

Time to separate EM and China?

For marketing purposes
For professional clients/
qualified investors only
2023

UBS ETFs **On Track Research**

By: **Davide Guberti**, FRM, ETF & Index Fund Investment Analytics, UBS AM;
Philippe Kybourg, ETF & Index Fund Investment Analytics, UBS AM

Since its inception in December 1987, the MSCI Emerging Markets index has seen its composition at times dominated by single countries. However, since its inclusion in 1996, China's footprint in the index has risen above anything previously observed. In this note we outline the case for separating China from the MSCI Emerging Markets index, using the MSCI Emerging Markets Ex-China index.

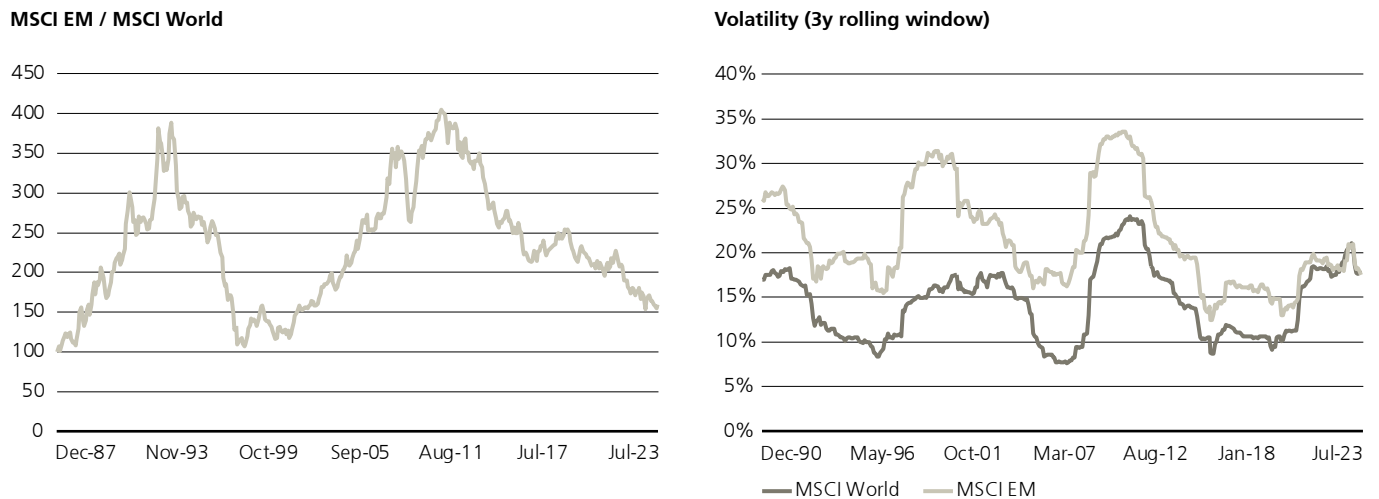


UBS

Emerging Markets – a risk and return perspective

From a risk perspective, one can observe on the right hand side of Figure 1, Emerging Markets (MSCI EM) volatilities have generally converged to volatilities similar to those of Developed Markets (MSCI World); interestingly enough, that holds true for both Equity and Fixed Income indexes. The fact that the overall EM risk profile has converged to that of DM over the past three decades may be because EM markets are growing and maturing as their economies become more advanced. We will see later on how it could affect asset allocation decisions.

Figure 1: Historical relative performance and volatility levels – MSCI EM and World indexes



Source: UBS Asset Management, MSCI. Data as of July 2023.



Growing importance of China within EM

China's economy represents a sizeable portion of the global GDP, but has been historically underrepresented in global market indexes, both in Equity and Fixed Income. Taking the Equity market as an example, the share of Global GDP for China is around 18% while the weight of China in MSCI ACWI is a mere 3.3%.

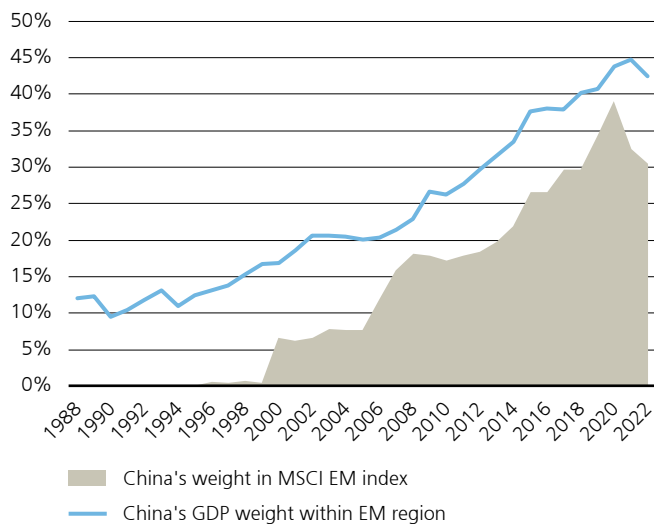
While this under-representation holds true for global equity indices, if we focus on Emerging Markets the picture changes substantially. On the left-hand side graph of Figure 2,

we can see that China is well represented in the MSCI EM index. In fact China has around 30% weight in the MSCI Emerging Market Index for approximately a corresponding 42% share of GDP.

An interesting point to highlight is not only the current weight of China within this benchmark, but also its staggering growth rate that has seen its weight increase from almost zero in the early 2000s to its current 30% level.

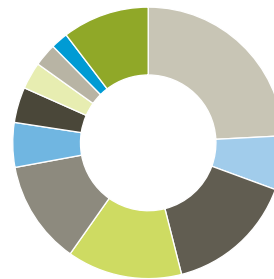
Figure 2: China's weight within MSCI Emerging Markets index

China within Emerging Markets



Current status

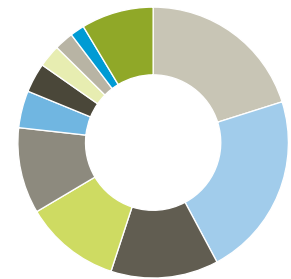
(If greater than 20%)



24.17%	China
6.42%	China A
15.44%	Taiwan
13.74%	India
12.33%	Korea
5.31%	Brazil
4.22%	Saudi Arabia
3.22%	South Africa
2.73%	Mexico
2.05%	Thailand
10.36%	Others

Full inclusion

(If at 100%)



20.13%	China
22.04%	China A
12.86%	Taiwan
11.45%	India
10.27%	Korea
4.43%	Brazil
3.52%	Saudi Arabia
2.68%	South Africa
2.27%	Mexico
1.71%	Thailand
8.63%	Others

Source: UBS Asset Management, MSCI.

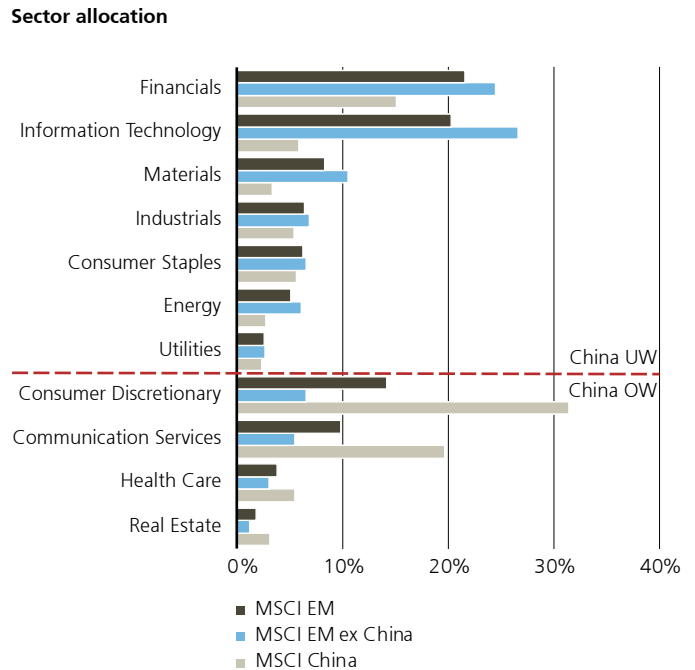
Additionally, the graph on the right hand side shows that there are nuances for potential future increases in weight. The current weight of China is around 30%, out of which only 6% is represented by China A-Shares. This is because these shares are currently only included at 20% of their free-float market capitalization. If A-shares were to be fully included, the actual size of China within MSCI EM would increase to about 42%, out of which 22% would be China A-Shares.

How different is China with respect to the rest of EM?

China's growing rise in importance poses some questions in regards to its place within EM. We have already seen how this increase in weight has been linked to the growing dominance of China's economy within Emerging Market countries, but in the following paragraphs we will analyze how China compares to the rest of EM from a sector, returns and correlation perspective.

If we first focus on sectors, we can see in Figure 3 how both EM and EM ex China are quite distinct from China. MSCI China has substantial overweight in Consumer Discretionary and Communication Services, especially when compared to MSCI EM Ex-China. On the other hand, both EM and EM ex-China have much greater allocations to Financials and IT when compared to MSCI China. Within the IT sector in particular, EM ex-China has a substantially heavier exposure to companies involved in technology hardware and semiconductors, which has been in focus for many investors in recent months. Additionally, MSCI EM ex-China have about 17% weight allocated to commodity-orientated sectors (i.e. energy and materials) compared to only 6% for MSCI China.

Figure 3: Indexes sector breakdown



Source: UBS, Asset Management. Data as of 31 July 2023.

An asset allocation perspective

Most investors construct a global portfolio by combining Developed Markets and Emerging Markets, in proportions that are mostly dictated by their tactical view and overall risk appetite. In a portfolio context, where clients often frame the problem as a mean-variance optimization, lower correlations between EM and DM are desirable as they allow you to diversify risks. On the other hand, as shown previously, the risk characteristics of EM Equity have converged to those of DM in recent years

Looking at the correlation matrix (Figure 4), we can still see how MSCI EM provides diversification opportunities / benefits with respect to DM, with correlations trending around 0.855. MSCI China exhibit an even lower correlation to MSCI World, with the A-share market displaying an

even lower correlation relative to both MSCI World and MSCI EM. One reason often cited for this lower correlation of A-shares is because the domestic market has been largely closed to foreign investors in the past and remains to this day dominated by onshore investors.

Over the past decade, China's price correlation with the rest of the EM equity complex has been trending downwards, suggesting a reducing sensitivity to China's economic linkages is also manifesting in equity prices. As a consequence, the correlation of MSCI EM ex-China relative to MSCI World is larger than for MSCI EM (where China is included). This might suggest that, given its large weight, China has contributed to EM's performance divergence with respect to MSCI World.

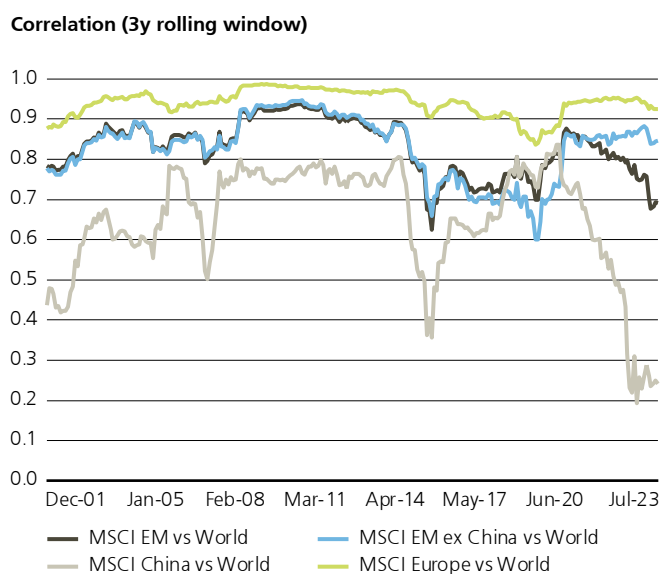
Figure 4: Correlation matrix (index monthly returns)

	MSCI ACWI	MSCI World	MSCI EM	MSCI EM ex China	MSCI China	MSCI China A
MSCI ACWI	1.000	0.997	0.855	0.879	0.613	0.414
MSCI World	0.997	1.000	0.810	0.843	0.561	0.381
MSCI EM	0.855	0.810	1.000	0.962	0.836	0.550
MSCI EM ex China	0.879	0.843	0.962	1.000	0.662	0.426
MSCI China	0.613	0.561	0.836	0.662	1.000	0.706
MSCI China A	0.414	0.381	0.550	0.426	0.706	1.000

Source: UBS Asset Management, MSCI. Monthly returns data from December 2008 to July 2023.

To understand whether such long-term correlations are stable or if there have been recent swings, we can analyze the rolling correlations of the most important segments. Looking at Figure 5 we can see how, in recent years, MSCI China’s correlations to global developed markets have also fallen substantially and diverged with those of MSCI EM ex-China equities. It’s interesting to note how, given the growing weight of China within MSCI EM, the decrease in correlation can also be seen on MSCI EM. On the other hand, if we look at the rolling correlation of MSCI EM ex China, we can see how this number is stable, suggesting that the decoupling of MSCI EM from MSCI World was mostly linked to the performance of China within MSCI EM.

Figure 5: Rolling correlations (3Y correlation window)



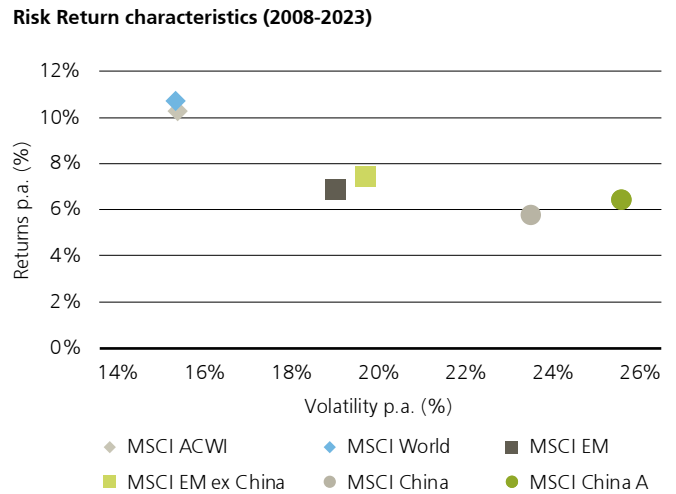
Source: UBS Asset Management, MSCI. Monthly data from December 2001 to July 2023.

Risk-returns characteristics and recent performance

In addition to correlation, the other key components of a mean-variance optimization are returns and volatilities. In Figure 6, we plotted the long-term returns and volatility for selected indices. It is worth highlighting how China is showing lower returns paired with higher volatilities. The MSCI EM ex-China index has risk-returns very much in line with those of MSCI EM.

One should note that the return profile of MSCI China strongly deteriorated in the last few years, while previously it had been one of the best performers within MSCI EM countries. In the chart below (Figure 7), we isolate the performance over the last 5 years for MSCI EM, MSCI EM ex-China and MSCI China.

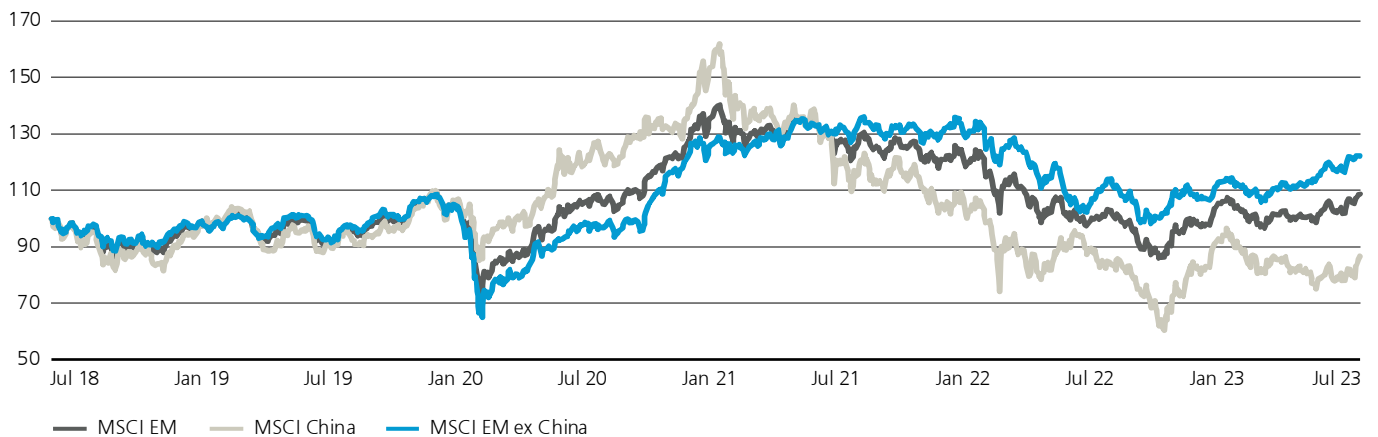
Figure 6: Risks & returns of selected indexes



Source: UBS Asset Management, MSCI. Data from 2008 to July 2023.

Figure 7: Long-term performance comparison

Long run performance comparison



Source: UBS Asset Management, MSCI. Data from July 2018 to July 2023. Please note that past performance does not guarantee future results.

Until early 2020 we can observe that returns of China have closely tracked the relative performance of EM ex-China as well as that of MSCI EM. However, the performance of China has seen a large divergence since the COVID-19 outbreak: this may partly be explained by the fact that the Chinese economy has been impacted first by the COVID-19 pandemic but also recovered earlier than others, which helped Chinese equities performance in 2020. On the other hand, in 2021 and especially in 2022, Chinese equities have underperformed sharply given regulatory tightening. Additionally, it's interesting to note how MSCI EM ex-China generally tends to move in line with MSCI EM (as noted

previously, it has a correlation of 0.962) and, given that China dragged down the performance of MSCI EM, the index that removes Chinese companies has therefore outperformed in both 2021 and 2022.

Together with the previous findings on correlations, these observations further support the argument that China's risks are somehow decoupled from the rest of EM. In addition, thanks to a lower IT exposure, the rest of EM provided portfolio diversification to EM investors while significantly impacting returns.

In a nutshell

To recap, we have made the following observations:

- The sector composition of China is very different from the rest of EM.
- The performance of EM is closer to DM than to China
- China's weight within EM is growing, which can alter EM's correlation profile and has negatively impacted returns in the last years.
- MSCI EM Ex-China is closely related to both MSCI EM and MSCI World, while adding diversification benefit in 2023.

These findings point to China's economic and policy cycle which is distinct from the rest of the world, indicating that global investors may be better served by separating China from the rest of EM.

For marketing and information purposes by UBS.

For professional clients / qualified investors only.

Before investing in a product please read the latest prospectus and key information document carefully and thoroughly.

Any decision to invest should take into account all the characteristics or objectives of the fund as described in its prospectus, or similar legal documentation. Investors are acquiring units or shares in a fund, and not in a given underlying asset such as building or shares of a company. The information and opinions contained in this document have been compiled or arrived at based upon information obtained from sources believed to be reliable and in good faith, but is not guaranteed as being accurate, nor is it a complete statement or summary of the securities, markets or developments referred to in the document. Members of the UBS Group may have a position in and may make a purchase and / or sale of any of the securities or other financial instruments mentioned in this document. Units of UBS funds mentioned herein may not be eligible for sale in all jurisdictions or to certain categories of investors and may not be offered, sold or delivered in the United States. The information mentioned herein is not intended to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. Past performance is not a reliable indicator of future results. The performance shown does not take account of any commissions and costs charged when subscribing to and redeeming units. If whole or part of the total costs to be paid is different from your reference currency, the costs may increase or decrease as a result of currency and exchange rate fluctuations.

Commissions and costs have a negative impact on the investment and on the expected returns. If the currency of a financial product or financial service is different from your reference currency, the return can increase or decrease as a result of currency and exchange rate fluctuations. This information pays no regard to the specific or future investment objectives, financial or tax situation or particular needs of any specific recipient. Future performance is subject to taxation which depends on the personal situation of each investor and which may change in the future. The details and opinions contained in this document are provided by UBS without any guarantee or warranty and are for the recipient's personal use and information purposes only. This document may not be reproduced, redistributed or republished for any purpose without the written permission of UBS Asset Management Switzerland AG or a local affiliated company. Source for all data and charts (if not indicated otherwise): UBS Asset Management

This document contains statements that constitute "forward-looking statements", including, but not limited to, statements relating to our future business development. While these forward-looking statements represent our judgments and future expectations concerning the development of our business, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from our expectations.

A summary of investor rights in English can be found online at: ubs.com/funds.

More explanations of financial terms can be found at ubs.com/am-glossary

© UBS 2023. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.