Insights
Active Quantitative Equity (AQE)

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The Case for Emerging Markets Small-Cap Equity

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Emerging market small-cap (EMSC) equities are a distinct slice of the market offering opportunities for certain investors, using the right methods. We believe that employing an active, quantitative investment process with robust breadth of information is the optimal approach to capitalizing on these opportunities.

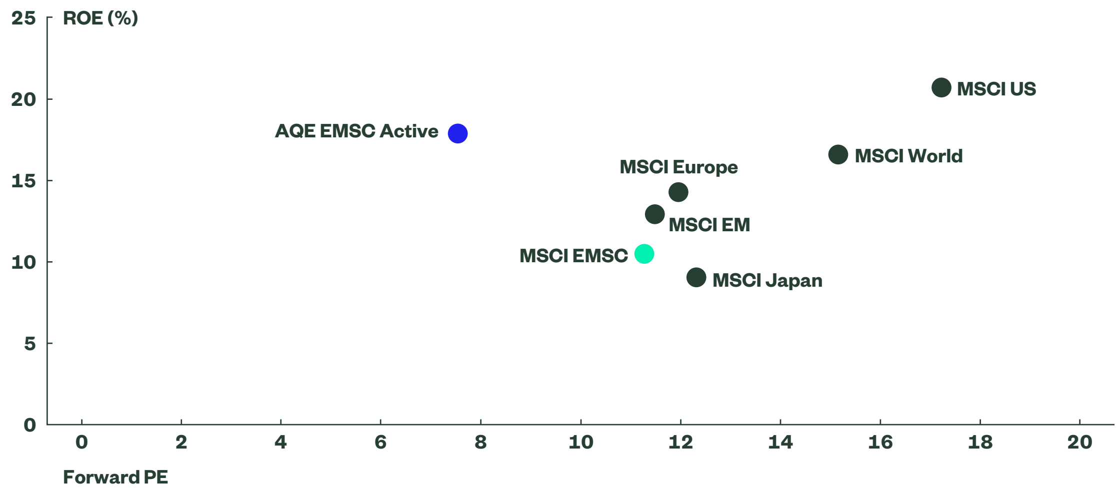
The world is changing and the emerging market growth story over the last few decades has been a key story of the global economy. After a couple of years of declining growth as compared to developed economies, the trend is set to change in 2023 with emerging market growth re-accelerating. Investors routinely make allocations to small-capitalization companies in developed markets, but often ignore their emerging market counterparts, despite the potential return enhancement and diversification benefits they can offer. While there is much to like about emerging market large-caps, the universe is now driven more so by global growth than economic growth in emerging markets, whereas small-cap names have greater exposure to domestic growth. Systematic Equity Team thinks it is time investors consider making an allocation to emerging market small-cap stocks — it is an area of the market that we believe offers the most direct avenue to the emerging market growth story.

Why Investors Should Consider Emerging Market Small-Cap Stocks

Since its inception in 2007, the MSCI Emerging Markets Small Cap Index (MSCI EMSC) has changed markedly. In the past, the MSCI EMSC universe consisted almost exclusively of small, lower value-add companies supplying the global and local firms exporting to the rest of the world. While these supply chain stocks remain an important part of the investment universe. More recently we have also seen a large influx of high intellectual property firms in fast-growing segments of the market. This development is particularly true in Asia where manufacturers of lithium batteries and solar power modules are becoming ever more prevalent in China. Likewise, in South Korea the health care sector has undergone a dramatic transformation, expanding beyond traditional pharmaceuticals with the addition of numerous innovative, cutting-edge biotechnology firms. We believe these changes in the constituency of the Index are in the early stages, and represent potential growth opportunities available within the emerging market small-cap universe.

In many global markets, valuation levels are quite high currently — despite all the selling pressure in 2022. When we look at valuation to profitability in the EMSC universe — specifically on the dimensions of return-on-equity (ROE) to forward price-to-earnings (PE) levels — prices have come down more than 2022 earnings (Figure 1). We believe this is an opportunity to find some well-valued, quality firms. For example, our AQE team is able to construct our Active Emerging Markets Small Cap portfolio with an ROE at attractive levels of greater than 17% and with a PE more than a third lower than the MSCI EMSC.

Figure 1
Profitability and Value



Source: State Street Global Advisors, MSCI, FactSet. Data as of March 2023. **Past performance is not a reliable indicator of future performance.**

What Makes Emerging Market Small Cap Stocks Attractive Now?

As we think about the balance of risks and rewards to the emerging market asset class for the remainder of 2023, we recommend looking at the asset class through several lenses. On balance, we think the time to step in is appropriate. Here's why.

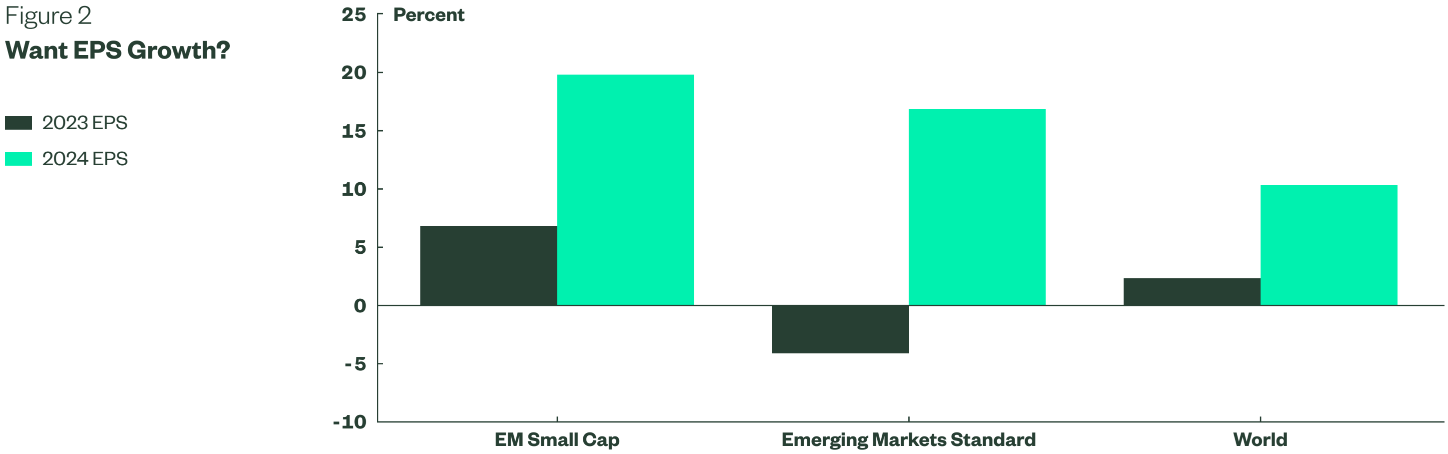
EPS Growth Potential

Earnings growth is getting squeezed in both developed market and in the main segment of emerging markets as rate hikes and a slowing global economy take their toll. We believe that estimates for MSCI World are perhaps 'saved' a bit by the inflation figures, but in real terms, are quite negative. Earnings growth in emerging markets (EM) large cap is already declining in nominal terms (-4% for 2023) and it is heavily reliant on the strong estimates for China and India (about 15% for each).

We are believers in the China recovery story, but it does not appear to be happening as fast or as powerfully as investors has hoped for in the fourth quarter in 2022 — although, to be fair, the near term data is improving. We have greater confidence in the Indian growth numbers, which are substantially more meaningful for small caps (India is 12% of MSCI EM, but 22% of MSCI EMSC). The Indian growth story has power, which we, and the IMF, believe will continue into 2024.

In normal times, 7% EPS growth for MSCI EMSC may be considered 'ordinary' but that is about as good as it gets from 2023. The 2024 figures are better as well, which suggest that there is more earnings momentum. However, we will likely not have strong visibility on 2024 until a bit later in the year, yet the combined story for EMSC in 2023 and 2024 is compelling. The corollary question for global investors will be: How can developed markets command such a compelling valuation with a rather subpar growth outlook?

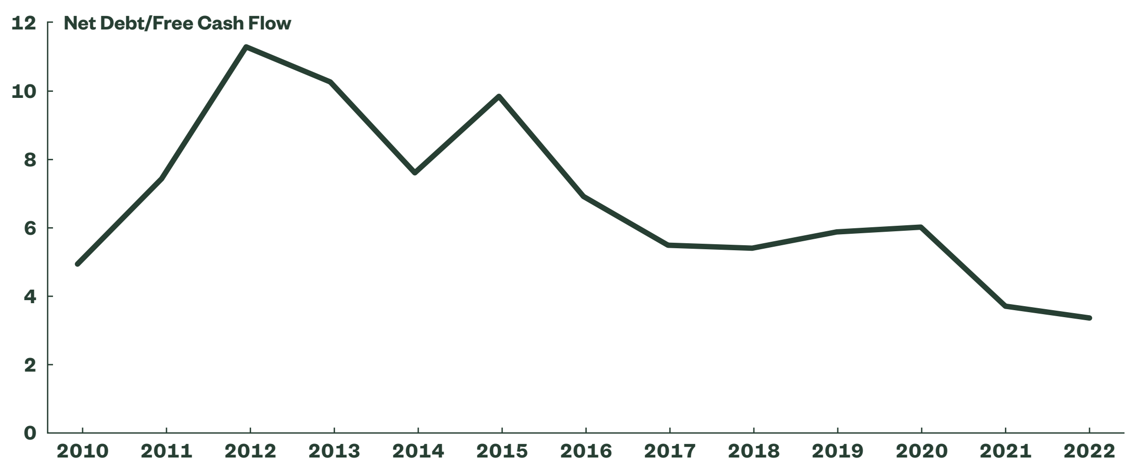
Figure 2
Want EPS Growth?



Source: State Street Global Advisors, MSCI, FactSet. **Past performance is not a reliable indicator of future performance.** Data as of March 31, 2023.

One of the concerns investors have about EM small caps is the risk environment. There is no question that risk is embedded in all equities, but some of the big risks at the forefront of investment minds are a bit light at the moment for emerging market small cap stocks. In the aftermath of the Global Financial Crisis (GFC), some emerging market companies took on a fair amount of leverage (2010–2; see below chart). Rates were low, capital plentiful, and there was a global recovery story in place. In truth, these companies probably invested a bit too much — which pushed down overall profitability. The good news is that net debt (as a function of cash flow) has been normalizing for some time. In fact, the level of debt is now lower than it has been since the post-GFC period. We expect this trend to continue as companies face higher rates.

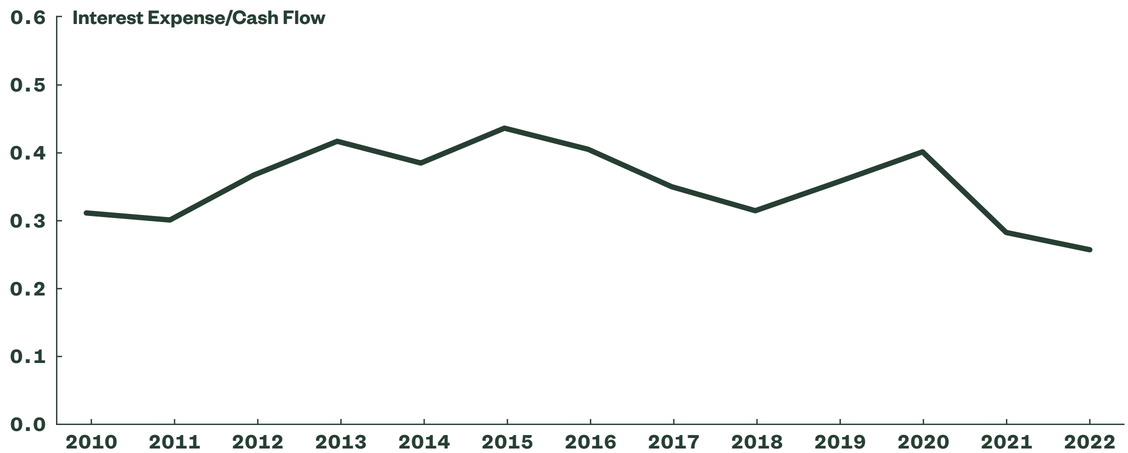
Figure 3
Corporate Leverage Has Been Coming Down



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

We have been in a rising interest rate environment since the early part of 2022. While this trend on interest expense does not show as much improvement as one would like (given the fall in net debt), but directionally, it is worth noting that interest expense is falling in a time of rising global rates and higher risk aversion. This may rise, a bit, in 2023, but should remain at very manageable levels. The risk of an EM-style sudden stop appears low in the standard EM equity index countries — even though some smaller countries, such as Egypt, may see some pressures. Other markets in the Frontier space will see a debt squeeze, but those linkages to MSCI Emerging Markets are limited.

Figure 4
Interest Expense Heading in the Right Direction



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

Are Emerging Market Banks a Weak Point?

Emerging market banks largely shrugged off the dramas surrounding Silicon Valley Bank (SVB) and Credit Suisse and continued to trade off of more local dynamics. Emerging market banks (and their regulators) have seen almost everything in the last three decades — and they are well skilled at interest rate risk management and securing deposit flows. It may well be viewed, in retrospect, a mistake for US bank managers to move slowly in raising deposit rates for savers as it allowed a large spread to open between deposit rates and money markets.

A close look at emerging market banks illustrates that in our view, EM banks, in general, have a better degree of capitalization and profitability. A few markets in Asia, however, remain important to watch — namely, China and Korea, and even Taiwan. Overall leverage in the Chinese financial sector remains large — and there have been some important credit issues (Evergrande being the most obvious). The unique characteristics of the Chinese financial sector (most of the key banks are state owned), and the fact that the country has a closed capital account, make us less worried that the country faces a Minsky moment.

Korean banks have faced a unique set of challenges over the last six months with earnings on a downward trend and ongoing macro uncertainty. A combination of high household debt, weakening property sector, and floating-rate housing loans have squeezed household finances across South Korea. This has inevitably led to concerns that regulators may adopt populist policies encouraging banks to do more to assist the economically vulnerable, which would present an additional headwind for the sector. All that said, however, Korean banks are generally well capitalized and we view these macroeconomic challenges as cyclical. We assign a low probability to contagion from the developed world leading to systematic bank failures, and look for the macro environment for Korean financials to improve in the second half of 2023.

Banks in Taiwan have been supported by strong net interest margins. While the sustainability of that trend is in question if central banks near the end of their rate hike cycle, asset quality and coverage levels across Taiwan banks look benign and we do not foresee credit risks or contagion from western bank failures.

Why Should Investor Go Active in Emerging Market Small Caps?

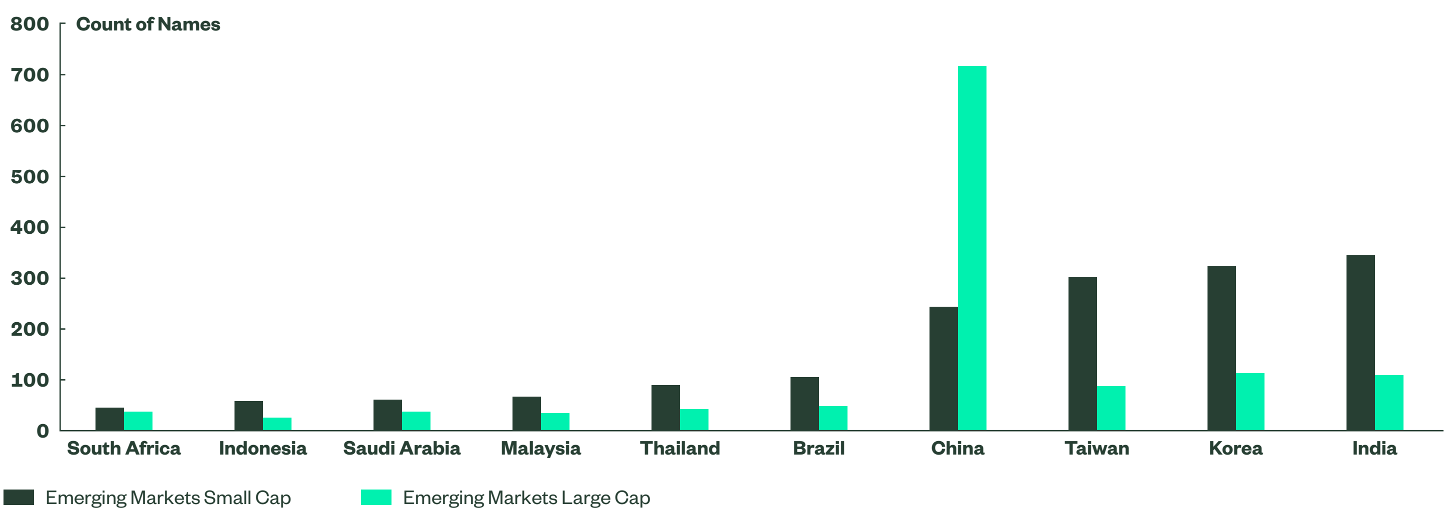
There are strong arguments for considering an active approach when investing in small-cap equities in emerging markets. While there are clear benefits to indexing from an overall investing perspective, indexing remains a difficult proposition for investors in the emerging markets small-cap space. Tracking a theoretical index in the MSCI EMSC arena provides added challenges due to liquidity constraints and other costs associated with full or even partial replication. The large number of names, the cost of investing in emerging markets, and the high index turnover are all strong headwinds for an indexing approach. Examining the track records of some long-standing indexing strategies in the space, we observe that there has been underperformance compared to the benchmark. We believe an active approach reliant on robust research and analysis of companies offers an effective solution to addressing these indexing constraints and optimizing potential for alpha generation.

The Importance of Balance in Investing

Emerging market investors are also challenged by the sheer concentration of China names in the standard MSCI Emerging Markets Index (MSCI EM), largely driven by the high growth of China's composition within the MSCI EM index (China now represents nearly 40% of this index). Investors in the standard EM space are widely buffeted by the love/hate cycle surrounding Chinese assets because of COVID-19, regulatory uncertainty, and geopolitical concerns. Amazingly, over 50% of the securities in the MSCI EM, or over seven hundred names, reside in a single country, China. Upon closer examination of the MSCI EM benchmark's concentration, we note that approximately only 10% of the names in the Index make up over 60% of the Index's overall market capitalization. This contrasts with the MSCI EMSC, where the largest 10% of names constitute less than 30% of the Index's market capitalization. Additionally, China is only about 10% of the total EMSC universe (Figure 2). The added breadth in emerging market small caps provides a much richer and diverse set of opportunities for bottom-up stock selection.

Figure 5

Small-cap vs. Large-cap Composition within Top Emerging Market Countries



Source: State Street Global Advisors, MSCI, FactSet. Data as of March 2023.

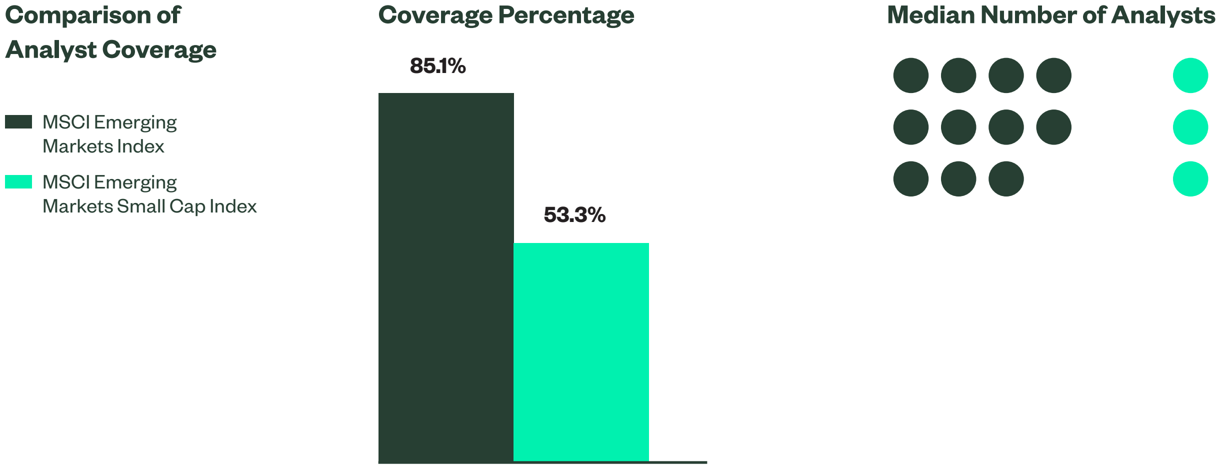
Active Emerging Markets Small Cap — Why a Quantitative Approach is Best Suited

While we are proponents of an active investing philosophy in this space, there are strong reasons to lean into a quantitative approach. Analyst research coverage of the emerging market small-cap equity space is low, resulting in limited information. The brokerage community has not made major investments in covering these companies. In fact, just over 50% of the names in the universe have analyst coverage (versus nearly full coverage for names in the standard MSCI EM). Interestingly, this coverage issue has barely changed since we launched our Emerging Markets Small Cap Active Strategy nearly fifteen years ago. Fundamental investors often rely on sell-side support (data, forecasts) and/or investor relations departments (data, management meetings) to support their investment decisions. This potential neglect or lack of attention by other investors offers unique opportunities for active managers, especially those with information or insight across the full universe of securities.

A quantitative investment approach is much more independent. Our edge is that we have best-in-class data infrastructure that collects the latest and most important publicly-available information on nearly 4,000 emerging market stocks. On a daily basis, our models evaluate the optimal set of stocks to build a portfolio. Through this rigorous process, we minimize inertia or slippage when it comes to finding the best stocks to buy.

Additionally, sell-side analyst coverage is heavily tilted towards the (much) larger names in the universe. Many of our team's best investments are off the beaten path. Our model zeros in on firms with attractive valuations, strong quality characteristics, and signs of improving fundamentals. If we can find these names before other investors, that is an even better outcome.

Figure 6
Comparison of Analyst Coverage

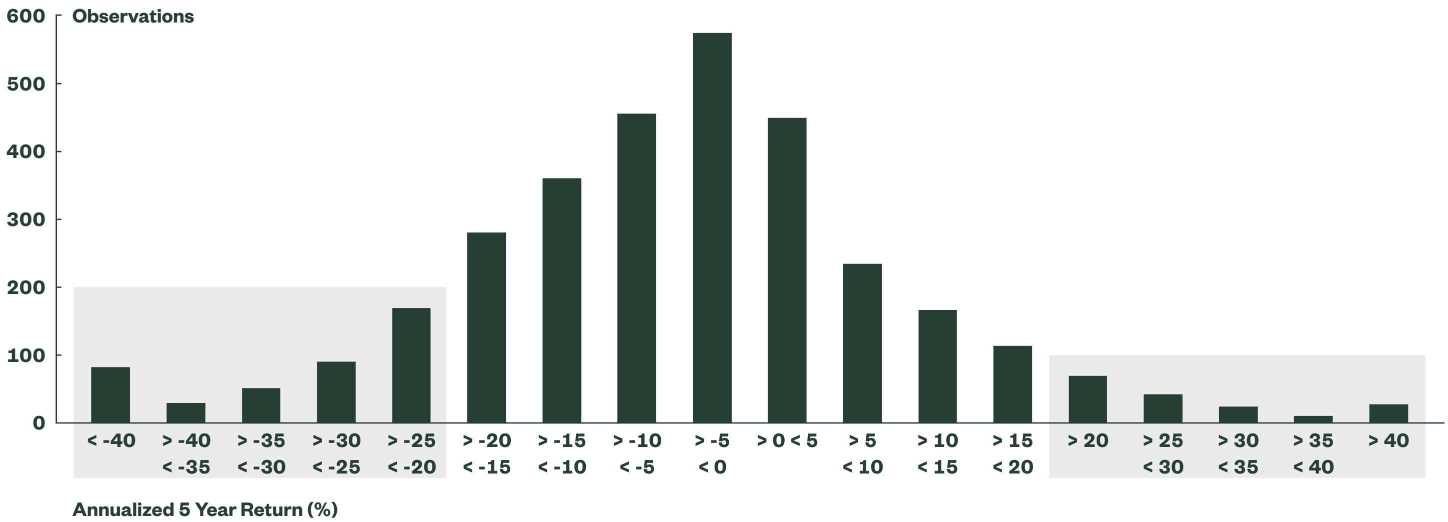


Source: State Street Global Advisors, MSCI, FactSet. Data as of March 2023.

Risk Management and Diversification — Keys to Our Strategy

Most investors understand that the returns of financial assets are often skewed. What this means is that there are scenarios of outcomes, or *fat tails*, that are larger than otherwise anticipated, and there are extremely unlikely scenarios, or *black swans*. While this is true across nearly all segments of the market, it is doubly so in emerging market small-cap equities. In Figure 7 below, stock returns in the emerging market small-cap space exhibit a non-normal distribution, specifically concentrated tails. However, the weight in the negative tail is much fatter than the weight in the positive one. For managers who have the skills to pick a few good stocks, they can generate strong returns. However, if a manager running a concentrated portfolio gets a position wrong, there can be a very long recovery period. Our philosophy is to be diversified and to carefully limit the position in any one name, an approach which can only help a portfolio with this distribution profile.

Figure 7
Five-Year Annualized Stock Performance Histogram of MSCI EMSC

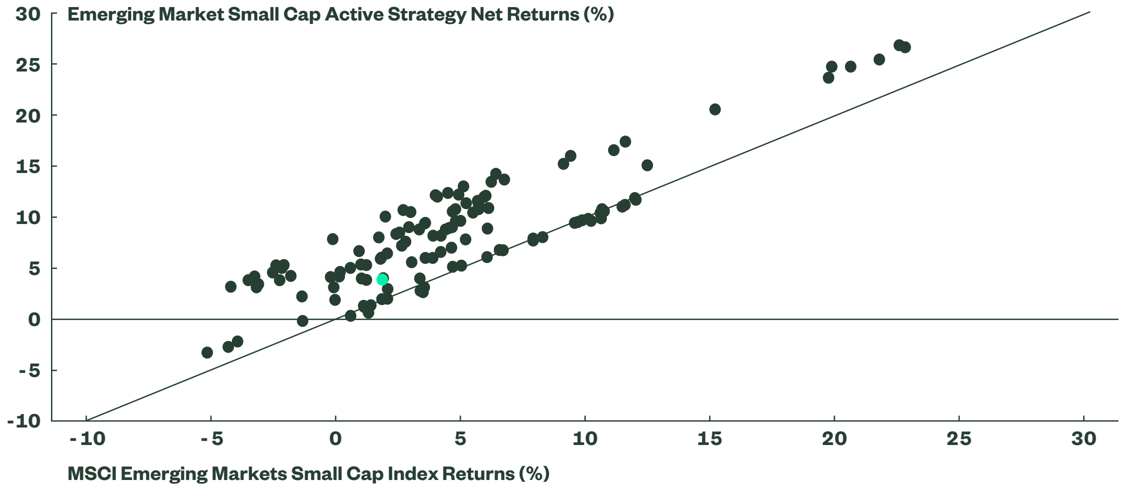


Source: State Street Global Advisors, MSCI, FactSet. **Past performance is not a reliable indicator of future performance.** Data as of March 2023. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a net of fees basis and reflect the deduction of advisory or other fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in USD.

Our recommendation is simple: be diversified. State Street Global Advisors' AQE team believes that incorporating, as exhaustively as possible, security level risk and return factors in the portfolio optimization process is one of the most effective ways to mitigate idiosyncratic tail risk.

The AQE team's approach in the EMSC space has experienced many market cycles and we can confidently state it has delivered a track record of attractive and consistent risk-adjusted returns for investors. This record can be demonstrated by viewing a scatter plot of rolling five-year excess returns for our Emerging Markets Small Cap Active Strategy (Figure 8). The scatter illustrates the strategy's trailing five-year excess return against its respective benchmark rolling back monthly to its inception on October 1, 2007. On a gross basis, our Emerging Markets Small Cap Active Strategy has delivered a 100% gross batting average, outperforming the index in every five year period since its inception (86% net batting average).

Figure 8
Rolling Five-Year Excess Return of SSGA's Emerging Markets Small Cap Active Strategy



Outperformed the MSCI Emerging Markets Small Cap Index in 127 out of 127 rolling five-year periods since inception.
Gross Batting Average: 100%.
Net Batting Average: 82%.
Median Gross Excess Return: 5.5%.
Source: State Street Global Advisors, MSCI. Data as of March 2023. **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. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a net of fees basis and reflect the deduction of advisory or other fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in USD.

The Bottom Line

Emerging markets small-cap equities are certainly a distinct universe of securities with an abundance of opportunities for the right investor, using the right method. Due to the greater breadth, lower concentration, lack of analyst attention and non-normal returns, we believe that employing a quantitative investment process with robust breadth of information is the optimal approach to capitalizing on these opportunities.

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 $3.8 trillion† under our care.

* Pensions & Investments Research Center, as of December 31, 2022.
† This figure is presented as of June 30, 2023 and includes approximately $63 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. Please note all AUM is unaudited.

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Investments in emerging or developing 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.

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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.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

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.

Diversification does not ensure a profit or guarantee against loss.

This document provides summary information regarding the Strategy. This document should be read in conjunction with the Strategy's Disclosure Document, which is available from SSGA. The Strategy Disclosure Document contains important information about the Strategy, including a description of a number of risks.

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