



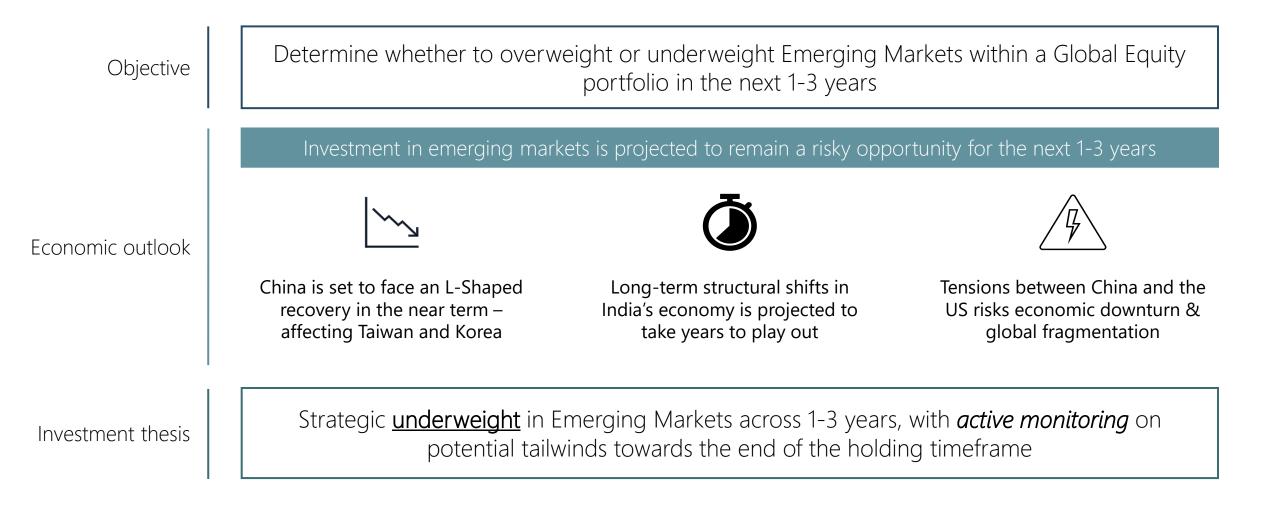
Emerging Markets – A Strategic Underweight

Joelle Ting, Jaris Kassim, Ally Chen, Shobini Ravindran





Strategic underweight for Emerging Markets due to macroeconomic and geopolitical outlooks in 1-3 years



Overview of the MSCI Emerging Markets Index (EEM)



EEM has a heavy allocation towards China, and equities in the Information Technology and Financials sector

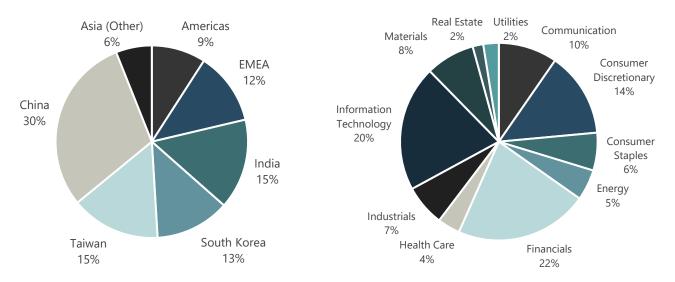
Overview

- MSCI Emerging Markets Index (EEM) tracks large- and midcapitalisation equities in over 24 emerging markets countries
- Greatest exposure to China (30.67%), followed by Taiwan (14.77%) and India (14.21%)
- Largest sector weightings in Financials (21.60%) and Information Technology (20.27%)
- Recent underperformance in returns, compared to the MSCI All Country World Index (ACWI) due to macroeconomic and geopolitical factors in countries, such as China

Top 10 holdings

Name	Weight (%)	Sector	Country
Taiwan Semiconductor Manufacturing	6.76	Information Tech.	Taiwan
Tencent	3.90	Communication	China
Samsung Electronics	3.88	Information Tech.	South Korea
Alibaba Group	2.54	Consumer Disc.	China
Reliance Industries	1.40	Energy	India
Meituan	1.17	Consumer Disc.	China
ICICI Bank	0.92	Financials	India
PDD Holdings ADS	0.89	Consumer Disc.	China
Infosys	0.87	Information Tech.	India
HDFC Bank	0.80	Financials	India

Country & sector composition



Driving factors behind allocation



China has experienced an economic boom in the past decade, with India expected to follow suit in the mediumterm



Taiwan & South Korea are major exporters of semiconductors – critical to modern technology, clean energy & healthcare



China's banks have been resilient due to healthier balance sheets & adequate liquidity, following 2017 deleveraging campaigns

Evolution of the MSCI Emerging Market Index



China plays an increasingly important role in EEM since inception; however, India may offer more attractive future returns

Country weights in EEM over time



Key commentary

- China's contribution to EEM increased from ~17% in 2010 to a peak of ~38% in 2020; however, the allocation towards China has since decreased closer to ~30% in 2023
- While Brazil comprised of a substantial ~16% of EEM in 2010, this has dropped to ~5%
- From 2020 onwards, there has been a shift in greater allocation towards India
- Contributions from Taiwan and South Korea have remained relatively similar

China's economic boom

China's rapid growth in the last decade can be attributed **to largescale capital investment and rapid productivity growth**, with China's GDP growing by an average annual rate of 6.6% between 2013 to 2021. China's **linkage to international markets** led to greater exports and consolidation of technology transfers

Srazil's recession

3

From 2014 - 2016, Brazil experienced recession for 11 consecutive quarters, and a debt downgrade. This was a result of **corruption scandals** and **political chaos**, as well as **falls in commodity prices** beginning in 2012, which were a driving factor of Brazil's growth in the 2000s. **Debt also ballooned**, comprising of 70% of Brazil's GDP

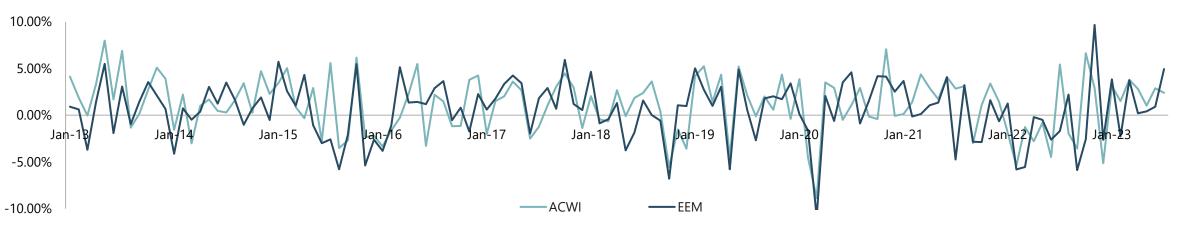
India's promising economy

India is expected to become the **world's third largest economy** by **2027**, and its GDP grew by 7.2% in 2022-23, despite a global slowdown. This can be attributed to **favourable demographic trends**, **structural reforms**, investment in **technology** and integration with the **broader global economy**

Comparison of EEM and ACWI

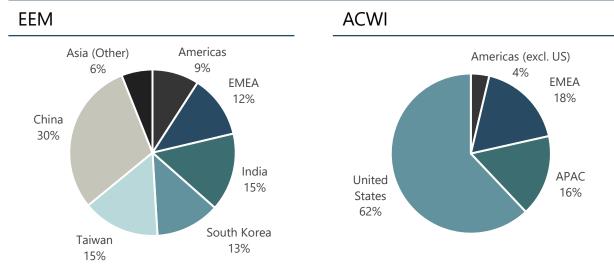


Emerging markets has experienced higher volatility and lower returns, compared to a global index, weighted more heavily in the US



ACWI and EEM historical monthly returns

Comparison of country & sector composition



Index performance – total returns (%)

					Annualised		b
	1 Mo	3 Mo	1 Yr	YTD	3 Yr	5 Yr	10 Yr
EEM	(6.16)	3.47	1.25	4.55	(1.39)	0.98	2.99
ACWI	(2.79)	6.61	13.95	14.80	7.23	7.46	8.56



MSCI EEM has less attractive financial ratios and risk-return rewards compared to MSCI ACWI

Financial metrics

	Div Yield (%)	P/E	P/E Forward	P/B	07.00/	0.44
EEM	3.05	14.20	11.78	1.61	-27.8% Jensen's	().44 Treynor's
ACWI	2.09	19.37	16.20	2.74	alpha	measure

ACWI and EEM risk & return profile

	Annualised Std Dev (%)			Sharpe Ratio		
	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr
EEM	17.52	19.03	17.01	0.08	0.10	0.22
ACWI	17.16	17.92	14.47	0.58	0.44	0.57

Key commentary

- Despite cuts in China's GDP forecasts and recent underperformance, EEM is trading above its historical P/E average of 11.2x, indicating it is overvalued
- In 2000, AWCI traded almost twice the forward P/E of EM (24x vs 12x). This discount gap has since narrowed mainly driven down by ACWI. Investor preference for EM equities over DM is a signal of inflated pricing of the index given existing headwinds and uncertainty
- EM equities are at crisis-level lows relative to DM. The MSCI EM index P/E ratios suggesting otherwise, pointing towards overvaluation.

EM minus DM 12-month forward P/E & EPS



ACWI and EEM YTD performance

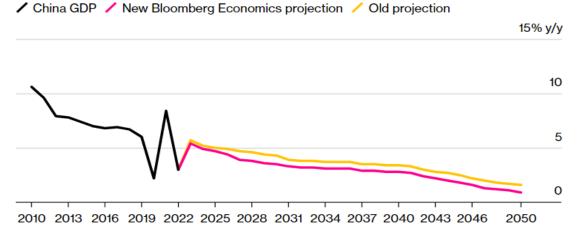


Recent underperformance of MSCI EEM relative to MSCI ACWI

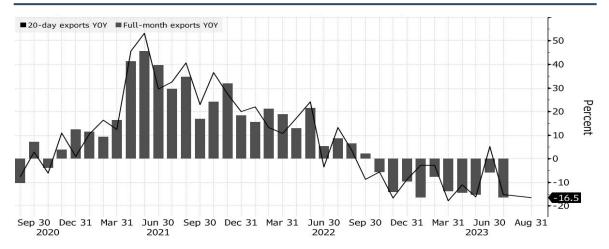


Economic contractions, from weaker export volumes, for several emerging markets have underpinned lower EEM performance

China's long-term economic outlook



Export volumes for South Korea



Economic activity in key emerging countries





- Sharp drop in **demand** for Taiwan's **semiconductor** / chip exports
- GDP contraction of 3.02% in first quarter
- Labour shortage impacting tourism and services sector

🔹 India

- Rise in domestic consumption and more investment from global manufacturers (1 7.8% in GDP)
- Rising income inequality, monsoon season and weaker exports may compromise India's growth

The major emerging market economies are heavily dependent on exports. Weaker demand from China, a prominent trading partner, and falls in chip consumption could prolong economic slumps

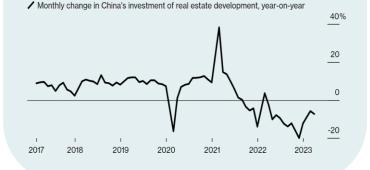
China's lacklustre post-pandemic recovery



Turbulence in the shaky property sector, consumer spending and trading volumes are inhibiting China's recovery

Shaky property sector

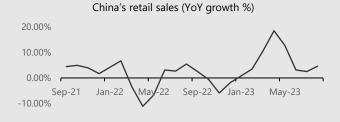
- China possesses the largest property market in the world, which is integral to its national growth (~20% of GDP in 2020)
- Existing home prices in major metropolitan cities, such as Shanghai & Shenzhen, have fallen by >15%
- 12% of China's current GDP consists of developer debt, which is at risk of default (e.g. Country Garden - \$535m debt)
- Despite cuts in interest rates and stimulus measures, such as relaxing of purchase restrictions, Beijing's countermeasures are not sufficient





Shortfall in consumer spending

- Consumers spending shift from high-end fashion towards travel and purchases in the wellness sphere
- Imminent Chinese economy double-dip recession posing concerns for spending
- Perpetual cycle as consumer spending drops in fear of job security. Weak labour market -> Jobless rate increase from 4.2% (2022) to 5.6% (2023)
- More government stimulus required; however, PBoC hesitant to act as China is facing weaker Yuan and elevated debt levels

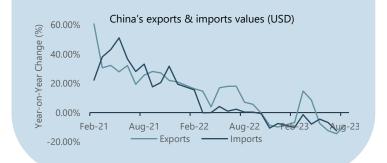


-20.00%



Weak trading volumes

- Despite an easing in August, China's export values remain subdued at 8.8%
- Attributed to weak global demand, which is unlikely to change, given the US is expected to enter a mild recession in 2H 2023 and inflation is persistent in Europe
- Decline in Chinese imports, indicative of downturn in domestic demand and subdued consumer spending
- China is an export-oriented country, with exports contributing 20.7% of GDP in 2022

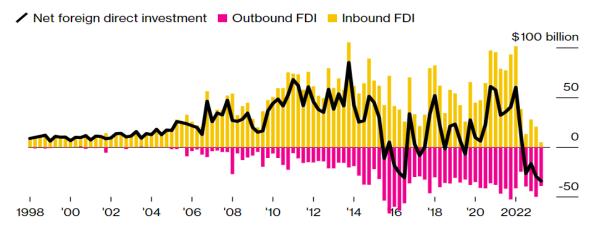


China proving unattractive to foreign investment



China's FDI falls as growing concerns over geopolitical tension and slowing recovery dampen foreign investor confidence

China's foreign direct investment



Source: China's State Administration of Foreign Exchange

Impacts of FDI



US chip investment ban in China has spillage effects on South Korea & Taiwan, as Samsung, Hynix and TSMC (leading players in chip production) all operate production facilities in China



Foreign-funded enterprises (FFEs) tend to be most **dynamic** and productive in Chinese economy, with **domestic firms largely** benefiting from FFEs



Drop in foreign investors has led to less developed industrial productivity, heavily affecting the manufacturing industry & exports. These are the largest contributors to China's economy



One of the most prominent impacts of FDI in China has been the **creation of employment opportunities.** This is a heightened concern given the **rise in unemployment** China's central bank has cut **foreign exchange reserve requirement ratio** from **6% to 4%** to recover all in the Yuan and **attract more foreign investment**, as investors can realise higher returns when converting back to domestic currency

- Huge decline in FDI due to COVID-19, decrease in corporate profits and regulatory tightening (e.g. clampdown on foreign consultancy firms)
- FDI is still slow to recover as it was 2.7% lower in January June 2023, compared to a year ago
- Notable outflow in 2022 includes China's \$2.1bn investment in Australia
- Export controls and sanctions are likely to shrink the playing field in China for foreign investment

China's feedback of monetary policy tightening in the US



Interest rate hikes by developed countries have adversely affected emerging market economies, worsening the lack of capital inflow

Key statistics for China

1.02bn
barrels of onshore

160% of GDP is tied to corporate debt

Key commentary

30.9%

increase in China's

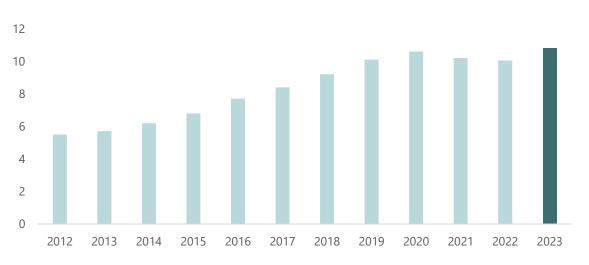
imports (YoY July)

Emerging markets are less attractive as global investors turn to the US for stable returns, reducing capital inflow and devaluing of exchange rate against the USD

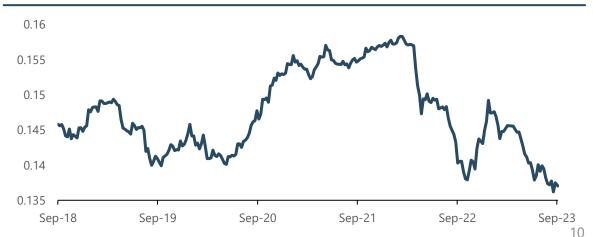
crude stockpiles

- China will take advantage of cheap Russian crude to support the economy and for stockpiling reasons, and foreign exchange reserve actions will appreciate CNY to support lower importing costs
- Higher interest rates, along with CNY depreciation, makes it more expensive to pay back borrowing denominated in dollars. However, China has not been forced to tighten its monetary policy yet
- Significant rise in China's interest rates has detrimental effects as the financial system has a **high exposure to corporate debt**. As a result, **profitability** of these companies may dampen significantly, affecting equities investment

China's crude oil imports

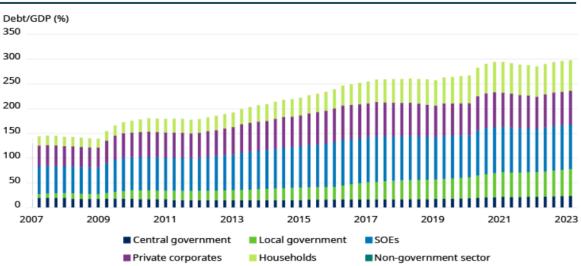


CNY/USD Historical



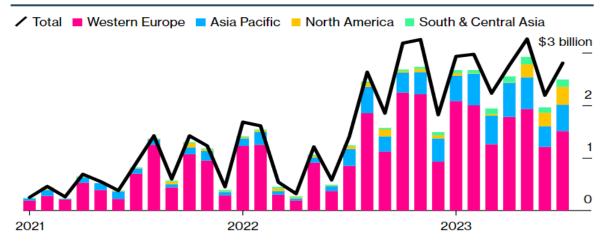


Poor consumer confidence, low fiscal stimulus, and structural changes in the real estate market will stunt China's growth



China's government debt reaches a record high

Electric Car Exports From China Have Soared Over Past Year

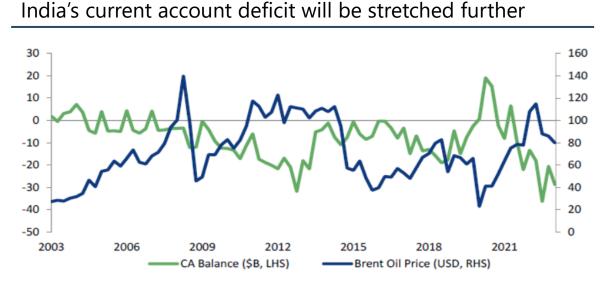


- China is set to face a L-Shaped recovery in the short-term, due to soft growth, weak demand for credit due to the structural changes in the housing market and negative CPI
- The housing market is also undergoing a structural shift away from speculative demand that had made up majority of housing sales historically
- Local government debt has risen over the past decade as its roll in delivering counter-cyclical stimulus through infrastructure spending has increased in the face of a structural slowdown in growth – debt restructuring is needed
- With the central government showing no urgency to deliver major stimulus into the property market , such fiscal stimulus will be less effective in the near term
- The state is devoting resources to foster "hi-tech" growth by issuing bonds to fund high-speed rail and renewable energy infrastructure (solar and wind), cheap loans for businesses, support for consumer demand through tax breaks for EV buyers

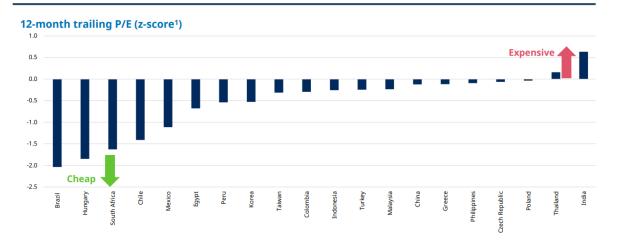
India remains an overvalued market



Whilst India remains an attractive investment destination in long-term, market valuations remain stretched in the near-term



India is the most expensive emerging market - overvalued



- India's long-term growth opportunity in the global economy is compelling but is not an attractive overweight position in the 1-3 year timeframe
- The long-term structural shifts in India's economy is projected to take years to play out, and the market appears to be pricing in this scenario to occur sooner despite headwinds
- The country's core inflation rate is likely to remain elevated above the RBI's 4% target for most of 2023 and 2024 which may lead the central bank to eventually tighten policy more
- India's already record-wide current account deficit is under pressure with their currency hitting all time lows
- Corporate profitability in India remains challenged. India's return-on-equity has been on a downtrend since 2007, and at 14.2% which is roughly 10 percentage points off peak levels from that time
- India is the most expensive EM based on trailing P/E. However, this valuation is premature, pointing towards an overvaluation.

Further dampening of Taiwan and South Korea's economies



Slumps in export volumes and weakening global growth rates will delay the recovery of emerging economies

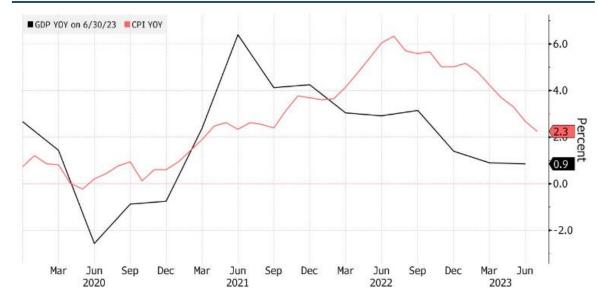
25.0 ■ Taiwan's real GDP ■ Exports -20.0 -15.0 -10.0 change y/y -5.0 -0.0 -3.0 -5.0 -10.9 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Taiwan's export slump affecting GDP growth

Key commentary

- Overseas orders for Taiwan have shrunk 12% in July YoY, due to plunge in international demand for technology products
- Stubborn headwinds for Taiwan's exporters, with cuts in GDP to 1.61% (slowest since 2015) and more severe forecasts to export declines (9.51%)
- While global economy is expected to recover, IMF predicts global growth rate for next 5 years will be weakest since 1990 (2.4% in 2024, 2.9% in 2025)
- Recovery in export volumes to pre-pandemic levels is unlikely, given looming political tensions & sluggish China recovery

Slowing GDP growth in South Korea



Contributing factors



Uncertainty on rebound of semiconductors (key to Korean trade) and exports continue falling rapidly as China is Korea's largest trading partner



Concerns in **Korea's credit market** after bad property loans led to closure of credit union branches. **Household debt** is still on the rise



Bank of Korea poised to make **future rate hikes** for rest of 2023 and potentially 2024, due to acceleration in interest rates in August from fuel costs

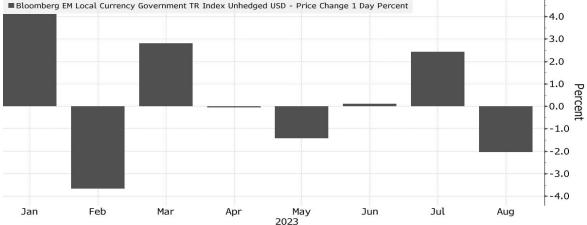
Ease of monetary policy in the next 12-months seems unlikely in hawkish Asia



Driven by the "higher-for-longer" rhetoric from Fed, policymakers seeking to support their currencies and El Niño threat to inflation

Hawkish trend is setting in across Asia ex China

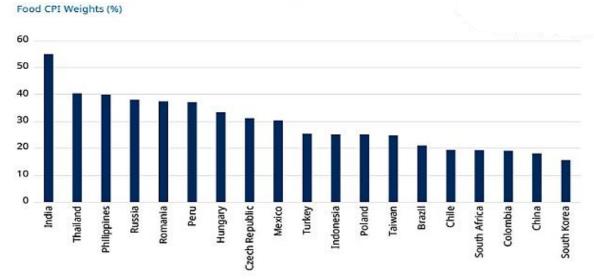




Downside potential for further EM rate hikes into 2024

- South Korea's central bank pledged to keep policy restrictive for a "considerable time" as cost of food staples, such as rice, climbs
- Bank Indonesia it would allow short-term bond yields to rise to support the rupiah, adding to signs it's a **long way** from shifting to an easing stance
- India's central bank said last week it's growing more concerned about surging food prices as well

EM countries are highly exposed to food cost spikes



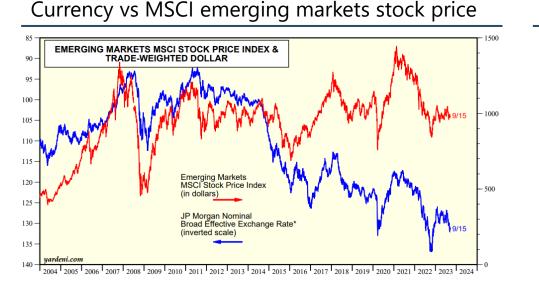
Investors should not underestimate the impacts of El Nino

- Weather pattern may cause inflation in Argentina and Brazil to accelerate by an additional 0.75 percentage point, and by 0.5 percentage point in India and the Philippines
- If proven to be intense, this can drastically increase hawkish risk to the EM inflation story, could cause stagflation and
- India's export ban of non-basmati rice to lower food prices will add further pressure to global costs at time El Nino is raising concerns about crop damage

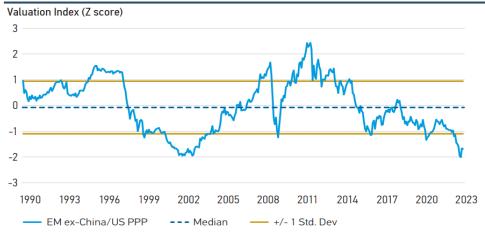
Currency dynamics paint a muted picture for EEM outlook



A decade of US dollar appreciation has resulted in heavy erosion of emerging markets equity returns



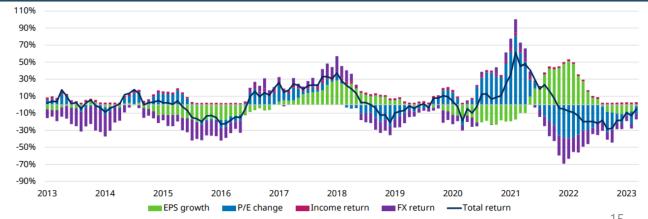
EM (ex-China) currencies are at crisis-level lows



Key commentary

- Despite better relative growth prospects, improved external balances and competitiveness and sustainable sovereign and private debt, relative valuations of currencies and equities have dropped to lows last seen in 2000.
- EM economies have a large share of their credit, trade and debt priced in **dollar terms**. Swings in FX are linked to capital outflows, tighter financing conditions and heightened financial instability.
- **Currency** moves on average have contributed to **one-third of total returns** historically for dollar investors.
- Recently, China's currency hit 16-year lows relative to USD and faced capital account outflows of \$49bn, plunging its market's appeal.
- Rupee value has steadily declined, closing at a record low of 83.27 against the USD on the 18/09 (Monday).

Decomposition of MSCI EEM index total returns



Underlying risks with Emerging Markets



Political tensions, geo-economic fragmentation, social and governance risks could threaten EEM

Political tensions

- Increasing tensions with Taiwan could instigate war between US & China, with China seeking to annex Taiwan as early as 2027
- Mounting political strife between China with other emerging economies (India, Taiwan & South Korea)
- The US-China war would decrease China's GDP by 25% and the US by 5%. It would also threaten one-third of the world's seaborne traffic passes, and blockades of Chinese energy imports

- COVID-19 and the Russia-Ukraine war has led to caution on globalisation, with investors seeking to diversify away from China
- China's share of US goods imports has fallen to 14.1% - lowest level since 2006, with US companies reorganising supply chains to decrease reliance on China

0- $\overset{\circ}{\Box}$ Social

- Alleged violations of human rights in China's Xinjiang region, with the UN and US accusing China of conducting genocide against Uyghurs
- Exploitation of child labour is prevalent in emerging economies, such as India, particularly after COVID-19, as more families have fallen into poverty. India's child labour has increased 180% YoY in 2021
- Alongside an aging population, China's youth unemployment is at an alarming 20.8%
- China's limitations of foreign access to data has led to **fears on data transparency** and the possibility that China's economic crisis is being understated
- Corruption remains a pertinent issue for emerging economies, as evidenced by Latin America's political turmoil and **illicit income** in China's healthcare sector

Deglobalisation

Agenda for decarbonisation

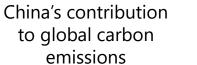


Emerging markets are responsible for more than two thirds of global carbon emissions, with China being the largest contributor

Key statistics



40%



of global renewable expansion will stem from China 9.5% average annual growth between 2021 – 2024

Government initiatives



In the short-term, China's economy is **still reliant on coal** for economic expansion, given lower prices and to support urbanisation during the energy transition period



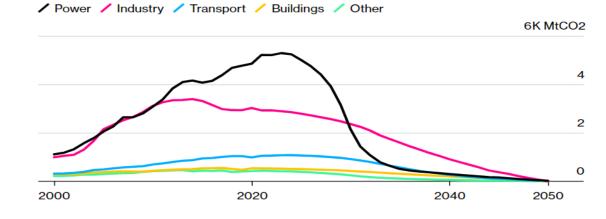
Consumer & manufacturer subsidies, tax breaks and government uptake of EVs has led to China accounting for **60% of the world's EV sales** in 2023

—–

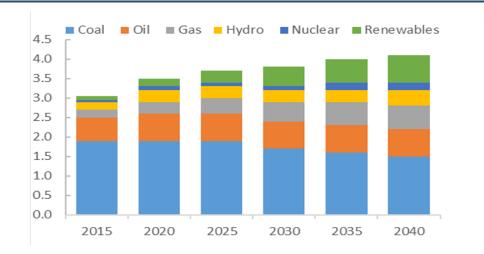
Government is retrofitting coal plants with **carbon capture**, **utilisation and storage (CCUS)** and imposing **carbon credits** to reduce emissions in the long-run

Aligns with VFMC's investment stewardship of supporting risk-adjusted returns through climate positive investments that will contribute to netzero emissions; however, may not be realised until 2030 onwards

China's emissions forecast

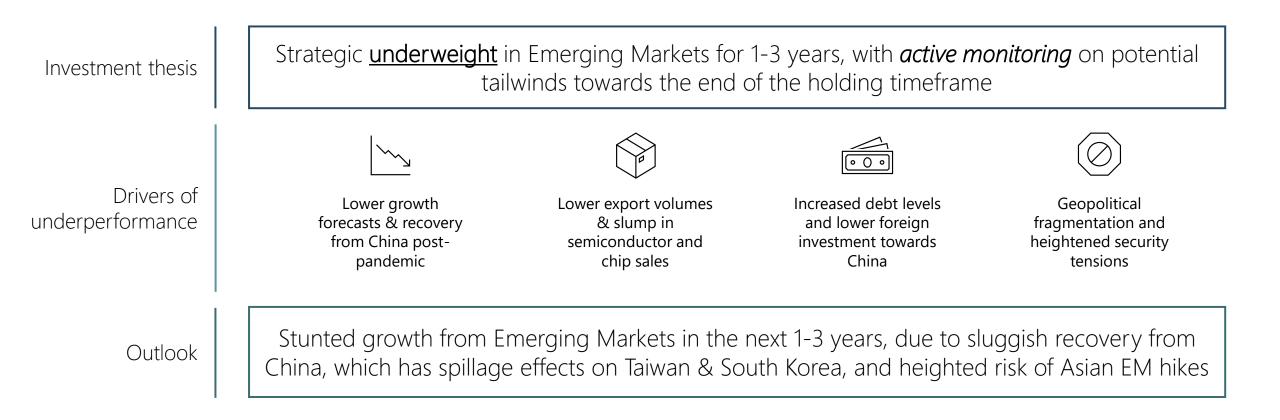


CNPC energy demand forecast





Quantum Advisory recommends an underweight case for Emerging Markets due to near-term macroeconomic and geopolitical outlooks





Appendices







Main Deck

Executive Summary

Overview of the MSCI Emerging Markets Index (EEM)

Evolution of the MSCI Emerging Markets Index

Comparison of EEM and ACWI

Quantitative breakdown

Recent underperformance of MSCI EEM relative to MSCI ACWI

China's lacklustre post-pandemic recovery

<u>China proving unattractive to foreign</u> <u>investment</u>

China's feedback of monetary policy tightening in the US

China's sluggish short-term growth

India remains an overvalued market

Further dampening of Taiwan and South Korea's economies Ease of monetary policy in the next 12months seems unlikely in hawkish Asia

Currency dynamics paint a muted picture for EEM outlook

Underlying risk with Emerging Markets

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VFMC Investment Philosophy

MSCI All Country World Index

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China's manufacturing activity

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Latin America's macroeconomic outlook

Heightened geopolitical tensions

El Niño's economic impact is being underestimated

China's oil demand

Historical allocations & exploring potential allocation changes

Quantitative analysis (continued)

Looking past the 1-3 year timeframe

VFMC Investment Philosophy



Our Pillars

Whole of Portfolio Approach

Portfolios are best managed as a whole, rather than simply a sum of parts. Enabling portfolio flexibility is important to respond to market developments.

Long-term Horizon

Long-term investing provides a competitive edge in generating better investment outcomes but should recognise the balance between short- and long-term pressures.

Active Management

Market inefficiencies can provide opportunity to add value via active management – which is managed to reflect the change in prospective risks and returns over time.

Diversification

Effective diversification is essential for maximising risk and return outcomes across the portfolio.

Risk is Multi-Dimensional

Risk is multi-dimensional and its management should support the successful meeting of clients' long-term objectives.

Execution

Robust and efficient execution is an important contributor to overall investment outcomes.

Investment Stewardship

Being an active investment steward adds value to our clients' portfolios by managing risks, identifying opportunities and influencing positive ESG outcomes.

Our Foundations

Clients

Clients' specific circumstances are considered when designing and managing their portfolios.

Culture & Governance

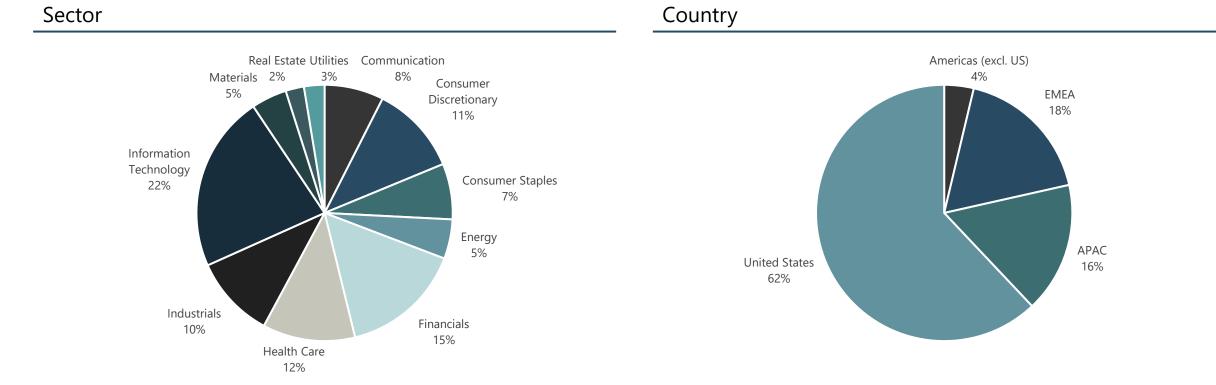
Good governance practices improve the quality of decision making that can lead to better investment outcomes.

"The dynamic asset allocation approach tends to take **a time horizon of anywhere from three to 12 months**, and takes relatively **modest tilts around the strategic benchmark portfolio.** So you have a range of relatively small positions that are on for much of the time and **adds incremental alpha over time**"

> Russell Clarke Chief Investment Officer VFMC

MSCI All Country World Index





Top 10 holdings

Name	Weight (%)	Sector	Country
Apple Inc	4.42	Information Tech.	US
Microsoft Corp	3.69	Information Tech	US
Amazon Com Inc	2.01	Consumer Disc.	US
Nvidia	1.81	Information Tech.	US
Alphabet Inc Class A	1.26	Communication	US

Name	Weight (%)	Sector	Country
Alphabet Inc Class B	1.15	Communication	US
Tesla	1.14	Consumer Disc.	US
Meta Platforms Inc Class A	1.04	Communication	US
Berkshire Hathaway Inc Class B	0.74	Financials	US
Eli Lilly	0.73	Healthcare	US
			2.2



Jensen's alpha

Treynor's measure

Jensen's
$$\alpha = r_p - [r_f + \beta (r_m - r_f)]$$

Where:

 r_p = return of the Emerging Markets portfolio r_f = risk-free rate (10-yr Treasury bonds) β = beta of Emerging markets portfolio (0.64) r_m = return of the market (MSCI ACWI)

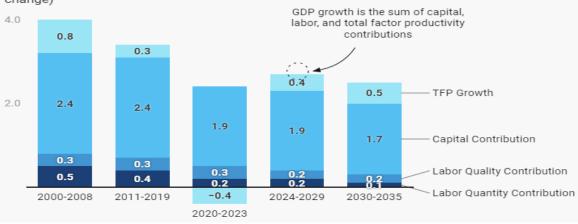
$$Treynor's\ measure = \frac{r_p - r_f}{\beta_p}$$

Where:

 r_p = return of the Emerging Markets portfolio r_f = risk-free rate (10-yr Treasury bonds) β = beta of Emerging markets portfolio (0.64)



Global GDP growth outlook



Contribution of factor inputs and efficiency changes to global GDP growth (average annual % change)

Key commentary

- Global real GDP is expected to further slow to 2.4% in 2024 \geq (down from 2.7% in 2023 and 3.3% in 2022)
- Moderation in positive trends in consumer spending and service-sector activities
- Despite peaks in headline inflation, core inflation has been stickier and has not decisively peaked in many economies
- Speed of disinflationary process is difficult to access and is dependent on demand, labour market dynamics and passthrough from past input price increases
- Tightening of monetary policy rapidly has exposed weaknesses in the financial markets
- Long and variable lags in passthrough of monetary policy could indicate there is further financial turmoil on the horizon

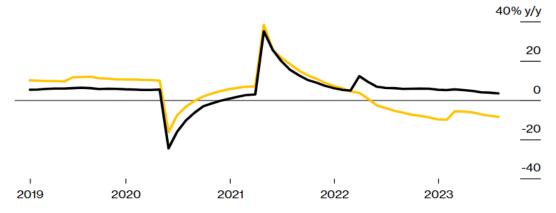
Country GDP growth forecasts (%)

	2022	2023	2024	2024- 2029	2030- 2035
US	2.1	1.9	0.5	1.7	1.6
China	3.0	5.1	4.4	4.4	4.1
India	6.8	5.8	5.0	4.7	4.3
Asia (Other)	5.5	3.9	3.6	3.6	3.4
Brazil	3.0	2.4	1.3	1.5	1.3

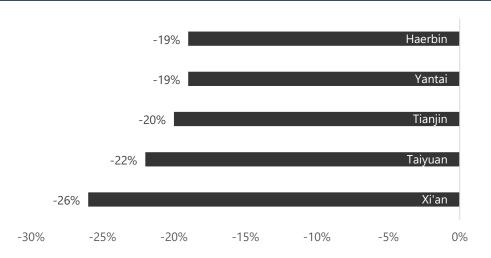


China's investment in real estate development

China's fixed-asset investment / Property investment



Existing home-price declines



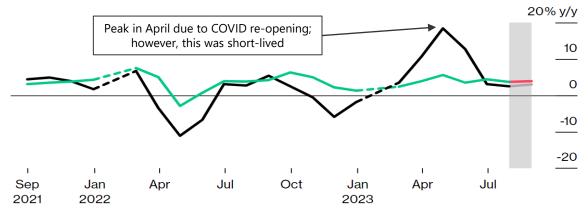
- Existing home prices falling by at least 15% in major metropolitan areas like Shanghai
- Existing homes in Hangzhou have dropped about 25% from late 2021 highs
- Top cities, like Shenzhen, considered resilient against housing downturn have also slumped by 15% in past three years
- Companies responsible for about 40% of Chinese home sales have defaulted
- Turmoil in property has left suppliers unpaid and homebuyers without apartments, as they have made hefty downpayments
- New home sales for top 100 property developers declined by 33% in July, compared to 2022
- Trying to stimulate by relaxing restrictions for residential purchases in major cities, regulators considering reduction in down payment and lowering agent commissions
- 12% of China's GDP consists of developer debt and is at risk of default
- 16-point plan to address liquidity crisis, and pleading of 200 billion yuan (\$28 billion) in special loans to ensure stalled housing projects are delivered

China's consumer spending

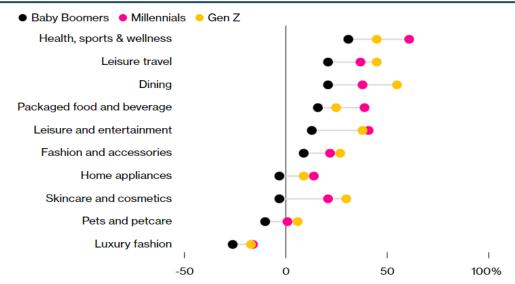


China's retail sales (YoY growth %)

China industrial output value added (yoy)
Economists' consensus estimate
Retail sales value
Consensus estimate



Spending intentions amongst Chinese population



Key commentary

Labour market

- Labour market remains weak, despite increase in jobless rate to 5.6% in February and youth unemployment at 18.1%
- There is calls for more stimulus; however, central bank is facing several constraints, such as weaker yuan and elevated debt levels in the economy
- Drop in China's trade activity, which creates tens of millions of jobs, has been a key driver to the surge in youth unemployment

Luxury purchases

- Pre-pandemic, China was world's biggest source of luxury buyers
- Consumers are spending more on the sports & wellness sphere (fitness equipment, gym memberships etc.) at the expense of high-end fashion & expensive bags
- Baby boomers, the first generation in China to embrace Western brands, are least likely to splash out post-pandemic, with their luxury fashion spending to drop the most this year

China's trade volumes

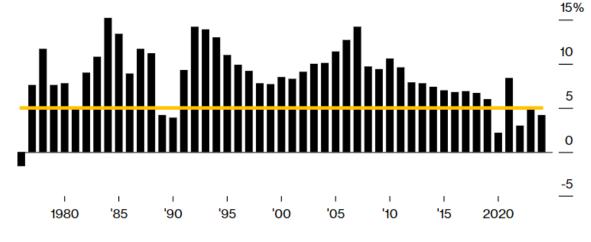


China's export volumes (USD)



Stagnation in China's economic growth

Annual economic growth



Key commentary

Exports

- China has experienced a trade slump, with overseas shipment falling 8.8% in dollar terms from a year earlier
- Muted global demand has weighed down on shipments, as the world grapples with inflation and recessionary fears
- China has been an export-oriented country, with trade exports accounting for over >20% of the country's GDP
- Little respite for China's exports as US is likely to enter a mild recession and Eurozone remains weak

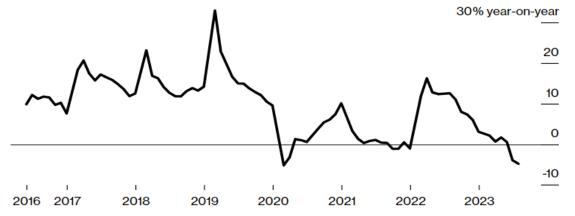
Imports

- Decline in Chinese imports; however, this has seen a milder decline in recent months, indicating that downturn in domestic demand may be bottoming out
- Taiwan and South Korea are reliant on China, and shipments to China have dropped 27.5% for South Korea due to slide in semiconductor prices and slackened demand from China
- China remains No. 1 buyer of Korean products and sustained struggles by China in jumpstarting its economy could be a bellwether of continued slump in exports for other emerging markets

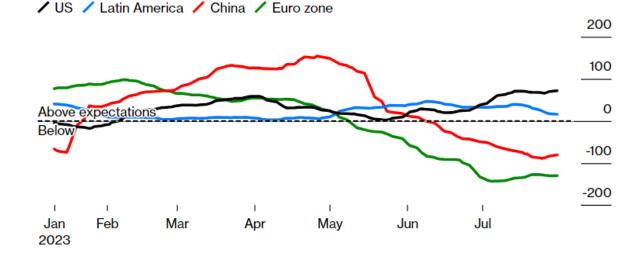


China's fiscal support

✓ Growth of government spending, cumulative



Expectations on economic performance



Key commentary

Current stimulus

- Lowered financing restrictions and mortgage costs for developers – this is in a doom loop as diminished cash flow leaves developers unable to finish properties, hurting buyer appetites and further declines
- Ended crackdown on internet platform companies
- Boosted local government funding via debt refinancing
- Stopped short of increasing own debt issuance, unlike before where special treasury bonds were sold in 2009 and 2020

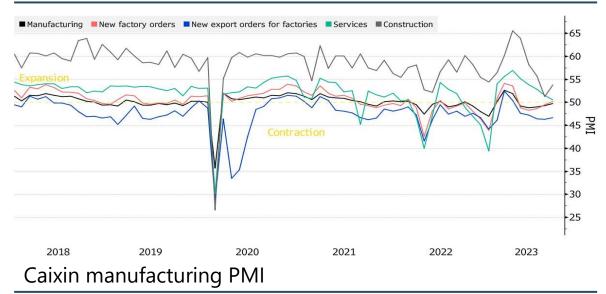
Rationale

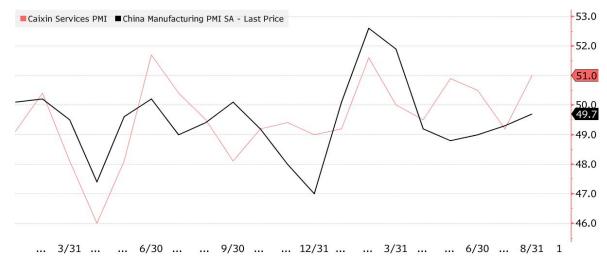
- Xi Jinping is pursuing "quality" growth, rather than economic expansion
- China is seeking to move away from a reliance on property and local government debt to stimulate its economy
- In the past, debt-fuelled expansion has led to industrial overcapacity and white elephant projects, which Beijing is trying to avoid
- Concerns on fostering a welfare dependency, and "laziness" amongst the population as employment is seen as the best way to boost consumption
- Beijing does not trust local governments to distribute money efficiently or without corruption

China's manufacturing activity



China's factory activity



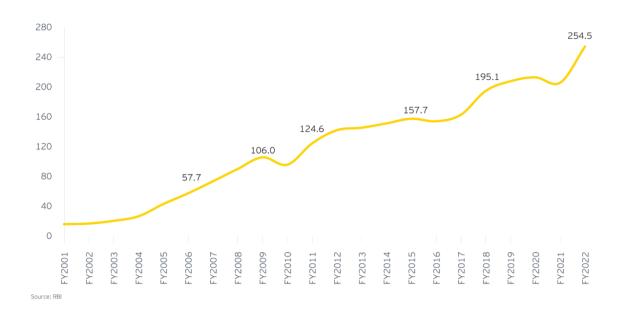


- China's manufacturers have been struggling due to slump in global demand and subdued domestic spending
- Manufacturing contraction eased slightly in August; however, market reaction to the figures was muted
- Manufacturing PMI in August looks as if activity will be flatlining in the near term
- Ebbing in the boom of 'consumption revenge' and there are concerns as to whether service spending can continue expanding in a sustainable manner, especially considering there is a lack of additional stimulus
- Traffic to many long-haul destinations in China are still down heavily compared to pre-COVID, due to political friction
- Further weakening of services spending rebound and manufacturing activity could lead to disappointment in Asian economies that are banking on recovery of Chinese tourist arrivals



India's technology sector indicates promising growth for positive investment

India services exports (US\$bn)



14% growth in services exports in past 20yrs



of the world's GCCs are set up in India >50%

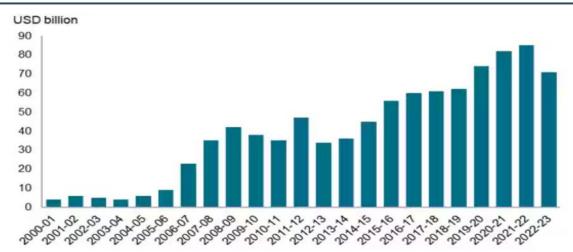
contribution to GDP by services sector

- India is emerging as the world's technology and services hub, being one of the largest global exporters of IT and BPO services
- India is growing as the preferred destination for GCCs partly due to value of the Indian demographic dividend, with over 1,500 GCCs set up in India as of end of 2022
- India accounts for over 45% of the GCCs in the world with 50-70% of global technology and operations headcount based out of India GCCs
- Over 99,000 recognised start-ups in India that has continued to garner global interest and FDI
- Rise in internet users, expected to reach 900m by 2025 from 759m in 2022, primarily from rural areas, will help propel the tech industry growth
- As India further gains strength as the world's technology and innovation hub, the share of transformational and more complex, expertise-based services will enable Indian IT services sector to grow faster
- Indian companies are now leading with new software innovations, due to strengthening relationship with the US and access to Americanprotected technologies

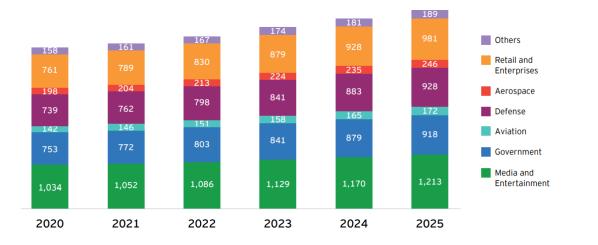
India's technology sector



Foreign direct investment inflows



Opportunity in India's space tech sector



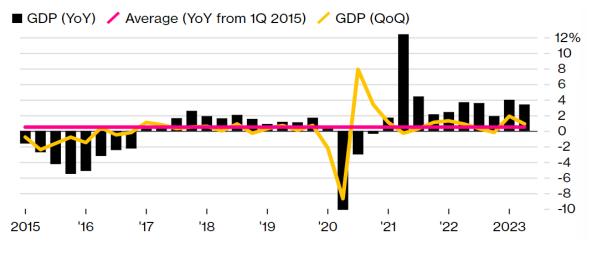
US-India relations

- Deeper relationship with US on a governmental and privatesector level will create a secure supply chain and positive feedback loop
- India can develop original intellectual property through US
- India's growth can compensate for US' loss of trade with China
- As India gains access to US-protected technologies like semiconductors, they can begin to innovate
- ~25% of foreign direct investment inflows to India was dedicated towards the Computer Hardware and Software sector

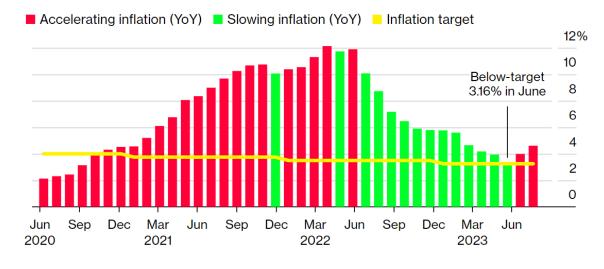
- 2020-25 CAGR growth rate for global space economy is 6%, with a 196% increase in investment into India's space tech start-ups between 2020-21
- India ranks No. 5 globally for number of space tech companies, positioning the country for accelerated growth
- Satellites have potential to bridge digital divide in India e.g. connectivity for education and improving digital health solutions
- US-India relationship and further private investment will be pivotal in growing space tech, given US' ranking as No. 1



Economic activity



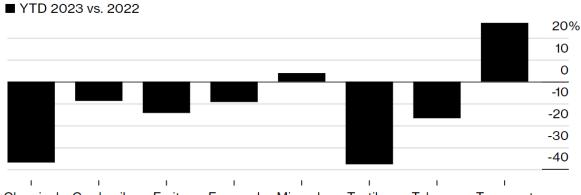
Inflation



- Under President Lula, there has been a push for monetary policy to be loosened in hopes of boosting economy
- While annual inflation has increased for two consecutive months, price pressures in services sector have exhibited signs of improvement
- Industrial production has increased slightly by 0.1% in June, while retail sales were unchanged
- Analysts have raised their 2023 economic growth estimates for Brazil up to 2.29%
- Robust labour market and strong services have helped to deliver back-to-back quarters of growth
- Elevated interest rates are likely to sap momentum from Latin America's largest economy in coming months
- Given Brazil's turbulent decade and political turmoil, there are still questions on the sustainability of Brazil's growth under Lula

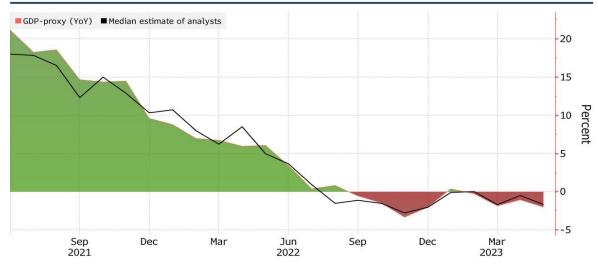


Argentina's exports



Chemical Crude oil Fruit Furs and Minerals Textiles Tobacco Transport products leathers

Shrinkage in Chile's economy (YoY %)



Key commentary

Argentina

- Argentina is headed towards a recession, with economic activity contracting for the fourth straight month
- Annual inflation is running over 100% and agriculture output has been curbed by a drought
- > Overall exports have plunged 35.8% in June from a year ago
- Political uncertainty is running high ahead of October's presidential election

Chile

- Industrial production has contracted more than expected in May as mining slumped
- Retail sales have fallen at double digit rates in nine of the last 13 readings
- Central bank is preparing to cut interest rates after holding steady at 11.25%

Peru

- El Nino weather pattern has paralyzed its important fishmeal industry
- Political turmoil has chipped away at the nation's success story (six presidents within seven years)



Precarious US-China relations



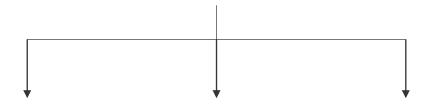
Xi Jinping has ordered China's military to annex Taiwan as early as 2027



US views China's presence in the Indo-Pacific region as military aggression



Alliances have been formed between US-South Korea-Japan against the threats of China & North Korea



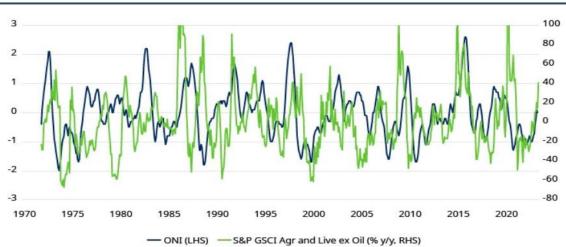
Escalation of US-China war could threaten **one-third** of the world's seaborne traffic passes, and blockades of Chinese energy imports Disruption to **critical technological supply chains**, and supply constraints on Chinese manufactured goods and industrial production War lasting one year would decrease US' GDP by 5%, and **China's by 25%**; however, US may be too strapped to sustain a war

Catalysts & responses

*

- Election of Taiwan's presidential forerunner, Lai Ching-te, could further strain China-Taiwan relations, given his support of pro-independence
- Lai's official stopover to the US has incited an agitated response from China, claiming it to be indication of a push for separatism
- China has recently conducted military exercises around Taiwan and escalated aerospace activities near the coast
- Last year, China protested the visit of House Speaker, Nancy Pelosi, to Taiwan and launched military drills in response
- Biden has vowed to defend Taiwan against an invasion from China, abandoning the usual US policy of strategic ambiguity
- US has imposed sanctions on major Chinese companies, such as Huawei, under the guise of national security
- Trilateral summit between US, Japan and South Korea and missile agreement has increased risk of confrontation by Beijing
- South Korea has also raised suspicions of China hacking government computer hardware
- > India has tensions with China due to Himalayan border disputes
- Strengthened defence ties with the US and joined the Quadrilateral Security Dialogue, along with Australia and Japan
- India has sought better relations with Taiwan, with former Indian military chiefs visiting Taiwan in 2023



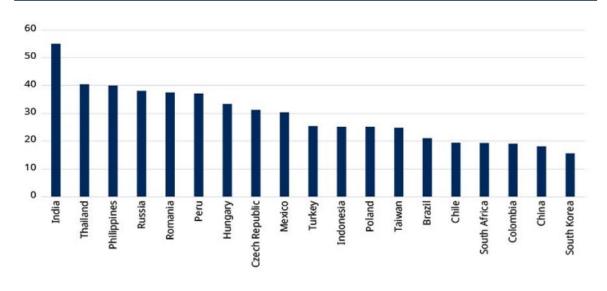


Correlation between ONI and global food prices

Key commentary

- El Nino is expected to impact the supply side of the global commodities market, with heavy rain disrupting copper mining in Chile
- Natural disasters have devastating impact on global activity and insurance markets in recent years (e.g. China and India have been suffering from heat waves)
- Changes in weather conditions are a threat to agricultural output, with drought conditions stunting production and excessive raining resulting in crops washing away
- Strong El Nino could lift current levels of food prices to be 40% higher, which could put renewed squeeze on real incomes to the detriment of non-food goods and leaving less room to lower interest rates for central banks
- El Nino would impact poorer countries more heavily as they have greater reliance on agricultural output for economic growth
- For example, food accounts for over 40% of the CPI basket in India

Food CPI Weights (%)





Key commentary

- Over the next decade. China's oil demand is estimated to rise significantly by a substantial volume in the global context. Key drivers of demand include rapid urbanization and a rising middle class which will continue to increase, e.g. through purchases in automobile or air travel.
- Chinese government's self-sufficiency concerns and desire for petrochemical independence suggest that China's petrochemical industry will rely on oil consumption for years to come
- Over 2 mb/d of new refining additions is planned through 2025 in China. Government is offering full support since new plants are being built by private companies – as part of the government's effort to open the sector to non-state actors. Integrated petrochemical plants further supports the government's goal of self-sufficiency in chemicals
- China expected to commence crude oil refinery projects during 2022-2026, driven by growing refining capacity to meet the rising demand for plastics and petroleum products

Key statistics

crude oil refinery projects during refinery projects in 2022-2026



Asia



expected rise in oil demand over the next decade

Refinery capacity additions in Asia, 2022-2026 (mbd)



Historical allocations & exploring potential allocation changes



MSCI indexes are rebalanced on the last business day of the month prior to quarter-end (Feb, May, Aug, Nov).

Key commentary

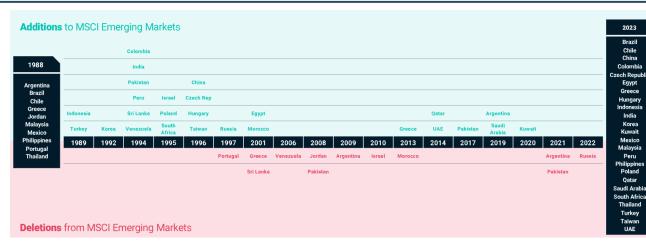
China's potential weighting downgrade post-war breakout

- > The MSCI EEM index has seen removal of countries upon initiations of war (i.e. Russia).
- If China were to launch an attack on Taiwan, war complications and imposed sanctions, such as those enforced on Russia, would result in a breach of MSCI's market accessibility criteria to be included in the investment universe. At minimum, China's weighting would decrease.

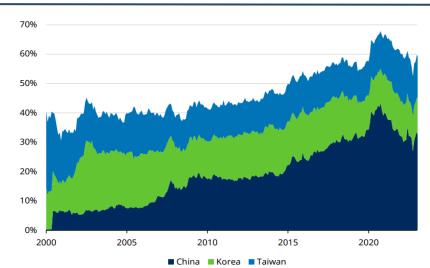
India to replace China?

- With India surpassing China's population in early 2023, it is a spotlight contender to potentially upgrade their weighting.
- Driven by top-line growth and a widening market breath, India is paving the way as a key member of the BRICS emerging economies and in technological innovation.
- This year, India achieved a significant milestone by becoming the first to successfully land on the moon's south pole.
- IMF projections indicate that by 2027, India is poised to surpass stalwarts like Japan and Germany, becoming the world's third-largest economy.

Country additions/deletions since MSCI Emerging Markets inception



China, Korea & Taiwan dominate the index



MSCI investment criteria

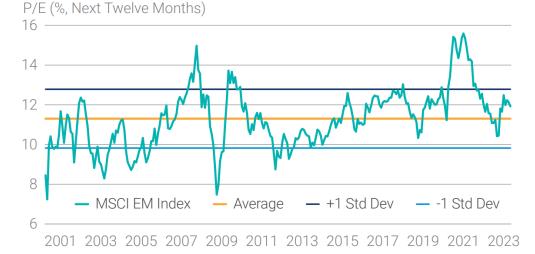
	Criteria	Emerging	Developed
A	A.1 Sustainability of economic development	No requirement	Country GNI per capita 25% above the World Bank high income threshold* for 3 consecutive years
в	Size and Liquidity Requirements B.1 Number of companies meeting the following Sta Company size (full market cap) ** Security size (float market cap) ** Security liquidity	andard Index criteria 3 USD 1260 mm USD 630 mm 15% ATVR	5 USD 2519 mm USD 1260 mm 20% ATVR
С	Market Accessibility Criteria C.1 Openness to foreign ownership C.2 Ease of capital inflows / outflows C.3 Efficiency of the operational framework C.4 Stability of the institutional framework	Significant Significant Good and tested Modest	Very high Very high Very high Very high

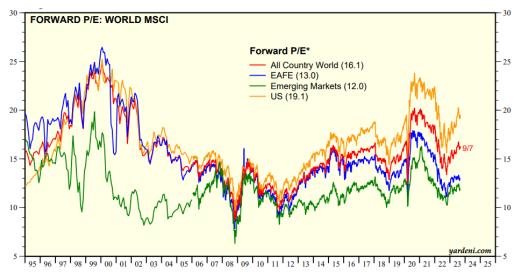
Quantitative analysis (continued)



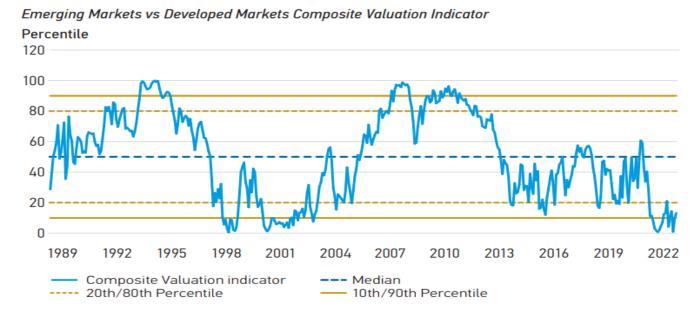
MSCI EM Index P/E

Emerging Markets Trading Above Long-Term Average





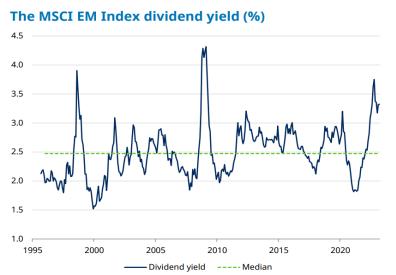
Relative EM Equity Valuation are at crisis-level lows

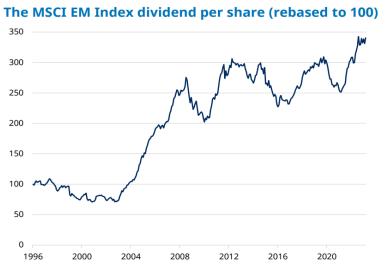


- EM equities are at crisis-level lows relative to DM. This is evident in the EM vs DM composite valuation indicator
- The current MSCI EM index P/E ratio that is trading above the long-term average suggest otherwise. This misalignment in valuation suggest investors are overpricing the index.



MSCI dividend growth over time

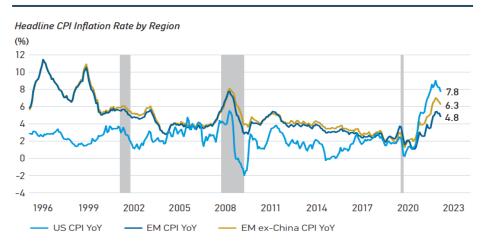




EM is the long-term performance winner



Inflation in EM tracks lower than the US



- Although there is additional risk, historically, the MSCI emerging markets index have remained the long-term performance winner, relative to MSCI AWCI and other benchmarks, when held since its inception.
- Despite falling EPS, dividends appear to be growing overtime.
- Generally, inflation in EM tracks lower than the US as they began their rate hiking earlier than developed countries. Although inflation still remains elevated, they may recovery faster and be able to relieve inflation-based pressures.