



GLOBAL STRATEGY PAPER NO. 52

EM ex-China as a separate equity asset class**A growing debate to split EM into China and EM ex-China strategies**

China's share in the MSCI emerging market (EM) index has doubled over the past five years and could rise further from the current one-third to well above 40% over the next 5 years, as per our estimates. Many investors are contemplating whether to separate China from the rest of their EM allocation and have dedicated China and EM ex-China strategies, given China's significant market size, its **rising dominance in the EM** benchmark and idiosyncratic factors (e.g. geopolitics, regulatory policy) that impact performance.

EM ex-China's value proposition

EM ex-China is **investable** and offers portfolio diversification benefits given its **distinct sector** (tech h/w, semiconductors is 24% vs. 5% in China while Internet and consumer retail sectors account for 6% vs. 45% in China) **and macro factor exposure** (higher sensitivity to US tightening and commodities) from those of Chinese equities. The benefits of portfolio diversification are shown by over 20pp **performance disparity** between China and the rest of EM this year. Furthermore, EM ex-China is not as levered to China demand as before and offers **attractive** growth and valuation metrics, but is **under-owned** by global investors (560bp UW, near its decade lows), suggesting favorable potential alpha opportunities. Moreover, based on **Japan's experience** following its separation from the rest of Asian equity markets in 2001, it appears likely that both China and EM ex-China could be viable indices and attract investment flows.

Implications for investors and portfolio allocations

EM asset managers could control their China risk better and have a greater emphasis on smaller markets in their EM ex-China strategies, global equity managers could create **more efficient portfolios** by treating China separately, and multi-asset portfolios could reallocate between EM equity and fixed income more efficiently. We could also see **greater allocation of resources** towards EM ex-China markets and more EM ex-China financial products over time, which bodes well for the asset management industry.

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Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html.

EM ex-China as a separate equity asset class

CHINA MERITS BEING ITS OWN ASSET CLASS, SEPARATE FROM REST OF EM



Significant size

2nd largest equity market globally (**US\$18tn** listed cap, **5900** listed stocks)



Index dominance

Weight of China in MSCI EM: **2x** over the past five years

Current weight: **1/3rd** of MSCI EM ; **Largest** single country share in EM's history

China likely to account for **>40%** of MSCI EM over the next five years



Idiosyncratic drivers

Geopolitics, regulatory policy

EM EX-CHINA'S VALUE PROPOSITION



Investable

MSCI EM ex-China consists of half of the MSCI EM stocks and **2/3rd** of the MSCI index cap (**US\$5tn**)

~1200 listed larger-cap stocks (>US\$2bn cap), **>50%** of those reasonably liquid (>US\$10mn/day)



Distinct exposure from Chinese equities

Tech h/w, semiconductors is **24%** vs. **5%** in China; Internet & consumer retail is **6%** vs. **45%** in China; Different macro exposures (higher sensitivity to US tightening, commodities)

Not as levered to China demand as before



Portfolio diversification benefits

Declining correlations with China; Wide disparity (**>20pp**) in performance between China and the rest of EM this year



Attractive fundamentals

Strong fundamentals (**33%** EPS CAGR this year and next at relatively cheaper valuation **12x**)

Light investor positioning: **under-owned** by global mutual funds (**560bp UW**, near decade lows)



Likely to attract flows and co-exist with China

Based on **Japan's experience** following its separation from the rest of Asian equity markets, both China and EM ex-China could be viable indices and attract investment flows

IMPLICATIONS FOR INVESTORS AND PORTFOLIO ALLOCATIONS



Better risk management: allows dedicated China and separate EM ex-China strategies



Separating China from EM offers a **more efficient** global portfolio



Greater allocation of resources towards EM ex-China markets and more EM ex-China financial products



Multi-asset portfolios can reallocate between EM equity and fixed income more efficiently

Executive Summary

China's share in the MSCI emerging market (EM) index has doubled over the past five years and could further rise from the current one-third to well above 40% over the next 5 years, based on our estimates. Based on our conversations, many investors are contemplating whether to separate China from the rest of their emerging market equity allocation, given China's significant market size, its **rising dominance in the EM** benchmark and idiosyncratic factors such as geopolitics and regulatory policy that could affect its performance. With a strengthening debate for **splitting an EM mandate into China and EM ex-China strategies**, we discuss the implications for investors and portfolio allocations in this report.

We first showcase EM ex-China's value proposition to EM and global equity investors: With about US\$5tn MSCI index cap, 1200 listed larger cap stocks (with at least US\$2bn market cap) and more than half of those reasonably liquid (trading at least US\$10mn/day), EM ex-China is indeed **investable**. Furthermore, it is not as levered to China demand as before and offers portfolio diversification benefits given its **distinct sector and macro factor exposure** from Chinese equities. The benefits of portfolio diversification, from different sector exposures (e.g. lower internet sector weights) has been quite apparent in the wide disparity in performance of China and the rest of EM this year. Moreover, EM ex-China offers **attractive** growth and valuation metrics, but is **under-owned** by global investors, suggesting attractive potential alpha opportunities.

While the investment case for EM ex-China looks solid, one of the key investor concerns has been whether carving out a dominant market (China) would adversely impact flows and investments in the rest of the EM region. Japan serves as a useful case study in this regard. Based on **Japan's experience** following its separation from the rest of the Asian equity markets in 2001, it appears likely that both China and EM ex-China could be viable indices and attract investment flows, as long as their underlying fundamentals remain robust.

Creating EM ex-China as a separate equity asset class would also have important implications for different investors and their portfolio allocation strategies. EM asset managers could **control their China risk better** and have a greater emphasis on smaller markets in their EM ex-China strategies, global equity managers could create **more efficient portfolios** by treating China separately, and multi-asset portfolios could reallocate between EM equity and fixed income more efficiently. We could also see **greater allocation of resources** towards EM ex-China markets and more EM ex-China financial products over time, which bodes well for the asset management industry.

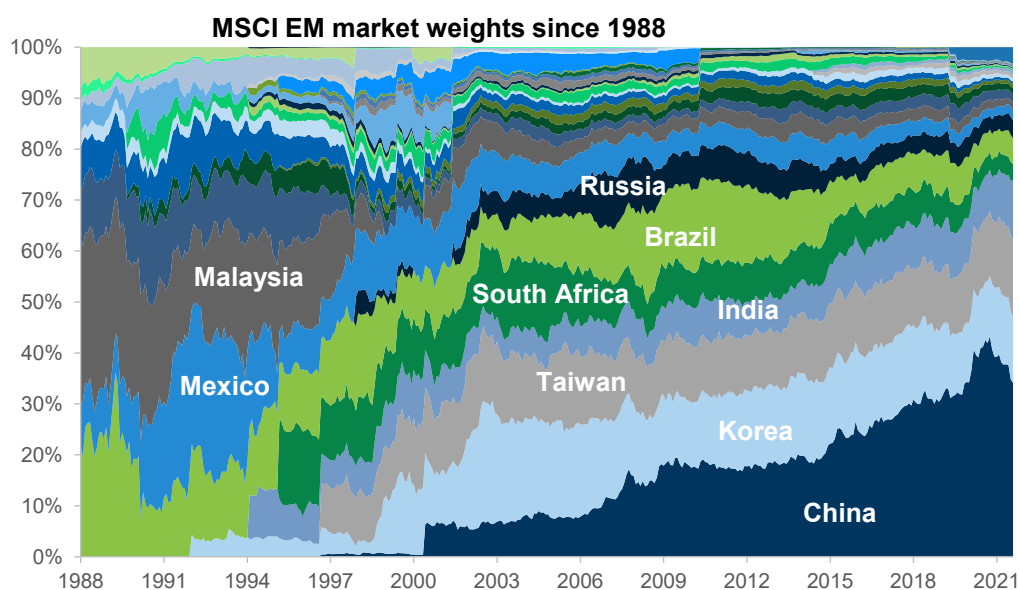
While the report makes a strong case why China merits a standalone allocation, and how investors would be better served by having separate China and EM ex-China strategies, we emphasize that EM ex-China is not a uniform block and needs to be evaluated granularly as well.

EM ex-China: A growing need to separate China from the rest of EM

China's share in MSCI EM/Asia indices has rapidly increased over the past decade.

China already occupies a dominant share in the MSCI EM and the regional MXAPJ index. The weight of China in MSCI EM doubled over the past five years from about 20% in 2015 to a peak of 43% in 4Q last year. This rapid increase in China's index share partly reflects the rise of the domestic digital economy, as we have discussed in greater detail in our previous publications. Notwithstanding the ongoing regulatory risks in China and the recent significant relative underperformance of Chinese equities, **China still accounts for about one-third of the MSCI EM and MXAPJ indices.**

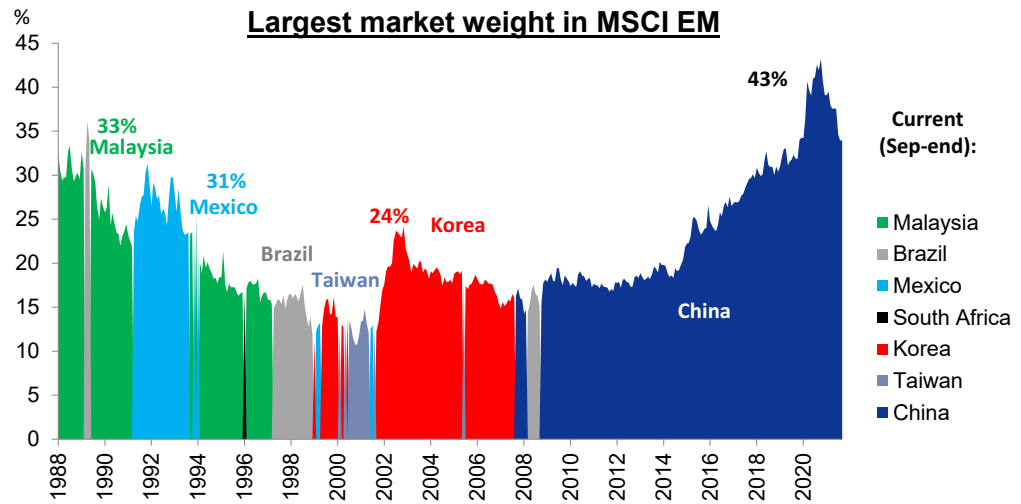
Exhibit 1: The weight of China in MSCI EM doubled over the past five years from about 20% in 2015 to a peak of 43% in 4Q last year



Source: FactSet, MSCI

China's index dominance stands out relative to EM's history. Looking at the history of country composition of MSCI EM, we note that country dominance has varied over time. During the late 1980s (when the MSCI EM index was created) until the Asian financial crisis in 1997, Malaysia and then Mexico had the largest country weights in index, peaking at 33% and 31% respectively. Korea was the largest EM market between 2002 and 2007 and had a peak weight of 24% in 2002. Since 2008, China has remained the largest market in EM with its weight rapidly increasing from 15% in 2008 to well over 40% in 2020, making it **the largest country share in EM's history.**

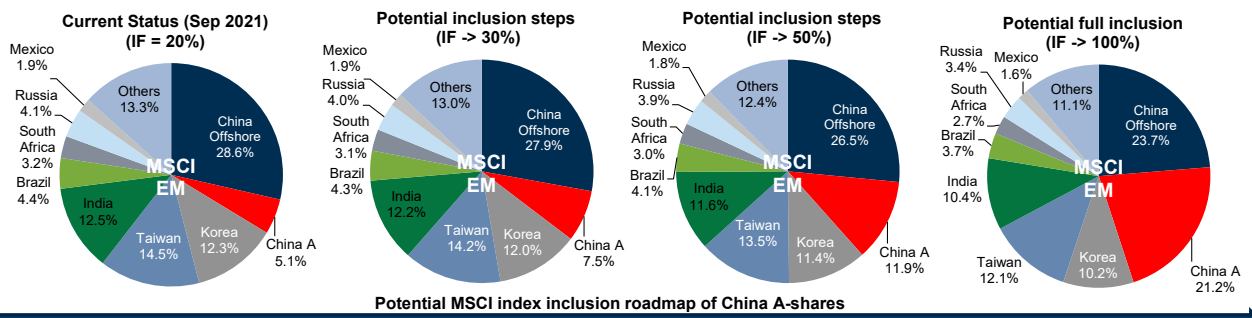
Exhibit 2: China's index dominance in EM stands out; China has remained the largest market in EM since 2008 and has the largest country share in EM's history



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

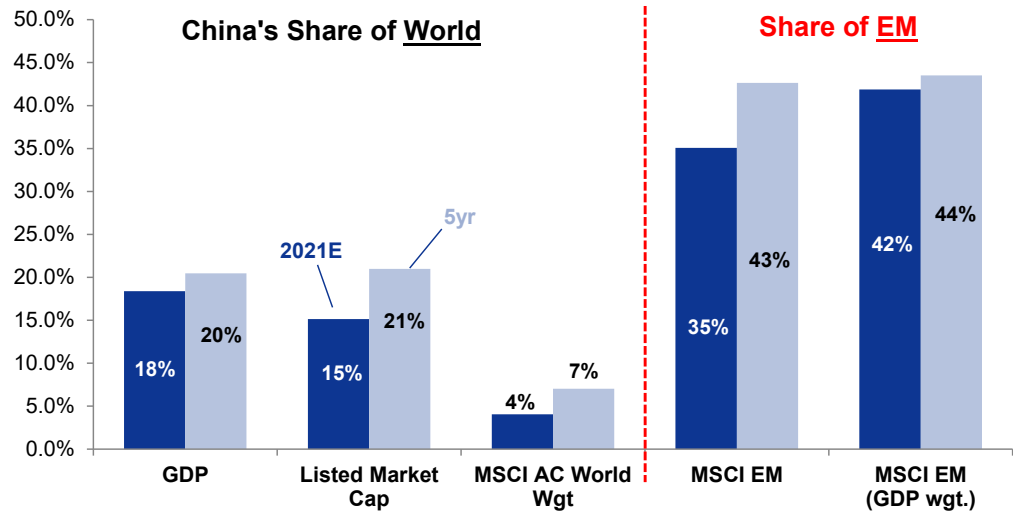
China's share of the global indices could further rise in coming years. Chinese equities remain underrepresented in global indices relative to the country's economic exposure. China currently accounts for 18% of global GDP, 15% of the listed market capitalization globally but only 4% of the float-cap weighted MSCI ACWI index. We think **China's weight in global/ EM benchmarks could increase further in coming years, especially as the inclusion factor for A-shares rises.** While the A-share inclusion factor (IF) has stood at 20% since Nov 2019, further progress on capital market reforms (as evidenced by the recent launch of MSCI China A50 futures in Hong Kong) bodes well for inclusion uplift. At 100% A-share inclusion, China could make up 45% of MSCI EM index weight at current prices, suggesting further index dominance by China. Our own refreshed long-term equity market cap forecasts suggest **China could account for a fifth of the global equity listed cap and over 40% of the MSCI EM Index over the next 5 years,** based on the framework in our previous Global Strategy Papers. China's index weight in EM will thus likely converge with its economic exposure over the next 5 years as per our estimates.

Exhibit 3: At 100% A-share inclusion factor, China would account for 45% of the MSCI EM index, at current prices



Source: MSCI, FactSet, Goldman Sachs Global Investment Research

Exhibit 4: China could account for roughly a fifth of the global listed equity cap and over 40% of the MSCI EM Index over the next 5 years. China index weight in EM will converge with its economic exposure over the next 5 years, as per our estimates



Source: FactSet, MSCI, IMF, World Bank, WFE, Goldman Sachs Global Investment Research

Rising index dominance and idiosyncratic factors highlight the benefit of China as a separate equity asset class from the rest of EM. With the rising dominance of China in EM benchmarks, EM investors inherently have to take a large exposure in China. Moreover, idiosyncratic factors (e.g. geopolitical concerns like US-China tension and recent regulatory risks in China) that have driven sharp underperformance of China equities vs. EM (15% ytd) have fueled the need for investors to better manage China risk and highlighted the merits of separating China from the rest of the emerging markets. As more EM investors begin to have separate China and EM ex-China strategies, we discuss the implications for investors and portfolio allocations in greater detail in this report.

Exhibit 5: Our proprietary China Regulation Index (GSSRCNRG) remains at a high level, implying market concerns about regulatory uncertainty



Source: Bloomberg, MSCI, FactSet, Wind, Goldman Sachs Global Investment Research

Exhibit 6: MSCI China has sharply underperformed the broader MSCI EM index this year



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

The investment case for EM ex-China

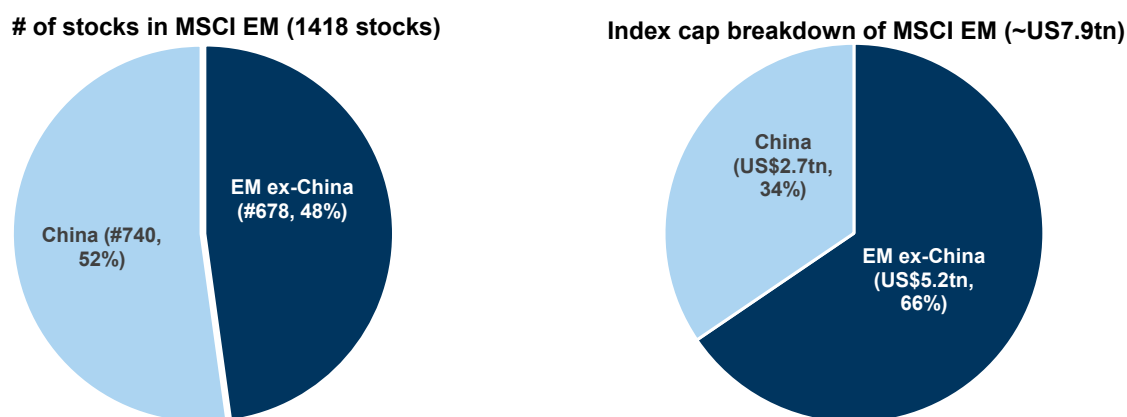
While China likely merits being its own equity asset class given its size and dominance in the EM index, we showcase **EM ex-China's value proposition to global equity investors**. EM ex-China is **investable, less levered to China growth** and offers **portfolio diversification benefits** given its **distinct exposure** from Chinese equities. It features **attractive growth and valuation metrics** but is under-owned by global investors, and thereby offers significant alpha opportunities.

1) Size of opportunity: EM ex-China is investable and offers significant alpha opportunities

EM ex-China as a separate market or index is quite large in terms of its capitalization and offers significant depth and liquidity. Within the MSCI EM index, EM ex-China currently includes about **half of the roughly 1400 stocks** (678 out of the 1418 stocks in MXEF) and **two-thirds of the index capitalization** (US\$5.2tn out of about US\$8tn index cap in MXEF). The capitalization share of EM ex-China may however be overstated based on the current index composition, given A-shares are still added only at 20% inclusion factor.

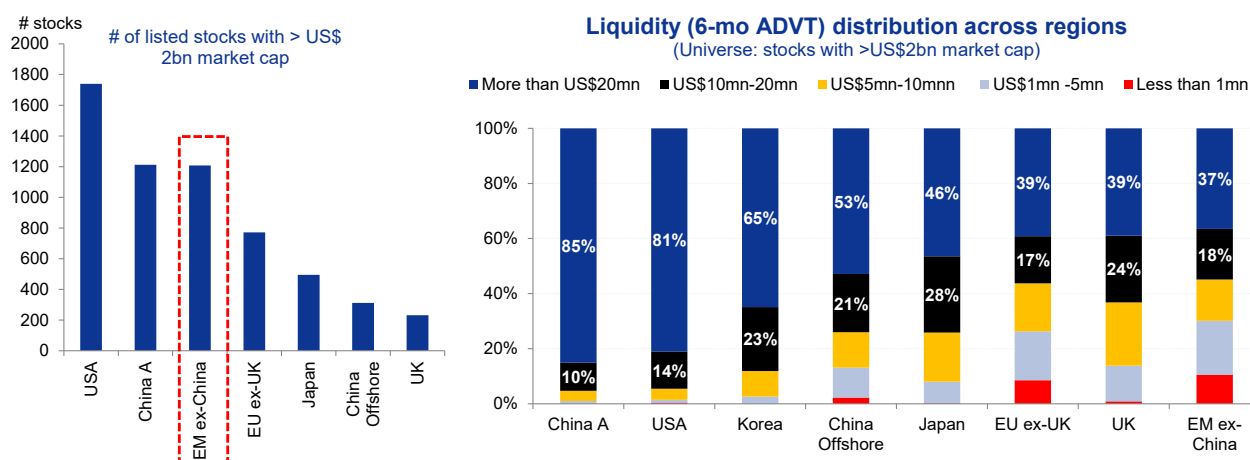
In order to overcome the index composition issue, we also look at the broader listed companies to gauge the depth and liquidity of the investable universe. Within a universe of larger-cap listed stocks globally (measured as having at least US\$2bn market capitalization), we note that the US market, not surprisingly, has the most number of larger cap stocks (about 1700). The **EM ex-China region stood at the third place**, with about 1200 larger-caps stocks, similar to that of China A-shares (about 1212 stocks) and followed by the EU ex-UK region (about 770 stocks). Japan, UK and offshore China markets accounted for only 200-500 stocks each. In terms of liquidity, **more than half (55%) of these larger-cap stocks in EM ex-China trade at least US\$10mn/day**. The proportion of liquid stocks (with at least US\$10mn/day trading volumes) in EM ex-China is however relatively lower compared to its peers (e.g. 95% in US and A-share; and 70% in Japan). **With about US\$5tn index cap, 1200 larger cap stocks and more than half of those reasonably liquid, we think the size, depth and potential alpha opportunities in EM ex-China are still significant.**

Exhibit 7: EM ex-China currently includes about half of the 1400 odd stocks in MSCI EM index and two-thirds of the index capitalization
Pricing as of October 8, 2021



Source: FactSet, MSCI

Exhibit 8: EM ex-China has about 1200 listed larger-cap stocks (with at least US\$2bn market cap), next only to US and China A-shares, with more than half of those trading at least US\$10mn/day suggesting significant investable opportunities



Source: FactSet, MSCI, Bloomberg, Goldman Sachs Global Investment Research

2) Diversification effects: EM ex-China offers distinct exposure from Chinese equities

While the current EM index is dominated by China, EM ex-China index is less levered to China growth and offers different market, sector and macro exposures to investors. The distinct exposure of EM ex-China from China could potentially offer portfolio diversification benefits and have significant impact on returns as apparent by the wide disparity in performance of China and the rest of EM this year.

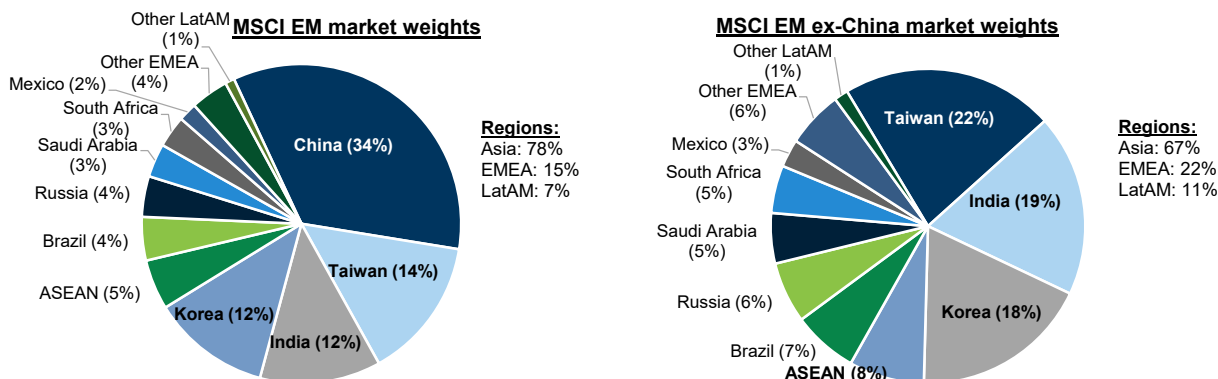
The exposures available in MSCI EM ex-China and China are distinct

While the current EM index is dominated by China (34% weight, more than 2x the next largest market Taiwan at 15%), the EM ex-China index is more balanced with the top 3 markets Taiwan, India and Korea all having similar weights of about 20% each. By region, Asia dominates the current MSCI EM index while EMEA and LatAM account for less than quarter of the weight (about 22%). On the other hand, the EM ex-China index has about one-third weight in EMEA and LatAM.

Sectorally, the EM ex-China index is quite distinct from China. **The tech hardware and semiconductor sector accounts for 24% in EM ex-China but only 5% in MSCI China.** On the other hand, **internet and consumer retail/tech jointly account for 45% in MSCI China but only 6% in EM ex-China.** The sector mix is likely to be favorable for EM ex-China as our global strategists think that the area of tech growth in the last decade (internet & entertainment) is going to be less important than tech hardware and semiconductor sector over the next decade.

Exhibit 9: Taiwan, India and Korea all have similar weights in EM ex-China; EMEA and LatAM account for one-third of the EM ex-China index vs. less than a quarter in the current EM index

Pricing as of October 8, 2021



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 10: EM ex-China is quite distinct from China; EM ex-China offers higher exposure to the tech hardware and semiconductor sector and is significantly less exposed to consumer retail and internet sectors

Pricing as of October 8, 2021

Sector weights in indices (%)				
GS Sectors	MSCI EM ex-China	China	MSCI EM	MSCI EM ex-China vs. China (pp difference)
	Tech Hardware & Semis	23.8%	5.1%	17.3%
Banks	17.6%	8.2%	14.4%	9.4 pp
Energy	8.4%	1.6%	6.0%	6.7 pp
Consumer Staples	6.3%	5.0%	5.8%	1.3 pp
Chemicals & other Materials	6.0%	1.5%	4.4%	4.5 pp
Metals & Mining	5.7%	1.5%	4.2%	4.1 pp
Insurance & other Financials	5.0%	5.4%	5.2%	-0.4 pp
Telecommunication Services	4.0%	0.2%	2.7%	3.8 pp
Software & Services	3.6%	1.4%	2.9%	2.2 pp
Consumer Retail & Services	3.6%	27.2%	11.8%	-23.6 pp
Health Care	3.0%	7.6%	4.6%	-4.6 pp
Capital Goods	2.7%	3.4%	3.0%	-0.6 pp
Internet/Media & Entertainment	2.6%	18.0%	8.0%	-15.3 pp
Autos & Components	2.6%	5.7%	3.7%	-3.1 pp
Utilities	2.1%	2.2%	2.2%	-0.1 pp
Transportation	1.8%	1.6%	1.7%	0.3 pp
Real Estate	0.9%	4.2%	2.1%	-3.2 pp

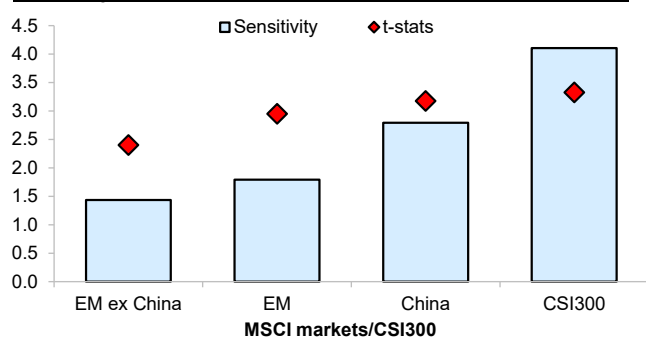
Source: FactSet, MSCI, Goldman Sachs Global Investment Research

EM ex-China is not as levered to China demand/growth as before

While many markets in the EM region have been historically levered to China demand/growth through their export and commodity linkages, we note that the sensitivity of EM ex-China equities to China growth has reduced significantly over time. We refresh our 4-factor macro models which gauge equity market return sensitivities to China growth (as measured by our China Current Activity Indicator - CAI), US growth, US rates and commodity prices. Our macro models show that **EM ex-China equities have lower sensitivity to China growth than China indices (MSCI China and CSI 300) and the broader EM index**. Moreover, the sensitivity of EM ex-China equity returns to China growth has come down significantly over the past decade. As an example, the rolling 3-year sensitivity of EM ex-China quarterly returns to China growth has reduced from a peak coefficient of 5x (i.e. 5% returns for every 1pp change in China growth, t-stats > 3) to a nearly-flat coefficient and statistically insignificant t-stats.

Exhibit 11: EM ex-China equities have lower sensitivity to China growth than China and the broader EM equity indices

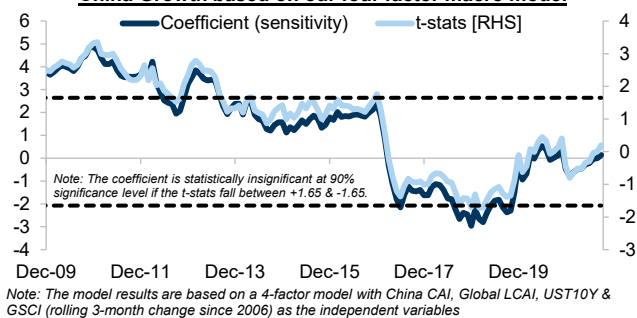
Sensitivity to China Growth based on our four factor macro model



Source: Bloomberg, Eikon, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 12: The sensitivity of EM ex-China equity returns to China growth has come down significantly over the past decade

Rolling 3-year sensitivity/t-stats of EM ex China equity returns to China Growth based on our four factor macro model



Source: Bloomberg, Eikon, FactSet, MSCI, Goldman Sachs Global Investment Research

EM ex-China has different macro exposures

We also use our 4-factor macro models to identify the key macro drivers that influence EM ex-China returns and how they vary from China and other regions globally. While China equity indices (both MSCI China and CSI 300) are not surprisingly most sensitive to China growth, as we noted earlier, **EM ex-China is relatively more negatively sensitive to US-rates than China**. This is largely because of the ASEAN and select LatAM markets (like Brazil) which have historically been sensitive to higher US interest rates. These results are consistent with the previous research from our EM Strategists.

Similarly, we note that **EM ex-China equities are more positively sensitive to commodities** than China equities and the broader EM index. While this may seem surprising at first given China's large share in global demand for metals, EM ex-China has large weights in oil-exporting EMs, such as Russia, Brazil and Mexico. Moreover, sector composition corroborates that the EM ex-China index has a higher exposure to commodity sectors: MSCI EM ex-China has about 20% weight in commodity sectors (energy and materials) compared to only 5% for China.

Additionally, the R-squared value for our EM ex-China macro model is about 58%, which is far higher than the China and CSI 300 models at 32% and 17%, respectively. This

suggests **EM ex-China returns are better explained by global macro factors**, while Chinese equities are driven by more idiosyncratic factors (e.g. policy), not explicitly captured by the macro model.

We also extend our 4-factor macro regression models to include other key regions globally like the US, Europe and Japan. While returns for all these 3 regions are impacted by global growth, Europe is more exposed to China demand/growth and commodities than others. On the other hand, Japan is relatively more impacted by rates and is driven by more idiosyncratic factors (relatively lower R-squared value) while US equities are sensitive to both global growth and the US rates outlook. This highlights the varying macro exposure in key DM markets and hence the merits of separating MSCI World (DM) into US, Europe and Japan. In the same vein, we think treating China and EM ex-China separately would help investors to manage macro exposures better in their portfolios.

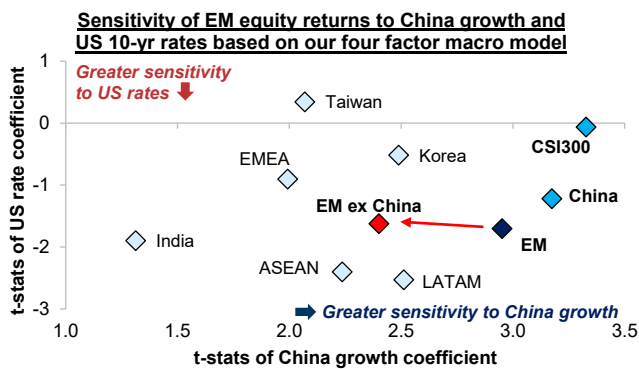
Exhibit 13: Our 4-factor macro models show EM ex-China has higher macro sensitivity to US tightening and commodities; high r-squared suggests EM ex-China returns are better explained by global macro factors than Chinese equities

Equity Market Return vs. Macro Variables (4-factor regression model)									
Return Sensitivity	Sensitivity (Coefficient) (per +1 pp)				Significance (t-Stats)				Rsq
	China Growth	Global Growth	US Rate	GSCI	China Growth	Global Growth	US Rate	GSCI	
MSCI markets/CSI300									
EM	1.8	3.6	-2.9	0.55	3.0	3.6	-1.7	10.2	55%
EM ex China	1.4	3.4	-2.7	0.60	2.4	3.5	-1.6	11.3	58%
China	2.8	3.5	-	0.41	3.2	2.4	-1.2	5.3	32%
CSI300	4.1	-	-	0.20	3.3	1.4	-0.1	1.8	17%

Note: The model results are based on a 4-factor model with China CAI, Global LCAI, UST10Y & GSCI (rolling 3-month change since 2006) as the independent variables and the MSCI index USD price returns (3-month) as the dependent variables (local price return for CSI300). Data points of China CAI and Global LCAI are winsorized to reduce the effect of extreme outliers in the COVID-19 period. Values of coefficients which are statistically insignificant at 90% significance level are not shown (i.e. have absolute values of t-stats < ~1.65).

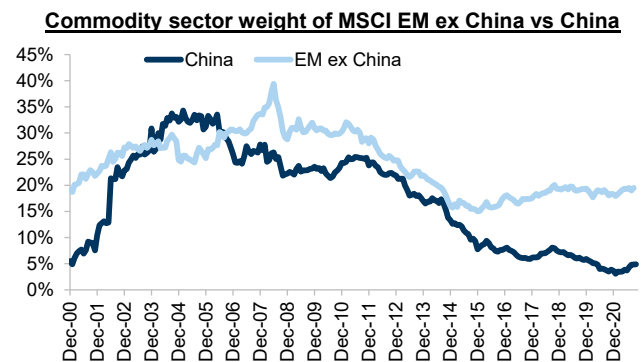
Source: Bloomberg, Eikon, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 14: While China indices are most sensitive to China growth, EM ex-China is relatively more negatively sensitive to US-rates than Chinese equities given its exposure to ASEAN and LatAM markets



Source: Bloomberg, Eikon, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 15: MSCI EM ex-China has about 20% weight in commodity sectors, compared to only 5% in case of China



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 16: Macro exposures in key DM markets vary, suggesting merits to separating MSCI World (DM) into US, Europe and Japan

Equity Market Return vs. Macro Variables (4-factor regression model)									
Return Sensitivity	Sensitivity (Coefficient) (per +1 pp)				Significance (t-Stats)				Rsq
	China Growth	Global Growth	US Rate	GSCI	China Growth	Global Growth	US Rate	GSCI	
MSCI markets/CSI300									
USA	-	2.7	2.1	0.28	1.2	4.0	1.9	7.9	53%
Europe	1.2	2.0	-	0.43	2.3	2.4	0.7	9.4	53%
Japan	-	2.1	2.7	0.21	1.3	2.7	2.1	5.0	37%

Note: The model results are based on a 4-factor model with China CAI, Global LCAI, UST10Y & GSCI (rolling 3-month change since 2006) as the independent variables and the MSCI index USD price returns (3-month) as the dependent variables. Data points of China CAI and Global LCAI are winsorized to reduce the effect of extreme outliers in the COVID-19 period. Values of coefficients which are statistically insignificant at 90% significance level are not shown (i.e. have absolute values of t-stats < ~1.65).

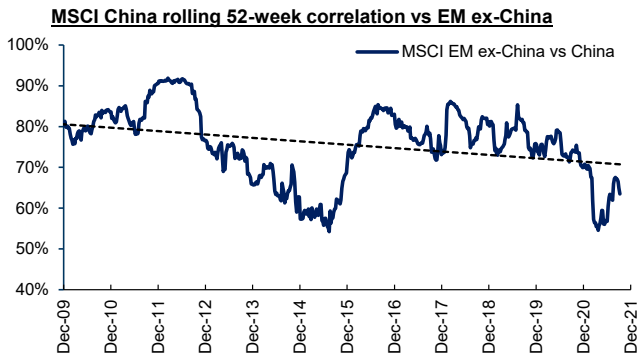
Source: Bloomberg, Eikon, FactSet, MSCI, Goldman Sachs Global Investment Research

Recent performance disparity within EM highlights benefits of portfolio diversification

Over the past decade, China's price correlation with the rest of the EM equity complex has been trending down suggesting that the reducing sensitivity to China's economic linkages is also manifesting in equity prices. The growing divergence between China and other parts of EM is shown by the more than 20pp performance divergence between China and the rest of EM this year. MSCI EM in aggregate is down only 3% ytd but MSCI China is down 16% while EMEA is up 20% ytd. While the sharp sell-off in China, notably in the tech sector was driven by regulatory tightening, the large performance dispersion showcases two important points. First, China risks remained relatively contained and did not spread to the rest of EM. Secondly, the **distinct exposure of EM ex-China from China, in terms of lower internet sector weights, offered portfolio diversification benefits to an EM investor and had a significant impact on returns.**

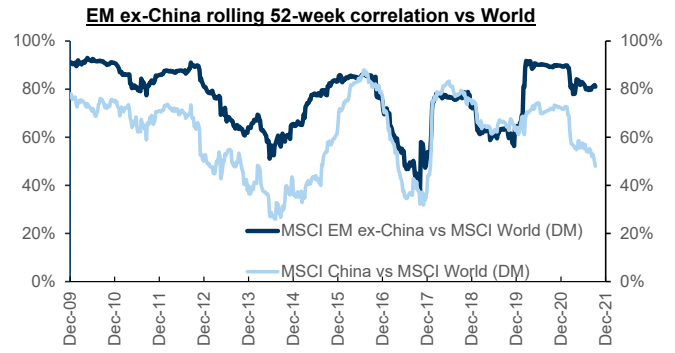
Similarly, in the context of a global portfolio, we note that historically China vs. MSCI Developed World relative returns have closely tracked the relative performance of EM ex-China vs. MSCI World. However, the two have seen a large and unusual divergence since Covid last year. This may partly be explained by the fact that the Chinese economy suffered first from the Covid-19 pandemic and recovered earlier than others, leading Chinese equities to outperform in 2020, while this year Chinese equities have underperformed sharply given regulatory tightening. This fact pattern points to a China economic and policy cycle that has been distinct from the rest of the world, indicating that global investors may be better served by separating China from the rest of EM.

Exhibit 17: Over the past decade, China’s price correlation with the rest of the EM equity complex has been trending down



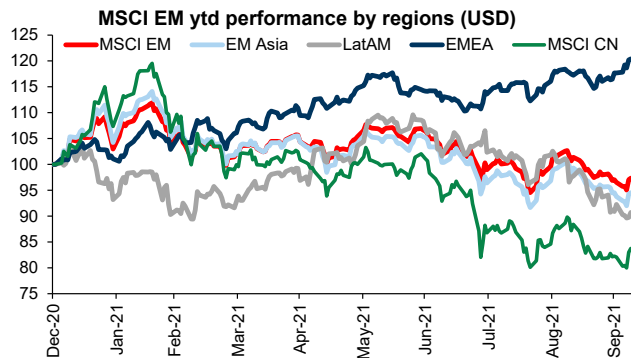
Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 18: MSCI China’s correlations to global equities have also fallen and diverged with those of MSCI EM ex-China equities



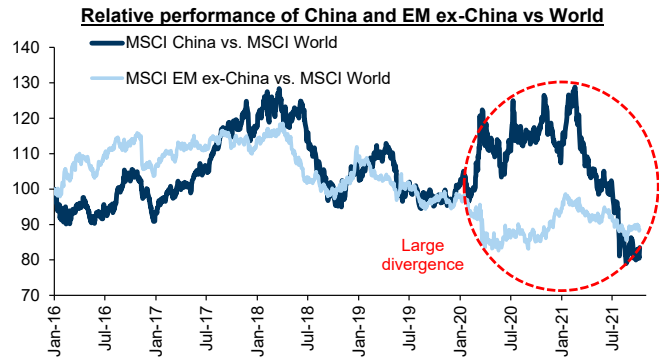
Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 19: Various parts of EM have seen a wide disparity in performance this year



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 20: In the context of a global portfolio, China and EM ex-China relative returns vs. DM, have diverged since Covid last year



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

3) Index characteristics: EM ex-China offers attractive fundamentals, but is under-owned by global investors

While EM ex-China as a separate asset class is investable and offers distinct exposure from China, it also offers **attractive fundamentals**. Based on the current MSCI composition, EM ex-China is expected to offer strong earnings growth of 33% CAGR over this year and next based on consensus expectations (vs. only 17% for MSCI China) at a slightly cheaper forward valuation of 12.4x (vs. 13.4x for China), suggesting attractive risk/reward. Looking across the regions globally, on a cross-sectional basis, EM ex-China also appears attractive based on various profitability and valuation metrics (like PB vs. ROE and PE vs. revenue growth metrics), suggesting attractive potential alpha opportunities.

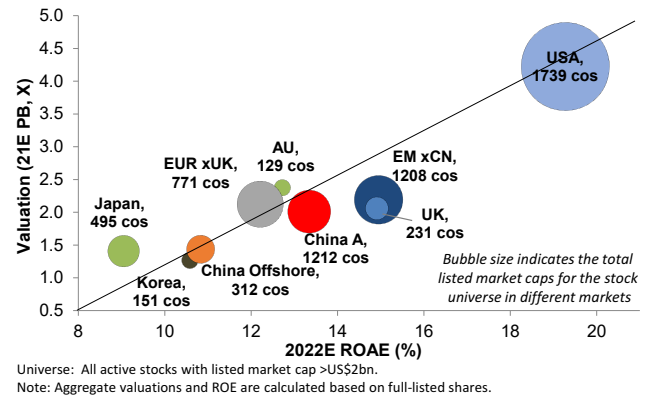
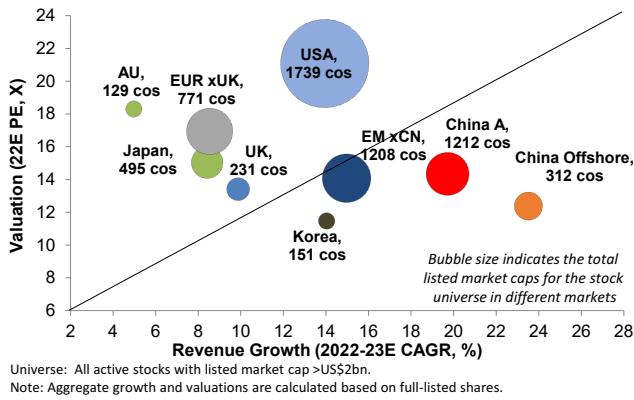
Moreover, **investor positioning also appears light**. Global mutual funds, with assets worth US\$2.4tn, are about 560bp underweight (UW) the EM ex-China region (relative to its proforma benchmark weight), which is near its decade lows. Global mutual funds are underinvested across the EM ex-China region with the largest UW allocations in the North Asian markets.

Exhibit 21: Based on the current MSCI composition, EM ex-China is expected to offer strong earnings growth over this year and next at a slightly cheaper forward valuations

		MSCI EM	MSCI EM ex China	MSCI China
	EM market characteristics			
Size of Opportunity	Number of stocks	1418	678	740
	Total mkt cap (\$US tn)	7.9	5.2	2.7
	Avg. / median mkt cap (\$US bn)	5.6 / 2.1	7.6 / 3.4	3.7 / 0.8
	Total 6m ADVT (\$US bn)	119	31	89
Fundamentals	EPS Growth (2021/22 CAGR)	27%	33%	17%
	Sales Growth (2021/22 CAGR)	10%	7%	17%
	12m fPE (x)	12.7 x	12.4 x	13.4 x
	fPE z-score (15-yr)	0.8	0.6	0.5
	LTM PB (x)	1.9 x	2.0 x	1.8 x
	PB z-score (15-yr)	0.3	0.7	-0.1
	LTM DY	2%	3%	2%
	PEG (past 5 yr avg)	1.0 x	1.1 x	0.8 x
	ROE (past 5 yr avg)	11.6%	10.8%	12%
	OP mgn (past 5 yr avg)	10.8%	8.7%	13%
Composition	EPSg (past 5 yr avg)	7%	6%	14%
	Wgt in EM (Current)	100%	66%	34%
	Concentration (Wgt of top 10 stocks)	24.8%	25.2%	42.7%

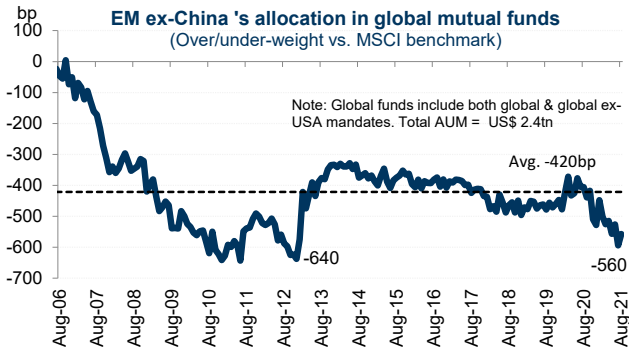
Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 22: On a cross-sectional basis, across regions globally, EM ex-China appears attractive based on various profitability and valuation metrics



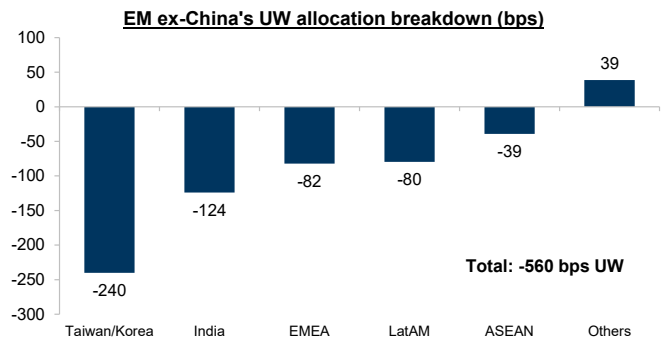
Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global Investment Research

Exhibit 23: Global mutual funds underweight allocations in EM ex-China equities are near their decade lows...



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 24: ...with UW positions across the EM ex-China region, led by North Asian markets of Korea and Taiwan



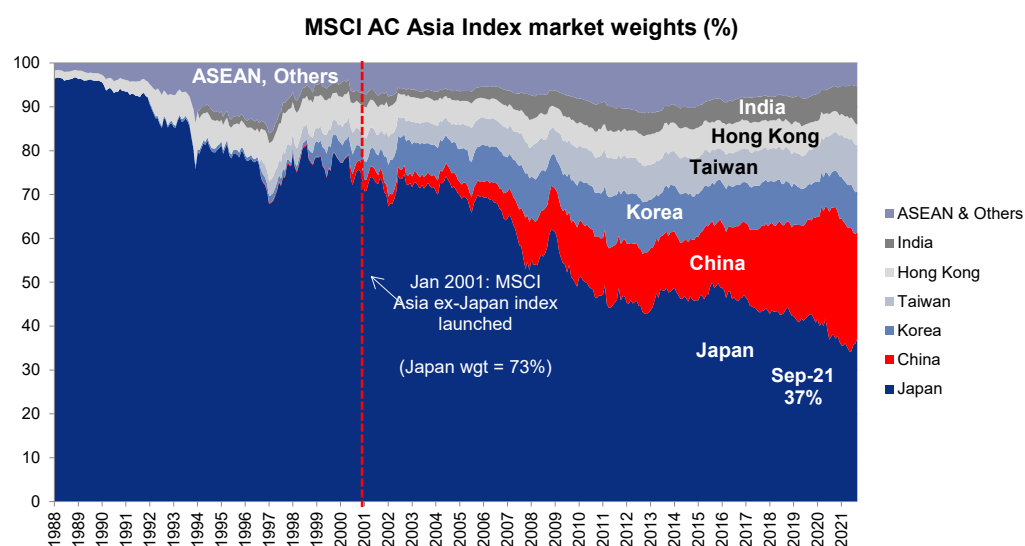
Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Lessons from Japan case study

Japan serves as a useful case study for how the investment terrain could change if investors separate China from the rest of the emerging market index. Based on the experience of how indices evolved and portfolio flows progressed following separation of the rest of Asian equity markets from Japan, it appears likely that **both China and EM ex-China can be viable indices and attract investment flows.**

MSCI launched its Asia ex-Japan index in January 2001. At that point, Japan accounted for 73% of the total index cap. Given the rising share of other Asian regional equity markets over the previous decade (even including the Asian financial crisis in the late 1990s), investors were seeking an index that was not dominated by a single outsized market. The MSCI Asia Pacific ex-Japan index, which includes Australia and New Zealand, was launched even earlier in January 1988 and its viability likely lent support to the decision to introduce the Asia ex-Japan version.

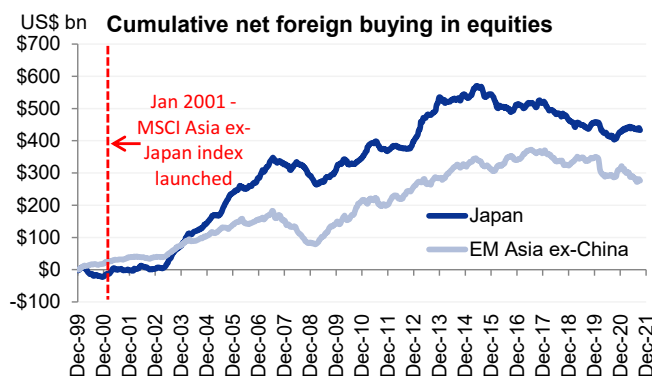
Exhibit 25: Asia ex-Japan Index was created in 2001 when Japan accounted for more than 70% of MSCI Asia index



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

Foreign portfolio flows following the introduction of the Asia ex-Japan index show that neither Japan nor the rest of the region suffered from the spin-out of the smaller markets from the aggregate Asian index: there was no cannibalization effect. Both Japan and the region (ex-China) continued to receive cumulative net inflows and at a fairly consistent roughly 60%/40% proportion. Of note, this distribution of net buying understates the rise of the non-Japan markets because it excludes foreign flows to China, which are not published by the relevant exchanges. Including China, the flow distribution would tilt meaningfully towards the non-Japan part of the region, which echoes respective growth differentials and shifts in relative index weights: Japan has dropped from 73% to 36% of the regional index, while the weight of the regional markets has risen from 27% in 2001 to 64% currently.

Exhibit 26: Post creation of AEJ index, foreign inflows continued in Japan and Asia ex-Japan region for many years, suggesting limited cannibalization impact



Source: Bloomberg, Local exchanges, Goldman Sachs Global Investment Research

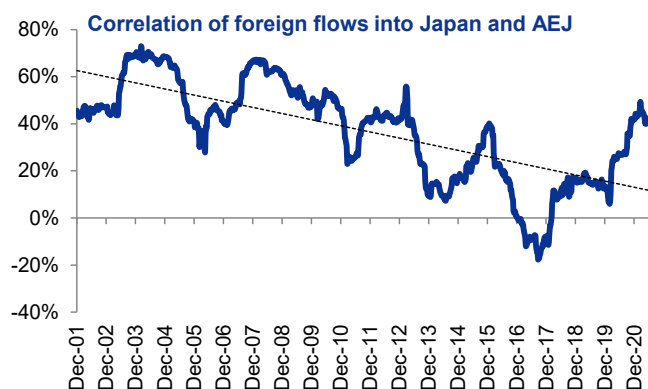
Exhibit 27: In the decade following AEJ index creation in 2001, the share of AEJ flows in Asia (incl. Japan) remained relatively stable in a 30-40% range

Period	Cum. foreign flows (US\$bn)		Share of foreign flows	
	Japan	EM Asia ex-China	Japan	EM Asia ex-China
2000-05	238	138	63%	37%
2006-10	108	77	58%	42%
2011-15	198	99	67%	33%
2016-19	-88	35	NM	NM
2020-YTD	0	-72	NM	NM
Since 2000	\$457	\$276	62%	38%

Source: Bloomberg, Local exchanges, Goldman Sachs Global Investment Research

Following the index separation, the correlation of foreign portfolio flows to Japan and Asia ex-Japan markets gradually reduced from a high of over 70% in the early 2000s to a roughly 10-20% range more recently, until the common shock of the Covid outbreak drove correlations back to the 40% level. **This fact pattern suggests that investors will consider each market on its own merits and that separation of a dominant market from an aggregate index could help investors focus on the smaller markets by means of the more targeted index.**

Exhibit 28: The correlation among flows between the two asset classes have been dropping over time, until recently during the COVID outbreak in 2020, suggesting decoupling over time



Source: Bloomberg, Local exchanges, Goldman Sachs Global Investment Research

What about China equities now? Will China’s significant size and rapid increase in market cap and index weight dominate the rest of the regional markets, especially if investors start to treat China separately? **On balance, we expect both China and EM ex-China can co-exist and both can attract foreign investor interest, as long as the underlying fundamental appeal for each remains.**

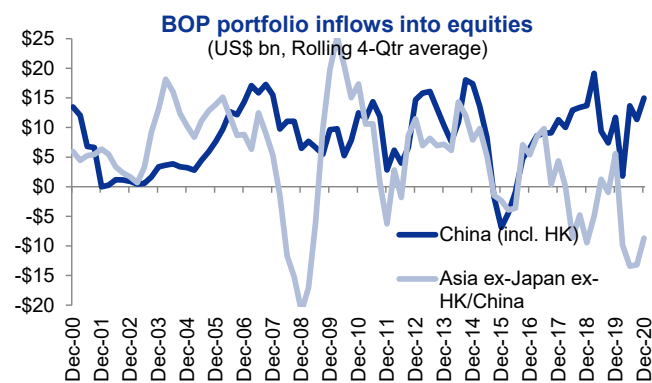
To examine this from a flow perspective, we look at balance of payments portfolio flows, since exchange-level net foreign activity is not available for China. Over the past two decades, China has gained about two-thirds of the flows into Asia ex-Japan markets and the flows moved fairly closely together until 2018 when they started to diverge. From

2006-2017, the split was a very consistent 65-68% in favor of China. From 2018-2020, this tilted dramatically in China’s favor, with China equities attracting \$162bn inflows and Asia ex-Japan ex-HK/China seeing \$50bn of net selling. Much of this appears driven by the rise of the digital economy in China and attraction- and outperformance- of this theme.

Although more recent BoP data are not available, other flow-based evidence suggests that China has seen net selling this year following the regulatory tightening in socially-oriented technology sectors as well as concomitant pressures in the property market. Foreign investors have also net sold other parts of Asia, but India stands out as receiving strong inflows despite this broad-based reduction in foreign exposure.

The insights from this fact pattern are **1) index weight alone does not wholly dictate flows: fundamentals matter; 2) both the dominant market and other smaller markets can coexist; and 3) portfolio flows are not a zero-sum game- flows in most Asian markets are positively correlated.**

Exhibit 29: Portfolio inflows in China and the rest of Asia ex Japan region have moved together historically, but have started to diverge since 2018



Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 30: China equities have typically gained about two-thirds of the foreign portfolio flows into the AEJ region over the past two-decades, although it has gained disproportionately more in past three years

Period	BOP portfolio inflows into equities (US\$bn)		Share of equity portfolio inflows	
	China (incl. HK)	Asia ex-Japan ex-HK/China	China (incl. HK)	Asia ex-Japan ex-HK/China
2000-05	114	205	36%	64%
2006-10	234	121	66%	34%
2011-15	154	72	68%	32%
2016-17	71	39	65%	35%
2018-20	162	-50	145%	-45%
Past 10- yrs	379	62	86%	14%
Since 2000	734	386	66%	34%

Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 31: Portfolio flows are not a zero-sum game; Flows in most Asian markets are positively correlated to each other

Correlation of portfolio flows into Equities (since 2000)									
	China	Korea	Taiwan	India	Indonesia	Malaysia	Philippines	Thailand	ASEAN-4
China	1.00	0.14	0.24	0.40	-0.06	0.05	-0.10	-0.04	0.29
Korea	0.14	1.00	0.49	0.35	0.27	0.55	0.34	0.41	0.48
Taiwan	0.24	0.49	1.00	0.46	0.45	0.52	0.35	0.54	0.59
India	0.40	0.35	0.46	1.00	0.41	0.19	0.22	0.51	0.93
Indonesia	-0.06	0.27	0.45	0.41	1.00	0.27	0.59	0.46	0.50
Malaysia	0.05	0.55	0.52	0.19	0.27	1.00	0.35	0.43	0.50
Philippines	-0.10	0.34	0.35	0.22	0.59	0.35	1.00	0.39	0.39
Thailand	-0.04	0.41	0.54	0.51	0.46	0.43	0.39	1.00	0.74
ASEAN-4	0.29	0.48	0.59	0.93	0.50	0.50	0.39	0.74	1.00

Source: Haver Analytics, Goldman Sachs Global Investment Research

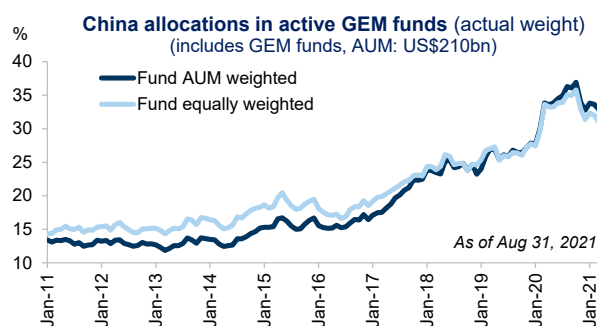
Implications for investors and portfolio allocations

Creating EM ex-China as a separate equity asset class has important implications for different investors and their portfolio allocation strategies. EM asset managers could **control their China risk better**, global equity managers could create **more efficient portfolios** by treating China separately, and multi-asset portfolios could reallocate between EM equity and fixed income more efficiently. We could also see **greater allocation of resources towards EM ex-China markets**, more EM ex-China financial products and greater investment flows, which bodes well for the asset management industry.

Implications for EM equity managers:

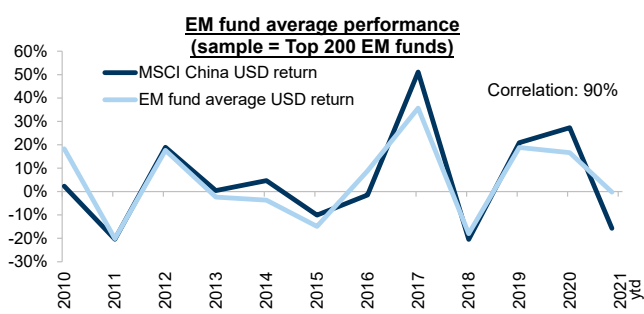
- **Targeted China risk management:** EM investors inherently have to take a large exposure in China given its index dominance. Having a dedicated China-only strategy and a separate EM ex-China strategy allows an investor to target and better control the China weight in their overall EM allocations, especially against the current backdrop of geopolitical concerns and domestic regulatory risks in China.
- **Mitigating performance dependence on China:** EM fund performance currently is very dependent on China allocations. EM funds, on average, hold nearly 30% of their portfolios in Chinese equities. Over the past decade, we note that EM annual fund performance of the largest 200 EM active funds is about 90% correlated to the yearly returns of MSCI China. Separating China from the rest of EM and the creation of an EM ex-China index could help reduce China dependency.

Exhibit 32: EM funds, on average, hold nearly 30% of their portfolios in Chinese equities



Source: EPFR, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 33: EM fund returns have been highly correlated to MSCI China returns



Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global Investment Research

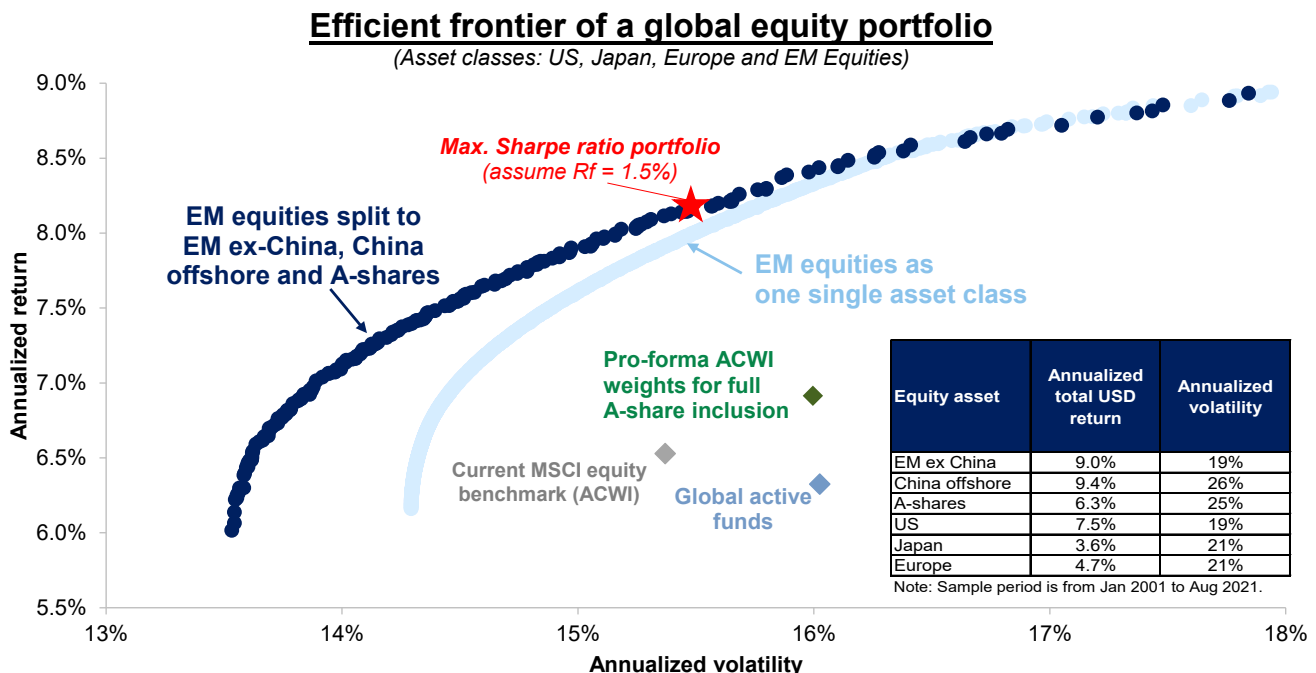
- **Greater emphasis on smaller markets.** In the EM ex-China benchmark, there is higher exposure to the non-Asian regions like LatAM and EMEA, as their weight rises proportionately. Within Asia, ASEAN markets also have a higher representation in the EM ex-China index. From an active manager's perspective, this has two implications. First, it facilitates better use of country allocations for top-down alpha generation as smaller markets have higher weight, providing more room to underweight them. Second, at the stock level, higher weights for smaller EM markets could shift investor focus beyond the top stocks in order to raise exposure.

Implications for Global equity managers: A more efficient portfolio

Investors often focus on different regional blocks within DM like the US (or North America), Europe and Japan separately. In the same vein, we think global equity managers may be better placed to separate EM into China and EM ex-China as there are many idiosyncratic opportunities across EM ex-China which justify a separate market allocation.

In order to illustrate this, we create a hypothetical global portfolio with various DM equity (MSCI US, Japan, Europe) and EM equity assets and calculate the trade-off between annualized risk (measured as realized volatility) and annualized total returns over the past 20 years, under several configurations of benchmark EM/DM asset weights (efficient frontiers). We use the past 20 years data (since 2001) to capture both the 2001-2010 EM bull cycle and the EM bear cycle since 2010, as outlined in our recent EM vs. DM cycle study. Based on numerous simulations (about 10 million portfolios), we find that the **optimal portfolios based on the efficient frontier created by separating China from the EM benchmark and having separate allocations to China and EM ex-China would have offered higher returns or a reduction in risk (i.e. a more efficient global portfolio) than the ones created by using EM as a single asset class.** This signifies the diversification benefits of having EM ex-China and China separately in global portfolios.

Exhibit 34: Global equity managers may be better placed to manage allocations to China and EM ex-China separately; separating China from EM could potentially create more efficient portfolios



Note: Each efficient frontier is generated through simulations of 10mn portfolios (with random weights for the asset classes included), and only the portfolios on the efficient frontiers are shown. MSCI USA, MSCI Japan, MSCI Europe, MSCI EM, MSCI EM ex China, MSCI China and CSI300 indices are used as the proxies of US equities, EM equities, EM ex China equities, Chinese offshore equities and A-shares. Historical daily USD total returns are used to generate the mean return vector and covariance matrix for simulation (sample period: Jan 2001 to Aug 2021). The allocations (DM/EM weights) of active global mutual funds are based on the country allocation dataset from EPFR.

Source: EPFR, FactSet, MSCI, Goldman Sachs Global Investment Research

Implications for multi-asset EM portfolios: cross asset comparability

While the current MSCI EM equity benchmark is dominated by China (34%) and Asia (78%) and has a very small exposure in LatAM (~7%), EM bond benchmarks like GBI-EM have a more balanced exposure across EM regions. For a multi-asset EM fund, this makes moving allocations from bond portfolios to equity portfolios or vice versa while trying to maintain similar country exposures harder given the underlying China vs. LatAM mismatches. The EM ex-China country weights are closer to GBI-EM, facilitating a smoother flow between EM equity and fixed income allocations in multi-asset EM portfolios.

Exhibit 35: EM ex-China equity benchmark is more comparable to EM fixed income benchmarks like GBI-EM than existing MSCI EM

Priced as of October 8, 2021

EM market weights (Equity vs. Fixed Income)					
	MSCI EM Weight	MSCI EM ex-China Weight	GBI-EM Weight	MSCI EM vs. GBI-EM	MSCI EM ex-China vs. GBI-EM
China	34%	0%	10%	+25pp	-10pp
Taiwan	14%	22%	0%	+14pp	+22pp
India	12%	19%	0%	+12pp	+19pp
Korea	12%	18%	3%	+9pp	+16pp
Brazil	4%	7%	10%	-5pp	-3pp
Russia	4%	6%	7%	-3pp	-1pp
South Africa	3%	5%	7%	-3pp	-2pp
Mexico	2%	3%	9%	-7pp	-6pp
ASEAN	5%	8%	22%	-17pp	-14pp
Poland	1%	1%	6%	-5pp	-5pp
Chile	0%	1%	3%	-3pp	-2pp
Turkey	0%	0%	2%	-2pp	-2pp
Hungary	0%	0%	3%	-3pp	-2pp
Peru	0%	0%	2%	-2pp	-2pp
Colombia	0%	0%	4%	-4pp	-4pp
Other EM	6%	9%	14%	-8pp	-5pp
Total	100%	100%	100%		

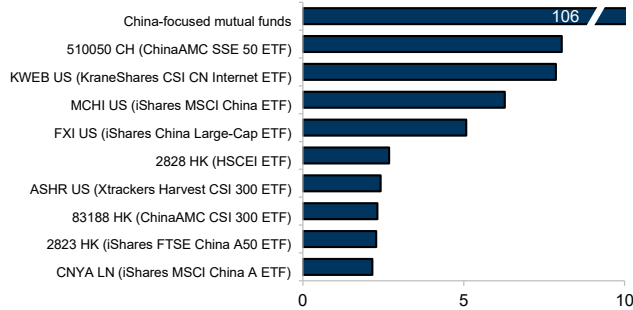
Source: FactSet, MSCI, Bloomberg

Implications for asset management industry: more EM ex-China products, greater investment flows

While many investors are already using various dedicated China-only products in their strategies, the options for EM ex-China products have been limited so far. MSCI launched an Emerging Markets ex China Index on Mar 09, 2017, that captures large and mid cap stocks across 23 of the 27 EM markets excluding China, for tracking purposes, but roll-out of an EM ex-China product suite has been limited since then. We find only 7 EM ex-China focused ETFs with aggregate assets worth just US\$1.5bn. In contrast to that, the top 10 China offshore ETFs alone have assets worth US\$40bn and China-focused mutual funds hold more than US\$100bn in assets, as per EPFR data. We think the creation of an EM ex-China benchmark would drive creation of more products (ETFs, futures) dedicated to an EM ex-China strategy. We could likely see greater allocation of resources towards EM ex-China markets, more institutionalization of EM ex-China assets and greater investment flows over time, as shown by the experience of Japan (following its separation from the rest of Asian equities).

Exhibit 36: Investors are already using various China-only vehicles for their dedicated China strategies...

Top China-focused ETFs and mutual funds AUM (US\$bn)

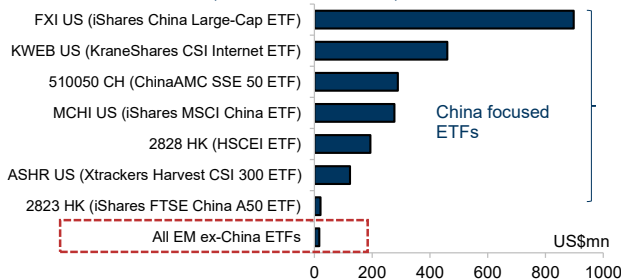


*Note: Based on EPFR data as of 10/13/2021. For ETFs, only the top 10 offshore listed ETFs with AUM

Source: Bloomberg, FactSet

Exhibit 38: ...and have limited liquidity compared to China focused ETFs

Liquidity of popular China/EM ex-China focused ETFs (6-month ADVT, US\$m)



*Note: For China ETFs, only the top offshore listed ETFs with AUM >US\$2bn and the largest onshore listed ETF are shown

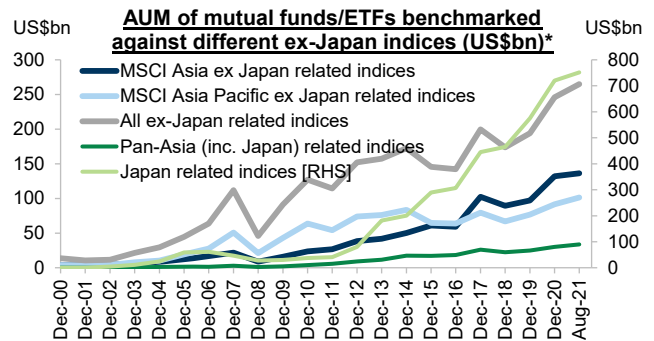
Source: Bloomberg, FactSet

Exhibit 37: ...but EM ex-China products are few

EM ex-China benchmarked ETFs
iShares MSCI Emerging Markets ex China ETF
Lyxor MSCI Emerging Markets Ex China UCITS ETF
Columbia EM Core ex-China ETF
iShares MSCI EM ex-China UCITS ETF
KraneShares MSCI Emerging Markets Ex China Index ETF
RBC Funds (Lux) - Emerging Markets ex China Equity Fund
Eastspring Investments - Global Emerging Markets ex-China Dynamic Fund
Total AUM (US\$ 1.5bn)

Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 39: The assets under management of both Japan and Asia ex-Japan mandates have grown over time



*Note: Based on the fund samples tracked by EPFR.

Source: EPFR, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Sunil Koul, Timothy Moe, CFA and Caesar Maasry, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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