EXECUTIVE SUMMARY

Emerging market economies, once on the fringe of the investment spectrum, have become a dominant force behind global growth and a staple of equity portfolios. As a result, the correlations between emerging and developed markets have increased, and traditional emerging market investments have become a less meaningful source of portfolio diversification. In addition, high security return correlation and low country return dispersion also have limited opportunities for outperformance through traditional strategies.

However, this does not mean that emerging markets can no longer play a valuable role in global portfolio allocations. Instead, it means investors would be wise to take a fresh look at their emerging market exposure and how they can achieve it. Expanding into small cap emerging markets equities and frontier markets can provide many of the opportunities early investors in traditional emerging markets saw. Though emerging markets have become more efficient, costs remain relatively high and liquidity relatively low, making index strategies an attractive means of gaining quick and efficient exposure. Investors may benefit from considering a core/satellite approach to their portfolio construction: gaining their core exposure to the asset class through a market cap weighted index approach, while targeting potential market inefficiencies and specific investment goals with active or alternatively weighted satellite strategies.

EMERGING MARKETS HAVE “GROWN UP”

At its inception in 1988, the MSCI Emerging Markets Index represented just 1% of the global market capitalization. Just eight countries and 290 securities were included in the index, and there was little transparency for investors, with virtually no analyst coverage. There were no
The evolution of these markets has dramatically changed the investment landscape, and investors should consider what this means for their emerging markets portfolio implementation.

Since then, emerging markets have grown up. A series of substantial economic reforms in the 1990s and the adoption by many countries of U.S. generally accepted accounting principles (GAAP) decreased many of the operational and regulatory risks that previously had plagued emerging market investments, and investors began flocking to emerging markets.

The MSCI Emerging Markets Index now represents 22 markets and makes up 13% of the global market capitalization. On average, 22 analysts now cover each of the 820 constituents in the index, and funds have been flowing increasingly into passive products, with $134 billion currently managed by emerging markets exchange traded funds (ETFs).

The evolution of these markets has dramatically changed the investment landscape, and investors should consider what this means for their emerging markets portfolio implementation. The continued reduction of barriers to foreign investment in these markets will change the effectiveness of certain strategies, especially given the increased use of index products. Additionally, as developing economies become more mature, the diversification, risk and growth characteristics of their equity markets will change how they fit into global portfolios. Emerging markets continue to serve a valuable role in a global equity portfolio, but investors would be wise to reconsider how they think about the asset class, weighing the benefits of including passive vehicles and broadening their allocation to include small cap and frontier markets as well.

EFFICIENCY BRINGS HIGHER CORRELATIONS

One consequence of the maturation of emerging markets has been an increase in security correlations within the segment. Improved information flow and increased competition among managers have diminished stock-picking advantages. Emerging markets stocks are now moving more in synch. This has been compounded by the increased use of passive management. More than 25% of all emerging markets assets are now invested through index products, up from just 10% five years ago (Chart 2).

**CHART 2: EMERGING MARKETS INDEX ASSETS ON THE RISE**

Emerging markets equity index assets relative to total emerging markets assets.

Chart 3 shows the historical median security pairwise correlations in developed and emerging markets. While both market segments show periods of both high and low correlations, emerging market correlations have been trending upward over time. We see the most dramatic rise in correlations between 2007 and 2009, coinciding with a substantial increase in the use of index products in emerging markets.

Correlations are just one part of the story, and they do not necessarily indicate less opportunity. However, the difference between emerging market country returns also has been falling over the same period (Chart 4). Country differentiation historically has been a main driver of relative performance in emerging markets, as managers have attempted to identify markets with relatively more attractive economic fundamentals. However, country dispersion within emerging markets has come down from levels as high as 20% to just below 5%, meaning that strategies attempting to outperform by over- and under-weighting countries may not pay off as well in the future.

The high security return correlation and low country return dispersion also have limited opportunities for outperformance through traditional strategies. This has created a difficult environment for fundamental active emerging markets managers.

The median active manager has outperformed the MSCI Emerging Markets Index by just 1.12% annually over the past five years, barely...
Complementing market-cap weighted index exposure with smaller, targeted non-market-cap weighted strategies may have more potential for outperformance while avoiding excessive uncompensated active risk. Recovering management fees, which can be well over 1.00% for emerging markets active managers. This outperformance also does not take survivorship bias into account, because funds that have been closed in the interim period are not included in the analysis.

There will be opportunities in the future to generate outperformance as correlations and dispersions oscillate over time, but managers will continue to face long-term headwinds. Investors should consider whether they will be adequately compensated for the active risk these strategies are taking. The median 10-year tracking error of emerging markets active managers is above 4%, resulting in a gross information ratio of just 0.24. When taking fees into account, the active risk may have gone totally uncompensated. Though some managers have been able to perform well, the large fund flows they attract limit their ability to target the best opportunities, resulting in actively managed portfolios that are heavily concentrated in the larger companies already found in the benchmark. Complementing market-cap weighted index exposure with smaller, targeted non-market-cap weighted strategies may have more potential for outperformance while avoiding excessive uncompensated active risk.

Finding fundamental active managers who deviate from the benchmark and have the combination of capacity and a long term track record has become increasingly difficult. While investors skilled in selecting active managers may be able to identify potential outperformers, many investors are turning their focus to market-cap weighted and alternatively weighted index products for implementation.

**GLOBALIZATION NARROWS GAP BETWEEN EMERGING AND DEVELOPED MARKETS**

As globalization has taken hold, international markets have become more highly integrated. Many developed market companies, seeing better growth opportunities, have expanded into emerging markets in the past decade. As of 2011, the MSCI World Index had 21% revenue exposure to emerging markets, up from just 10% in 2002. Additionally, several large constituents of the MSCI Emerging Markets Index have grown internationally, deriving most of their revenues from outside of their country of domicile and a large portion from outside of the emerging market economies. For example, Table 2 highlights four large constituents of the MSCI Emerging Markets Index that generate a significant portion of their revenues from outside of their home country.

<table>
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<tr>
<th>TABLE 1: THE MEDIAN ACTIVE MANAGER HAS HAD DIFFICULTY OUTPERFORMING NET OF FEES</th>
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<tr>
<td><strong>Active Emerging Markets Equity Relative Returns (Gross of Fees)</strong></td>
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<td></td>
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<td>25th Percentile</td>
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<td>Median</td>
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<td>95th Percentile</td>
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<table>
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<tr>
<th><strong>Active Emerging Markets Management Fees</strong></th>
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<td>Median</td>
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Source: eVestment Alliance, Northern Trust. Data as of 12/31/2012.

<table>
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<tr>
<th>TABLE 2: PORTION OF REVENUES GENERATED OUTSIDE COMPANY’S HOME COUNTRY</th>
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<tr>
<td>Outside of Home Country</td>
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<tr>
<td>88%</td>
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<td>Europe/America</td>
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Source: FactSet, Northern Trust. Data as of December 2011. Infosys data is as of March 2012. Due to different reporting methods, “America” includes just the United States for Samsung and Taiwan Semiconductor. For Infosys and Kia, “America” is North America.
Emerging markets are now tilted more toward sectors that are heavily affected by global factors, such as information technology and energy.

In addition, the development of these economies has resulted in a substantially different sector concentration. For example, in 2011 information technology companies comprised 13.1% of the market capitalization of the index, versus just 1.5% in 1994. Emerging markets are now tilted more toward sectors that are heavily affected by global factors, such as information technology and energy. On the other hand, sectors driven more by local factors, such as utilities and consumer discretionary, have become less significant in emerging markets.

The result has been a gradual increase in the correlations of emerging and developed markets. Emerging markets were less than 50% correlated with developed markets in the late 1990s, but they are now approximately 90% correlated (Chart 6), eroding potential diversification benefits.
To maintain diversification and participate in the next generation of growth opportunities, investors may want to expand their portfolios deeper, to include small cap emerging market stocks, and broader, into frontier markets, to complete the global equity opportunity set.

In the last few years, correlations across asset classes have increased dramatically, a trend that has been related to the financial crisis of 2008. However, the correlation of emerging markets to developed markets has been a long, gradual process connected to globalization and international expansion of both developed and emerging market companies.

**COMPLETING THE GLOBAL EQUITY OPPORTUNITY SET**

Emerging markets still offer diversification, though not at the same level as in the past, and emerging market companies have become important components of any equity portfolio. However, to maintain diversification and participate in the next generation of growth opportunities, investors may want to expand their portfolios deeper, to include small cap emerging market stocks, and broader, into frontier markets, to complete the global equity opportunity set. By doing so, investors can reduce total portfolio risk while gaining exposure to significant growth potential.

**EMERGING MARKETS SMALL CAP DEEPENS PORTFOLIO**

In the past, investors were hesitant to expand their emerging markets portfolios to include smaller, less liquid names. However, MSCI’s introduction of the Global Investable Market Index series in 2006 made investors more aware of the investability and potential benefits of global small cap stocks. As emerging markets have matured, funds have flowed into the small cap segment, providing additional investable growth opportunities. Small cap equities tend to have more volatile returns, but this “size risk” historically has been compensated by higher returns in the long run. This has been especially true in international markets. The diversification and growth benefits of the segment make a compelling case for an allocation to emerging small cap.

Emerging market small cap equities present substantial opportunities for increased diversification. The MSCI Emerging Markets Small Cap Index includes nearly 2,000 companies making up 11% of the emerging markets opportunity set. In addition to reducing individual security risk, the emerging markets small cap equities provide increased diversification relative to large and mid cap emerging market equities. For example, Brazil and China, which together represent more than 30% of the MSCI Emerging Markets Index, are just 22% of the small cap benchmark.
Emerging market small cap equities present substantial opportunities for increased diversification.

(Chart 8). This helps reduce the risk of concentration in the larger and more developed countries that may now experience slower growth than in the past.

**CHART 8: COUNTRY BREAKDOWN OF MSCI EMERGING MARKETS INDICES**

Emerging markets small cap offers differentiated country exposure from the standard benchmark.

The emerging markets small cap segment is also potentially less exposed to global factors. Small cap stocks tend to be more local in nature than those found in the standard benchmark, which often are large multinational companies. Additionally, the benchmark tilts more toward local sectors than its standard counterpart (Chart 9 on page 8). The relatively high weights of locally exposed sectors like healthcare and industrials, as well as a significant underweight to energy companies, can help reduce a portfolio’s correlation with developed markets. Additionally, the added exposure to the consumer discretionary sector positions small cap stocks to benefit from the growing middle class and steady transition to consumer economies in emerging markets.

Emerging market small cap equities also are poised for substantial earnings growth in the coming years. Three- to five-year projected earnings growth for the MSCI Emerging Markets Small Cap Index is 18.4%, versus just 11.9% for the standard MSCI Emerging Markets Index. Even with this potential growth, emerging small cap stocks have been trading at a forward price-to-earnings ratio of 10.62x, similar to the standard index, which trades at 10.75x. While the difference in valuations can be partly attributed to the segment’s higher risk, the expected earnings growth makes an allocation compelling. Emerging small cap also maintains a yield of 2.71% versus 3.00% for the standard index. Through an allocation to emerging market small cap, investors can increase their emerging markets diversification without sacrificing exposure to potential earnings growth or income.
Many investors consider frontier markets to be the next generation of emerging markets.

**FRONTIER MARKETS BROADEN EXPOSURE**

Many investors consider frontier markets to be the next generation of emerging markets. Like emerging markets in 1988, frontier markets currently represent approximately 1% of the global equity universe. They tend to be developing countries with high rates of economic growth and small, relatively illiquid stock markets. Typically, these markets have less advanced operational infrastructures than more established markets, which is the main reason for their exclusion from emerging market benchmarks. However, the risks are surmountable for investors who understand them and are willing to conduct the additional due diligence required to invest in these markets.

Frontier markets offer significant diversification benefits within a global equity portfolio. Many of the constituents do not have significant exposure to global factors, resulting in lower correlation and attractive risk/return characteristics. Frontier market returns have historically been less volatile than emerging markets, with growth that has outpaced developed markets. The result has been a 10-year Sharpe ratio of 0.50 for frontier markets versus 0.36 for developed markets. Frontier markets have also been just 74% correlated with developed markets over the past 10 years, while emerging markets were 89% correlated.7

These markets also have the potential to grow substantially in the coming years, with average real GDP growth in frontier markets expected to outpace developed markets by 2% annually over the next five years. Additionally, there is significant room for “equitization” in the frontier markets.

**ADDRESSING ENVIRONMENTAL, SOCIAL AND GOVERNANCE CONCERNS IN EMERGING MARKET INVESTMENTS**

As responsible investing research coverage in emerging markets has expanded, it is now possible to implement a strategy that incorporates environmental, social and governance (ESG) factors – including addressing potential concerns about the corporate governance of emerging markets companies. A large percentage of listed firms in emerging markets still have high implicit and explicit government ownership levels, prompting concerns about government influence on these firms’ performances. Similarly, a company’s board composition or social issues, such as labor rights in China, create potential risk. Applying screens to limit exposure to undesired companies, while maintaining a broad and diversified approach in emerging markets, can help mitigate these risks.
Frontier markets could also benefit from a “graduation effect,” which has the potential to enhance returns for early investors. Several more highly developed frontier countries could be reclassified as emerging markets relatively soon. For example, countries like the United Arab Emirates, which is already classified as an emerging market by FTSE, and Qatar are currently being considered for graduation to emerging by MSCI. By owning equities in these markets prior to their graduation, investors could benefit from the potential wave of buying that will occur in emerging market index funds when the new markets are added to the benchmark. This pattern could repeat itself as more countries reduce regulatory and operational risks and become more investable.

**COMBINING INDEX AND ACTIVE STRATEGIES IN EMERGING MARKETS**

Within emerging markets, investors should focus on gaining exposure to the high level of potential growth and adding portfolio diversification in the most efficient manner. Using market cap weighted index products can allow investors to quickly gain this exposure within a transparent, rules-based framework while avoiding the active management fees. At the same time, there may also be opportunities to add alpha, increase diversification and target goals through satellite allocations within emerging markets. However, investors should be wary of capacity constraints; active managers may have difficulty finding opportunities to effectively invest large amounts without incurring significant impact costs.
Investors can use non-market cap weighted strategies to tilt toward certain compensated risk factors, such as size, value and low volatility. Such strategies can effectively complement broad-based market cap weighted core exposure. Some situations may also lend themselves well to fundamental active managers, particularly if the managers are local and have some information advantages. Smaller managers with capacity and that differentiate significantly from the benchmark could be the best positioned to perform well going forward. However, investors with the ability and resources to identify these managers will have a better probability of generating excess returns through active strategies. When selecting any satellite strategy, investors should carefully consider whether the strategy aligns with their investment goals.

**CHART 11: EMERGING AND FRONTIER MARKETS CAN NOW BE USED AS CORE EXPOSURES WITH ALTERNATIVE STRATEGIES IN THE SATELLITE.**

**CHANGES IN EMERGING MARKETS REQUIRE A NEW APPROACH**

As traditional emerging markets have matured, the optimal implementation of an emerging markets equity allocation has changed. To continue to reap the diversification benefits and the potential for enhanced returns emerging market investments traditionally have brought to a portfolio, investors will need to rethink their approach. Today, investors may want to target potential growth opportunities by expanding their emerging markets allocations to include small cap equities, which offer diversification benefits with differentiated country and sector exposures and have historically outperformed the emerging markets benchmark, and frontier markets, which offer the potential growth of rapidly growing economies. Frontier markets have also historically had a relatively low correlation to developed markets, adding to overall portfolio diversification.
LEARN MORE
If you would like to learn more about how the changes in emerging markets may be affecting your portfolio, or whether broadening your allocations to include small cap or frontier market equities might help you meet your goals, please contact the Global Index Strategy Team at global_index_strategy@ntrs.com.

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END NOTES
1 As measured by the MSCI All Country World Index
2 Source: eVestment Alliance.
3 Source: MSCI. “Economic Exposure to Emerging Markets”
5 Source: FactSet, Northern Trust. Data as of 9/28/2012.
6 As of 9/28/2012; source: MSCI.
7 Source: S&P Dow Jones, MSCI, Northern Trust. Frontier is S&P Frontier BMI, emerging is MSCI Emerging Markets, and developed is MSCI World. Data as of 12/31/2012.