The Search for Alpha: Emerging Markets Small Cap

NOVEMBER 2014

In brief

- As one of the most mispriced asset classes, emerging markets small cap provides an abundant source of alpha for investment managers with the skill and resources to unlock the opportunity.
- Emerging markets small cap has outperformed emerging markets large cap, but without higher volatility. Since 2001, a portfolio of smaller capitalization stocks has higher returns with lower risk compared to emerging markets large cap.
- In addition to the beta return that comes from exposure to emerging markets small cap, active managers have an opportunity to capture alpha above market returns by taking advantage of greater idiosyncratic risk in the small cap segment to overweight select securities that demonstrate particular promise.
- An active, systematic stock selection approach based on fundamental measures can rigorously and consistently evaluate opportunities in the entire universe. This capability results in additional return potential that could be missed by managers relying solely on research insights for a small subset of companies.

A dedicated allocation brings new opportunities

In their continuous search for alpha, many investors have overlooked opportunities that can be found within the emerging markets small cap universe.

As institutional investors are increasingly moving toward broader based benchmarks, they recognize that their portfolios have gaps in exposure to these small cap companies. While most emerging markets mega-caps are dependent on global markets, emerging markets small caps are focused on their domestic economies and are less influenced by world trends and events. For example, Korean small cap stock Hyundai Green Food Company is dependent on local commerce for its profit and growth, while Hyundai Motor Company, a large Korean automobile manufacturer, operates a business model that generates 86% of its revenue outside of Korea[1] and is influenced by trends in large developed countries.

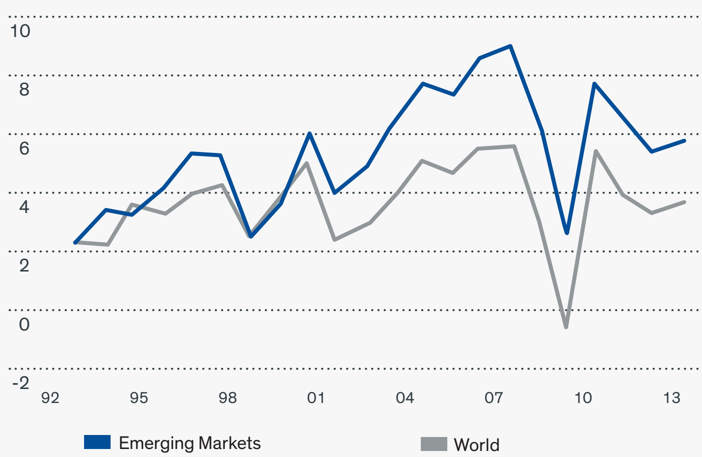
Concentrated buying in the emerging markets large cap space could miss exposure to these smaller capitalization companies promising significant value.

The emerging markets opportunity

The combined GDP of emerging market economies represents over one-third of world GDP, but their market capitalization is still less than 15% of world market cap. As Exhibit 1 suggests, both numbers should increase, and we expect the percentage gap between share of GDP and share of market capitalization to begin to close as the depth and breadth of the local financial markets continue to improve.

Emerging market countries represent about 80% of the world's population. With increasing affluence and an expanding middle class, these countries have growing spending power. For example, in 1988 a person with a median income in China was richer than only 10% of the world population. Twenty years later, a person at that same position within Chinese income distribution was richer than more than 50% of the world population —that means nearly a billion people with a newly achieved level of income and desire for increased consumption.[2]

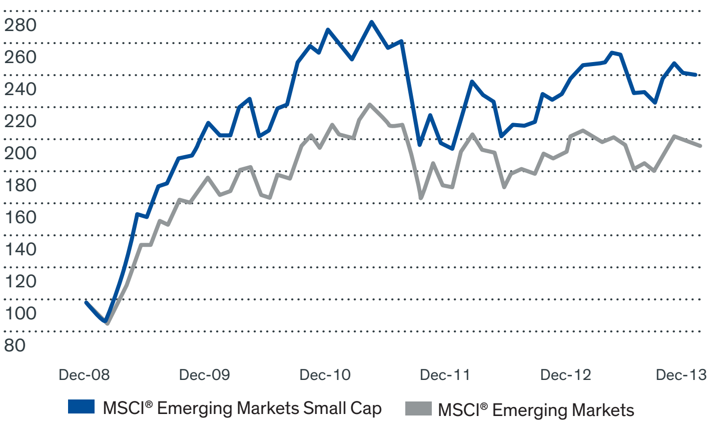
1 / EMERGING MARKETS GDP GROWTH VS. WORLD



Data as of December 31, 2013. Source: Thomson Reuters Datastream

As Exhibit 2 shows, exposure to the broader emerging markets universe doesn't completely capture the return opportunity available in the smaller capitalization names: emerging markets small cap outperformed emerging markets large cap over the last five years. In addition, the currently estimated 3-5 year earnings growth is notably higher: 17.3% for emerging markets small cap vs. 13.5% for emerging markets.[3]

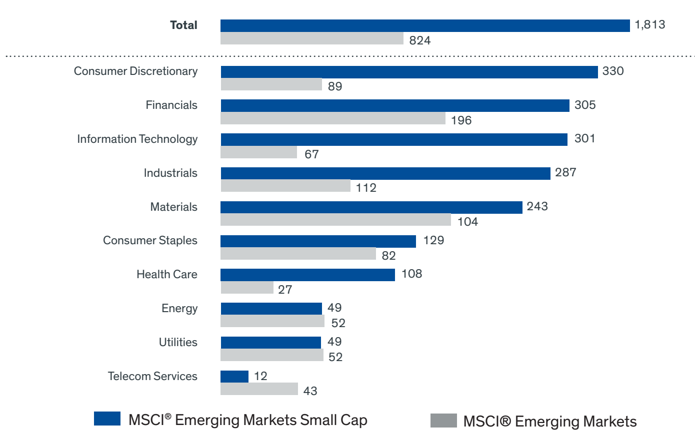
2 / SMALL CAPS HAVE OUTPERFORMED LARGE/MID CAPS IN RECENT YEARS



Data as of December 31, 2013. Source: QMA, Morgan Stanley.
The benchmarks shown provide the equity returns including dividends net of withholding tax rates. Past performance is not a guarantee or reliable indicator of future results.

A dedicated allocation to the emerging markets small cap universe provides access to a broad and diverse universe of companies. As shown in Exhibit 3, there are more than twice as many companies in the MSCI® Emerging Markets Small Cap Index as in the MSCI® Emerging Markets Index. The larger universe offers more opportunity to capture alpha across the majority of the sectors. The slower growing Telecom sector is the only sector with significantly fewer names to choose among.

3 / NUMBER OF COMPANIES IN EACH SECTOR

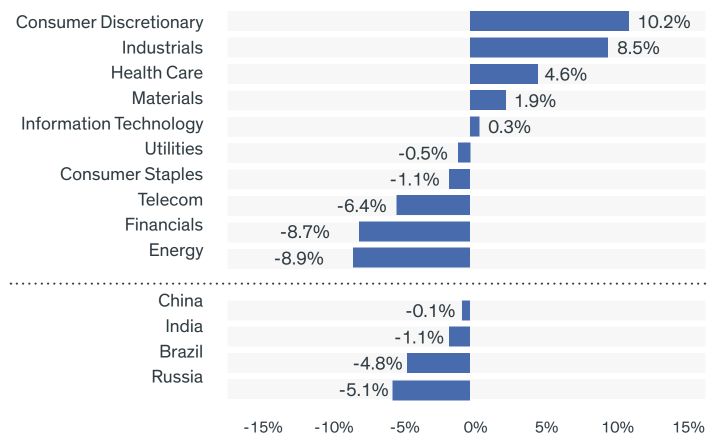


Data as of December 31, 2013.
Source: QMA, Morgan Stanley, FactSet. Source of sector classification: S&P/MSCI®.

Not only is the emerging markets small cap universe larger, but it provides much greater exposure to the sectors generally viewed as most responsive to local market dynamics, including Consumer Discretionary, Industrials, and Health Care (see Exhibit 4). The emerging markets small cap universe thus allows investors to take advantage of the increasing affluence in the developing world, rather than gaining access to the slower growth export markets of larger companies.

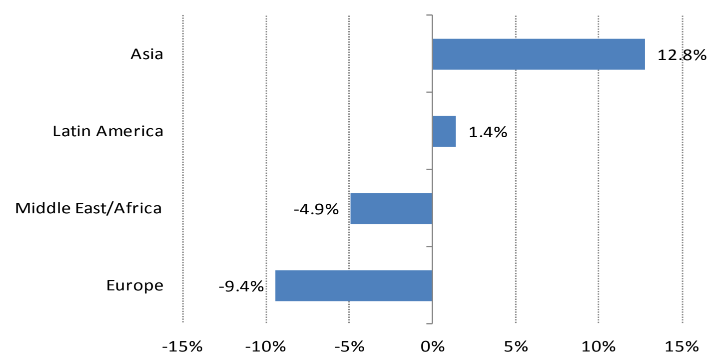
The emerging markets small cap universe has less exposure to BRIC countries (see Exhibit 4), and more of a tilt towards Asia when compared to the emerging markets broad universe (see Exhibit 5)—another point of differentiation that comes with a dedicated allocation.

4 / WEIGHTS OF MSCI® EMERGING MARKETS SMALL CAP VS. MSCI® EMERGING MARKETS



As of December 31, 2013.
Source: QMA, Morgan Stanley, FactSet. Source of Sector classification: S&P/MSCI®.

5 / WEIGHTS OF MSCI® EMERGING MARKETS SMALL CAP VS. MSCI® EMERGING MARKETS BY REGION

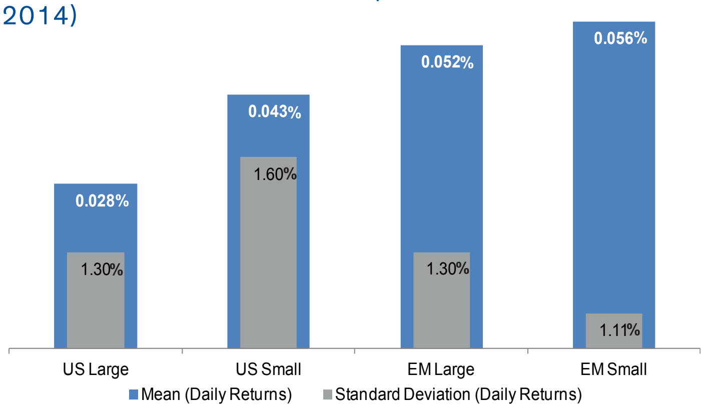


Source: QMA, Morgan Stanley, FactSet. Data as of December 31, 2013.

The role of volatility

While not intuitive, when investors add emerging markets small cap to their portfolios, they do not take on much, if any, additional volatility compared to an allocation to emerging markets large cap. At the index level, as illustrated in Exhibit 6, moving from emerging markets large cap to small cap increased average daily returns and reduced risk since the beginning of 2001—unlike US small cap stocks where they accepted significant additional volatility.[4]

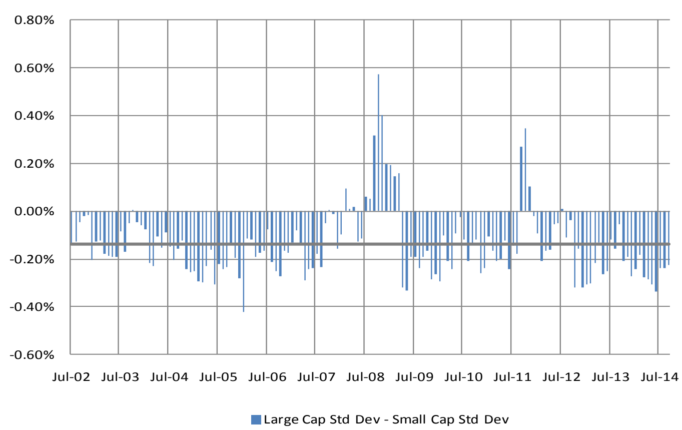
6 / INDEX RISK VS. REWARD (JANUARY 2001 - APRIL 2014)



Source: QMA, FactSet Morgan Stanley and Russell® Calculated using daily returns from January 2001 through April 2014 and shown for illustrative purposes only. US Large = Russell 1000®. US Small = Russell 2000®. EM Large = MSCI® Emerging Markets and EM Small = MSCI® Emerging Markets Small Cap. The Russell® Indices are trademarks/service marks of Russell Investments. Russell is a trademark of Russell Investments. Past performance is not a guarantee or a reliable indicator of future results.

Of course, volatility at the stock level as opposed to the market offers an opportunity to capture alpha. Exhibit 7 compares monthly differences in stock level standard deviation between emerging markets large and small cap stocks, and shows an average increase in volatility of 14 basis points among small cap stocks.

7 / DISPERSION BETWEEN THE TOP AND BOTTOM PERFORMANCE DECILE

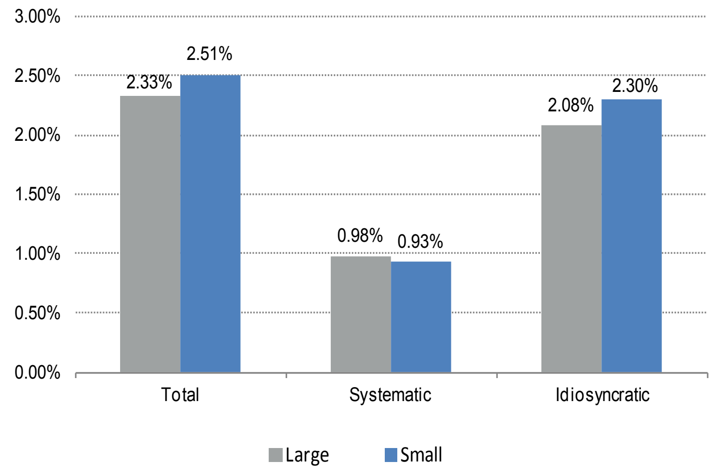


Source: DataStream, Morgan Stanley. July 2002-Sept 2014

Given that volatility is higher at the stock level for small cap stocks but not at the index level, the next task is to determine why this is the case. Exhibit 8 supports the notion that the higher stock level volatility for small cap emerging markets stocks is being driven by higher idiosyncratic risk.

Emerging markets small cap stocks tend to be tied more closely to their local economy and less buffeted by global macroeconomic developments. The benefit of this is that the higher levels of stock specific risk for small cap emerging markets stocks can be diversified away within a portfolio. Additionally, when stocks are not moving in the same direction, this creates a more favorable environment for skilled stock pickers to opportunistically buy shares and generate higher alpha.

8 / AVERAGE STOCK LEVEL RISK DECOMPOSITION FOR LARGE AND SMALL CAP EMERGING MARKETS



Source: DataStream, Morgan Stanley. July 2002-Sept 2014
Regression methodology was used to decompose individual stock returns into systematic and idiosyncratic components. Standard deviation of these components are then computed.

A wider investment universe creates more alpha opportunities

It can be hard to exploit the opportunities available in emerging markets small cap. The large number of companies in the universe spread over 21 countries in different regions makes information gathering difficult. This challenge gives systematic investment approaches an advantage. They can offer increased breadth and greater objectivity, and can be an effective way to exploit inefficiencies and unlock opportunity by consistently adding value over time.

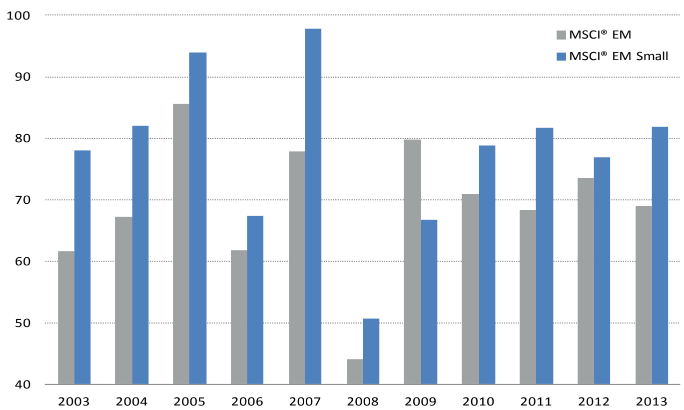
By taking advantage of market breadth, a systematic approach can isolate sources of return across the entire market cap range, thus creating a broader opportunity set than just relying on the larger cap part of the benchmark. In other words, if smaller capitalization firms are doing well, a systematic approach can reach deeper into the market and capture that value.

The wider opportunity set also increases the probability of consistent performance by spreading the bets across a larger number of stocks.

Breadth is especially important given the higher dispersion in stock returns. Higher dispersion indicates that a market offers greater opportunities for active managers to pick winners and losers. Exhibit 9 shows the dispersion between the best performing and worst performing stocks in the MSCI® EM and MSCI® EM Small Cap benchmarks, defined as the top and bottom deciles for each calendar year since 2003. The return dispersion is higher for MSCI® EM Small

Cap in every year but one in the past decade, implying that there are more alpha opportunities within the small cap space.

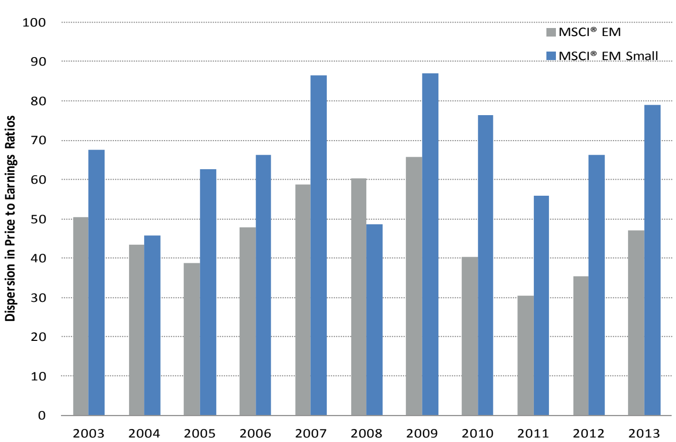
9 / DISPERSION BETWEEN THE TOP AND BOTTOM PERFORMANCE DECILE



Source: FactSet, QMA. Data as of December 31, 2013. Dispersion is calculated on the difference between the top 10% and bottom 10% of stock returns for each calendar year for each of the MSCI® indices.

Similarly, the effectiveness of valuation-based and profitability-based factors also increases as their dispersion increases. Exhibit 10 and 11 show the dispersion of trailing price-to-earnings ratios and return on equity during the same time periods for the MSCI® EM and MSCI® EM Small Cap indices. Again, the dispersion of these two factors is typically higher for the MSCI® EM Small Cap index, indicating that the potential efficacy of each set of factors is higher when applied to emerging market small caps.

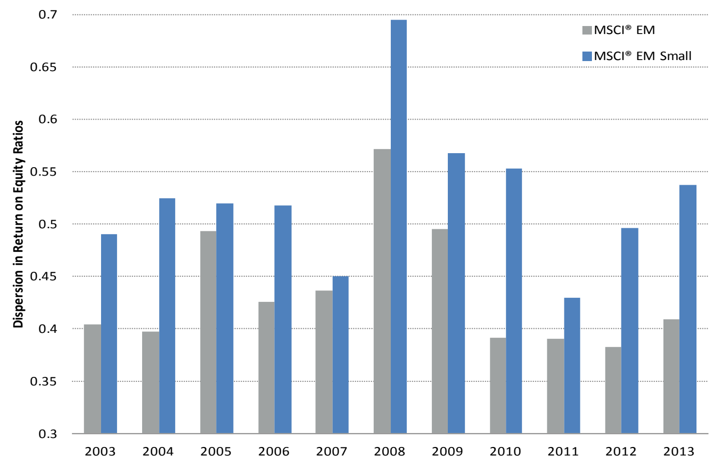
10 / OPPORTUNITY IN PRICE TO EARNINGS



Source: FactSet, QMA. Data as of December 31, 2013. Dispersion is calculated on the difference between the top 10% and bottom 10% of Price to Earnings ratios at the end of each calendar year for both MSCI® indices.

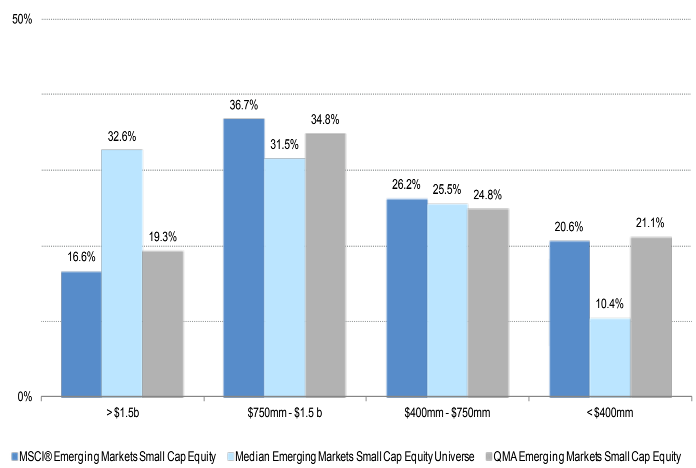
The power of systematically evaluating all of the information in the market, rather than just a subset, allows for a manager's insight to be applied to as many opportunities as possible. A systematic approach identifies alpha across a wider spectrum of stocks, thus increasing the probability of unlocking and capturing value in the asset class, while making it easier to manage risk exposures.

11 / OPPORTUNITY IN RETURN ON EQUITY



Source: FactSet, QMA. Data as of December 31, 2013. Dispersion is calculated on the difference between the top 10% and bottom 10% of Return on Equity ratios at the end of each calendar year for both MSCI® indices.

12 / QMA EM SMALL CAP EQUITY VS. MEDIAN EM SMALL CAP EQUITY UNIVERSE



Data as of December 31, 2013
Source: QMA, Morgan Stanley, eVestment Alliance[5]

Capitalizing on the full range of alpha opportunities

Portfolio implementation is a key consideration when evaluating managers in the emerging markets small cap space. As Exhibit 12 illustrates, effective portfolio construction can distribute active exposures across the entire market cap spectrum.

A well constructed portfolio also maximizes exposure to factors contributing alpha while minimizing other risk exposures. For example, a greater part of a portfolio's risk would be concentrated on factors producing alpha, while exposure to factors that are not generating alpha in a consistent manner is minimized so as to manage their risk.

In addition, a successful portfolio implements meaningful bets across the full liquidity spectrum in a cost-effective way. The challenge confronting managers is how to gain exposure to the full range of alpha opportunities—even to securities at the lower end of the liquidity spectrum—while simultaneously controlling the size and liquidity risk exposures in the portfolio.

Conclusion

Emerging markets small cap stocks offer investors an attractive combination of return potential and risk reduction. They provide access to the fastest growing sectors in emerging markets economies—sectors which benefit most from an expanding middle class and increasing affluence among customers. In addition, there is ample opportunity for skilled managers to capture significant alpha by taking advantage of the wide dispersion between top and bottom deciles of emerging markets small caps, whether measured by performance, price-to-earnings or return on equity. By capitalizing on this breadth of opportunity, a systematic investment process based on fundamental insights provides an excellent way to exploit market mispricing. Portfolio construction methodologies that capture the full range of return opportunities while also taking into account the potential costs of trading and liquidity risk measures is key to maximizing the alpha in this space.

For More Information

To learn more about how to gain exposure to the Emerging Markets Small Cap opportunity, please contact Pavlos M. Alexandrakis, CFA, Managing Director, at Pavlos.Alexandrakis@qmassociates.com or 973.802.9297.

About QMA

Since 1975, QMA has served investors by combining experienced judgment with detailed investment research in an attempt to capture repeatable long-term outperformance. Today, we manage approximately $112 billion in assets globally for institutions, sub-advisory clients and individual investors through a broad mix of asset allocation, core equity, value equity and indexing solutions.

1 Hyundai Motor Company Annual Report 2013

2 "Global Income Inequality by the Numbers: in History and Now", Branko Milanovic, The World Bank Development Research Group, Poverty and Inequality Team, November 2012

3 FactSet data as of 6/30/14. Such an analysis does not account for the gaps in small cap company data and calculates the growth rate of only those firms that have information available.

4 Analysis performed without any statistical adjustments for liquidity.

5 eVestment Alliance is an outside vendor whose software has been used to create this exhibit. QMA pays a fee for this software. QMA has made efforts to confirm accu¬racy/reliability of the data provided by eVestment Alliance but we disclaim responsibility for its accuracy or completeness. Median Emerging Markets Small Cap Equity Universe represents the median manager among the investment managers within the Small/Mid-Small primary cap space.

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MSCI® Emerging Markets Small Cap Index is a free float-adjusted market capitalization index designed to measure equity market performance in the global emerging markets of companies that are in the Investable Market Index (IMI) but that are not in the Standard index.

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Russell 1000® Index: A market capitalization-weighted index that measures the performance of the 1,000 largest companies in the Russell 3000® Index, which represents approximately 92% of the total market capitalization of the Russell 3000® Index.

Russell 2000® Index: A market capitalization-weighted index that measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represent approximately 8% of the total market capitalization of the Russell 3000® Index.

Standard deviation depicts how widely returns vary around its average and is used to understand the range of returns most likely for a given fund. A higher standard deviation generally implies greater volatility.

P/E Ratio relates to the price of a stock to the per-share earnings of the company.

Return on Equity is the amount of net income returned as a percentage of shareholders equity.

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