

---

# Optimizing Your Emerging Markets Equity Portfolio

---

**Altaf Kassam, CFA**

EMEA Head of Investment Strategy and Research

**Kamal Gupta, CFA, FRM**

Investment Strategist

---

<b>04</b>	<b>The Changing Face of Emerging Market Equity Investing</b>
<b>06</b>	<b>Indexing in Emerging Market Equities Is Not Enough</b>
<b>08</b>	<b>Seeking Opportunity Through Active Management</b>
<b>13</b>	<b>Breaking Down Emerging Market Equities</b>
<b>16</b>	<b>Coping with Currency Risk</b>
<b>18</b>	<b>'Optimal' EM Portfolio Allocations</b>
<b>22</b>	<b>The Bottom Line</b>

---

---

# Executive Summary

---

The opportunity set for emerging market (EM) equities has changed dramatically over the past three and a half decades — geographically, at a sector level, and in terms of market capitalization. But even as the composition and characteristics of EM evolve, we believe one thing remains consistent: EM equities continue to offer investors the opportunity to add value to their portfolios. As economic growth has translated into increased breadth, depth, and maturity in the EM capital markets, investors now have access to more building blocks than ever before, from indexing, fundamental active, and quantitative, to thematic, regional, and country-specific. In this paper, Altaf Kassam and Kamal Gupta outline the key points to consider and practical steps for creating an effective emerging market equity portfolio.

---

# The Changing Face of Emerging Market Equity Investing

---

The opportunity set for emerging market (EM) equities has changed dramatically over the past three and a half decades.

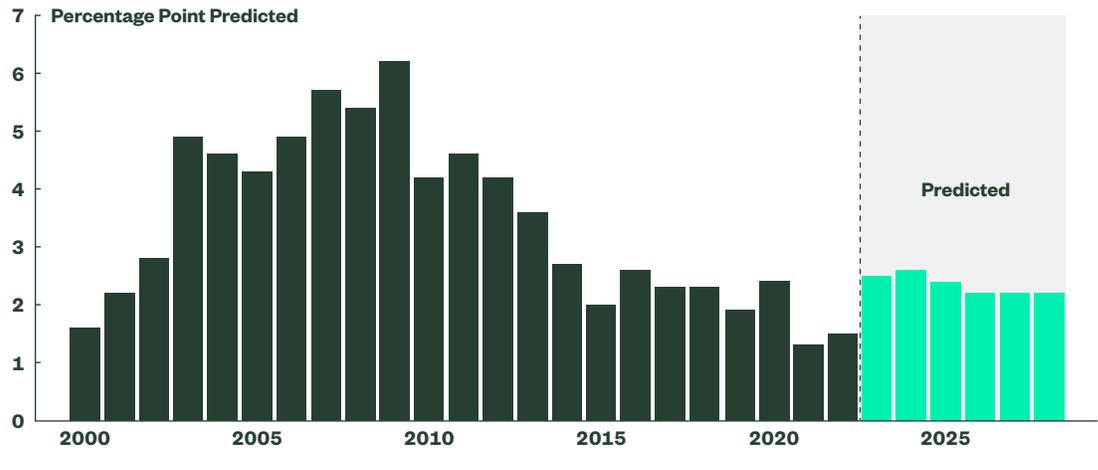
When the MSCI EM Index was first introduced in 1988, it represented 10 economies. Each of these could be roughly characterized as “underdeveloped but growing rapidly.” By the end of 2023, there were 24 economies reflected in the Index, and there is a healthy debate over whether some of its constituent economies, capital markets, and infrastructures are too mature to even qualify for the “emerging” label.

The current EM Index is very different from its initial incarnation, as economic growth has translated into increased breadth, depth, and maturity in the EM capital markets.

- In **geographic** terms, Asian firms made up nearly 46% of the EM Index at inception. Today, that number has jumped to over three-quarters of the Index, with China alone at over 25%.
- At a **sector** level, the EM Index’s tilt has shifted from production to consumption, with the financial, technology, consumer discretionary, and communications sectors displacing, to some extent, materials, staples, and industrials.
- Finally, in terms of **market cap**, mega- and large-cap stocks<sup>1</sup> now make up over half of the EM Index. Twenty years ago, these two capitalization categories together made up less than 20% of the total Index weight. While the nominal market capitalization of listed equities has increased over this period, the proportionate increase in mega- and large-cap companies in the EM Index has been considerably higher than in the Developed Market (DM) Index.

Even as the composition and characteristics of EM change, we believe one thing remains consistent: EM equities continue to offer investors the opportunity to add value to their portfolios. The biggest advantage of EM investment is the potential for higher growth. EM economies have consistently demonstrated higher gross domestic product (GDP) growth than their developed counterparts, and this differential is expected to grow back to the pre-COVID baseline, as we show in Figure 1.

Figure 1  
**EM Offers Access to  
 Higher Growth**



Source: IMF World Economic Outlook, State Street Global Advisors calculations, as of January 2024.

Our analysis of data from eVestment, however, indicates that EM makes up only about 9% of investors’ equity allocation. This is very much out of line with the influence of EM in global markets: 35% of global nominal GDP<sup>2</sup> and a majority of global GDP *growth* are attributable to EM. As emerging markets continue to develop and become more integrated into global markets, their influence is likely to increase. We believe this underweight is due to the fact that although EM *economies* have continued to outgrow their DM peers post the Global Financial Crisis, EM *equity markets* in aggregate have lagged DM over the same period.

Considering the changes in the EM landscape, as well as the non-trivial transfer between EM economic and equity market outperformance, we believe the time is ripe for investors to re-assess their EM equity portfolio allocations. In this paper, we’ll outline our views on five key dimensions of that assessment, including:

- 1 The role and limitations of indexed investments in EM
- 2 Why active management matters in unlocking the full scale of the EM opportunity set
- 3 Why EM small-cap firms may offer a particularly strong opportunity to add value
- 4 How to control the China concentration risk in your EM exposure
- 5 How investors can cope with the additional risk introduced by EM currency exposure

Finally, we’ll conclude by presenting a set of optimal EM equity portfolio allocations to serve as a foundation for further thinking.

---

# Indexing in Emerging Market Equities Is Not Enough

---

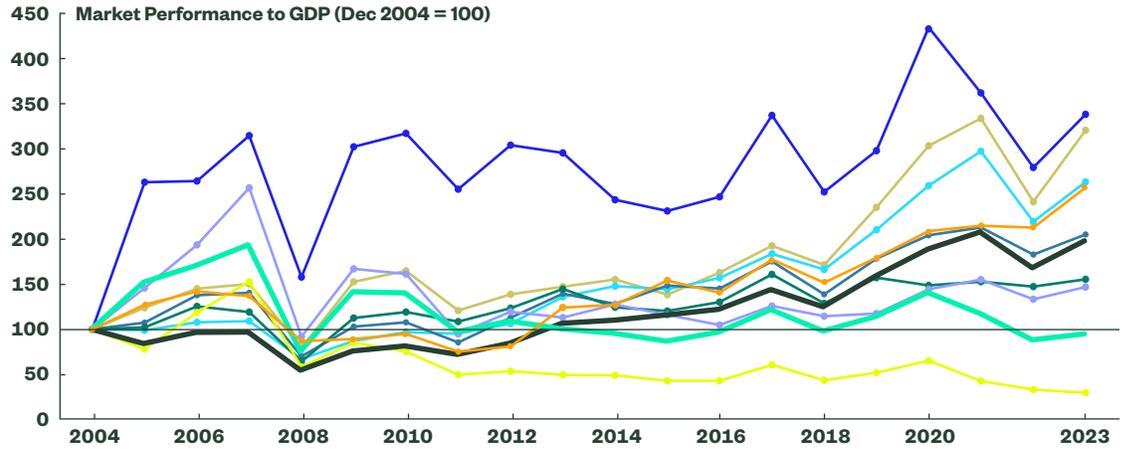
- **Best-in-class EM index managers can help overcome higher trading costs prevalent in EM through their smart portfolio construction and efficient trading.**
- **But the poor transmission of GDP growth into indexed equities' performance requires investors to look beyond indexing to realize the full scale of EM opportunity.**

Indexed investments in emerging markets have been gaining popularity in recent years. In addition to their relatively low costs, for large investors, market-cap weighted index strategies can be very helpful as a source of liquidity given their relatively high capacity. At the same time, EM index managers face a range of headwinds, including higher trading costs and other market frictions, which often cause EM index funds to lag their respective benchmarks and with a higher tracking error. While these headwinds can degrade the returns of many managers, best-in-class EM index managers are able to compensate for these challenges through smart portfolio construction and efficient trading, especially around index rebalance periods.

While we believe that indexed EM investments have an important role to play in investors' overall allocation to emerging markets, EM equities have lagged their developed counterparts for over a decade now. Simply put, the EM growth advantage hasn't led to superior index returns as we show in Figure 2. Why? The short answer is that economic growth hasn't always translated into strong equity profitability (and returns),<sup>3</sup> necessitating the need for active selection.

Figure 2  
**High GDP Growth Does Not Always Equal Superior Index Performance in Emerging Markets**

- DM
- EM
- Korea
- Taiwan
- USA
- Japan
- Europe x UK
- UK
- India
- China



Source: FactSet, IMF, State Street Global Advisors calculations, as of Dec 31, 2023. Equity performance is measured using total returns in USD for the respective MSCI country/region standard indices. GDP is measured in current dollar terms. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

The need for active management is further supported by the growing divergence between country/regional GDP and equity market growth, as shown above. On the one hand, Taiwanese and Korean equity markets have effectively turned their economic growth advantage into equity performance. The Chinese equity index, on the other hand, has lagged the major developed and emerging equity markets despite significant economic growth. This divergent behavior, together with the generally weak transfer from economic growth to equity performance, makes an active approach an essential tool to exploit the full range of emerging market opportunity. In the next section, we delve into the scope of active investing and throw some light on some of the questions that are faced by asset owners and allocators.

---

# Seeking Opportunity Through Active Management

---

- **Inefficient EM markets offer an attractive alpha opportunity for skilled active managers.**
  - **Declining cross-sectional country return dispersion, combined with low pairwise stock correlation, imply growing promise for bottom-up portfolio construction versus top-down country rotation.**
  - **EM small-caps offer a potentially larger alpha opportunity without the concentration risk inherent in the standard EM Index.**
- 

---

## **Exploitable Inefficiencies Persist**

Active equity management builds on the substrate of market inefficiency. An analysis of factor spreads confirms that over the last 20 years, the investment themes that have prevailed in DM have worked in EM, and in fact, comparing DM and EM factor spreads suggests that EM are relatively less efficient. In general, inefficiencies in EM create a higher potential for outperformance in active management.<sup>4</sup>

To give an idea of the extent of these inefficiencies and where they tend to be concentrated, Figure 3 shows historical quintile factor returns across the large- and mid-cap universe for emerging and developed markets, respectively. Factor-return spreads in EM are in all case larger than those in DM. The EM Value factor, in particular, has not suffered the slump seen over its medium-term history in DM.

Figure 3  
**Quintile Returns to Smart Beta Factors Across EM Universes**

Large + Mid Cap (Dec 3–Nov 23)	Low Vol (%)	Value (%)	Quality (%)	Momentum (%)	Size (%)
Q1	9.2	11.1	9.5	11.6	7.6
Q2	8.9	9.4	8.5	9.0	6.8
Q3	8.6	7.2	7.3	7.5	9.4
Q4	8.3	5.9	7.6	6.3	6.7
Q5	2.9	4.9	5.5	4.3	7.7
<b>EM Quintile Spread</b>	<b>6.3</b>	<b>6.2</b>	<b>4.0</b>	<b>7.3</b>	<b>0.1</b>
<b>DM Quintile Spread</b>	<b>3.0</b>	<b>1.9</b>	<b>3.4</b>	<b>4.2</b>	<b>-1.4</b>

Source: FactSet, State Street Global Advisors. Time period from December 2003 to November 2023. Quintile Returns to Smart Beta Factors for MSCI EM Index are shown along with quintile spread comparison against the Developed Market Index. Factor returns represent the returns of components of the emerging market equity universe (at their cap-weight) which have been grouped methodically based on their factor exposure. The performance assumes no transaction and re-balancing costs, so actual results will differ. Past performance is not a reliable indicator of future performance. Index returns reflect all items of income, gain and loss and the reinvestment of dividends. Performance of an index is not indicative of the performance of any product managed by State Street Global Advisors.

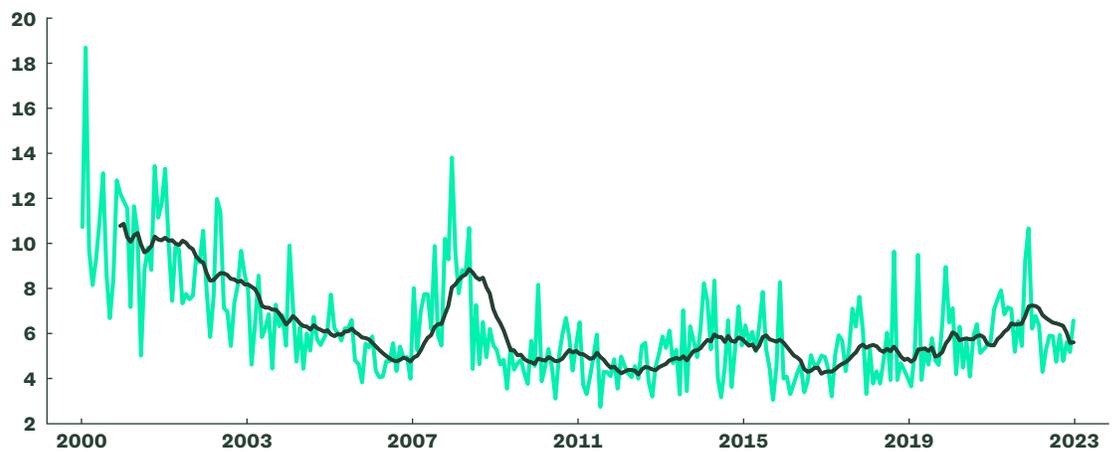
**Bottom-up Portfolio Construction Currently Shows More Promise Than Top-down Approaches**

When considering their active allocations, investors have traditionally focused on a combination of top down-oriented thematic, country- and sector-level approaches. Top-down macroeconomic and geopolitical influences can serve as a useful complement to stock selection,<sup>5</sup> but we believe that a bottom-up stock selection approach to EM equity portfolio construction is currently more effective than a pure top-down, country-rotation approach.

In general, the country-rotation approach to EM investing starts from the premise that the EM opportunity set should be partitioned on a country basis because emerging markets are not a homogenous bloc, but rather a changing number of countries, each with its own investment idiosyncrasies. This premise is now coming under question: Analysis of cross-sectional dispersion of EM country returns — an indication of the opportunity to generate excess returns from EM country selection — shows that dispersion has fallen substantially in our study period (see Figure 4).

Figure 4  
**Cross-Sectional Dispersion of EM Country Returns**

■ MA(12)  
 ■ X-Sectional Disperison (%)

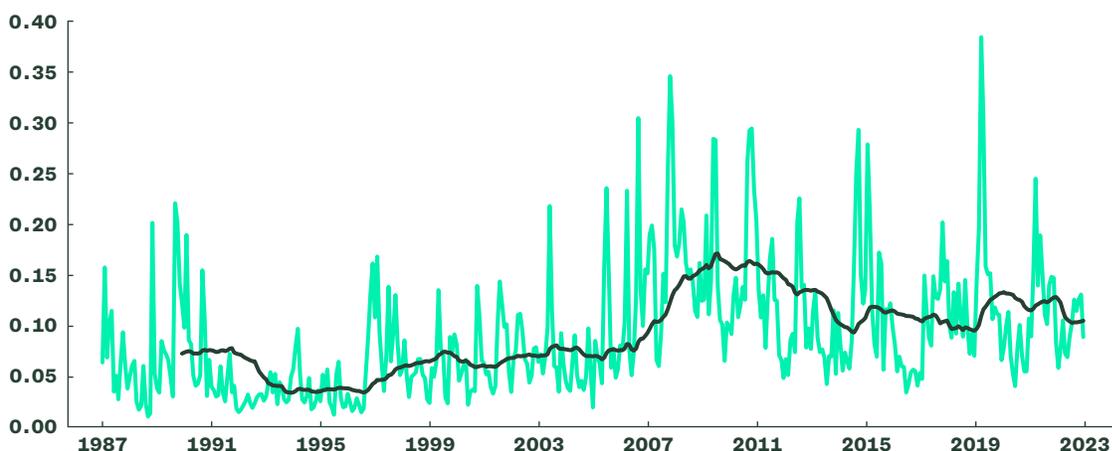


Source: MSCI Emerging Markets data, January 2000–December 2023 (Monthly), Gross Return in U.S. Dollars. Cross-sectional dispersion for a month is calculated as the standard deviation across all MSCI EM country monthly returns for that month.

In contrast to this dwindling top-down dispersion, stock-level correlation in emerging markets has been declining from its post-GFC peak, after having picked up during the pandemic (see Figure 5).

Figure 5  
**Average Pairwise Correlation and Its Three-Year Moving Average for EM Stocks**

■ 3-Year MA  
■ Pairwise Correlation



Source: FactSet, State Street Global Advisors calculations, as of December 31, 2023.

Viewed together, these analyses show increasing opportunity for active management via stock selection rather than country rotation in EM. The opportunities for EM stock pickers have broadly improved over the past ten years, even as country rotation approaches may have become less effective.

### **EM Small-cap Stocks Offer the Ability to Add Value for Active Managers Without the Concentration Risk Inherent in the Standard EM Index**

We can see that factor return spreads — already greater in emerging markets than in developed markets — are even wider among EM small-cap firms as shown in Figure 6 below. This suggests that EM small-caps may present a particularly ripe opportunity for active management to drive outperformance, with the caveat that as we move down the capitalization spectrum, these theoretical factor returns can be harder to capture in practice.

Figure 6  
**Quintile Returns to Smart Beta Factors Across EM Universes**

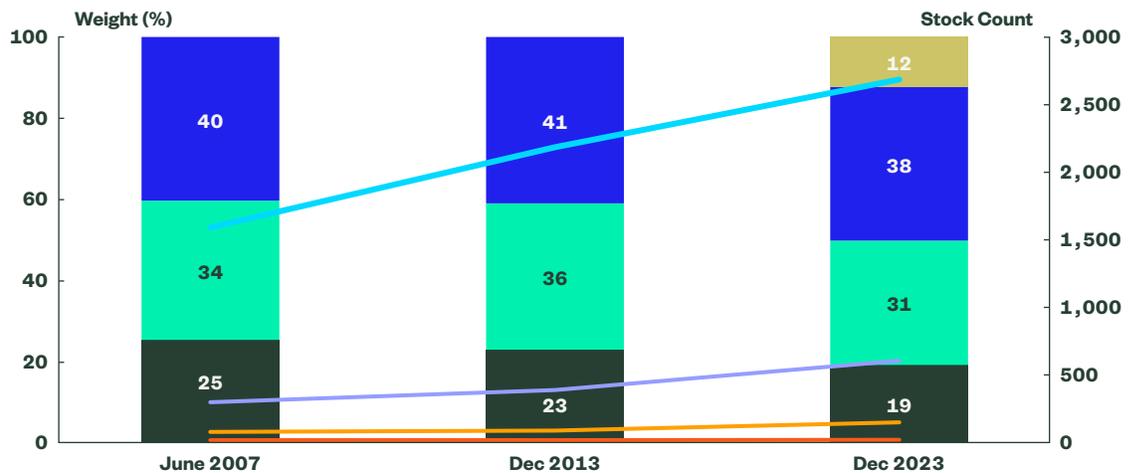
EM Small Cap (Dec 03–Nov 23)	Low Vol (%)	Value (%)	Quality (%)	Momentum (%)
Q1	11.5	15.4	11.8	15.9
Q2	11.5	9.1	9.1	12.4
Q3	10.3	8.9	7.4	8.2
Q4	8.0	8.0	8.0	4.3
Q5	0.4	1.2	5.4	1.4
<b>EM SC Quintile Spread</b>	<b>11.1</b>	<b>14.1</b>	<b>6.4</b>	<b>14.6</b>
<b>DM SC Quintile Spread</b>	<b>7.5</b>	<b>8.6</b>	<b>2.4</b>	<b>9.0</b>
<b>EM Quintile Spread</b>	<b>6.3</b>	<b>6.2</b>	<b>4.0</b>	<b>7.3</b>
<b>DM Quintile Spread</b>	<b>3.0</b>	<b>1.9</b>	<b>3.4</b>	<b>4.2</b>

Source: FactSet, State Street Global Advisors. Time period from December 2003 to November 2023. Quintile Returns to Smart Beta Factors for MSCI EM Small Cap Index are shown along with a quintile spread comparison across the universes. Factor returns represent the returns of components of the emerging market equity universe (at their cap-weight) which have been grouped methodically based on their factor exposure. The performance assumes no transaction and re-balancing costs, so actual results will differ. Past performance is not a reliable indicator of future performance. Index returns reflect all items of income, gain and loss and the reinvestment of dividends. Performance of an index is not indicative of the performance of any product managed by State Street Global Advisors.

This opportunity is bolstered by the growing accessibility of EM small-cap markets. Over the past 20 years, mid- and small-cap EM stocks have increasingly become a viable universe for investors. The creation in 2007 of the MSCI Emerging Markets IMI Index, which includes large-, mid- and small-cap stocks, has helped to foster the inclusion of small-cap names in EM portfolios. Figure 7 shows the evolution of the market cap and name distribution of the Index since inception. The rise of the mega- and large-caps as a proportion of market capitalization is clear, squeezing the mid- and small-caps, but crucially the number of names has increased roughly in line with the Index's growth so the breadth remains.

Figure 7  
Market Cap and Name Distribution of the MSCI EM IMI Index

- Small Cap
- Mid Cap
- Large Cap
- Mega Cap
- Small# (rhs)
- Mid# (rhs)
- Large# (rhs)
- Mega# (rhs)

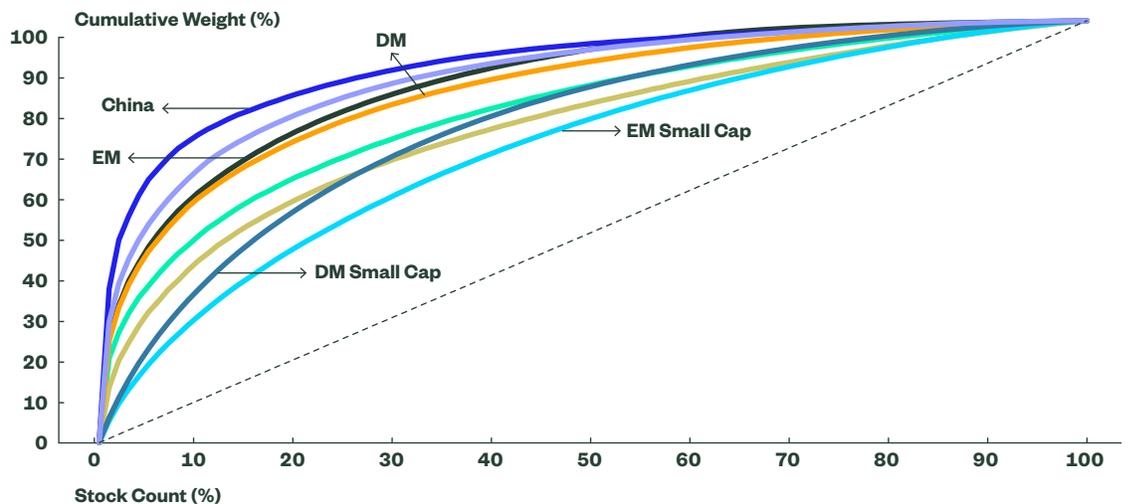


Source: FactSet, State Street Global Advisors calculations, as of December 31, 2023. MSCI EM IMI was launched in June 2007.

So, despite the startling rise in index concentration across the developed and emerging markets, EM small-cap concentration continues to offer great breadth. This is reiterated in Figure 8 below, where we see that the top 20% of names cover more than 70% of the Index by weight in the emerging as well as developed market indexes, but comprise less than 50% of the Emerging Market Small-Cap Index. In contrast, the top 20% of names cover 82% of the weight of the China Index.

Figure 8  
EM Small-cap Index Is Well Distributed in Weight

- EM
- EM ex China
- China
- China 'A' Onshore
- EM Small Cap
- DM
- DM Small Cap
- USA



Source: FactSet, State Street Global Advisors, as of December 31, 2023.

---

As discussed above, the EM equity opportunity set seems to be growing more top-heavy. This means that the size and variability of the EM small-cap universe yields fertile ground for a range of approaches to active stock selection. With more than 1,900 securities, the level of information flow and analyst coverage among EM small caps varies from virtually non-existent — 16% by name of the MSCI EM small-cap universe has no analyst coverage — to a level of coverage most often associated with large-cap DM stocks. The median MSCI EM small-cap stock is followed by only five analysts.<sup>6</sup> In this environment, investors may derive value from active quantitative approaches<sup>7</sup> that are able to exploit the full breadth of the small-cap universe to construct their portfolios.

# Breaking Down Emerging Market Equities

Given geopolitical and economic challenges in China, we believe that investors should pay close attention to the China-specific risks in their EM Index allocation. The fundamental divergence between China and the rest of the EM Index has been growing since the global financial crisis as shown in Figure 2, and further illustrated in Figure 9, which shows the dissimilar country-wise historical returns of the largest components in the recent past.

Figure 9  
**Dissimilar  
Historical Returns**

	3 Years	5 Years	10 Years
<b>MSCI World Index</b>	7.3	12.8	8.6
<b>MSCI EM</b>	-5.1	3.7	2.7
<b>MSCI China</b>	-18.4	-2.8	0.9
<b>EM x China</b>	2.2	6.8	3.8
MSCI Taiwan	4.9	17.3	11.4
MSCI Korea	-7.3	5.3	3.1
MSCI India	12.0	11.8	9.9
MSCI Brazil	7.8	5.1	2.8
<b>MSCI EM SC</b>	6.5	9.9	5.3

Source: FactSet, State Street Global Advisors calculations, as of December 31, 2023. Net of dividend taxes returns were used. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss, and the reinvestment of dividends and other income as applicable. Past performance is not a reliable indicator of future performance.

This divergence between China and the rest of the EM is even more clear in the below correlation matrix. Given these differences, we believe that investors should instead consider a nuanced approach of owning a separate China exposure alongside EM ex-China<sup>8</sup> to manage these risks better. We explore the consequences of this approach in the next section.

Figure 10  
**Ten-Year Monthly Return  
 Correlation Matrix  
 (from December 2013 to  
 December 2023)**

	China	EM ex China	Japan	Europe	DM
China	1	—	—	—	—
EM ex China	0.56	1	—	—	—
Japan	0.51	0.73	1	—	—
Europe	0.47	0.81	0.79	1	—
DM	0.46	0.82	0.82	0.92	1

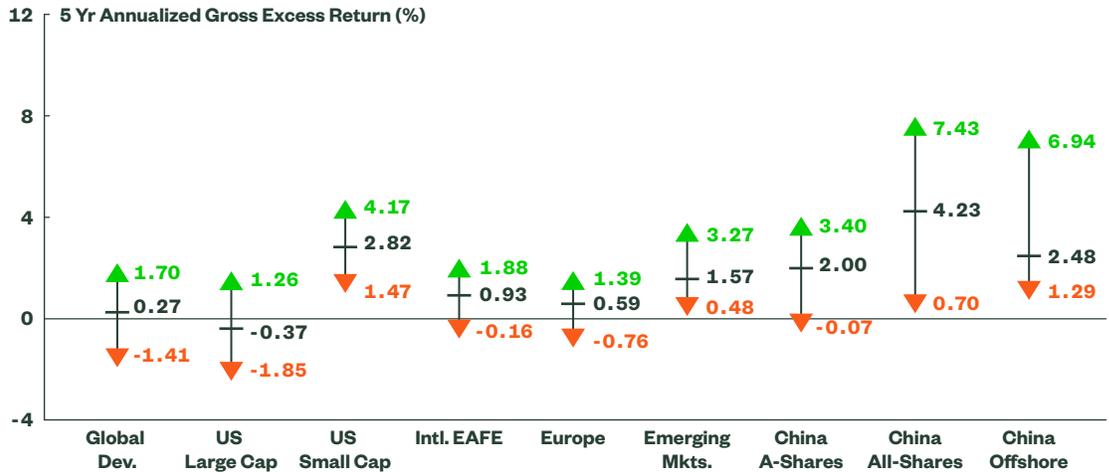
Source: MSCI, Bloomberg, State Street Global Advisors Calculations, as of December 31, 2023. China = MSCI China Index; EM ex-China = MSCI EM ex China Index; Japan = MSCI Japan Index; Europe = MSCI Europe Index; DM = MSCI World Index.

**China Is Hard to  
 Ignore and Warrants  
 Special Attention**

China’s prominence in MSCI EM has fallen significantly, but it still comprises nearly a quarter of the Index. At this weight, China is still impossible to ignore for any emerging market investor. However, we believe the extra attention could be rewarding as our study of eVestment data suggests that China remains a fertile ground for Active managers. As shown in the figure below, active strategies have done particularly well in China.

Figure 11  
**Take an Active  
 Approach in China**

- 75th
- Median
- 25th



Source: eVestment, State Street Global Advisors, as of November 30, 2023. 5-year annualized gross of fees excess returns are shown over the manager’s preferred benchmark. Past performance is not a reliable indicator of future performance. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

In addition, we believe China’s complex market structure, consisting of the onshore ‘A’-share markets and the offshore ‘H’-share, Red Chip and ADR markets, *inter alia*, is best navigated by an active approach. These various markets are very different from one another in terms of sector composition and capitalization buckets. In general, ‘A’-shares tend to provide investors with more access to domestic consumption themes and have typically traded on a varying level of premium to ‘H’-shares, depending on liquidity and investor preferences. In addition, China’s A-share market may also be a particularly fertile ground for active investing due to its relative inefficiency and volatility on the back of a predominance of retail investors. Given the heterogeneity within the China equity opportunity set, investors are faced with many choices. We believe they should carefully consider the choice of allocating separately to ‘A’-shares/‘H’-shares or into a broad China strategy. Our preference is for a broad, active approach to China, which allows the manager the flexibility to allocate dynamically across sectors, capitalization buckets, and stocks as themes come to the fore and ebb away.

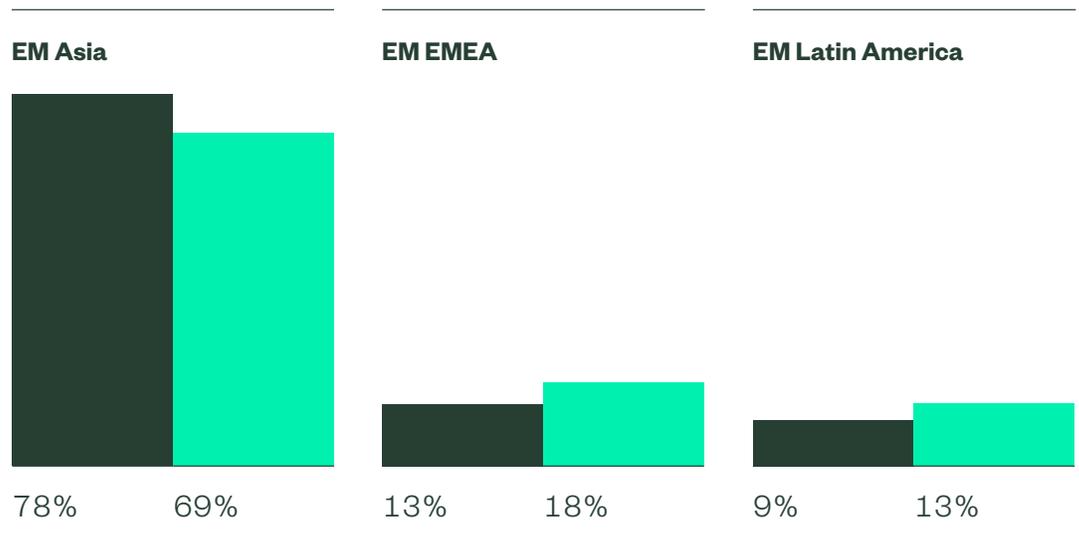
## What to Know About an EM Ex China Allocation

While investors' interest in EM ex-China has been growing, particularly as China's post-pandemic boom has faded, there aren't many active vehicles available for this region. Our search on eVestment only returned 30 active funds with an EM ex-China focus, with just three strategies having longer than a five-year track record.<sup>9</sup> Given the limited availability of active strategies in this region, along with the relatively successful GDP growth to index performance conversion for EM ex-China, indexing seems the most sensible, scalable option for large asset owners.

Given our preference for indexing in EM ex-China, it is worth exploring how the weights are distributed across sectors and countries in the rest of EM.<sup>10</sup> The combined weight of Taiwan, India, and Korea — the three largest countries by weight — increases significantly from 46% to 62% when looking at EM ex-China. Despite the removal of China, Asia remains the highest regional exposure at just under 70% of the Index, as we show in the figure below. At the same time, the rest of the EM Index overweights the financial, information technology, and materials sectors at the expense of consumer discretionary and communication services.

Figure 12  
**Asia Maintains  
Dominance in  
EM ex-China**

■ EM  
■ EM ex-China



Source: MSCI, FactSet, State Street Global Advisors, as of December 31, 2023.

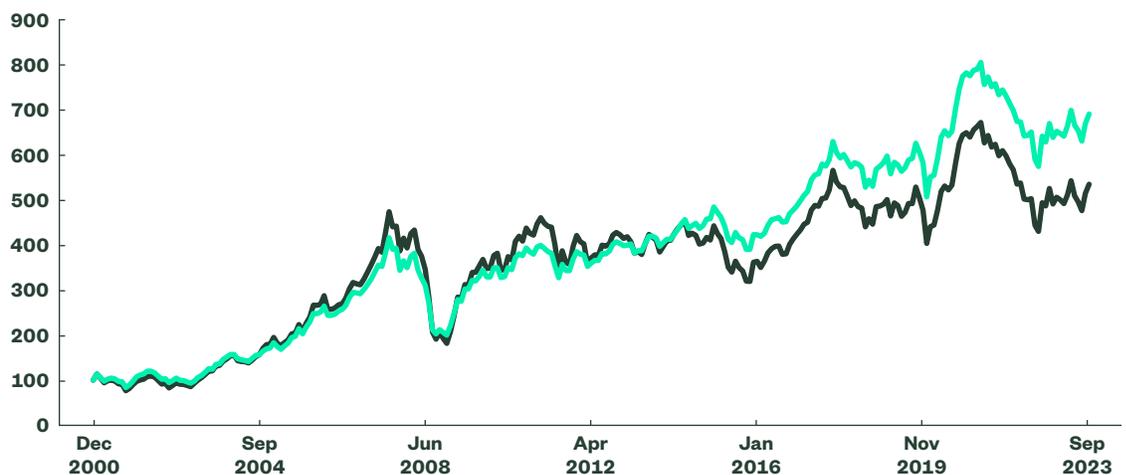
# Coping with Currency Risk

Emerging markets' currency exposure is a byproduct of investing in emerging markets equities; it impacts investor returns and introduces additional risk.

For example, buying the MSCI EM Index includes exposure to an equity market-capitalization weighted basket of EM currencies versus an investor's home (or "base") currency. Figure 13 highlights how this can have a substantial impact on returns. MSCI EM returns in US dollars (USD) have underperformed MSCI EM local returns by 1.2% on an annualized basis from the end of 2000.

Figure 13  
**Evolution of the MSCI EM Index in US Dollars and Local Currency**

■ MSCI Emerging Net Total Return USD Index  
■ MSCI Emerging Net Total Return Local Index



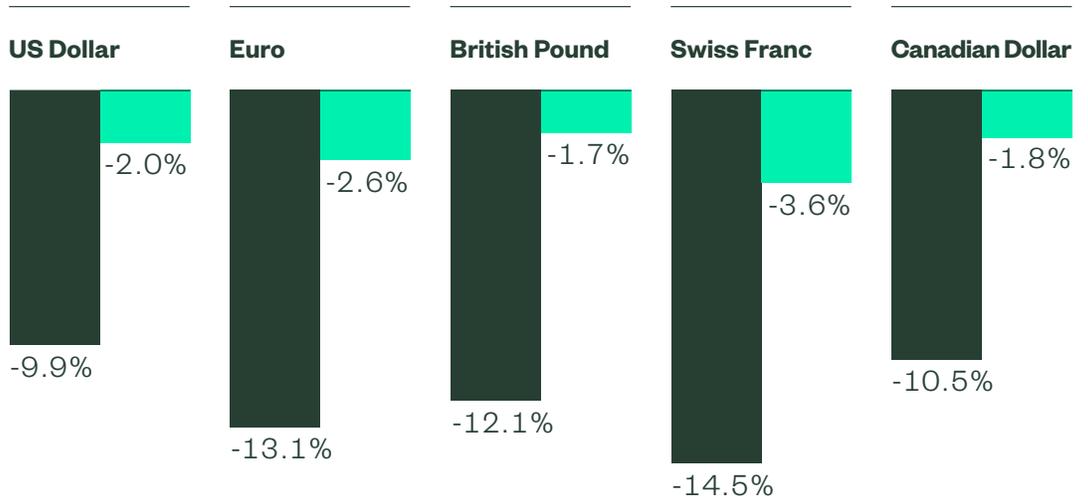
Source: FactSet, MSCI as of December 31, 2023. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Emerging market currencies can be volatile with large drawdowns, and hedging this currency risk passively is possible but often prohibitively expensive — ranging from 1.5% to 4.0% per year, depending on the home currency of the investor (see Figure 14). Additionally, determining the true currency exposure is challenging because EM corporate treasurers can be active hedgers. We find these costs and complications result in most equity investors choosing not to hedge their EM currency risk.

Figure 14  
**Value-at-Risk (VaR)**  
**of MSCI EM Index**  
**Currency Basket,**  
**December 2001**  
**to June 2023, and**  
**Representative**  
**Hedging Costs**  
**by Currency**

■ Annual Currency VaR (95%)  
 ■ Annualized Cost of Hedging

**Investor Base Currency**



Source: Bloomberg, State Street Global Advisors Calculations, as of December 31, 2023.

A simple passive hedge is indeed very expensive. Even so, we believe that investors shouldn't dismiss downside risk management simply because it's expensive *on average*, given the risks that unhedged currency exposures can transmit, as shown in the VaR analysis in Figure 14.

We think a better approach — as currencies have widely different hedging costs, and those costs change over time — is to carefully consider the hedging decision for *each* EM currency *per se* to balance several factors including its expected downside risk, the cost of hedging, and its volatility. This assessment should then be used to focus hedging efforts. By concentrating hedges where the downside risk protection is likely to be greatest relative to the cost, EM currency risk overall can be controlled more effectively.

# 'Optimal' EM Portfolio Allocations

With this backdrop in mind, we can use quantitative techniques to give the foundation of an optimal allocation to EM. A traditional paradigm for portfolio construction has been the “core-satellite” construct, in which investors garland a pure market-capitalization indexed core with a necklace of high active-share, fundamental stock-selection strategies.

Based on the opportunities we’ve identified in emerging markets for active equity management, for small-cap equities, and for Chinese equities, our version of this core-satellite construct places very low tracking error “Enhanced” strategies — active approaches which aim to replicate the characteristics of their reference indexes — alongside indexing at the core of the portfolio. Because Enhanced strategies seek modest outperformance relative to the benchmark, they can be helpful in reducing the effect of index lag in emerging markets, while maintaining the overall risk and cost profile of the core allocation.

In the satellite sleeve of the portfolio, we’ve included specific allocations to small-cap and Chinese equities, in addition to an allocation to highly active, higher tracking error strategies. We tabulate our assumptions and define the opportunity set in terms of risk and return in Figure 15, based on our own investment experiences (we also construct a covariance matrix for these strategies).

Figure 15  
**Assumptions Used to Create the EM Efficient Frontier**

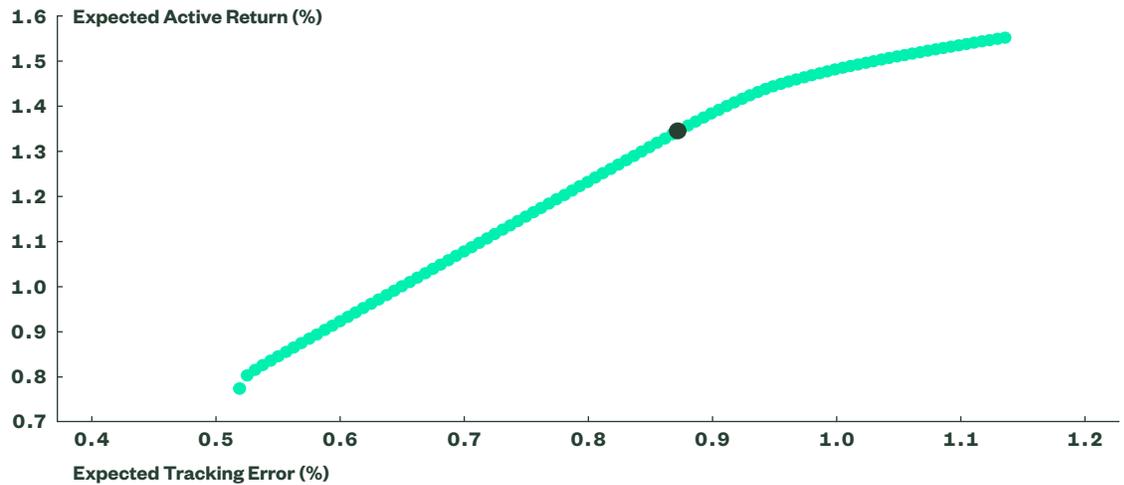
	Alpha (%)	Tracking Error (%)	Min Weight (%)	Max Weight (%)
<b>Index</b>	0.0	0.1	20.0	50.0
<b>Enhanced</b>	1.0	1.0	30.0	50.0
<b>Highly Active</b>	2.0	4.0	0.0	50.0
<b>Small Cap Active</b>	2.5	5.0	0.0	10.0
<b>China Active</b>	3.0	4.0	10.0	20.0

Source: State Street Global Advisors, as of December 31, 2023. Enhanced refers to low tracking error active or index-plus strategies having less than a 1.5% tracking error target. Highly Active refers to active strategies having greater than a 4% tracking error target.

Based on the above assumptions, we can run through a range of strategy combinations to create an efficient frontier and choose the “optimal” combination (based on maximizing information ratio) from these. The efficient frontier is shown, and the optimal portfolio highlighted in Figure 16, with the composition of the optimal portfolio reported in Figure 17.

Figure 16  
**EM Efficient Frontier with Constrained Sub-Optimal Portfolios for Higher Tracking Errors**

■ Optimal A  
■ “Efficient Frontier A”



Source: State Street Global Advisors, as of December 31, 2023.

Figure 17  
**Optimal Portfolio A, Based on Maximum Information Ratio**

	Optimal Weights (%)
Index	20
Enhanced	48
Highly Active	5
Small Cap Active	10
China Active	17

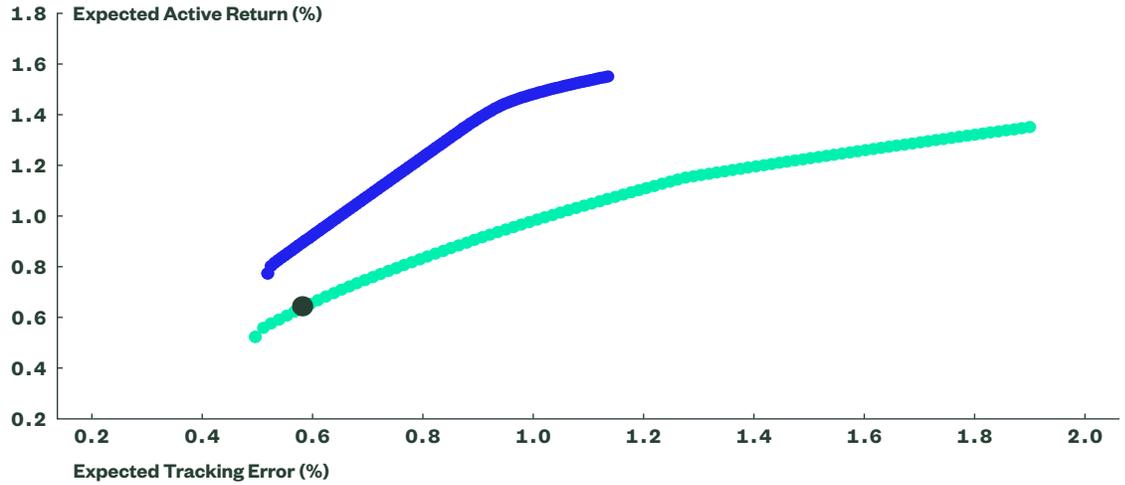
Source: State Street Global Advisors, as of December 31, 2023. Enhanced refers to low tracking error active or index-plus strategies having less than a 1.5% tracking error target. Highly Active refers to active strategies having greater than a 4% tracking error target.

The Optimal Portfolio A in Figure 17 is expected to have an active return of 1.35%, a tracking error of 0.87% and an information ratio of 1.54.

Given that Optimal Portfolio A has a heavy weight in China, we next explore removing this China Active allocation and compare the results in Figure 18.

Figure 18  
**Efficient Frontier Shifts Down on Excluding China Active**

■ Optimal B  
 ■ "Efficient Frontier B"  
 ■ "Efficient Frontier A"



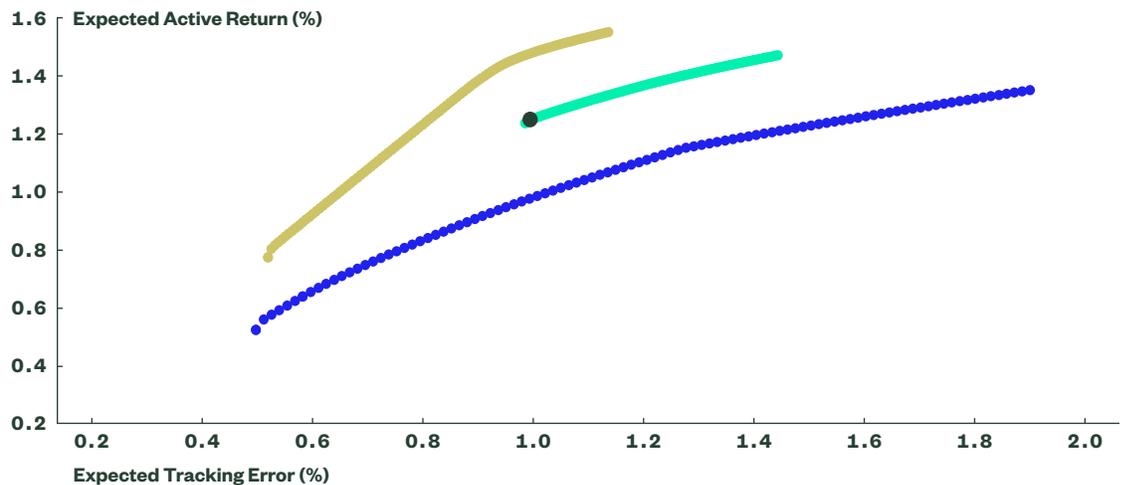
Source: State Street Global Advisors, as of December 31, 2023. Frontier B constrains China Active weight at zero.

While leaving out the China standalone allocation addresses the concentration risk in China, it does so at the expense of shifting down and flattening the efficient frontier, due to the constraint of ignoring the active opportunity in China.

Searching for a balance in portfolio efficiency and concentration to China, we next consider a combined approach that considers separating and owning a China active exposure alongside EM ex-China (Approach C) to manage these risks better. We show the comparisons between approaches A, B and C in Figure 19 below.

Figure 19  
**Efficient Frontier Comparison Snapshot**

■ Optimal C  
 ■ "Efficient Frontier C"  
 ■ "Efficient Frontier B"  
 ■ "Efficient Frontier A"



Source: State Street Global Advisors, as of December 31, 2023. Frontier C constrained EM index weight at zero and allowed EM ex-China a range of 20% to 50% allocation.

Frontier C makes use of the active opportunity in China but gives greater control over the overall China allocation and can be customized to specific preferences. Figure 20 below shows a simple comparison of the expected performance characteristics of the three optimal portfolios as explained above.

Figure 20

**Optimal Portfolio  
Comparison Snapshot**

	<b>Optimal A</b>	<b>Optimal B</b>	<b>Optimal C</b>
<b>EM Index (%)</b>	20	44	—
<b>EM ex-China Index (%)</b>	—	—	20
<b>Enhanced (%)</b>	48	50	50
<b>Highly Active (%)</b>	5	1	5
<b>Small Cap Active (%)</b>	10	5	5
<b>China Active (%)</b>	17	—	20
<b>Active Return (%)</b>	1.35	0.64	1.24
<b>Tracking Error (%)</b>	0.87	0.58	0.99
<b>Information Ratio</b>	1.54	1.10	1.26

Source: State Street Global Advisors, as of December 31, 2023. Enhanced refers to low tracking error active or index-plus strategies having less than 1.5% tracking error target. Highly Active refers to active strategies having greater than 4% tracking error target.

---

# The Bottom Line

---

Given the unique nature of emerging markets and their distinctive return drivers, constructing the “optimal” EM equity portfolio requires significant thought and care to maximize return potential while managing risks.

Over the medium to long term, emerging markets have delivered returns on a par with, if not better than, their developed market counterparts, but recent performances have disappointed, especially with respect to the growth potential of EM economies. However, as emerging markets have developed, investors now have more potential building blocks to choose from, with an increasing number of choices — index, enhanced, fundamental active, quantitative, thematic, regional, country-specific, and so on — to aid in their quest to capture this superior economic growth.

In this paper, we have examined the key considerations for investors to build an effective EM equity portfolio and provided investors with practical ways to build a portfolio. We recognize that a final equity portfolio involves a wide range of considerations that are unique to each investor, including liquidity needs, fees, and risk tolerance. We hope this paper gives investors some of the tools they need to start building portfolios equipped to capture emerging markets' rising influence, and would welcome the opportunity to aid and accompany our clients on this journey.

---

## Endnotes

- 1 Here, mega-cap refers to stocks with a free-float market capitalization above USD 200 billion, while large-cap refers to stocks with a free-float market capitalization between USD 10 billion and USD 200 billion.
- 2 EM contribution as well as global figure exclude Russia's contribution to GDP.
- 3 "Emerging Market Equities: Choose the Right Target," (Christopher Laine, Jay Siegrist, and Tim Herlihy, State Street Global Advisors 2024).
- 4 "Market Concentration, Dispersion, and the Active-Passive Debate," (Jennifer Bender, Altaf Kassam, and Kamal Gupta, State Street Global Advisors).
- 5 "Don't Ignore the Macro in Picking Emerging Market Stocks," (Laura Ostrander and George Bicher, State Street Global Advisors 2019).
- 6 The standard MSCI EM Index which has just over 1,400 members has only 5% of stocks with zero analyst coverage, and a median of 16 analysts on each name. Comparatively, these figures stand at 6% and 7 analysts for the MSCI DM Small-Cap Index. The data is from MSCI and Bloomberg as of close December 29, 2023.
- 7 "The Case for Emerging Markets Small-cap Equity," (Christopher Laine, Jay Siegrist, and Timothy Herlihy, State Street Global Advisors, 2023).
- 8 "Why It's Time for China Equity to go Solo," (Christopher Carpentier and Dane Smith, State Street Global Advisors, 2023).
- 9 eVestment, Q4 2023.
- 10 "What to Know about an EM Ex China Allocation," (Ben Goldberg and Christopher Carpentier, State Street Global Advisors).

## About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager\* with US \$4.13 trillion<sup>†</sup> under our care.

\* Pensions & Investments Research Center, as of December 31, 2022.

<sup>†</sup> This figure is presented as of December 31, 2023 and includes approximately \$64.44 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

### ssga.com

#### Marketing communication

#### State Street Global Advisors Worldwide Entities

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without State Street Global Advisors' express written consent.

The views expressed in this material are the views of Altif Kassam and Kamal Gupta through March 8, 2024 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All information is from State Street Global Advisors unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor

liability for, decisions based on such information and it should not be relied on as such.

Past performance is not a reliable indicator of future performance.

Investing involves risk including the risk of loss of principal.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Investments in emerging markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions. Investments in small-sized companies may involve greater risks than in those of larger, better known companies. Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

The trademarks and service marks referenced herein are the property of their respective

owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

**For EMEA Distribution: The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.**

This communication is directed at professional clients (this includes eligible counterparties as defined by the appropriate EU regulator) who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description (including retail clients) should not rely on this communication.

Investments in small-sized companies may involve greater risks than in those of larger, better known companies.

Companies with large market capitalizations go in and out of favor based on market and

economic conditions. Larger companies tend to be less volatile than companies with smaller market capitalizations. In exchange for this potentially lower risk, the value of the security may not rise as much as companies with smaller market capitalizations.

The strategy may emphasize a "growth" style of investing. The market values of growth stocks may be more volatile than other types of investments. The prices of growth stocks tend to reflect future expectations, and when those expectations change or are not met, share prices generally fall. The returns on "growth" securities may or may not move in tandem with the returns on other styles of investing or the overall stock market.

Actively managed funds do not seek to replicate the performance of a specified index. The Strategy is actively managed and may underperform its benchmarks. An investment in the strategy is not appropriate for all investors and is not intended to be a complete investment program. Investing in the strategy involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

© 2024 State Street Corporation.  
All Rights Reserved.  
ID2087153-2685736.3.2.GBL.INST 0424  
Exp. Date: 04/30/2025