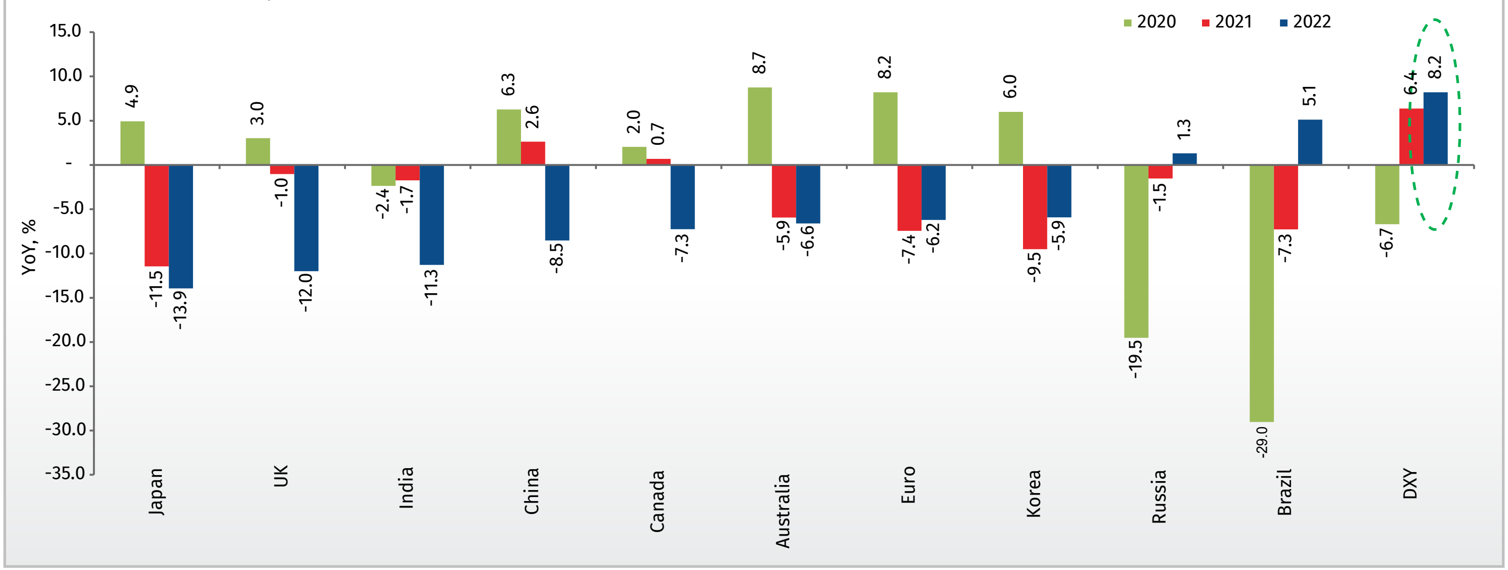
- Aggressive monetary tightening and relatively strong growth in the US led to the USD appreciating against most major currencies
- For most part of the year, INR outperformed other EM currencies; however, it depreciated faster in the last few months and ended the year weaker than other EM currencies against USD

Currency movement



Source: Bloomberg; Data updated till 31 December 2022; EM – Emerging Markets;
DXY Index is an index which measures the value of the US Dollar versus a basket of global currencies.
Currency movement for various countries against USD
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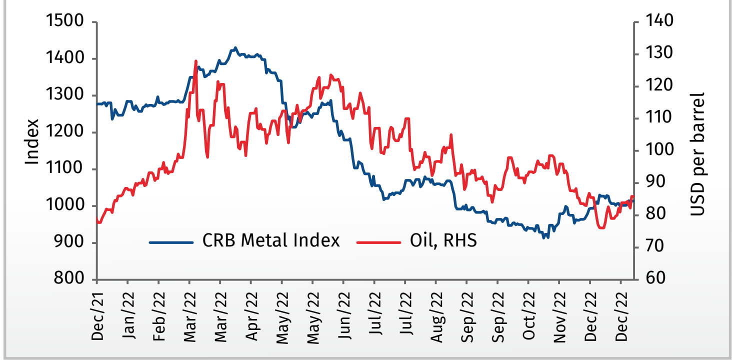
Commodities : Meaningful correction

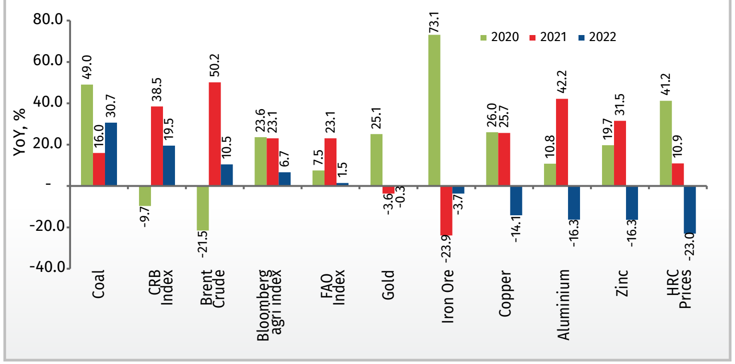
- Resurgent post-Covid demand, supply constraints and infusion of liquidity contributed to a sharp surge in commodity prices in 2020-21. The Russia-Ukraine war resulted in a further spike in the prices of energy and agri commodities in 1H of 2022
- Inflation surged across geographies driving interest rates higher and culminating in monetary tightening
- Demand moderation and supply easing resulted in prices correcting sharply in the 2H of 2022

Commodity price movement during the year



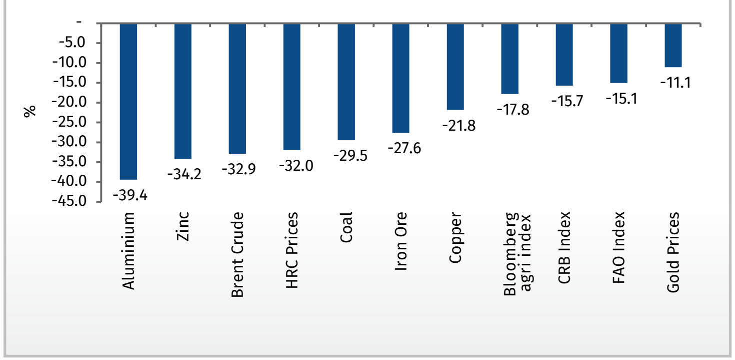
Source: Bloomberg

Commodity Price Movement (%)



Source: Bloomberg; Data updated till 31 December 2022

% change from peak price in 2022



Source: Bloomberg

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Recency Bias

To give greater importance and weightage to events that have occurred more recently / most recent information

Example:

Focus on short term performance

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Global Economy

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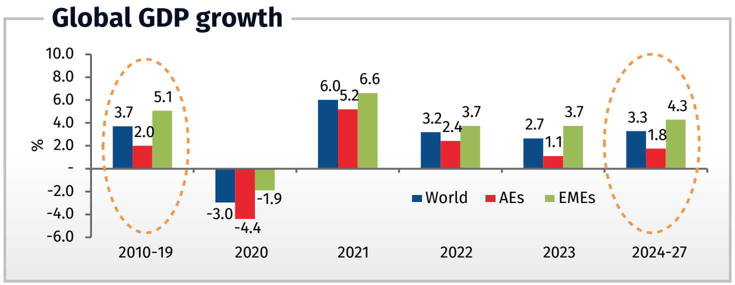
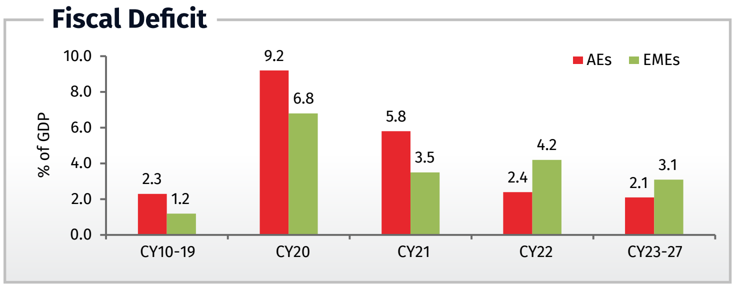
Global growth, which swung sharply in 2020 and 2021 due to the pandemic, normalised in most economies in 2022. Higher inflation, interest rates and energy prices to weigh on growth in 2023

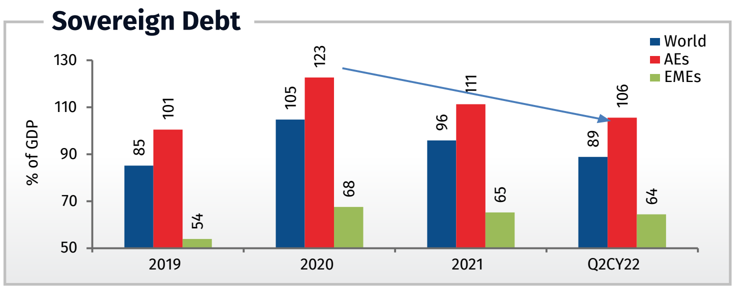


Fiscal deficit is also set to normalise close to pre-pandemic levels for AEs, although for EMEs it is likely to remain at elevated levels



Aggregate sovereign debt to GDP is also trending towards pre-pandemic levels supported by strong nominal GDP growth and narrowing fiscal deficit

- EMEs debt continues to remain high



Source: IMF
AEs – Advanced Economies; EMEs / EMs – Emerging market and developing economies
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Several headwinds to global growth

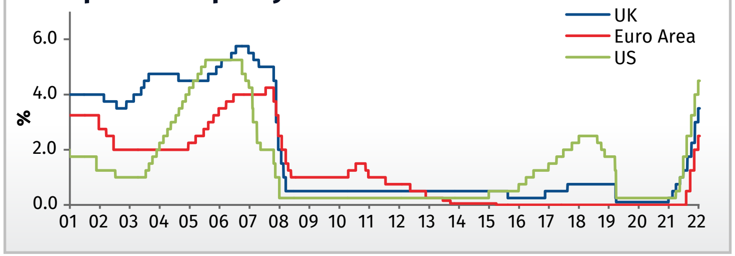
Inflation catapulted in 2021-22 driven by a combination of supply chain disruption, pent up demand, excess savings and tight labour markets

Global Inflation

Source: Bloomberg, GDP weighted inflation for top 11 countries of the world

Central banks responded by raising policy rates which are now at decadal highs

Rapid rise in policy rates

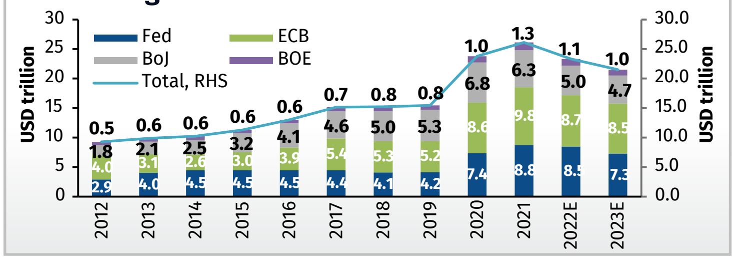


Source: Bloomberg

…and reducing balance sheets

- G4 Central banks are expected to reduce balance sheets by ~USD 2 trillion in CY23

Sovereign Debt



Source: Kotak Institutional Equities

...counterbalanced by excess savings and strong labour market

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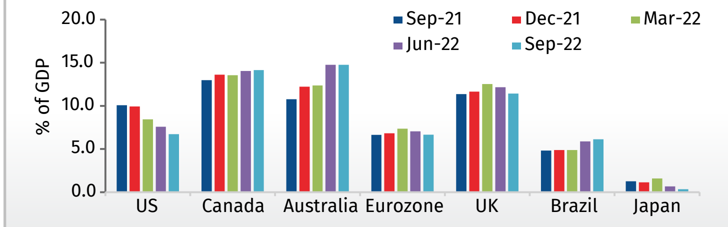
Excess accumulated savings provides a buffer for consumption against inflation

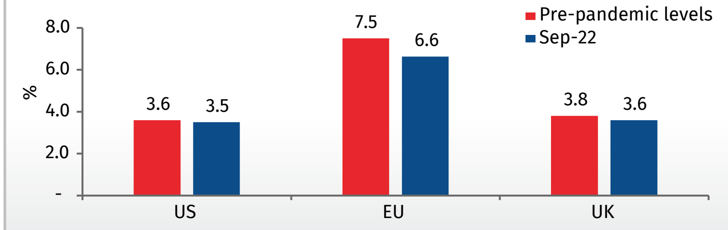
Excess savings stocks (% GDP)



Source: UBS

Unemployment rates in major economies are below pre-pandemic levels

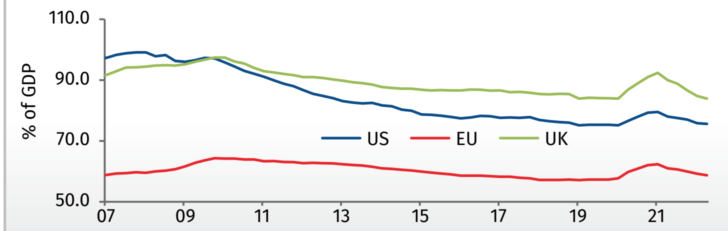
Unemployment rate



Source: Bloomberg

Household (HH) debt as % of GDP trended lower after peaking during the pandemic and may provide some support to consumption

HH Debt



Source: Bank of International Settlements (BIS)

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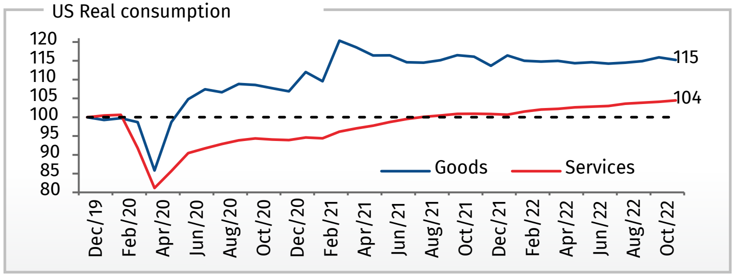
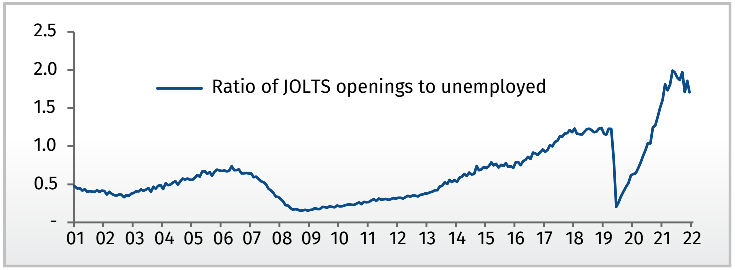
Real consumption has been trending higher and is now above pre-pandemic levels

- Goods consumption is above pre-pandemic level while services is catching up fast



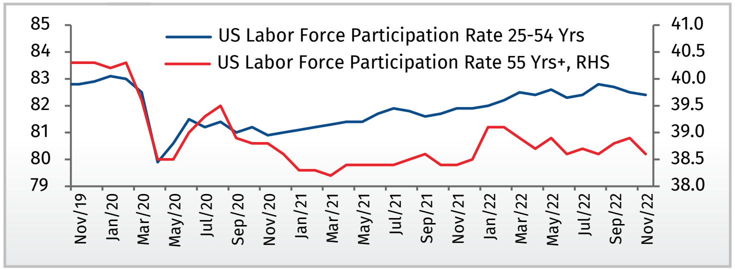
Source: Bloomberg

Labour market is tight with ~2 job openings available for every unemployed person



Source: Bloomberg; Calculated by dividing total openings by total unemployed people

Overall labour force participation has fallen from pre-pandemic levels driven by lower participation of people aged 55+ years



Source: Bloomberg

JOLTS opening refers to openings as per Job Openings and Labor Turnover Survey
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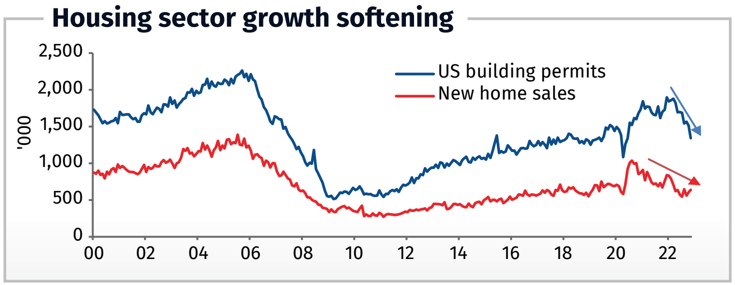
...but growth is moderating

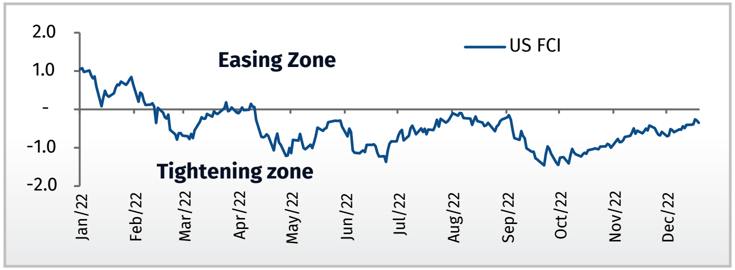
Mortgage rates have risen sharply over the past year and are now higher than pre-GFC levels; housing forms ~17%^ of US economy

- US home sales and building permits have trended down over the past few months



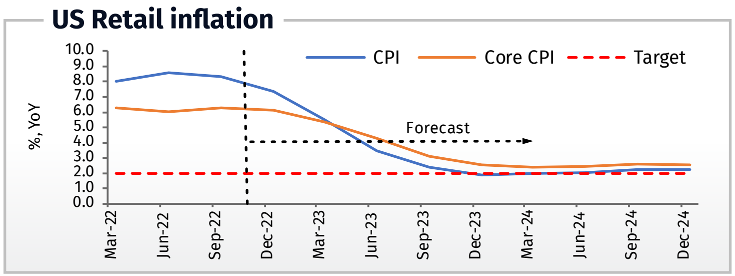
Source: Bloomberg

Financial conditions tightening is also likely to weigh on growth and inflation



Source: Bloomberg

US inflation is set to decelerate in CY23 as tight monetary policy and softening growth outlook is likely to weigh on prices



Source: Bloomberg, Morgan Stanley

^ in 2021 based on the study published by the National Association of Realtors in US
FCI – Financial condition Index
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China : Preparing to rebound in the near term but LT challenges emerging

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China's growth slowed down meaningfully in 2022 driven by Covid lockdowns and a real estate slowdown. Growth poised to recover post re-opening.

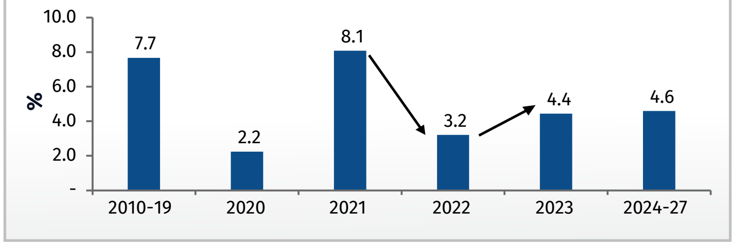
- Vaccination coverage has improved and > 90% of people over 60 years are vaccinated

Real estate sector, a major contributor to China's GDP, faced headwinds in CY21-22 with a fall in prices, financial challenges for few major developers and poor demand resulting in sharp weakness in activity. Real estate accounts for 40-50% of local government funding.

- Chinese government has announced supportive measures for real estate including credit support for property developers, financial support to ensure completion and handover of projects to homeowners, and assistance for deferred-payment loans for homebuyers

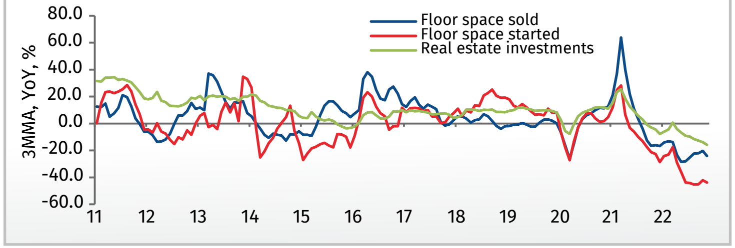
China's working age population is likely to shrink and the average age will rise over the coming years which could impact LT consumption growth

China Real GDP growth



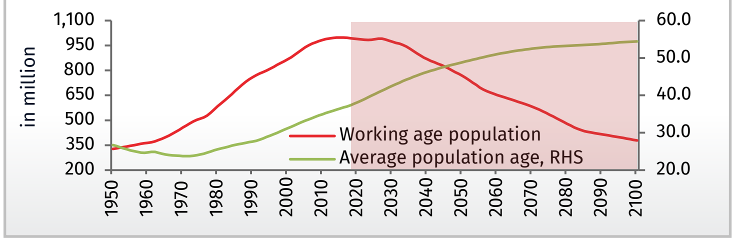
Source: IMF

China real estate activity trended lower



Source: JP Morgan

China Demographical disadvantage



Source: UN population database

LT - Long Term
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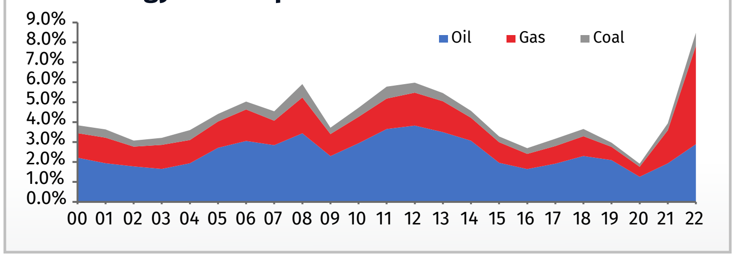
Euro Area (EA) has been significantly impacted as energy prices rose sharply post the Ukraine war. Energy prices have corrected significantly from their peak and should provide some relief to inflation.

EA Energy consumption as % of GDP

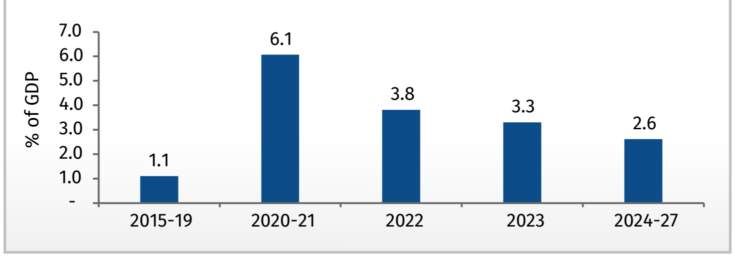


Source: BP, Bloomberg

Governments have imposed windfall taxes and announced measures to cushion the impact

- Fiscal deficit of EA is expected to remain significantly higher than the pre-pandemic averages

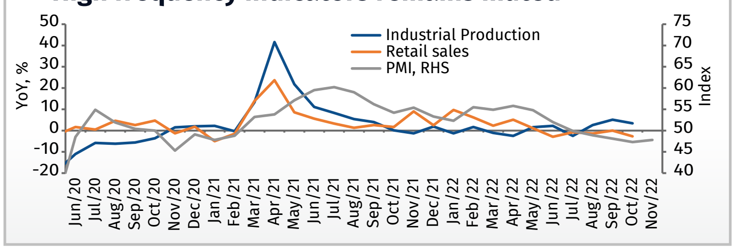
Euro Area Fiscal deficit



Source: IMF

Growth remains a challenge. Retail sales are contracting on YoY basis and composite PMI is also in contraction zone

High frequency indicators remains muted



Source: Bloomberg

Global Oil: Tug of War

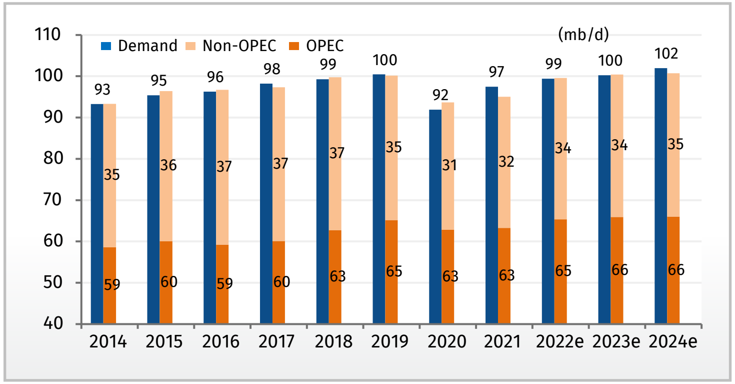
- Oil prices have been volatile due to several uncertainties on both the demand and supply side

Demand still below pre-pandemic levels

- Slow recovery of aviation sector resulted in ATF consumption being ~2 mb/d lower than in 2019
- Held back by lockdowns, China's oil demand is ~1 mb/d below 2020/21 levels
- Inflationary pressures impacting outlook for demand

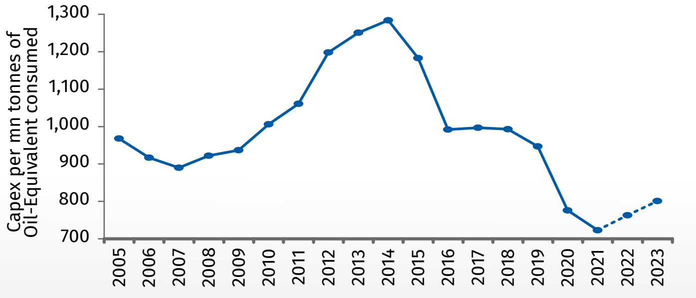
Supply inelasticity to price is increasing

- Underinvestment continues: ESG concerns and capital discipline weighed on capex
- Slower scale up in US shale oil output leads OPEC to regain prominence
- US SPR releases (drawdown of 0.8 mb/d since Mar-22) likely to end soon
- Russian supplies have returned to pre conflict levels of ~10 mb/d



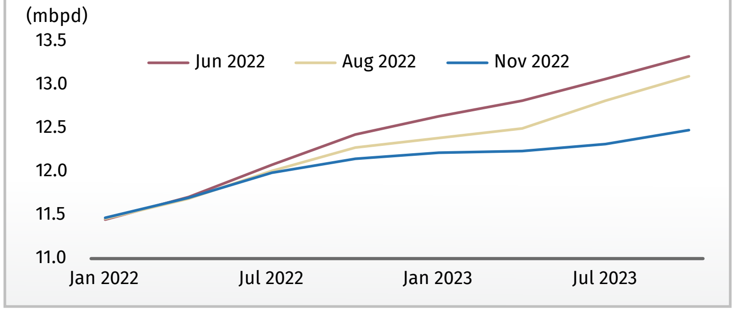
Source: IEA, HSBC Global Research

Oil & gas field development capex (USD)



Source: BP Statistics Review, IHS, Rystad Energy, Morgan Stanley Research
Note: Dashed line represents Morgan Stanley Research estimates based on Rystad's capex forecast.

US Oil production ramp-up is trailing expectations



Source: EIA Short term Energy Outlook, Morgan Stanley Research

SPR - Strategic Petroleum Reserves, ATF – Aviation Turbine Fuel
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Global Gas : Higher for Longer?

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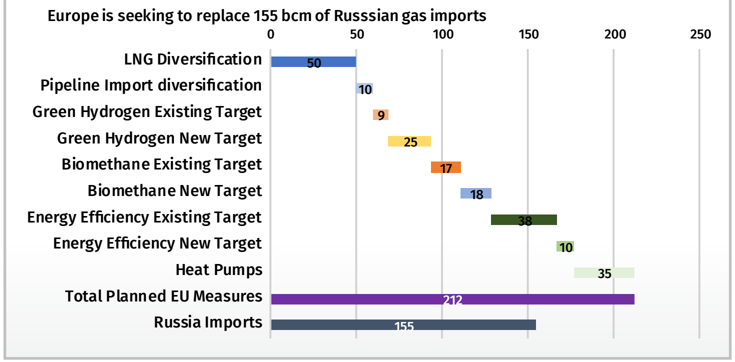
- Ukraine-Russia war may alter global gas markets structurally as EU plans to reduce its dependance on Russian gas (~40% of its total gas demand in 2021)
- CY22 gas prices touched an all time high as European LNG imports increased >50%. They have corrected substantially from the peak (mild winter) but remain above LT averages
- Europe needs to replace ~155bcm of pipeline gas (~118MT of LNG) i.e. ~30% of global LNG demand and equivalent to China's total annual consumption *(Chart 2)*
- EU has planned several replacement options *(Chart-1)*. Even after factoring various alternatives, there is incremental demand of ~50MT of LNG. However, there is insufficient global LNG supply *(Chart-3)*
- The transition towards LNG requires liquefaction terminals, special ships and regasification terminals which necessitates significant capex

Chart 1



Source: IEA, HSBC Global Research

Chart 2

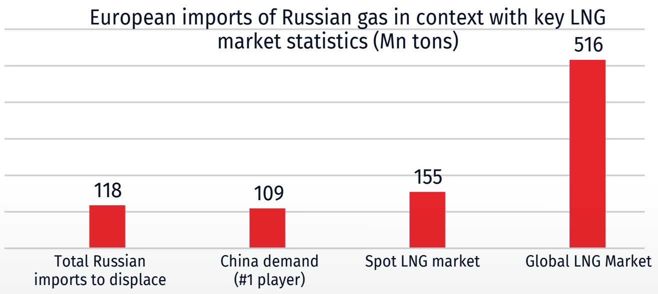
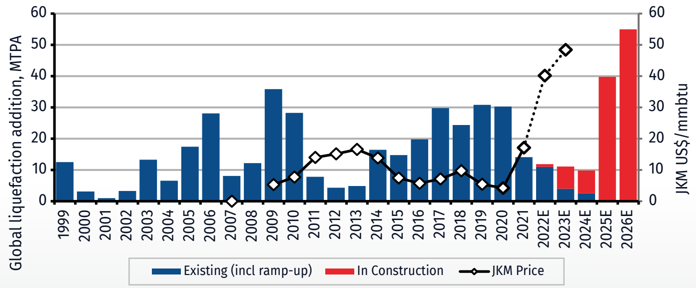


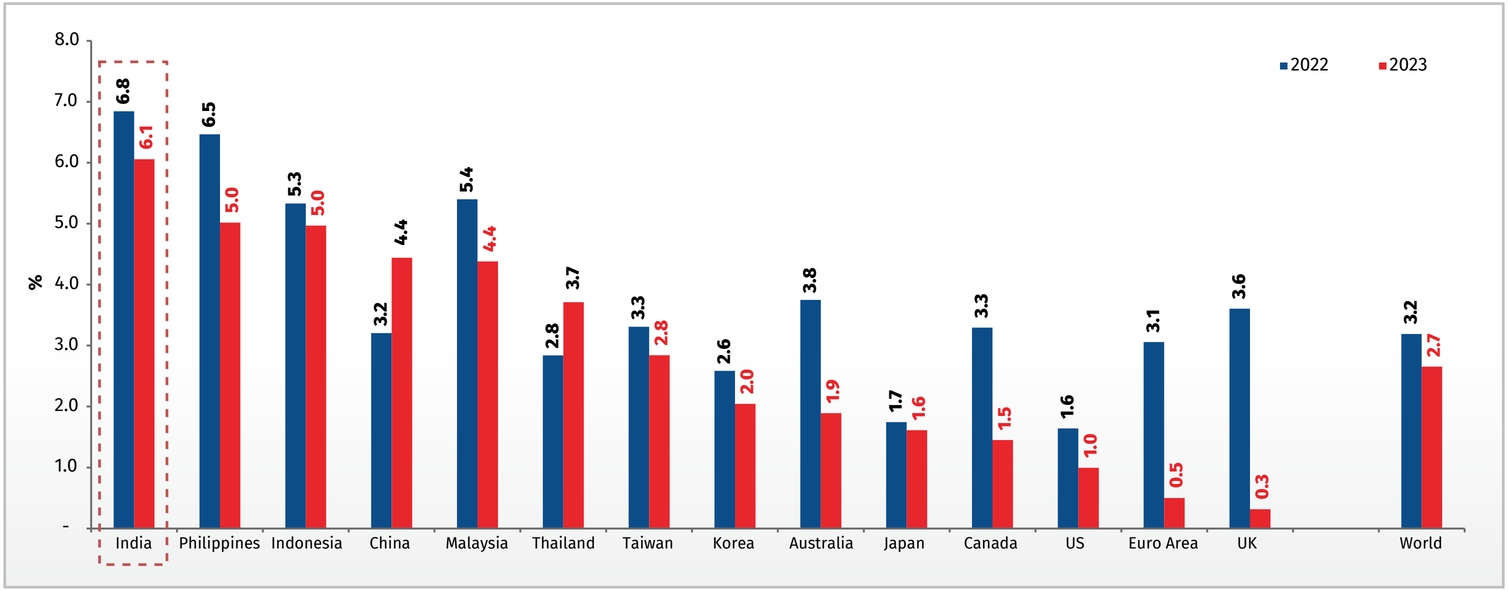
Chart 3



Sources: Bernstein Research, BofA Global Research, European Commission

2023 : Amid Global slowdown, India stands out

- Most economies are likely to experience a slowdown next year
- India's absolute and relative GDP growth remains attractive



Source: IMF

Confirmation bias

The tendency to search for, treat kindly, and be overly impressed by information that confirms your initial impressions or preferences*

*Source: Book by Gary Belsky and Thomas Gilovich - Why Smart People Make Big Money Mistakes And How To Correct Them: Lessons From The New Science Of Behavioral Economics
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Key Emerging Trends

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Direct to Consumer (D2C) brands

Direct to Consumer (D2C) / Direct online channel (DOC) brands are those that sell directly to the end consumer
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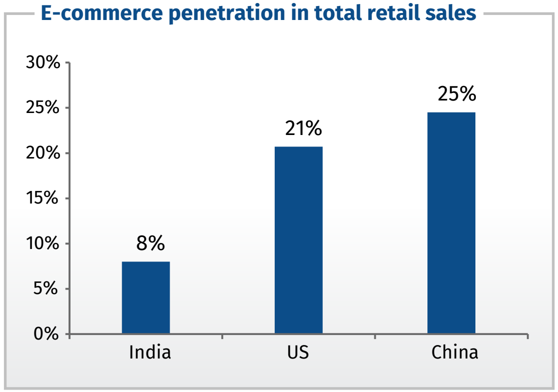
D2C Brands– Beginning of a new age

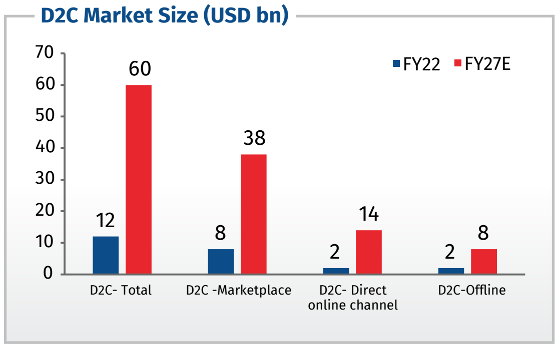
- **Online shoppers to increase from 150-180m to 350-400m by 2025. This is on account of rising penetration of smart phones, low mobile data cost, Government enabling of digital ecosystem and availability of start-up funding.**
- **E-commerce penetration in India is ~8% (FY22) and is projected to reach ~15% by FY27.**
- **D2C market is expected to grow from ~USD 12 bn in FY22 to reach ~US$60b in FY27 implying growth of 38% CAGR.** *(Source: India D2C Report 2022 - CII – Shiprocket).*
  - D2C sells through a combination of Marketplace, DOC (Direct Online Channel) and Offline models. Marketplace is the largest and contributes >60% of total D2C market.
  - D2C players are present across Personal Care (e.g. Mamaearth, Sugar, Beardo), Grocery (e.g. Country Delight, Licious), Apparel (e.g. Firstcry, HRX, Zivame), Jewellery and Accessories (e.g. Caratlane, Lenskart) and Electronics (e.g. Boat, Noise)
- **Large Consumer/ FMCG companies are either building their own or acquiring D2C brands. For e.g. Marico acquired "Beardo" and "Just Herbs", ITC acquired 'Mother Sparsh' and Colgate acquired 'Bombay Shaving Company'**
- **D2C Brands advantages over traditional brands:**
  - Lower time to market with better control over supply chain resulting in lower working capital.
  - Access to consumer level demand data.
  - Potential of higher return ratios in mature state with higher margin (lower number of intermediaries) and lower capex requirement.
- **Key Enablers of D2C brands are a) payment gateway platforms (e.g. Gpay, Paytm), website/ app building platforms (e.g. Shopify, Woo commerce), logistics management platforms (e.g. Delhivery, Shiprocket, etc.)**

E-commerce is now >20% of total retail sales in US and



Source: Digital Commerce 360 analysis of U.S. Department of Commerce data, The state council People's Republic of China

D2C Market Size (USD bn)- Marketplace contributes >60% of total D2C market



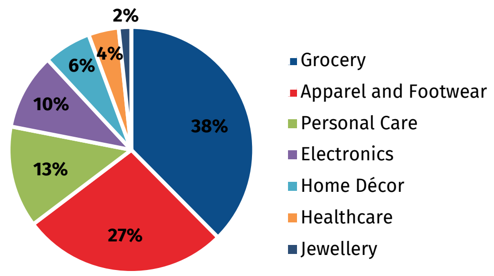
Source: India D2C Report 2022 - CII – Shiprocket

D2C Brands– Focus on differentiated product proposition and data oriented strategies

- **Grocery and Apparel & Footwear are the largest categories and together contribute >60% of market. Personal care (13%) and Electronics are other large categories in the space.**
- **What are D2C brands focusing on?**
  - The principal focus is on product proposition with a niche and differentiated offering
  - **Data driven approach** - with customer data in place and use of Artificial Intelligence (AI) there is a strong focus on repeat sales and product improvement based on feedback. Data also helps in targeted marketing approach on select digital platforms.
  - **Unit economics** – Favourable average order value, gross margin and repeat purchase help in entry and scale-up of D2C brands
  - **Focusing on both Own and Marketplace platform** - While Own platform helps in accessing customer data and insights, marketplace platforms help in larger reach and reducing CAC (customer acquisition cost).
  - **Outsourced manufacturing & diversified supply chain** - Majority of D2C players have diversified supply chain network and work with multiple players. Manufacturing is outsourced by most and focus is more on brands and customers.
- **Strong funding availability has helped in fast scale-up of several brands.**
- **House of Brands are helping D2C brands scale up faster and provide an avenue for exit to founders:**
  - House of Brands buy D2C brands and assist with marketing, marketplace optimization and technology support. Global success stories are Thrasio and Perch.

D2C Category wise - Grocery and Apparel contributes> 60% of the market

Category wise- D2C Market Size



Source: India D2C Report 2022 - CII – Shiprocket

Strong Funding availability has helped in fast scale-up

Company/Brand	Total Funding (US$m)	Key investors
Lenskart	940	Temasek, Alpha wave, Bay Capital, IFC
Firstcry	663	TPC, Chrys Capital, Premji Invest
Pepperfry	239	Norwest Venture Partners, Innoven Capital
Country Delight	178	Orios, Matrix, IIFL Finance
Mamaearth	125	Sequoia, Sofina, Fireside Ventures
BlueStone	111	Innoven Capital, Accel
Bombay Shaving Company	51	Colgate, Reckitt

Source: India D2C Report 2022 - CII – Shiprocket

House of Brands- entity which has multiple sub-brands catering to different categories

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Biotech in Pharmaceutical

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Biotech in pharmaceuticals – Rapid strides in drug development

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Chemically synthesized traditional drugs

- Traditional small molecules drugs are chemically synthesized with known structures, low molecular weight and are easy to manufacture
- Small molecules are suitable for oral ingestion, which ensures better patient compliance
- However, they target only ~15% of proteins in the body and entail higher side effects/toxicity

Need for biotech in pharmaceuticals?

- Proteins (or targets) are amino acid chains required for structure, function and regulation of tissues; therapeutic effect is invoked once drugs bind to them
- A wider range of proteins need to be targeted for developing solutions in unmet areas (e.g, diabetes, oncology, immunology); this propelled the need for biotech in pharmaceuticals
- Human insulin for diabetes in 1980s was the first such breakthrough; monoclonal antibodies (mABs or biologics) are currently the most widely prescribed biotech solutions
- Biologics are characterized by large molecular weights, multi-step complex manufacturing process, entail lower toxicity and are generally administered invasively
- Input is DNA sourced from humans, animals or microorganisms; can be composed of sugars, proteins, or nucleic acids or complex combinations of these substances

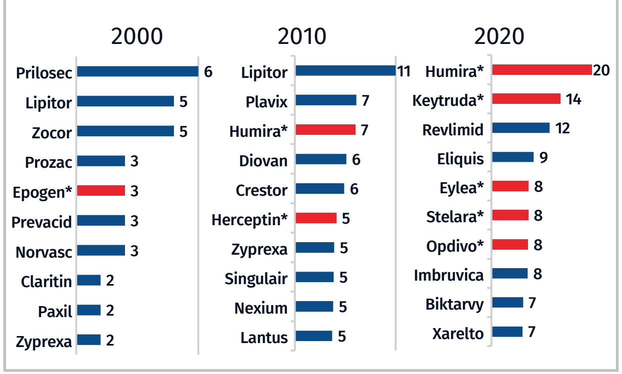
Advancement of novel biotech solutions beyond monoclonal antibodies (mABs)

- New modalities include genetically based medicines – gene therapy, mRNA, cell therapy, gene editing and small molecules targeting RNA
- mRNA technology for Covid vaccines by Pfizer/BioNTech and Moderna proved to be a success; quick development was a key advantage with timeframe between phase 1 trial commencement and emergency use authorization by USFDA being only eight months

Biotech vs traditional small molecules

Targets a wider range of proteins	Complex manufacturing process
Addresses unmet needs (e.g., oncology)	Affordability is hindering access
Lower toxicity	Majorly administered invasively

Half of today's top selling drugs are mAbs



Source: Industry data, Bernstein Research; *represents biologics/biotech drugs, 1acronyms
Refer disclaimers on slide 75

Biotech in pharmaceuticals – Notwithstanding challenges, further penetration inevitable

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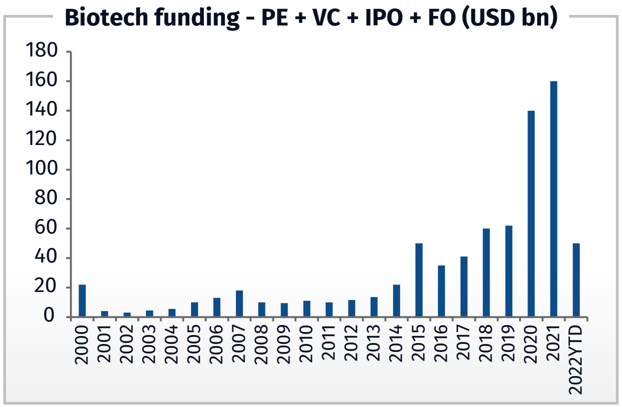
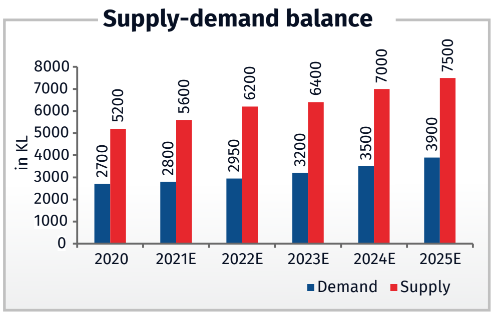
Conducive funding environment driving biotech adoption

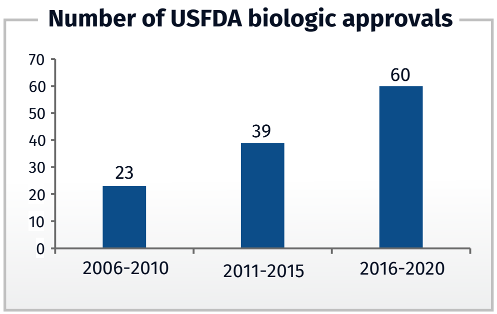
- ~USD460bn worth funding has been pumped during 2017-21; 2022 slowdown is a consequence of global liquidity tightening
- US listed Alvotech is estimating ~USD580bn biologics market size by 2026 (~USD290bn in 2020); higher number of biologic approvals and R&D spend (>40% of total in the US) is driving this
- Considerable capital being committed with global capacity to reach ~7.5mn liters by 2025

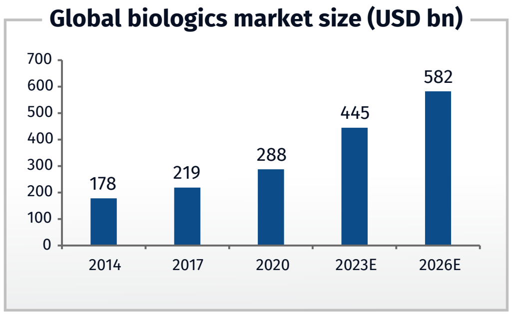


Key challenges

- Constant need to fund losses due to high failure probability at development stage
- Extensive competition – small/emerging biotech companies represent ~73% of development pipeline
- Manufacturing complexity - handling of cell cultures/living organisms results in variability







Source: Industry data, Alvotech investor presentation, Bernstein Research; acronyms: PE – private equity, VC – venture capital, IPO – initial public offer, FO – follow on offer. USFDA - The United States Food and Drug Administration

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Electric vehicles

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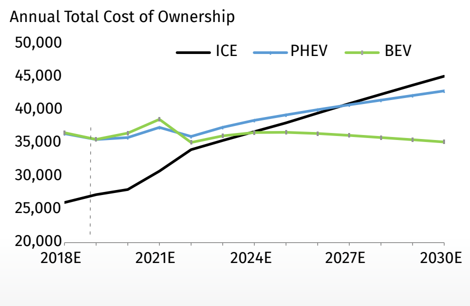
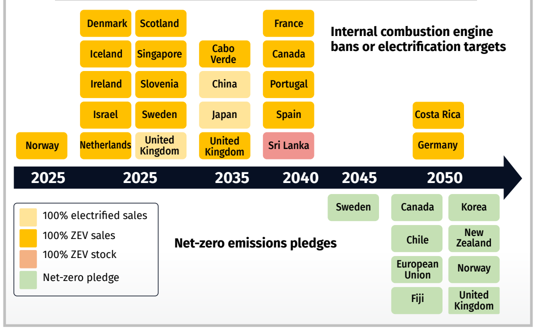
BEV adoption is a reality with govt encouragement and favourable ownership costs…..

Favourable TCO* are key driver of BEV penetration (USD bn)



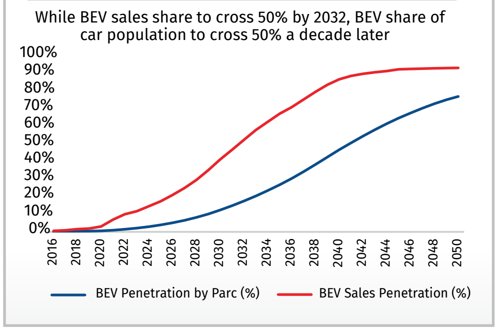
Source: Morgan Stanley Research

~50% of geographies by volume have announced exit of ICE engine vehicle sales by 2035



Source: IEA

By 2040, BEV share of sales to cross ~90%, but ICE to remain at 50% of fleet



Source: Morgan Stanley Research

- With subsidy from government, TCO breakeven for BEV is achieved in the first year in China and Europe; Even without subsidies, breakeven could be achieved in 2nd year
- Governments of large PV markets like China, UK, Germany, France, USA etc. are providing subsidies on purchase of BEV through either direct cashback, tax refund or lower purchase tax to help bridge TCO gaps for consumers
- While sales penetration reached ~10% in CY22, various forecasts suggests almost full BEV penetration across geographies by 2040

BEV – Battery Electric Vehicle; PHEV – Plug-In Hybrid Electric Vehicle; FCEV – Fuel Cell Electric Vehicle; ICE – Internal Combustion Engine; TCO – Total Cost of ownership

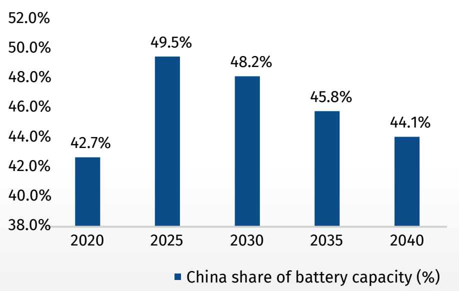
....but, energy security and supply chain challenges haven't been fully addressed yet

Energy security risk may force balkanization of battery capacities

Rush to secure battery raw material supply given demand/supply gap and mining capacities

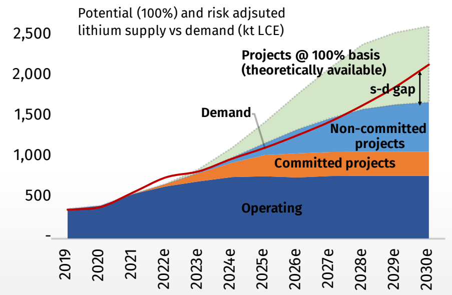
Lithium supply chain imbalance changed the annual price reduction trends in Battery Cell during 2022

Battery dependence on China is likely to remain high



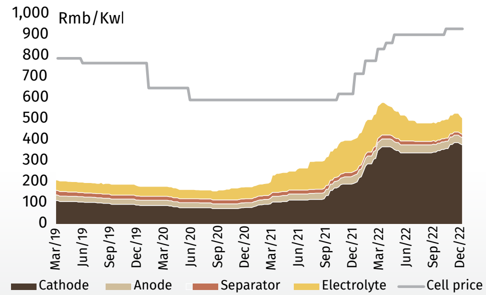
Source: Morgan Stanley Research

Lithium demand-supply balance may turn into deficit by 2025 again



Source: Morgan Stanley Research

Battery prices increased 50% in last 1yr on demand/supply mismatch



Source: UBS Research

US$430 billion Inflation Reduction Act (IRA) of US imposes complex restrictions on EV tax credits based on sourcing location of battery components and critical minerals and this should spur local battery capacities going forward.

US President Joe Biden "By undercutting U.S. manufacturers with their unfair subsidies and trade practices, China seized a significant portion of the market,". "Today we're stepping up... to take it back, not all of it, but bold goals."

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Over Confidence

Person's subjective assessment in his or her judgements is greater than the objective accuracy of those judgements

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Indian Economy

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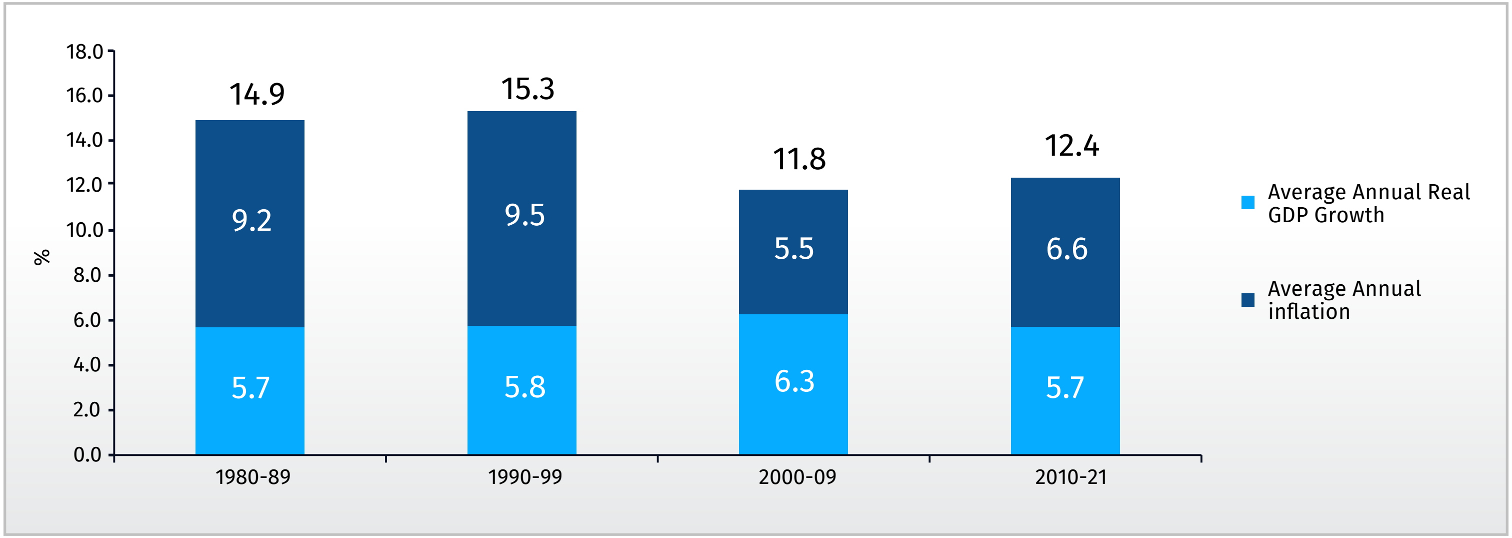
Indian economy has grown steadily despite several global and domestic cycles and events



1980-89
Operation Blue Star
Rajiv Gandhi Government
Birth of IT Industry
Rise of BJP in Indian Politics
Launch of Maruti Car

1990-99
Global Oil Crisis - Gulf War
BoP Crisis, Reforms commence
Asian Crisis, Era of coalitions
1st BJP govt., Kargil Conflict
Growth of IT, Satellite TV,

2000-09
Violence in Gujarat post Godhra
9/11 , Dotcom Bubble bust
Growth of Indian Generics Cos.
10 year Congress rule, growth of mobiles / smartphone
Lehman crisis, Quantitative easing

2010-21
Coal, NIMO etc. scandals
QE Tapering, PIGS
High FD & CAD, high inflation
Demonetisation, GST, Make in India
Covid-19
Russia-Ukraine war

Source : IMF Data, Estimates are IMF estimates;
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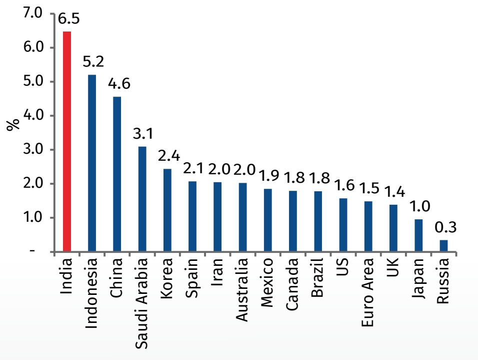
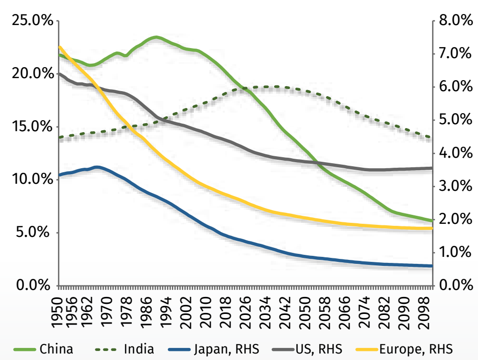
- **Of all the major economies, India is likely to see the highest growth over the next 5 years**
- **Demographic advantage likely to accentuate in the coming decades**
  - Working age population of India is likely to be highest globally in next 10 years
- **Total debt to GDP remains the lowest amongst the major global economies**

Average GDP growth over 2023-27



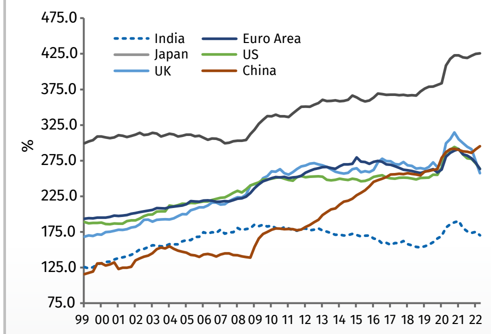
Source: IMF

Working age population^



^ Working age population (15-64 years) as % of total global working population
Source: UN Population database

Total Debt to GDP



Source: BIS

Indian Economy Outlook: Stars aligned for sustained growth over the long term

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Macro economic environment	▸ Continued thrust on infra, recovery in private capex and steady consumption bodes well for growth ▸ Inflation likely to moderate in FY24; Government borrowings is likely to be within manageable level ▸ Slowing global trade and Quantitative Tightening are key headwinds
Resurgence of manufacturing	▸ Rising costs and supply chain concentration to accelerate shift of manufacturing to other EMs from China ▸ Favourable government policies like PLI, reduction in taxes, tariff barriers, etc. ▸ Large market, competitive cost and favorable demographics makes India an attractive FDI destination
Private capex prime for pick up	▸ Corporate profitability and leverage have improved ▸ High capacity utilization and reasonable demand outlook bodes well for future capex ▸ Banks balance sheet in good shape with low NPAs and strong capital adequacy
Infrastructure Capex and Housing	▸ Central government thrust on capital spending especially on roads, railways and defense likely to continue ▸ Higher affordability and RERA to support better housing demand
Consumption	▸ Large potential with under penetration across major consumer categories ▸ Household (HH) debt remains relatively low compared to other markets
Near term risks	▸ Elevated commodity prices especially oil and natural gas can be a drag on India's external sector and corporate margins ▸ Quantitative tightening by major central banks may impact capital flows to EMs ▸ High inflation in AEs and monetary policy tightening can impact global demand

Structural growth drivers to support India's growth story

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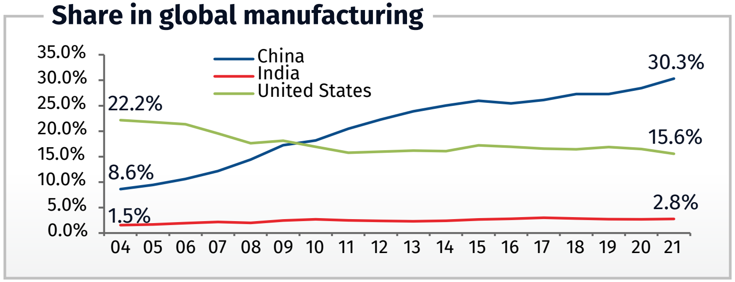
India to play a more important role in global manufacturing

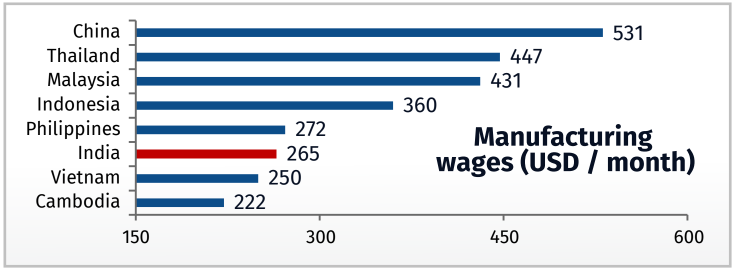
Supply chain diversification - China has become a dominant player in global manufacturing accounting for more than 30% of manufacturing globally. In an effort to de-risk, MNCs are looking to reduce supply chain dependence on China

- **Supply Disruption due to Covid-19** - has triggered an urgency to diversify global supply chain and many global MNCs are implementing a China+1 strategy



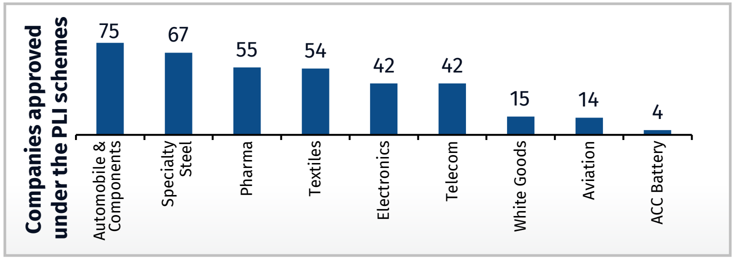
Source: Worldbank; Share in global manufacturing GVA

Improving competitiveness of India vs China and other peer nations. Reduction in tax rate is likely to make India more competitive.



Source: JETRO Survey

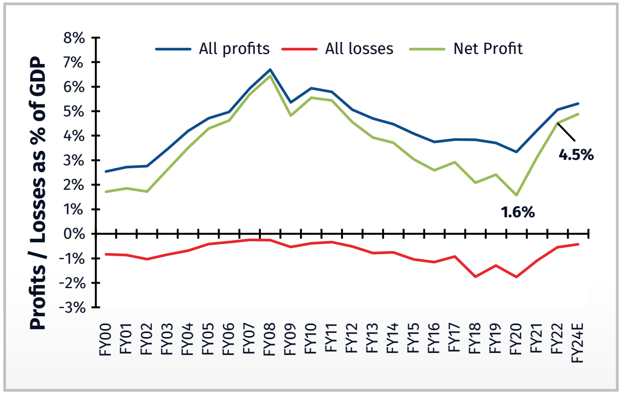
Reforms (PLI, reduced taxes, improved ease of doing business) make India an attractive destination for global MNCs



Source: Media Articles, Ambit Capital research

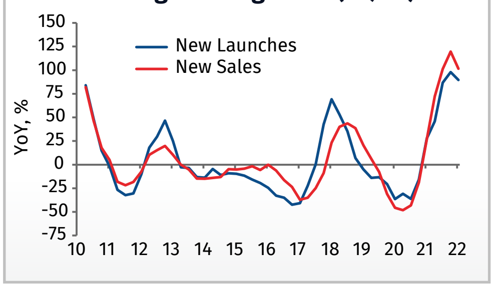
Private capex – Environment conducive for pick up

- **Broad based improvement in profitability across major manufacturing sectors like metals, cement, sugar, textile, chemicals, paper, etc.**
- **Other supportive factors for pick up in private capex**
  - Corporate leverage is near 10 year low and banks balance sheets are adequately capitalised
  - Supportive government policies and China+1 to support investment activities
  - Capacity utilization has picked up and is now close to pre-pandemic levels; should result in new capacity addition over time
- **Rising affordability, improved regulatory environment (RERA) to support housing demand**



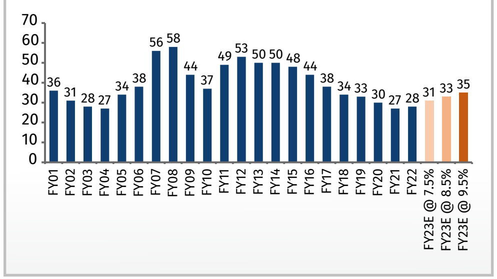
Sources: ICICI Securities. Based on data available on all listed securities

Housing Sector growth (4QMA)



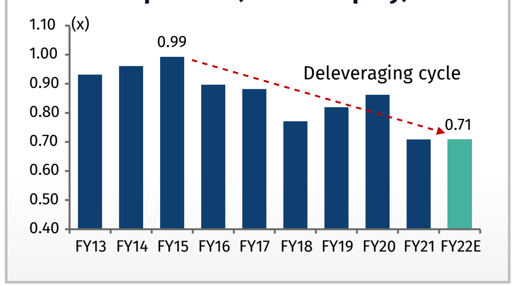
Source: Morgan Stanley

Affordability ratio
(Home loan payment / Income ratio)



Source: Jefferies

Corporates (Debt to Equity)



Sources: Jefferies

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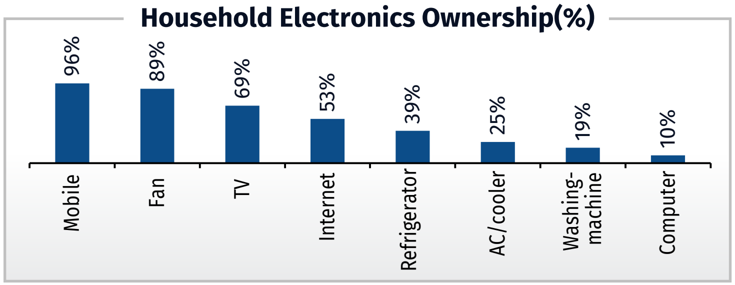
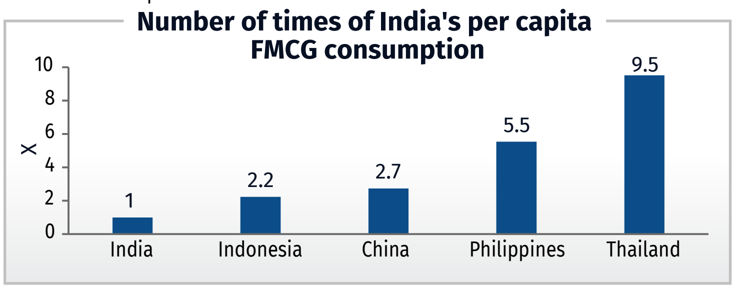
Apart from advantage of a young population, there is large market potential with under penetration across consumption category

- Rising per capita incomes and rising urbanization should help boost consumption in India



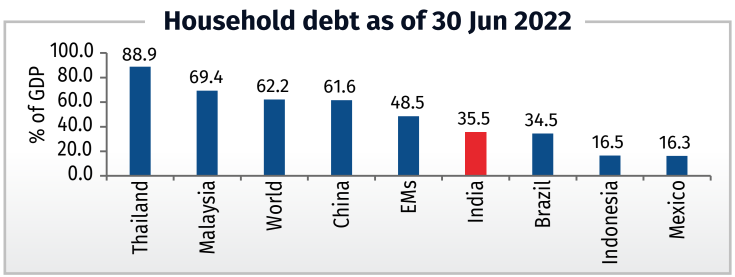
Source: Ambit Capital research

Compared to other EMEs, penetration of FMCG products within India remains amongst the lowest and thus, there is immense potential



Source: Presentation of Hindustan Unilever Limited

Household leverage is also low in India compared to other EMEs



Source: Media Articles, Ambit Capital research

External sector– Stabilising

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- **Elevated energy prices and robust domestic demand negatively impacted CAD**
- **Capital outflows resulted in BoP swinging into deficit**
- **Interplay of slowing global trade, lower commodity prices and softening domestic demand likely to ease the pressure on current account going forward**
- **Capital account remains susceptible to ensuing Quantitative tightening across major AEs**

USD bn	FY21	FY22	FY23E	FY24E
Non-oil exports	271	362	352	312
Non-Oil imports	316	457	512	444
Net Oil imports	57	94	132	133
Trade deficit	102	189	308	265
Trade deficit /GDP (%)	-3.8%	-6.0%	-8.6%	-7.2%
Invisibles (net)	126	151	195	168
-Services	89	108	143	129
-Transfers	73	80	94	90
Current Account Balance (CAB)	**(24)**	**38**	**97**	**86**
CAB/GDP (%)	**-0.9%**	**1.2%**	**2.9%**	**2.3%**
Capital account	**64**	**86**	**69**	**67**
Capital account/GDP (%)	**2.4%**	**2.7%**	**2.0%**	**2.0%**
-FDI	44	39	36	36
-FPI	36	(17)	-	10
-Others	(16)	64	33	21
BoP	**87**	**48**	**(41)**	**(7)**

Source: Kotak Institutional Equities; Average oil price assumption: FY23: USD 95/barrel. FY24: USD 90/barrel

- **FX reserves provide adequate cushion against external volatility and negative BoP**
  - Import cover as of end-Dec 2022 is higher than earlier episodes of high oil prices (such as 2011-15)

	FY08	FY13	FY19	FY22	Latest*
Fx reserves (USD bn)	310.0	292.0	413.0	607.0	562.8
Fx Reserves to External debt	138.0%	71.0%	76.0%	98.0%	87.0%
Import coverage (Fx Res/TTA imports)	14.4	7.0	9.6	11.8	9.1
Short term debt^ to Fx reserves	26.0%	59.0%	57.0%	44.0%	NA

Source: CMIE, Bloomberg; ^ short term debt by residual maturity; Fx – Foreign exchange TTA- trailing 12 months average. * - based on last available data by 31 December 2022

Source: CMIE, RBI, Kotak Institutional Equities, Bloomberg;
BoP – Balance of Payment, CAD – Current Account Deficit, DXY – USD Index, FX – Foreign Exchange
Refer disclaimers on slide 75

Anchoring

an individual's decisions are influenced by a particular reference point or 'anchor'

Clinging on to a fact or figure that may not have any real relevance to your decision

Example:

When issuing upgrades and downgrades, research analysts may anchor on their initial estimates

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Equity Markets

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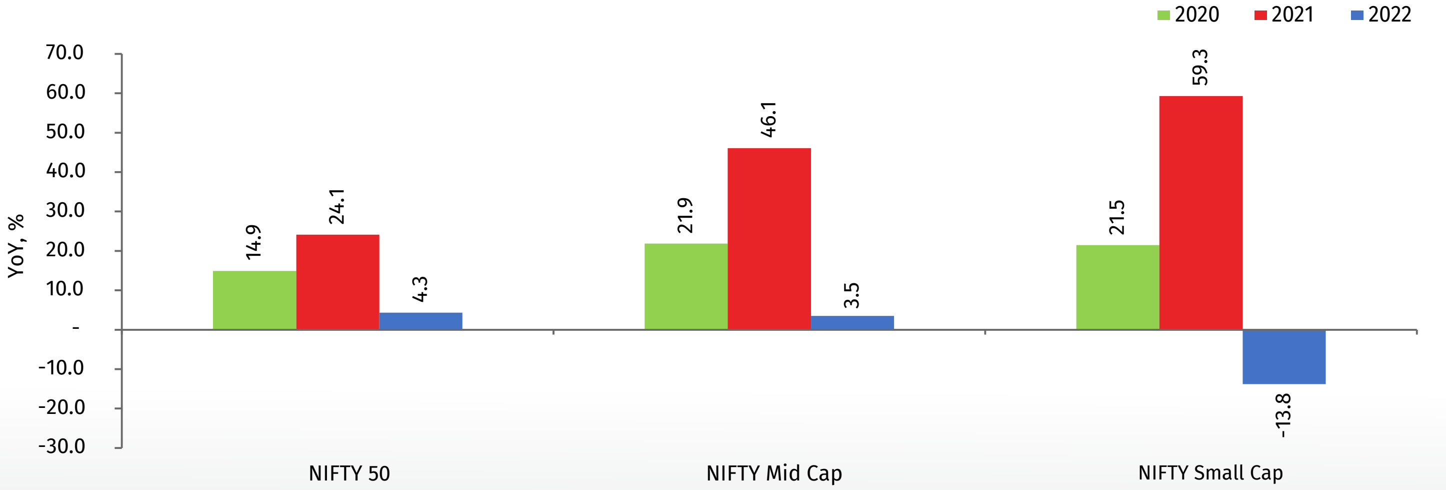
Indian equities outperforms major global counterparts

- **Performance of Indian equities was supported by resilient growth outlook, strong corporate earnings and steady DII flows**
  - *NIFTY 50 delivered 7th consecutive years of positive return, a first since the inception of index*
- **Large caps outperformed the broader market**

Indian Equities



Source: Bloomberg; Data updated till 31 December 2022
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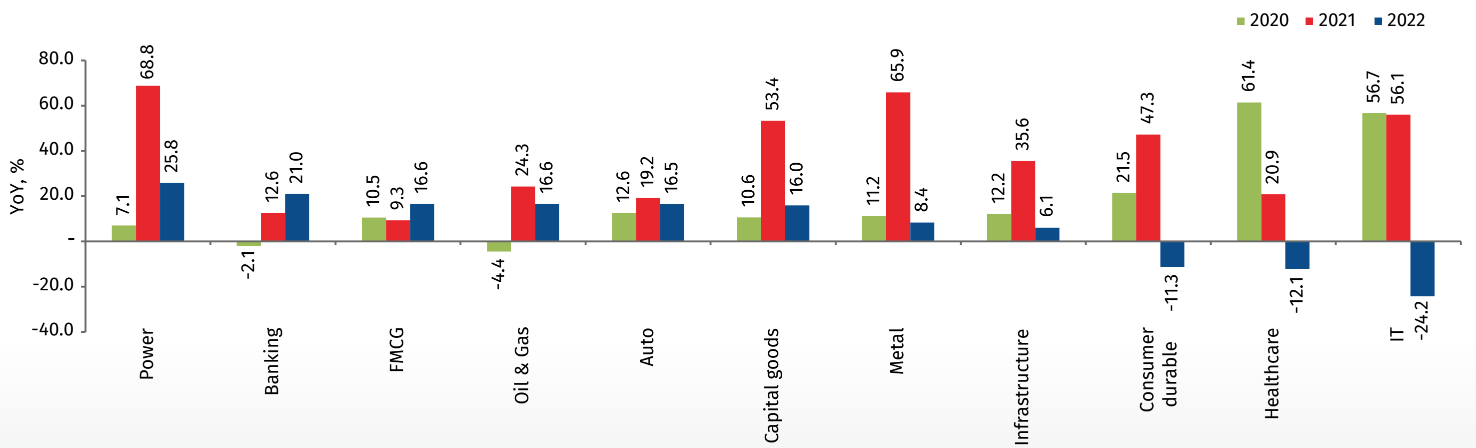
Indian equities - Sectoral performance

- Most sectors did well in 2022 on the back of resilient domestic demand and formal sector gaining market share
- Sectors liked IT and Healthcare which are closely linked to external demand lagged; consumer durables sector underperformed as profitability came under pressure due to high input prices
- Utilities sector outperformed on better underlying demand-supply. Banking did well driven by improvement in credit offtake and NPA moderation

India's Sectoral indices



Source: Bloomberg; Data updated till 31 December 2022
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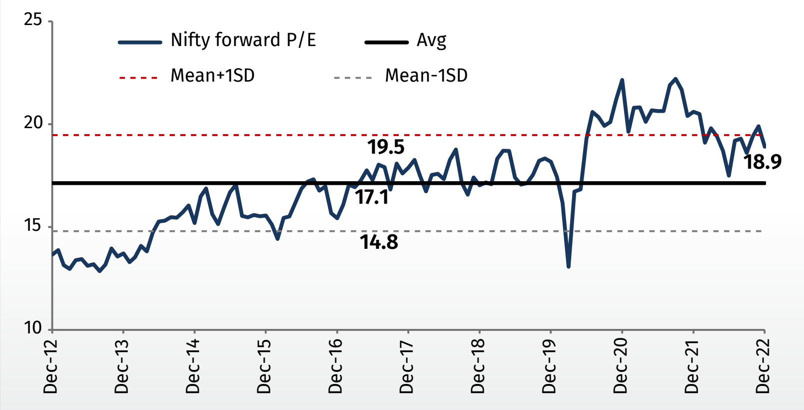
Equity Market Valuations

- **NIFTY trades at premium to its historical average partly driven by superior relative growth prospects**
- **Meaningful valuation dispersion continues to provide sector and stock specific opportunities**

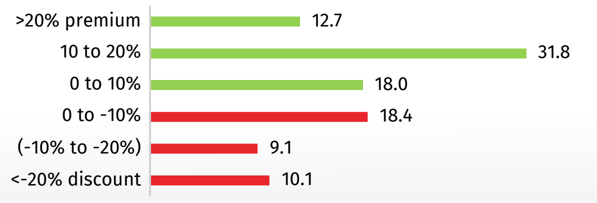
NIFTY 50 Valuations (P/E)



Source : Kotak Institutional Equities

Meaningful valuation dispersion (%)

Discount / premium of FY24 PE vs 10 year avg PE based on NIFTY weight

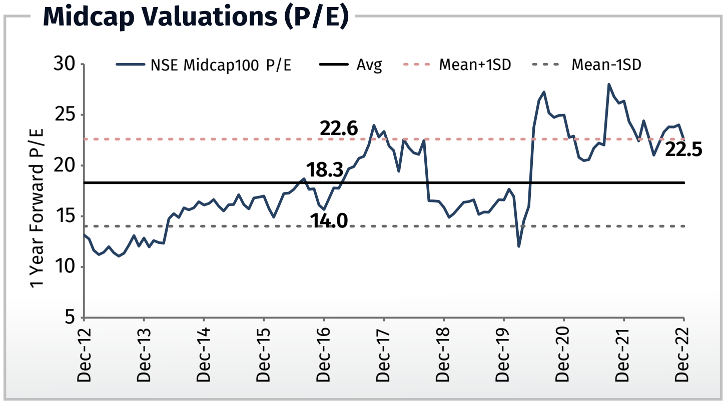


Source : Kotak Institutional Equities

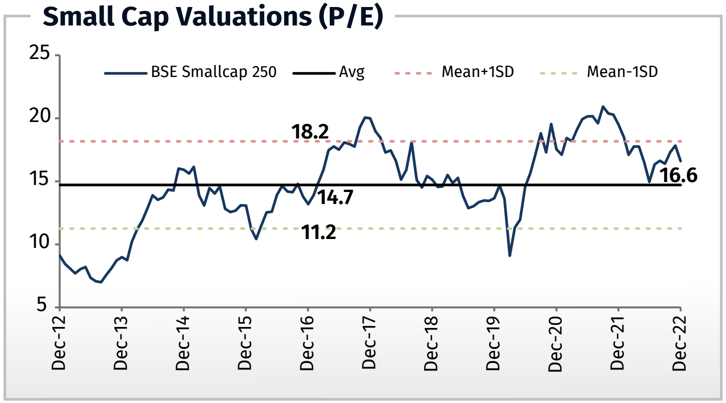
	12 months forward Price To Earnings		
	Current	10 year average	Discount / Premium (%)
Auto	20.3	18.2	11.7
Consumer staples	52.3	43.8	19.4
Consumer Discretionary	57.8	48.8	18.5
IT services	22.5	19.4	16.4
Energy	13.5	11.7	15.8
Electric utilities	10.4	10.4	0.1
Pharma	22.5	23.1	-2.5
Private Banks	16.8	18.4	-8.6
Tobacco	20.8	23.0	-9.8
Metals	9.4	9.8	-4.4
PSU Banks	9.5	11.8	-19.4

Source : Kotak Institutional Equities; stocks here forms part of Kotak institutional equities coverage universe

Mid Cap Index trades at ~30% premium to its historical average



Small Cap Index trades at a lower premium



While Mid/Small have done well in the last few years, they have trailed on a medium-term time frame and have performed in line on a LT basis

	CAGR Returns %			
As on December 31, 2022	**1 year**	**3 years**	**5 years**	**10 years**
Nifty 50 (A)	4.3	14.2	11.4	11.9
Nifty Midcap (B)	3.5	22.6	8.3	14.0
Outperformance vs NIFTY 50 (B - A)	**-0.8**	**8.4**	**-3.1**	**2.1**
Nifty Smallcap (C)	-13.8	18.6	1.4	10.1
Outperformance vs NIFTY 50 (C - A)	**-18.1**	**4.4**	**-10.1**	**-1.7**

Source : Kotak Institutional Equities, Bloomberg; LT – Long term
NIFTY MidCap 100 Index used as proxy for Mid Caps. NIFTY 50 used as proxy for Large Caps
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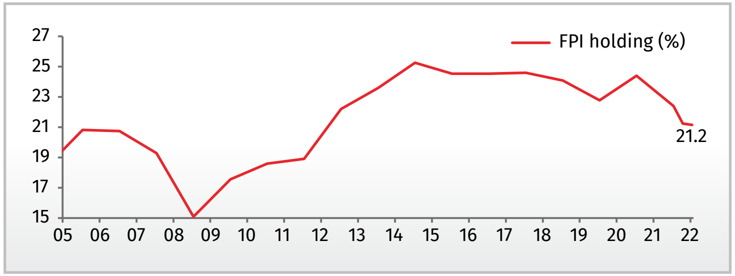
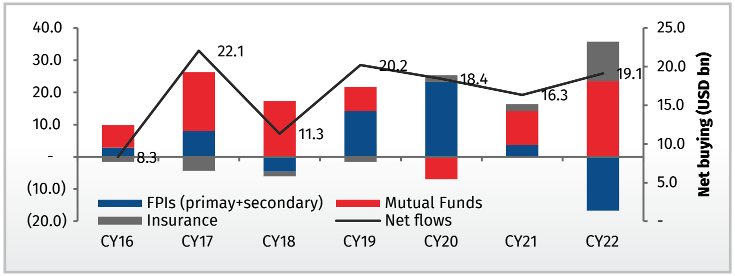
Large selling by FPIs during the year has reduced FPI ownership

Period	FPI selling (USD bn)	FPI Holding as of	FPI AUM (USD bn)	Selling as a % of AUM
Jan-08 to Feb-09	(14)	31-Dec-07	264	(5.4)
May-15 to Feb-16	(9)	31-Mar-15	343	(2.6)
Aug-17 to Oct-18	(13)	30-Jun-17	388	(3.4)
Apr-21 to Jun-22	(42)	31-Mar-21	575	(7.4)

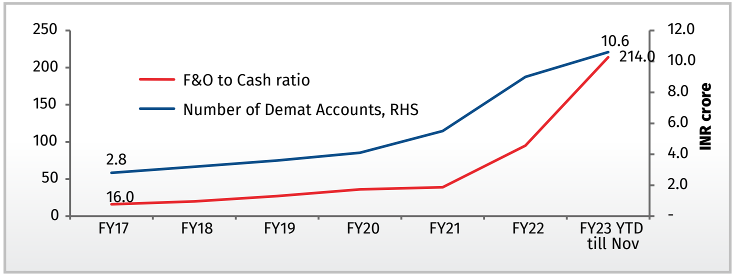


Indian equity market returns were supported by strong DII flows in mutual funds and insurance

- Mutual Fund SIP flows has increased sharply and in last few years



Rise in retail participation has resulted in a multifold increase in F&O volumes



Source : Kotak Institutional Equities, Bloomberg, Motilal Oswal, universe for FPI holdings is BSE 200 companies
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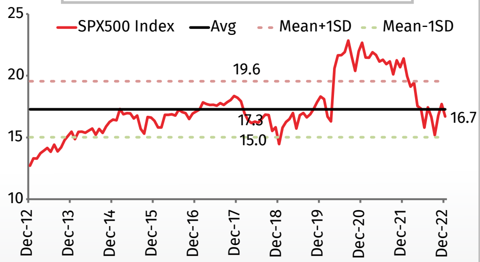
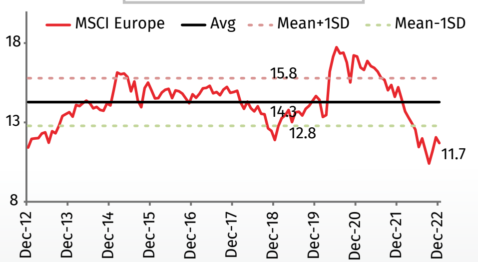
Global Valuation Summary

- Global markets have corrected and now trade at or below LT valuations
- India's premium to global markets has expanded driven by better economic performance and lower global exposure; Domestic facing economies have done relatively better than export dependent ones

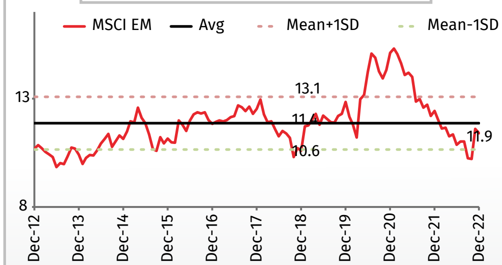
US markets trading lower than LT averages



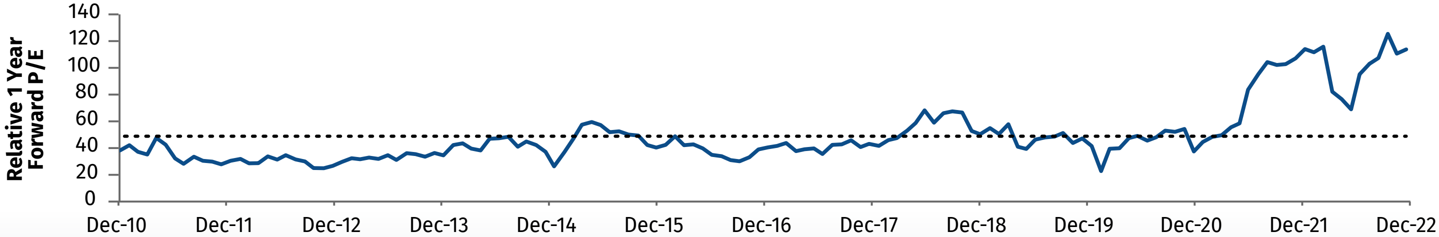
Europe trading below LT PEs



Asia and EM markets trading below LTA



India's premium to MSCI



Source : Kotak Institutional Equities, Bloomberg
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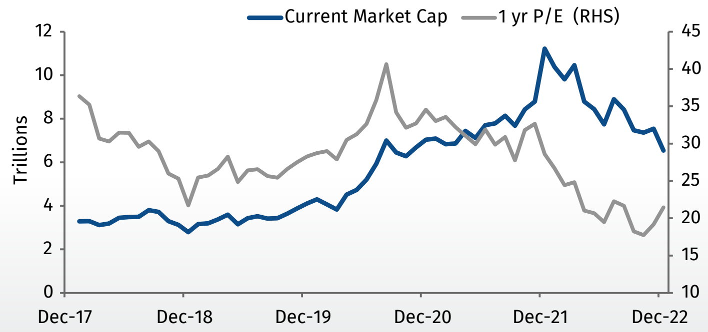
The Tech correction - FANGS lose their teeth

NYSE FANG+ Index which consists of 10 tech stocks including Apple, Amazon, Meta, Netflix, Google, Tesla, Nvidia has corrected by ~45% since its peak Nov 21 **eroding wealth of USD 5 trillion**

- Tech stocks missed the earnings expectations in the last few results and disappointment in revenues / earnings has led to sharp corrections.
- As a result, the P/E multiples have contracted by ~50%

NYSE FANG+ Index

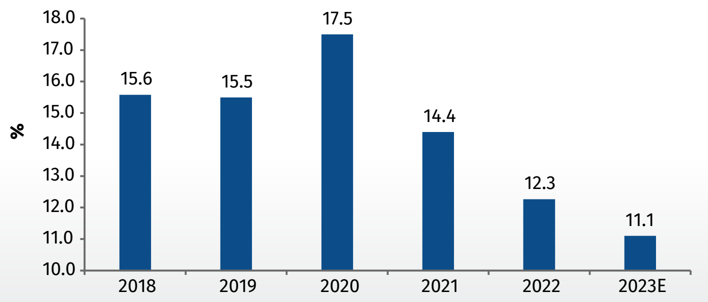


Source: Bloomberg, NYSE FANG+ Index is an equal weighted index consisting of 10 tech related stocks

Higher capex intensity - As a % of revenue, the capital expenditure of NYSE FANG Index is expected to grow from 7.7% in 2019 to ~11% in 2022 / 2023. (Source: Bloomberg). It could have impact on the free cash flow generation of these companies

- FCF as a % of sales is expected to decline in coming years which is getting reflected in stock prices

FCF% Sales for NYSE FANG+ Index



Source: Bloomberg, NYSE FANG+ Index is an equal weighted index consisting of 10 tech related stocks

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Herding

The tendency of investors to follow and copy what other investors are doing.

They are largely influenced by emotion, instinct and / or fear of missing out, rather than by their own independent analysis

Example:

Dot com bubble was preceded by this kind behaviour towards IT stocks

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Sector Overview

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Sector Overview : Automobile OEMs

HDFC MUTUAL FUND
BHAROSA APNO KA

Background / Characteristics	› Industry has witnessed easing of supply chain disruption in CY22 with improvement in semiconductor chips and related components availability. › While PV and tractor sales have crossed new peak, CV and 2W are still 27% and 16% lower than their respective 2018 peak.
Recent Business performance / developments	› Sales volume of 4W/2W/CV improved by 23%/8%/60% YoY on a low base of CY21 (lockdown and chip shortage) › Large demand incentive (upto 40% of the vehicle price) by both central and various state governments led to strong shift towards EVs in 2Ws during CY22 › While commodity cost inflation has hit OEM margins significantly, suppliers' margins were broadly stable due to commodity pass-through
What's changing ?	› SUV share in PV volumes continues to rise and have reached ~50% in 2022 from 36% in 2020 › Prices of major automotive commodities like steel, aluminum and rubber has started cooling-off and this should help OEMs margins going forward › Global economic recession is leading to demand/volume softness in exports markets for both OEMs and suppliers
Prospects / Key Drivers / Risks	› Global shift towards EV is playing out in India too with 2W/3W/PV likely to see rapid shift towards EV in the next 1-3yrs once supply is able to fulfil demand › Aggressive start-ups and multiple new players in electric 2W/3Ws space might result in market share churns over medium term in these segments › Infrastructure push and government capex to stimulate economy augurs well for MHCV and tractor segment in 2023 › Impact of consumer inflation is likely to weigh on consumer segments (2W and PV) growth in 2023
Valuation	› Sharp valuation divergence between players with EV story and perceived laggards in both OEMs and ancillary space except CV/tractor segments where disruption is not yet visible › Sector valuation is about +1sd deviation above its historical average of 20x PER

2W – 2 Wheelers; 4W – 4 wheelers; PV – Passenger vehicles; UV – Utility vehicles; BS – Bharat Stage emission standards; OEM – Original Equipment Manufacturer; NEVs – New Energy Vehicle; MHCV – Medium and Heavy Commercial Vehicles; SD – Standard deviation

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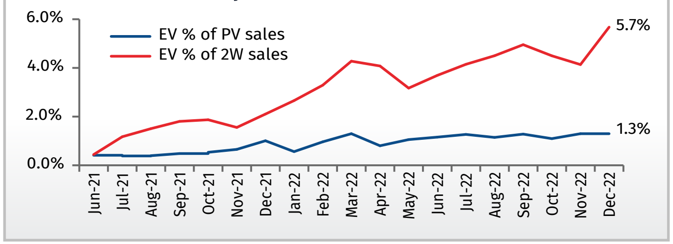
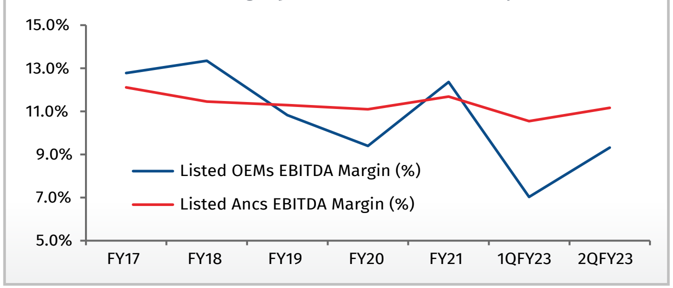
EV 2W and 4W sales penetration



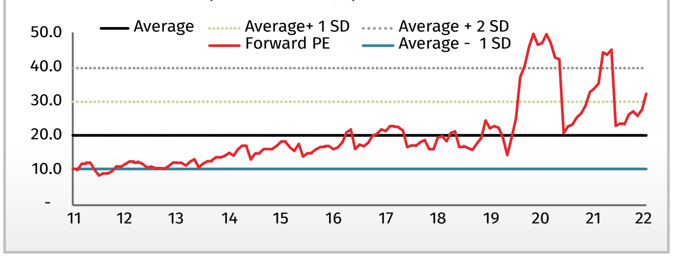
Sources –Vahan Database

Auto OEMs faced margin pressure from commodity inflation



Sources – Company disclosures

Sector Valuation (1Y forward P/E)



Source: Kotak Institutional Equities

HDFC MUTUAL FUND
BHAROSA APNO KA

Sector Overview : Banking & NBFCs

Background / Characteristics	> Over the last decade, regulatory capital requirement has increased from 4.5% to 9.0% (Banking system Tier 1 at 14.2%) > Liability franchise, asset quality, operating costs & technology are key drivers for profitability > Asset quality is cyclical & industry growth is linked to GDP growth > Asset quality is the key variable which impacts Banks NIMs over cycles and not interest rates (Chart 2)
Recent Business performance / developments	> Corporate NPA cycle has improved. Strengthening balance sheet – High capital adequacy, lower Credit to Deposit ratio 75%, robust floating provision and declining net NPA (Chart 1). > Banks technology platform & cost structure are key differentiators
What's changing ?	> Sector is consolidating with larger banks gaining market share > Digitization of processes and payments is driving a paradigm shift in Retail & MSME underwriting and collections > Digital payments (P2M) as a % of PFCE has double in last 2 years from 14% to 28%, driven by UPI
Prospects / Key Drivers	> India's System credit to GDP at 91% (Chart 3) is low compared to developed markets such as US at 156% > This should driver higher credit growth over the next few years as our credit penetration further increases > Retail credit growth has been high, however the experience during Covid for major banks has been stable > Several new listings of Fintech has increased the investment universe for BFSI
Valuation / Risks	> Sector valuations are marginally higher than long term averages as earnings and RoEs have surprised positively > Outcome on restructured advances under COVID need to be monitored but credit costs should remain benign

NIM – Net interest margin; SCBs – Scheduled commercial banks, PFCE – Private Final Consumption Expenditure, MSME- Micro, Small and Medium enterprises, PCR - Provision coverage Ratio

Chart 1

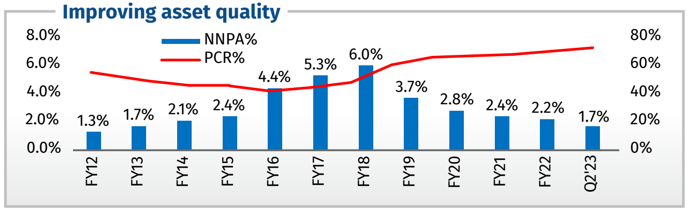


Chart 2

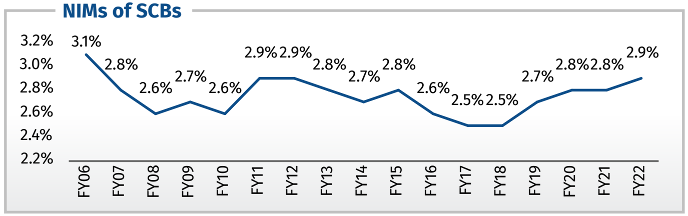
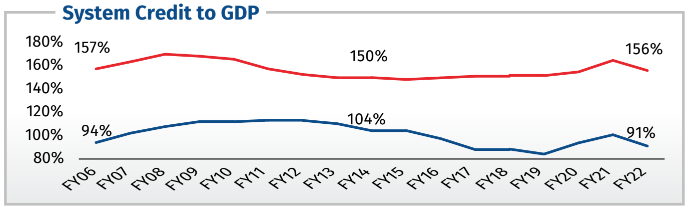
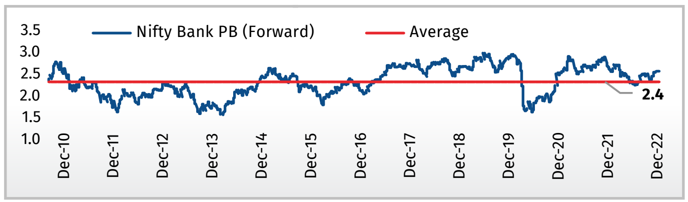


Chart 3





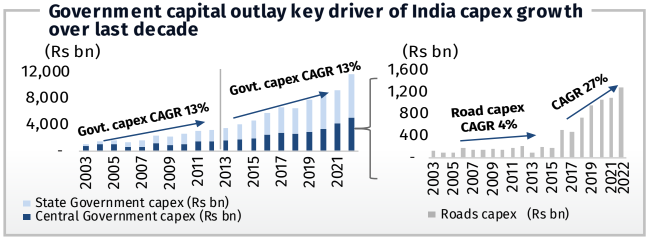
Sources: Investec, RBI, IBBI

Sector Overview : Capital goods

HDFC MUTUAL FUND
BHAROSA APNO KA

Background / Characteristics	Cyclical sector dependent on capex outlook. Capacity utilization of underlying industries/balance sheet strength a key driver for capex. Companies increasingly adopting advanced solutions such as automation, robotics, digitalization and rely on data to glean efficiencies. MNCs with access to technology have competitive advantage. Green energy transition changing nature of capex—renewable/green technologies like solar, wind, hydrogen gaining wider acceptance.
Recent Business performance / developments	Capex spending over 2010-2022 saw large divergence—Private/PSU capex growth was muted at 4% CAGR while Central/State government capex increased at 13% CAGR adding to overall capex growth of 10% CAGR (Chart 1 & 2). Private capex was weak due to highly leveraged balance-sheets and weak earnings for the core sector. Order inflows, enquiry pipelines have increased for last 12-18 months.
What's changing?	Government spending on roads, railways, metro projects, water, airports aided capex growth and is likely to continue. Improved debt levels for core sector companies such as in metals, power combined with GoI's push to aid manufacturing growth through PLI schemes can aid growth in private capex (Chart 3). Green capex to aid spending. (a) Investments into clean technologies such Flue Gas Desulphurization for conventional power plants as well as (b) investments in renewable energy such as Green Hydrogen, Solar Energy, Wind Energy will add to capex growth. Significant investments could be required in creating associated infrastructure beyond generation including Transmission and Distribution capacities.
Prospects / Key Drivers	Private capex cycle in India can see an improvement after a muted decade led by revival from core industries/new age manufacturing as well as growth in exports of products as countries look to diversify/widen supply chains. Public capex has remained strong over last few years but can see further improvement led by National Infrastructure pipeline. Key risks include weak implementation of PLI, NIP scheme and lower investments in core industries resulting in weak capex cycle.
Valuation / Risks	Current valuations are higher than long term average (Chart 4).

Chart 1



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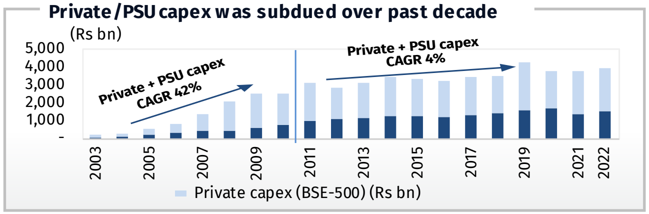

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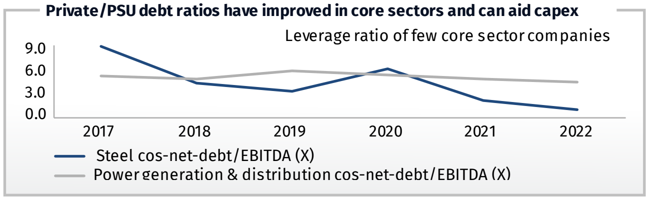
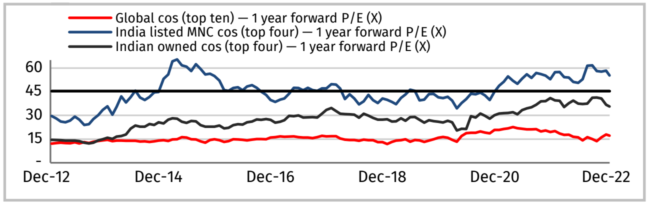


Chart 4



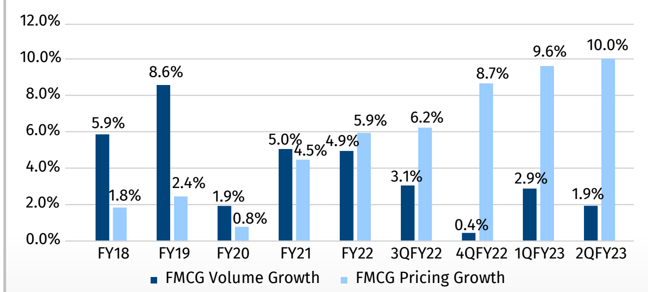
Source: India Budget Documents, Capitaline, RBI, NIP

Sector Overview : Consumer Staples (FMCG)

Background / Characteristics	> Relatively stable, predictable and profitable businesses. Less capital intensive with high return ratios. > Barriers to entry are low, but barrier to succeed are high due to presence of established brands and tough to build distribution. > Dominant market shares of leaders in many categories.
Recent Business performance / developments	> Volume growth has come down in the last 4 quarters on account of higher inflation impacting demand. > High Inflation has impacted rural growth more than urban growth. Rural growth is significantly below urban growth in the last 4 quarters. > Higher inflation has also led to higher price increases by companies in the last 1 year. > Sharp rise in raw material prices in the last 2 years has led to lower EBITDA Margin in the last few quarters.
What's changing?	> There is some moderation in raw material prices which may help improve margin going forward. > Market shares are consolidating with leading players gaining market share from the unorganized segment in the last few years. > Distribution landscape is changing with online channel contributing much higher and increasing direct to consumer (D2C) products.
Prospects / Key Drivers / Risks	> FMCG per capita consumption in India is much below Asian peers. Higher per capita consumption and premiumization opportunities remain long term growth drivers for the industry. > Risks: High penetration in large categories (like Soaps, Toothpaste etc.) can lead to selectively lower growth. Rising share of private label brands of modern trade and online channel (D2C players) are key monitorables.
Valuation	> 1-year fwd PE at 54x is lower than last 5 years average but still higher than 10 years average. Higher visibility of earnings growth over medium to longer term vs other sectors and strong return ratios may support high multiples for the sector.

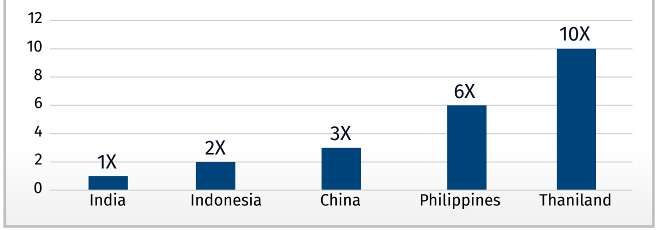
Sources: Bloomberg, Company presentations, Kotak Institutional Equities estimates

FMCG volume growth vs Pricing growth

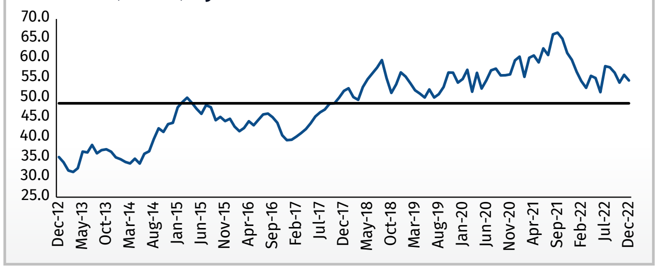


Calculated by taking weighted average volume growth of 12 listed FMCG companies

FMCG per capita consumption in India remains low



FMCG (ex-ITC) 1 yr fwd PER -Valuation



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Sector Overview : Infrastructure and Construction

HDFC MUTUAL FUND
BHAROSA APNO KA

Background / Characteristics	> Comprises of Asset owners and construction companies of roads, railways, metro, airports, irrigation, ports, affordable housing etc. > High capital intensity for both owners (asset funding) and contractors (working capital requirement). However, there is low entry barrier leading to large number of small-scale players > Execution, working capital control and strong balance sheet are key to success > High dependence on Government awarding > Rising urbanisation, decadal low inventory and vertical development leading to orders from private sector in real estate
Recent Business performance / developments	> Last 2 years there has been strong awarding by NHAI for road projects (charts 2) and water projects by states. > NHAI pipeline for next 3 years remains strong > Margins has been under pressure due to rising raw material prices but now stabilsing with moderation in energy prices > High competitive intensity in roads sector post relaxation of norms by NHAI in last 2 year, some norms getting tightened > Share of unlisted construction companies in NHAI awards has increased from ~45% in FY19 to ~75% in FY22
What's changing?	> NIP, Gati Shakti program and NMP are comprehensive schemes to drive growth. > Continued interest of foreign players to own yield generating assets through acquisitions, InvITs etc helping developers to deleverage and value unlocking which results in availability of growth capital and improvement in return ratios. > GoI has approved first river linking project. Total 30 are planned. > Strong traction seen in Jal Jeevan Mission awarding with UP being pioneer but now followed by many other states
Prospects / Key Drivers	> Companies with strong balance sheets have advantage as mix of HAM and BOT projects award are rising. > InvITs especially of HAM projects could be attractive monetisation strategy > River linking and irrigation could become another big opportunity > Balance awarding of Bullet train contracts and Metro segments to drive order inflow in railways sector
Valuation / Risks	> On overall basis, based on 1Y forward PE the sector valuation are lower than historical average

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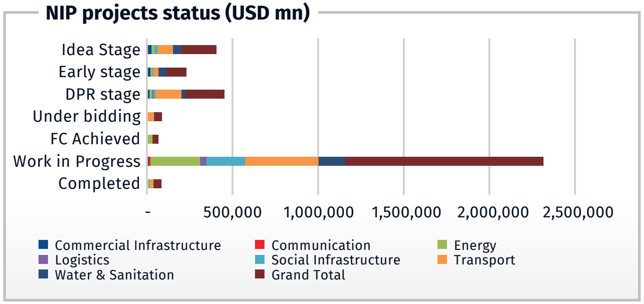
Chart 1



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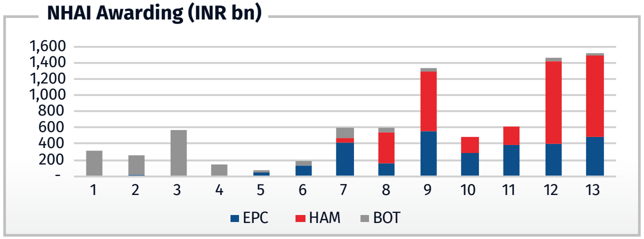
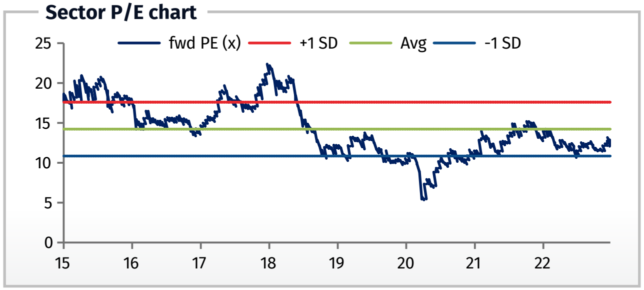


Chart 3



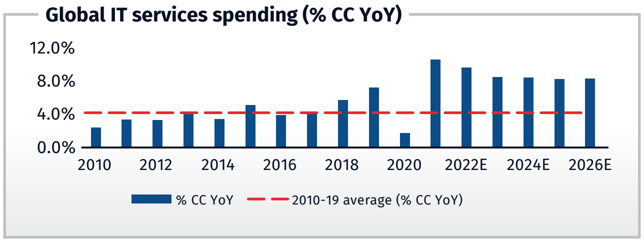
Sources: GOI, NHAI, DAM Capital

Sector Overview : IT Services

HDFC MUTUAL FUND
BHAROSA APNO KA

Background / Characteristics	> Globally, IT Services is a fragmented industry. Top-10 companies have ~25% market share. > Indian IT-BPM revenue was $227Bn in FY22. Exports contribute to ~80% of Indian IT-BPM revenues. USA (~62%), UK (~17%) and EU (~11%) account for ~90% of exports. > Indian IT-BPM sector had an employee base of over 5 million in FY22. > The pandemic has provided an impetus to technology spending across industries and increased comfort with offshore delivery.
Recent Business performance / developments	> Indian IT services revenue growth was strong at mid-teens in H1FY23, above the high-single digit growth witnessed during FY16-20. > Employee attrition has worsened to ~25%, from pre-covid levels of ~15% due to strong demand for talent > Higher employee churn and higher cost of talent impacted profitability in FY22 and H1FY23 (chart 2) > Employee utilization has deteriorated as headcount addition outpaced revenue growth to mitigate higher churn
What's changing?	> Global IT services spending is expected to remain above pre-covid levels (chart 1) due to increasing penetration of technology across sectors. > Employee attrition has stabilized in H1FY23 and likely to come down. > Headcount addition has slowed down in H1FY23 due to concerns around demand visibility.
Prospects / Key Drivers	> In the near-term, economic weakness in developed markets poses downside risks to sector growth. > Higher mix of digital services and comfort with offshoring could aid growth of Indian IT Services sector in the medium term. > Lower employee churn relative to CY21/22 and potential for improvement in utilization (efficiency) mean margin downsides are behind.
Valuation / Risks	> Post the re-rating seen in H2 2020/21, sector valuation has some down meaningfully in 2022 (Chart 3) due to margin deterioration and growth concerns amidst global weakness. > Valuations have corrected but are still ~15% above long-term average. Midcaps valuations are at a higher premium compared to their historic averages.

Chart 1



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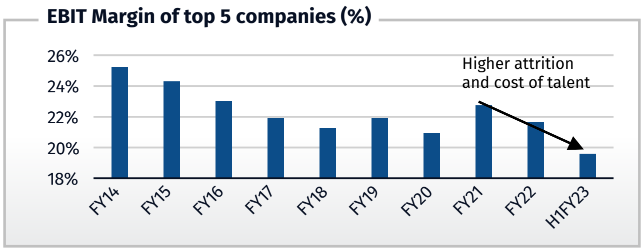
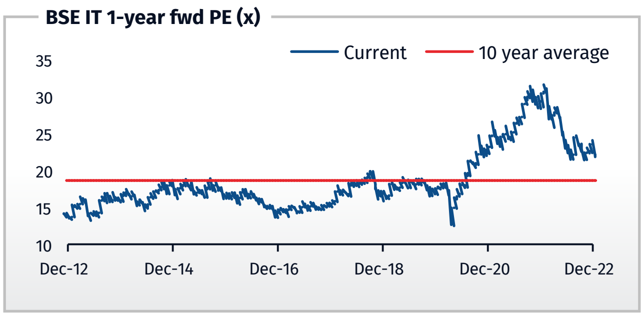


Chart 3



Sources: Gartner, Bloomberg, Kotak Institutional equities

Sector Overview : Metals

Background / Characteristics	Products are homogenous with little differentiation. Cyclical sector dependent on global prices. China is a dominant producer/consumer and has a key influence in global demand-supply, price determination. Other key metal consuming regions globally include Europe, US. Cost efficiencies and good balance-sheets are key to growth.
Recent Business performance / developments	**Demand weakened** globally in 2022 due to high inflation, US monetary tightening, China's economic deceleration resulting in a fall in metal prices, especially in 2H2022 (Chart 1 & 2). **Global inventories** for non-ferrous metals declined in 2022 on the back of supply challenges that includes (a) under-investment in new capacities over the years, (b) logistics challenges. Logistics challenges have eased and ocean freight rates declined. **Cost curves.** High energy prices have led to inflated cost curves, especially for aluminum. At current aluminum prices, high-cost smelters are incurring cash losses. However, spot prices are above marginal cost curve for zinc, copper, etc. (Chart 3).
What's changing?	De-carbonization in the metals sector gaining foothold with Government policies aimed at controlling emissions, especially in Europe, China. Energy cost for companies rising either due to (a) higher cost of conventional energy due to under investment in new capacities, Russia-Ukraine conflict, or (b) cost of reducing emissions. China looking to export less of commodity grade material and more of value-added material which has lessened the risk of large-scale dumping of low-priced metals.
Prospects / Key Drivers	**Prospect for 2023** depends on the impact of tightening monetary policies and central banks' ability to anchor inflation expectations. EU outlook is subject to further risk due to the high inflation and the energy crisis while China is expected to stabilize with easing of lockdown restrictions. Key risk is weak demand and weakening of metal prices
Valuation / Risks	Sector valuations are lower than average for global and domestic metal companies (Chart 4).

****Cost curve percentiles:** Cost Curve shows how much output (of total global demand) can suppliers produce at a given cost (per unit) . Beyond 90th percentile are projects that produce 10% of global output at highest cost and considered "marginal producers". If prices fall below costs for sustained period, they may stop producing to bring supply demand in balance.

Source: World Steel Association, Macquarie Capital Securities, Bloomberg, ILZSG, ICSG, Kotak Institutional equities

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Chart 1

Metal prices declined in 2022 due to weaker demand

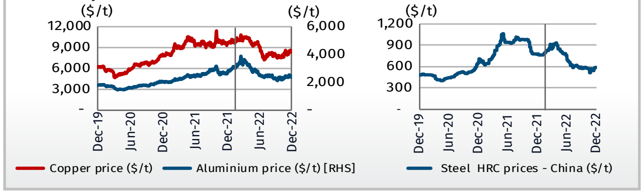


Chart 2

Demand for metals weakened in 2022; supply tight for metals like aluminum

Metals—global demand & supply estimates (mn tons)

Metals demand-supply	mn tons 2021	mn tons 2022 (f)	mn tons 2023 (f)	yoy growth rates (%) 2021	yoy growth rates (%) 2022 (f)	yoy growth rates (%) 2023 (f)
Steel: global demand	1,839	1,797	1,815	2.8	(2.3)	1.0
China steel demand	952	914	914	(5.4)	(4.0)	-
Aluminum: global demand	69.0	69.1	70.8	9.6	0.2	2.4
Aluminum: global supply	67.4	68.9	70.3	4.0	2.2	2.0
Global market balance (surplus / (deficit))	(1.6)	(0.2)	(0.5)			
Copper: global demand	25.3	25.8	26.2	1.1	2.2	1.4
Copper: global supply	24.8	25.5	26.3	0.8	2.8	3.3
Global market balance (surplus / (deficit))	(0.5)	(0.3)	0.2			

Chart 3

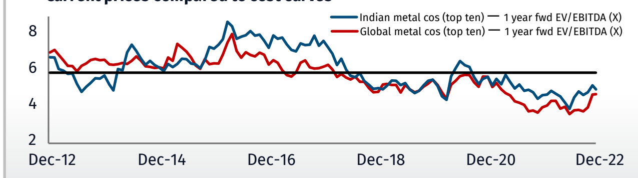
Current prices compared to cost curves

	Spot	Unit	Cost curve percentiles** 50th %	75th %	90th %
Aluminum	2,345	US$/ton	2,250	2,490	2,573
		Spot relative to costs	4%	-6%	-10%
Zinc	3,181	US$/ton	1,600	1,934	2,195
		Spot relative to costs	50%	39%	31%
Copper	8,253	US$/ton	3,108	4,016	5,200
		Spot relative to costs	62%	51%	37%

** Spot prices as on 16th Dec 22*

Chart 4

Current prices compared to cost curves

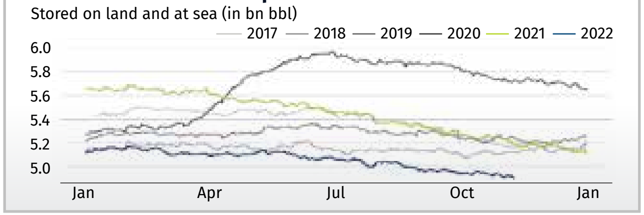


Background / Characteristics	> Highly capital-intensive business with 4-7 years gestation for large projects. This acts as a major barrier to entry > US E&P for last 13 years on average spent ~130% of their OCF to deliver US shale production growth which was the largest source of growth in the last decade > India is amongst the large pockets of demand growth in the current decade
Recent Business performance / developments	> Due to geopolitical issues and several uncertainties on both demand and supplies, oil prices has been extremely volatile. > Oil and oil product inventories are at multi-year low adding further to supply fears amidst Ukraine-Russia conflict > Gas markets globally to change structurally as EU plans to reduce its dependance Russian gas (~40% of its total demand in 2021) > Globally governments have resorted to policy measures like windfall taxes, price caps etc. to ease out pressure of record energy prices on consumers
What's changing?	> Global oil demand likely to peak out in 5-10 years but even in 2040 demand is expected to be close to current levels > As auto fuel demand declines, oil demand is likely to get converted to chemicals > Despite higher oil prices, capex resurgence is missing as managements are prioritizing dividends and buy backs over growth. Risk remains that the current run rate of capex proves to be insufficient to meet long-term demand. > India putting thrust on natural gas consumption; developing infrastructure for the same, however, availability of reasonably priced gas appears to be a challenge in the near-term
Prospects / Key Drivers	> Competitive intensity is low in auto fuel retailing – margins have headroom to expand in the long run > Diversification by companies towards petrochemical and natural gas to gradually reduce earnings volatility
Valuation / Risks	> The S&P BSE Oil & Gas Index is trading near the bottom range of its 10 year 1-yr forward P/E (Chart 3)

Sources –Bloomberg, Morgan Stanley Research

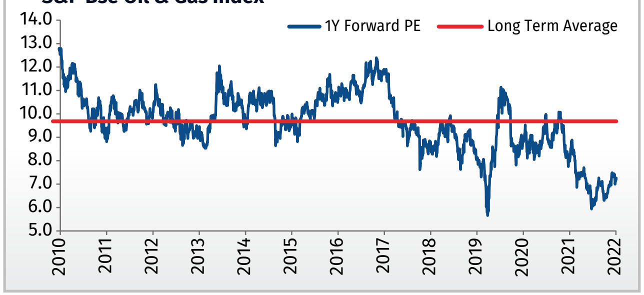
Oil prices are volatile but moving in many short cycles

Global crude oil 3 main products inventories



Note: 3 main products = gasoline, gasoil/diesel and ket/kerosene
Source: IEA, EIA/DOE, PJK, IE, Genscape, PAJ, Platts, Kpler, Morgan Stanley Research

S&P Bse Oil & Gas Index



Sector Overview : Pharmaceuticals

Background / Characteristics	> US generics is the key export market with Indian companies holding 45% volume share > Markets like the US are highly regulated, have long gestation with upfront investments in manufacturing & development. US distribution is highly consolidated. > Indian pharma is fast growing and entails limited capital need, but considerable marketing spend > Biosimilars is an evolving area, but complex approval pathway and branded nature of commercialization is inhibiting scale-up
Recent Business performance / developments	> US generics pricing erosion is trending at 7-8% due to competitive pressures and de-stocking > USFDA inspections have resumed with select companies receiving import alerts > Indian market growth in FY23 is slightly below trend due to an adverse Covid base but remains healthy > Sharp margin squeeze due to commodity inflation and freight > Resumption of promotional costs in the domestic market has also impacted margins negatively
What's changing?	> Companies are de-risking their business models by leveraging US R&D capabilities in other markets like Europe/China > US pricing pressure should abate in FY24, as re stocking commences and companies partly discontinue low margin products > Domestic market should revert to trend level 9-10% growth > API restocking should result in considerably growth and margin rebound
Prospects / Key Drivers / Risks	> Commercialization of complex generics and certain products losing exclusivities result in a better 2-year outlook vs FY22/23 > However, investment opportunities will be selective given companies' idiosyncratic growth drivers and differing investment cycles
Valuation	> Sector is trading close to its its 10-year average of 21x 1-year forward P/E

Sources: Bloomberg, Goldman Sachs Global Investment Research;
*Companies considered include Aurobindo, Cipla, Dr. Reddy's, Lupin, Sun Pharma, Zydus Lifesciences

Refer disclaimers on slide 75

Chart 1

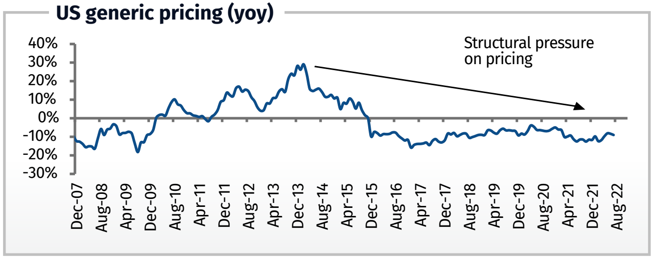


Chart 2

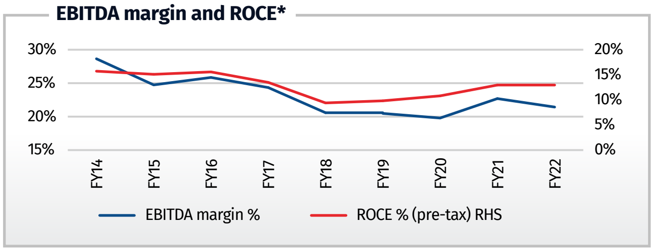
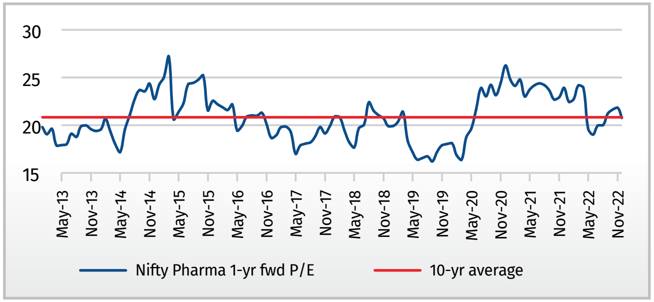
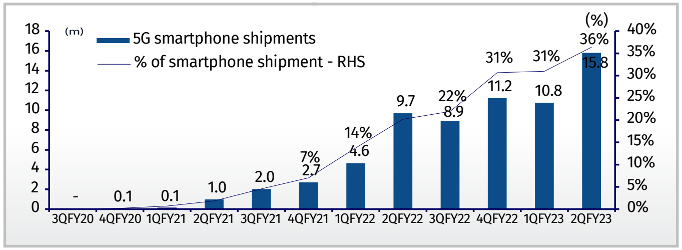


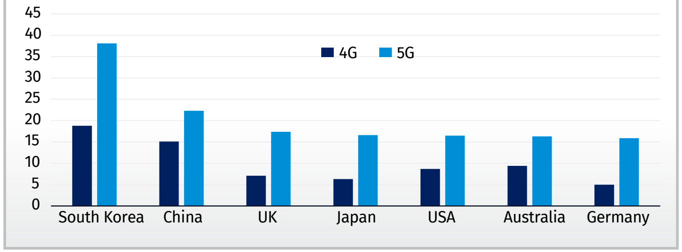
Chart 3



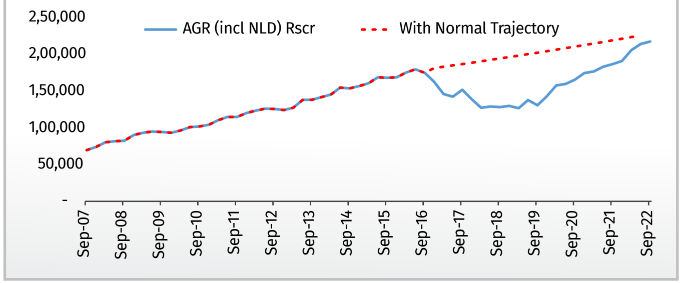
Background / Characteristics	Wireless communication has transformed daily life; India has cheapest wireless data pricing in the world (Rs5-7/GB) Predictable and profitable business if market shares settle Capital intensive with high entry barriers Indian market is an oligopoly with three private players and one state owned player; Top-2 players enjoys >75% market share
Recent Business performance / developments	Indian telecom industry has been on path of repair with revenues crossing earlier higher and reaching near normalized trajectory after series of tariff increase. Policy environment remains favorable; government announced several policy measures to support industry like lower spectrum prices, eased payment terms for spectrum, abolition of spectrum usage charge (SUC) etc. 5G spectrum auction was a success and top 2 players are already rolling out 5G across the country
What's changing?	Data consumption post Covid-19 has increased by ~45% Smartphone penetration is increasing steadily & 5G phones are already ~35% of shipments Acceleration of adoption of digital application in areas like education, healthcare, financial services to support 5G penetration 2023 will mark the year of large-scale rollout and adoption of 5G in the country which is expected to drive data consumption ever higher
Prospects / Key Drivers / Risks	Global examples suggest that as 5G adoption picks up, average data consumption per user doubles compared to 4G Accelerated 5G adoption could be another lever of revenue growth for the industry as customers upgrades to higher data allowances
Valuation	Sector trades at EV/EBITDA on 8x FY24e which is broadly in line with its historical average



Average Moible data consumption per user/month (GB)



India Telecom Industry Revenues (INR crs)



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

Framing

Tendency of investor to choose based on whether options are presented in negative or positive connotation

Investor's willingness to accept risk can be influenced by how questions/scenarios are framed

Example:

e.g. Rs 10 NAV is better Rs 100 NAV.

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Fixed Income Markets

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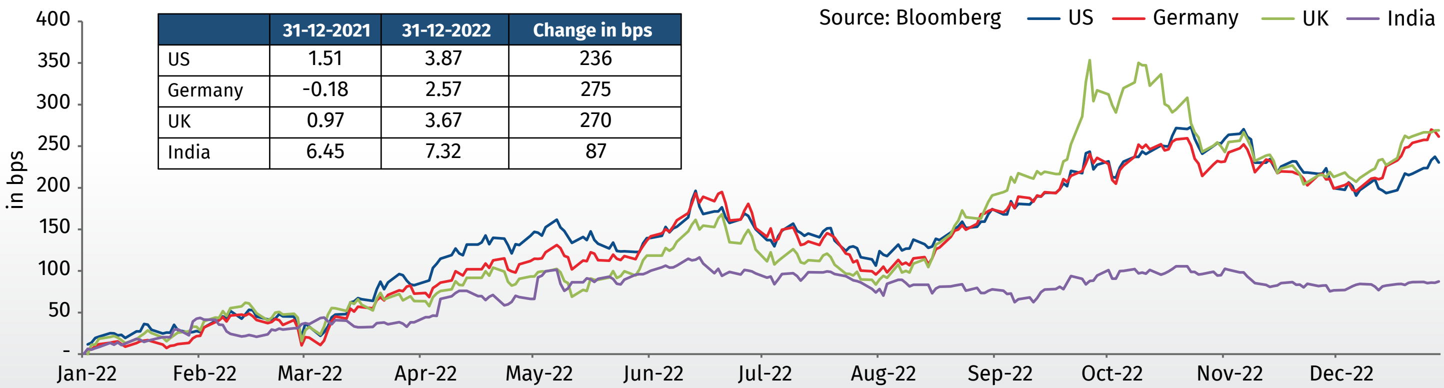
Global Bond Markets in 2022 : Annus Horribilis

Cumulative 10Y Government bond yield change in CY22

	31-12-2021	31-12-2022	Change in bps
US	1.51	3.87	236
Germany	-0.18	2.57	275
UK	0.97	3.67	270
India	6.45	7.32	87



Jan-Mar 2022

- AEs central banks increasingly become concerned with elevated inflation
- Russia attacks Ukraine resulting in sharp rise in commodity prices; Many countries impose sanctions on Russia
- India's central government announces fiscal deficit and market borrowings higher than market expectations

Apr-Jun 2022

- RBI shifts its pivot from growth to inflation; raises policy rates Commodity prices remain at elevated levels
- Intermittent supply chain disruption continues due to
- China's Zero Covid strategy US Fed accelerates the pace of rate hikes; BoE also starts to hike rates
- Global equity markets correct and financial conditions tighten

July-Sept 2022

- US labour markets remain tight and US Fed maintains its hawkish stance
- ECB surprises with higher than expected hike
- UK Government announces large unfunded fiscal stimulus and cuts select taxes; UK government bond yields spike
- India's tax collections remain strong, risk of fiscal slippage reduces
- Commodity prices correct from the peak; USD strengthens

Oct- Dec 2022

- Rise in yields triggers margin call on UK pension fund; Government rollback stimulus
- US Fed reduces pace of rate hike and shifts focus from "How much" to "How high"
- RBI also reduces pace of rate hike but maintains hawkish tilt
- Oil prices correct sharply on back of easing supply and weak demand outlook
- Bank of Japan widened their Yield curve control corridor to (+/-) 50 bps to (+/-) 25 bps

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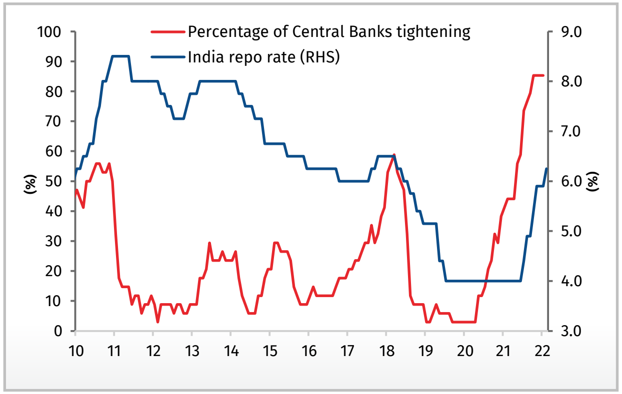
- Sharp rise in inflation (worst since 1980s) resulted in synchronized tightening of monetary policy globally
  - RBI raised repo rate by 225 bps since May-December 2022 and also normalized liquidity

Global inflation has likely peaked in view of

- Broad based decline in commodity prices in H2CY22
- Supply chain pressures have eased considerably and freight costs are off their peak
- Global growth likely to slowdown in CY23 (refer the global economy section)

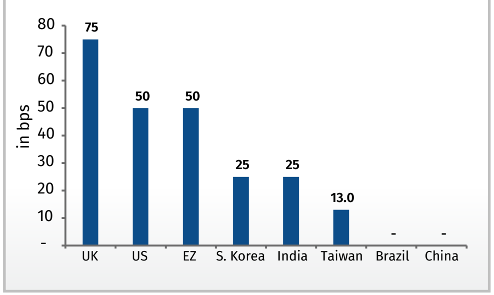
Central banks policy rates close to peak ?

- BCentral banks have moderated the pace of rate hikes recently
- Slowing growth and benign inflation outlook implies that central banks are now close to their peak rates



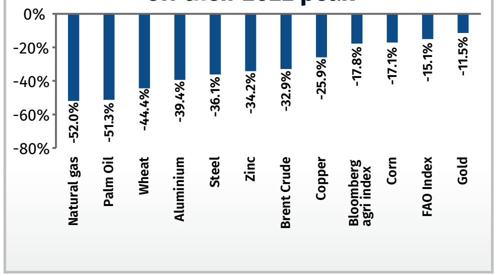
Source: Bloomberg; Total 34 central banks are considered for the purpose of above calculation. A bank which have raised policy rates in past 6 months are considered to be tightening

Rate hikes expected in CY23



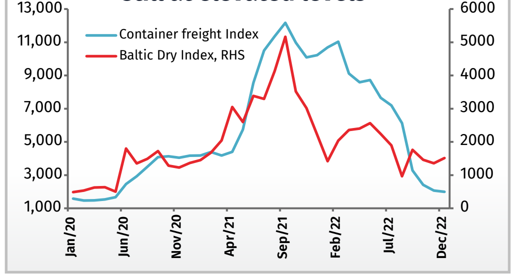
Source: Bloomberg; Consensus estimates

Commodity prices significantly off their 2022 peak



Source: Bloomberg

Supply chain easing, though still at elevated levels



Source: Bloomberg

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India inflation – likely to follow global trends ?

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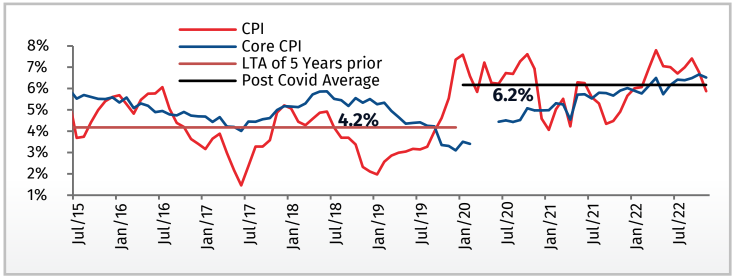
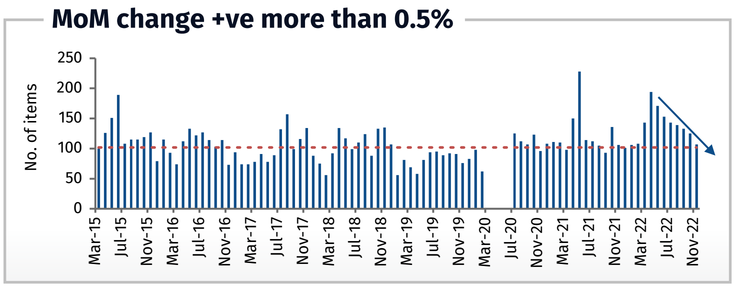
- Post pandemic, India's CPI has been range bound but at elevated levels
  - Diverse drivers - Food, fuel and commodity prices kept inflation at elevated levels
  - Core inflation was also high impacted by high WPI, sustained supply chain disruptions and reopening releasing pent up demand



Source: CMIE

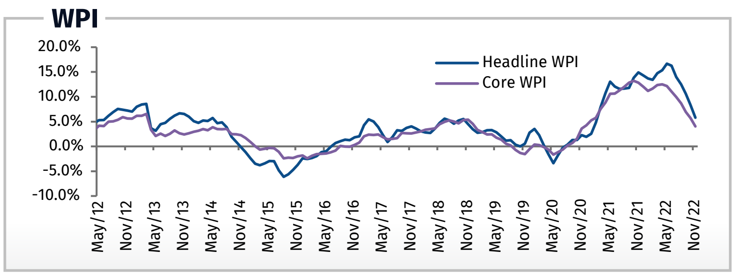
Emerging sign of inflation softening

- Number of items for which prices rose by more than 0.5% (month on month) is trending lower, thus reflecting slowing inflation momentum



Source: CMIE

- WPI has come off its highs and should ease input price pressure on CPI, albeit with a lag



Source: CMIE

Is RBI close to ending rate hiking cycle?

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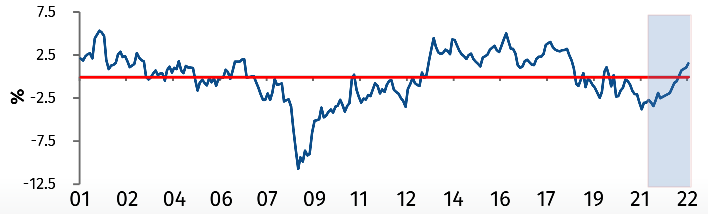
- Post pandemic, reverse repo rate (3.35%, 65 bps lower than Repo rate of 4% at beginning of year) was practically the operating rate as system was flush with liquidity
- With global liquidity tightening and elevated inflation, RBI hiked repo rate by 225 bps to 6.25% and drained out the liquidity; thus, making repo rate the operating rate and doing **an effective tightening of 290 bps.**
- At the current levels, real policy rate (Repo rate less 1 year forward inflation) has turned positive and is now higher than the long term average ; this should slowdown growth and thus, inflation over time

- Currency pressure has eased significantly over the past couple of months
  - DXY has significantly come off its peak while INR has not appreciated, thus depreciating on relative terms
  - INR depreciation is higher than other EMs and is now close to long term average REER

- Inflation has come off its peak and is likely to moderate and average within the target range of 2% - 6% in CY23
  - However, Core CPI likely to remain at elevated levels although lower than 6%

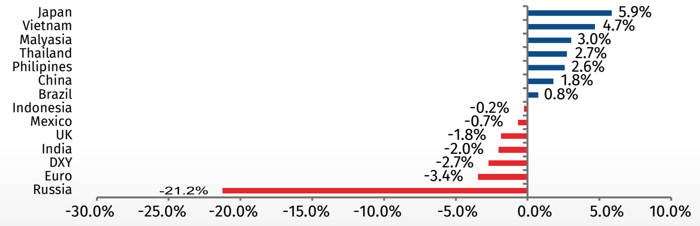
CPI is likely to ease, although direction of core CPI may weigh on RBI's decision

Repo rate less 1Y forward inflation



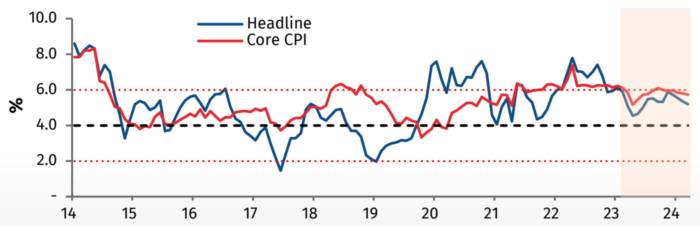
Source: Bloomberg, Kotak Institutional Equities

Major Currency Movements since 15-11-2022



Source: Bloomberg

CPI

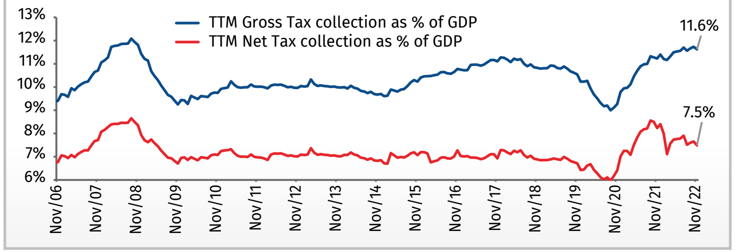


Source: CMIE

Fiscal deficit : Gradual fiscal consolidation path

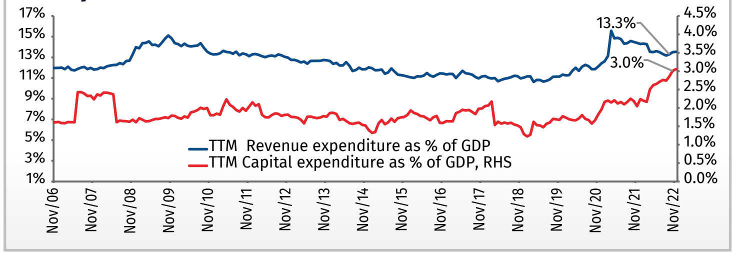
- Tax collections in FYTD23 grew at a healthy pace and significantly higher than Budget estimates (BE)
  - Broad based improvement visible in direct taxes and GST driven by better compliance and inflation
  - Impact of reduction of duties on auto fuels to be partly offset by imposition of windfall taxes
- Expenditure is also expected to rise significantly on back of higher subsidies on fertilizers and extension of free food grain scheme in FY23
- Fiscal deficit to remain close to budget estimate (~6.4% of GDP) for FY23 and likely to see gradual consolidation in FY24
  - Risk of announcement of significant additional measures for FY24 to support rural sector poses an upside risk

Tax collections as % of GDP



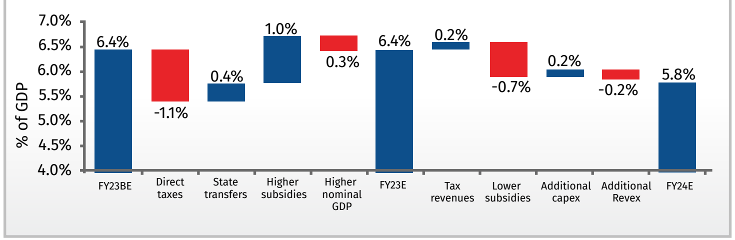
Source: CMIE, TTM - Trailing 12 months

Expenditure as % of GDP



Source: CMIE, TTM- Trailing 12 months

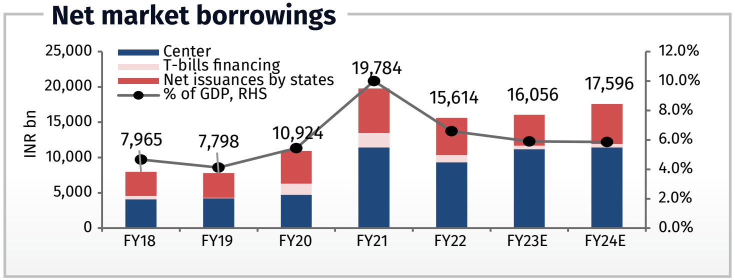
Gradual fiscal consolidation



Source: Bloomberg, Kotak Institutional Equities

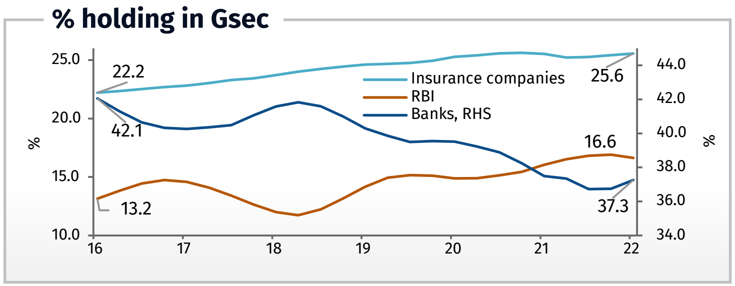
Government borrowings : Diversification of investor base likely to provide cushion against volatility

- FY23: Centre's market borrowings expected to be close to budget estimates while States are likely to borrow less
- FY24: Given expectations of gradual consolidation, net market borrowings is likely to be higher by ~**INR 1.5 trillion** but remain within manageable levels



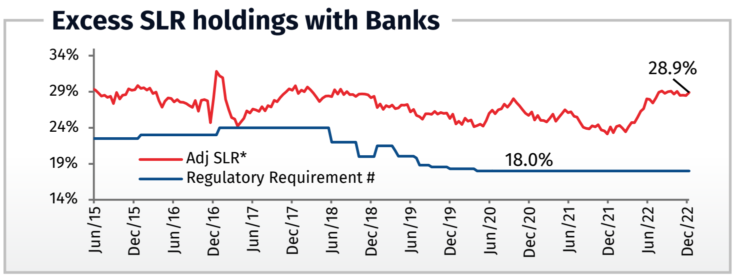
Source: CMIE

- Over the past few years, Gsec demand dynamics have changed with rise in share of stable long term buyers like insurance companies
  - In the event of tight liquidity and / or high volatility in Gsec yields RBI stepped in to buy Gsec through open market operations (OMOs)



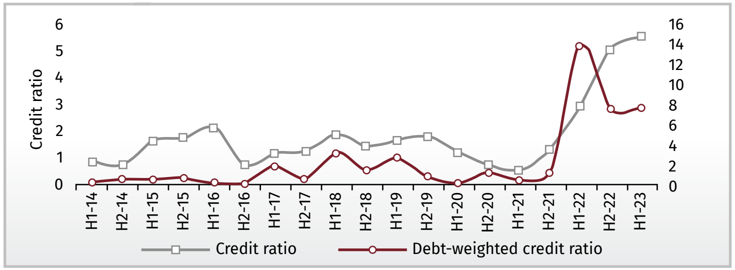
Source: CMIE

- Diversification of investor base provides alternative source of demand for Gsec, thus diminishing volatility



Source: RBI * Adjusted for Interbank liquidity. #factoring in requirement / adjustment under liquidity coverage ratio and carve out allowed under Marginal standing facility

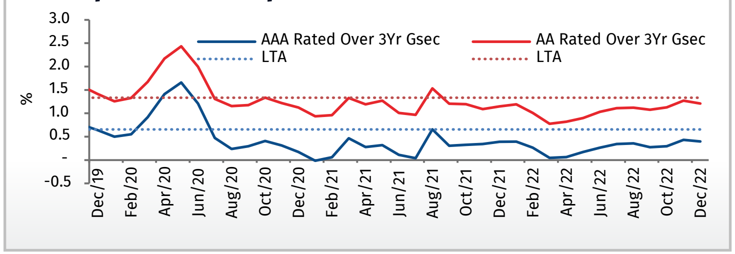
- Credit upgrade to downgrade ratio is near all time highs partly due to surplus liquidity and supportive policies of government announced during pandemic



Source: Crisil Ratings

- Lower supply of corporate bonds (both AAA and non-AAA rated) has resulted in credit spreads of corporate bonds over Gsec falling sharply vis-à-vis long term average

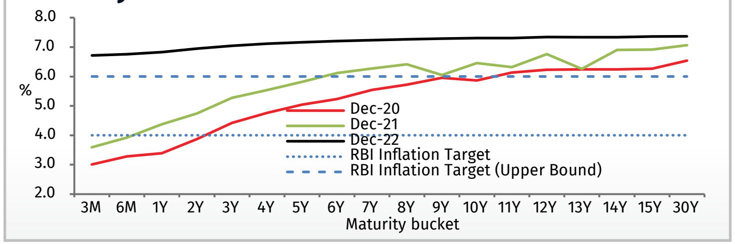
Corporate bond spreads



Source: Bloomberg

- In CY22, Gsec yield curve flattened as liquidity normalized and RBI raised rates while the longer end yields remained anchored driven by robust demand by long term investors like Insurance, provident fund (PF), etc.

Gsec yield curve



Source: Bloomberg

Source: CMIE, RBI, Kotak Institutional Equities
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Interest Rate Outlook – Key Drivers

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Growth	▶ Global growth outlook muted ; India's FY23 GDP growth supported by domestic demand; ▶ Slowdown in FY24 likely on back of tight monetary policy and weakness in global trade/growth
External Sector	▶ With USD strength easing and BoP likely to improve sequentially in FY24, thus easing pressure on INR; ▶ Quantitative tightening globally to impact capital flows to EMEs including India ▶ FX reserves remains comfortable and to provide buffer against volatility
Inflation	▶ Outlook on inflation remains benign in view of softening growth and easing supply chain pressures; ▶ Commodity price corrections to provide some relief too
Monetary policy	▶ Pace of rate hikes have moderated globally and are not far from peak but likely to keep rates at elevated levels till clear signs of inflation slowing ▶ RBI's policy rate is close to terminal rate with real yield based on 1Year forward inflation estimate in positive territory ▶ Growth slowdown in FY24 likely to weigh on RBI's policy decision
Market borrowings	▶ Gradual Fiscal consolidation to keep supply of Gsec at elevated but within manageable levels ▶ Growth in AUMs of Insurance and Provident & Pension fund to cushion volatility in yields ▶ Collections in NSSF likely to be muted as differential between term deposit rate and small savings rate has narrowed

With global monetary policy cycle likely to peak in 2023, yields are likely to trade in a range with a downward bias

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Risks to Outlook

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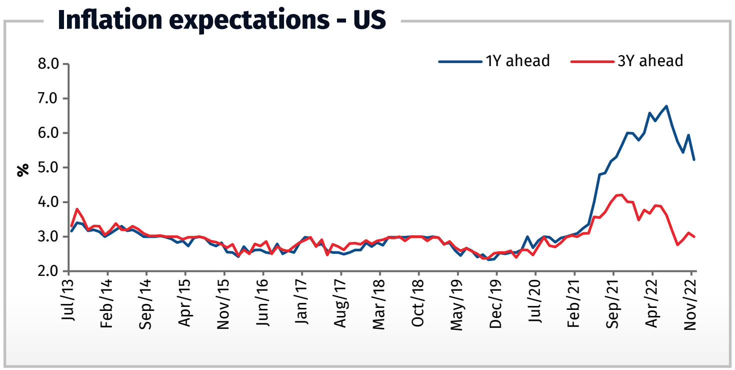
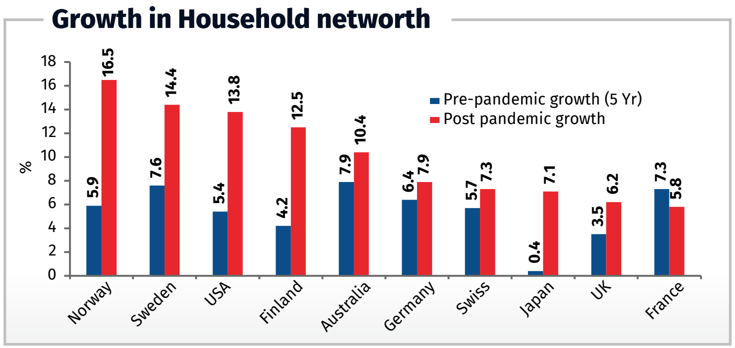
Inflation expectations continue to remain high compared to pre-pandemic averages and thus, poses a risk of actual inflation persisting for longer and settling at structurally higher level than US Fed's targe

- Inflation, if persists, above the comfort level of central bankers can result in interest rate remaining high and liquidity tight for longer



Globally growth can surprise positively if consumption momentum holds up well due to sustained pent up demand and higher wealth effect due to rise in asset prices (real estate and equities)

- Build up of capacities given the elevated prices can result in pick up of investments and capital spending



While supply chain pressures have eased, they still remain higher than pre-pandemic levels; moreover, given the sharp rise in covid cases in China, risk of it spreading to other countries is high and consequent supply chain disruption could resurface

Meet our Investment Team

HDFC MUTUAL FUND
BHAROSA APNO KA

Equities

- **Chirag Setalvad**, Head - Equities,
- **Roshi Jain**, Senior Equity Fund Manager
- **Rahul Baijal**, Senior Equity Fund Manager
- **Gopal Agarwal**, Senior Equity Fund Manager
- **Srinavasan Ramamurthy**, Equity Fund Manager
- **Krishan Kumar Daga**, Fund Manager, Passive Strategy
- **Rakesh Vyas**, Equity Fund Manager and Infrastructure & Real Estate Analyst
- **Anand Laddha**, Equity Fund Manager and BFSI Analyst
- **Abhishek Poddar**, Metal, Industrial and Defence Analyst
- **Amit Sinha**, Consumer and Retail Analyst
- **Rakesh Sethia**, Oil & Gas, Consumer Durables, Logistics and Telecom Analyst
- **Nikhil Mathur**, Pharma and Healthcare Analyst
- **Dhruv Muchhal**, Utilities and Chemical Analyst
- **Priya Ranjan**, Auto Analyst
- **Balakumar K**, IT and Business Services Analyst
- **Bhagyesh Kagalkar**, Fund Manager - Commodities and Media & Pipes Analyst
- **Arun Agarwal**, Co-Fund Manager - Arbitrage and Dealer - Equity
- **Nirman Morakhia**, Dealer - Equity and Backup Fund Manager - Arbitrage and Passive
- **Abhishek Mor**, Dealer - Equity
- **Monish Ghodke**, Textile / Building Material Analyst and Backup Dealer - Equity
- **Nandita Menezes**, Investment Process Control and Backup Dealer - Equity

Fixed Income

- **Shobhit Mehrotra**, Head - Fixed Income
- **Anil Bamboli**, Senior Fixed Income Fund Manager
- **Anupam Joshi**, Senior Fixed Income Fund Manager
- **Vikash Agarwal**, Fixed Income Fund Manager and Dealer
- **Praveen Jain**, Co-Fund Manager - Low Duration Fund and Credit Analyst
- **Swapnil Jangam**, Co-Fund Manager - Liquid Fund and Dealer
- **Bhavyesh Divecha**, Credit Analyst and Backup Dealer- Fixed Income
- **Sankalp Baid**, Economist and Backup Dealer - Fixed Income

Support

- **Sadanand Moily**, Assistant for Investment Department
- **Sanjay Bhagat**, Assistant for Investment Department
- **Prashant Kudchadkar**, Librarian

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Sunk Cost Fallacy

Tendency to follow through on an endeavor if we have already invested time, effort, or money into it, whether or not the current costs outweigh the benefits.

Example:

Averaging out or not selling stocks despite there being inherent change in its valuation

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The views are 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 given is for general purposes only. Past performance may or may not be sustained in future. The statements are given in summary form and do not purport to be complete. The views / information provided do not have regard to specific investment objectives, financial situation and the particular needs of any specific person who may receive this information. 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. Stocks/Sectors referred above are illustrative and not recommended by HDFC Mutual Fund / AMC. The Fund may or may not have any present or future positions in these sectors. The above has been prepared on the basis of information which is already available in publicly accessible media. The above should not be construed as an investment advice or a research report or a recommendation by HDFC Mutual Fund/HDFC AMC to buy or sell the stock or any other security covered under the respective sector/s. HDFC Mutual Fund/AMC is not guaranteeing any returns on investments made in the Scheme(s). 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.

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नव वर्ष की हार्दिक शुभकामनाएँ! ಹೊಸ ವರುಷದ ಶುಭಾಶಯಗಳು !
ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା! নববর্ষের শুভ কামনা!
নৱবৰ্ষৰ শুভেচ্ছা! నూతన సంవత్సర శుభాకాంక్షలు ! نیا سال مُبارک ہو HAPPY NEW YEAR
2023
ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା! নববর্ষের শুভ কামনা!
নৱবৰ্ষৰ শুভেচ্ছা! HAPPY NEW YEAR نیا سال مُبارک ہو ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ!
નવા વર્ષની શુભકામનાઓ! नवीन वर्षाच्या हार्दिक शुभेच्छा! নৱবৰ্ষৰ শুভেচ্ছা!
ਨਵੇਂ ਸਾਲ ਦੀਆਂ ਲੱਖ-ਲੱਖ ਵਧਾਈਆਂ! ନବବର୍ଷର ହାର୍ଦ୍ଦିକ ଶୁଭେଚ୍ଛା! নববর্ষের শুভ কামনা!
নৱবৰ্ষৰ শুভেচ্ছা! నూతన సంవత్సర శుభాకాంక్షలు ! نیا سال مُبارک ہو HAPPY NEW YEAR
નવા વર્ષની શુભકામનાઓ! नवीन वर्षाच्या हार्दिक शुभेच्छा! নৱবৰ্ষৰ শুভেচ্ছা!