



The Case for International Small-Cap

Fall 2015

Executive Summary

Most investors would agree that investing in domestic small-cap stocks has become an essential element to building a well-diversified investment program. Over time, small-cap stocks have provided exposure to a segment of the equity market that has offered faster growth, good risk-adjusted returns, and relatively low correlation with larger-cap stocks and other asset classes. Yet often when investors make an allocation to the international markets they tend to ignore the substantial universe of smaller-cap stocks that are available overseas, quite possibly thinking they are getting significant small-cap exposure by investing in emerging markets.

We believe investors are missing an opportunity to further add value and increase diversification by ignoring a large segment of the international equity market. In this analysis, we show that international small-cap stocks provide the same benefits that U.S. small-cap stocks offer, along with some additional benefits. They:

- ▶ Substantially increase the investment opportunity set and potential for adding alpha
- ▶ Complete the “cap range” of an international portfolio, as emerging market benchmarks derive approximately 16% of their weighting from companies with market capitalizations less than \$5 Billion¹
- ▶ Have demonstrated added diversification benefits
- ▶ Historically have provided good absolute and risk-adjusted returns, allowing investors the opportunity to enhance their portfolio return without additional uncompensated risk

As a result, we believe investors should reassess their allocation to international small-cap stocks, with the goal of increasing their weighting to a target of 5%-10% of their total equity allocation².

¹ Source: Factset, MSCI as of 07/31/15.

² Investors should consider their particular circumstances and/or speak with their advisors to determine the specific allocation that is appropriate for them.

The global small-cap market

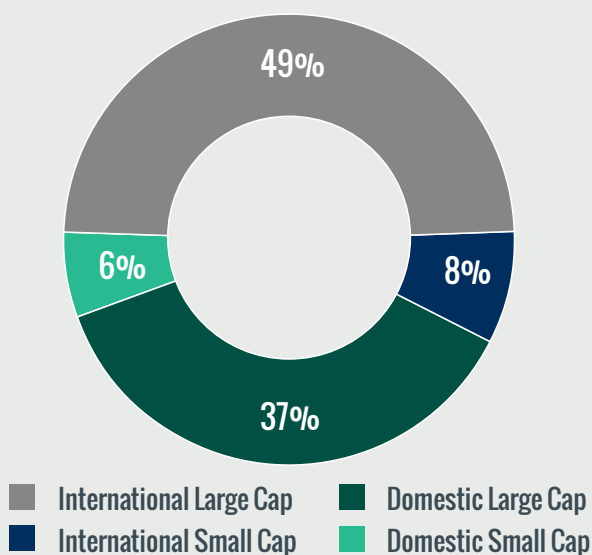
International benchmarks and investors do not have a uniform capitalization definition of small-cap stocks. Some consider \$2 Billion as the cutoff, while others prefer \$3 or \$5 Billion. One of the most popular index providers, Morgan Stanley Capital International (“MSCI”), defines small-cap stocks as those that represent the bottom 10%–15% of global market capitalization. Using recent MSCI data, small-cap stocks represented 14% of the global equity market, roughly split between domestic and non-U.S. stocks (as of July 31, 2015). (Chart 1)

The global small-cap stock universe, as measured by the MSCI All Country World Small Cap Index (“MSCI ACWI SC”), contains approximately 6,100 stocks, with roughly 4,300 of those outside the United States (as of July 31, 2015). This universe represents a sizable pool of stocks for active international managers to choose from—one that has more than twice as many stocks as the U.S. small-cap market. (Chart 2)

Chart 1

Global Investable Universe

Total world equity market cap \$58.4 Trillion

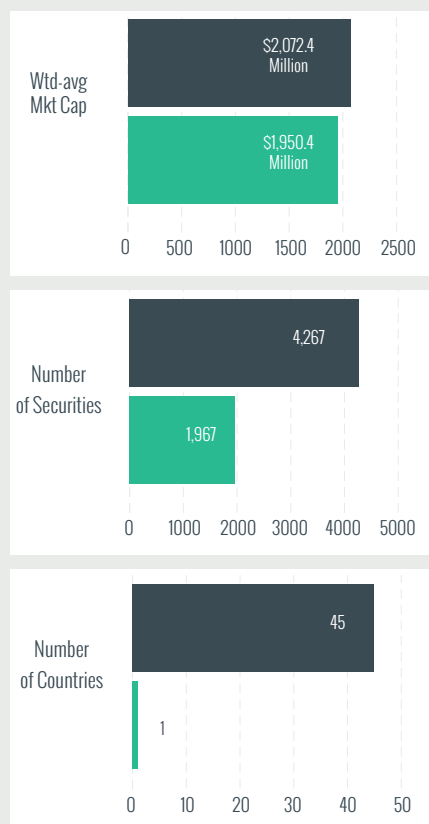


Source: Factset, MSCI, 07/31/15.

Chart 2

Characteristics (as of 07/31/15)

■ MSCI ACWixUS SC¹: International small-cap
■ Russell 2000®: Domestic small-cap



Source: Factset, MSCI, 07/31/15.

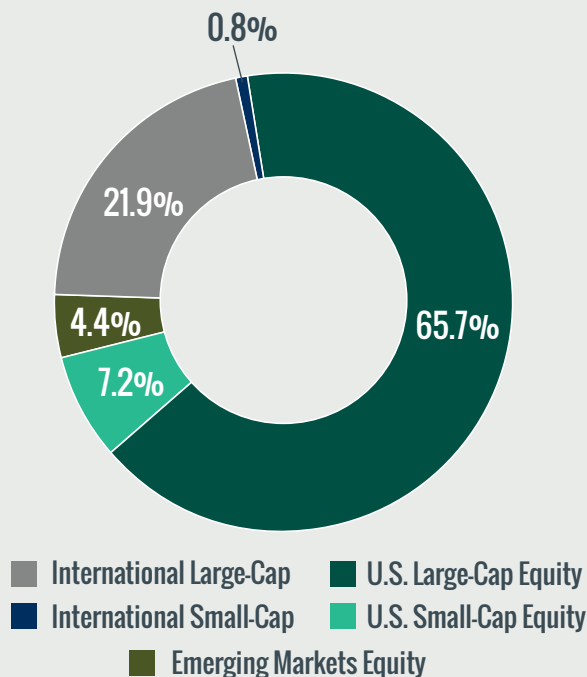
¹ MSCI All Country World Index ex USA Small Cap (“MSCI ACWixUS SC”)

Even though the non-U.S. small-cap stock universe is large and represents 8% of the global marketplace, international small-cap stocks are substantially underweighted in investors' portfolios. According to Morningstar, international small-cap stocks represent only 0.8% of equity mutual fund assets (Chart 3) and 1.7% of separate account equity assets (Chart 4), signifying investors are underweight a meaningful portion of the global capital markets. The underweight to international small-cap stocks is likely attributable to one or more of the following factors:

- ▶ **Most non-U.S. exposure is concentrated in products that are benchmarked against broad international indexes, such as the MSCI EAFE Index and the MSCI ACWIxUS. These indices each have less than a 2% weighting in small-cap stocks (less than \$2 billion market capitalization)¹.**
- ▶ **Investors may believe they are achieving small-cap exposure by allocating assets to emerging markets. In reality, the MSCI Emerging Markets Index has less than a 3% weighting to stock with market capitalizations below \$2 Billion and less than a 16% weighting to stock with a market capitalization below \$5 Billion¹.**
- ▶ **Investors may be unaware of the opportunity or the significance of the opportunity.**
- ▶ **Investors may perceive that international small-cap stocks are too risky and/or do not offer compelling diversification benefits, although history does not support this perception (particularly compared with the experience of U.S. small-cap stocks).**

Chart 3

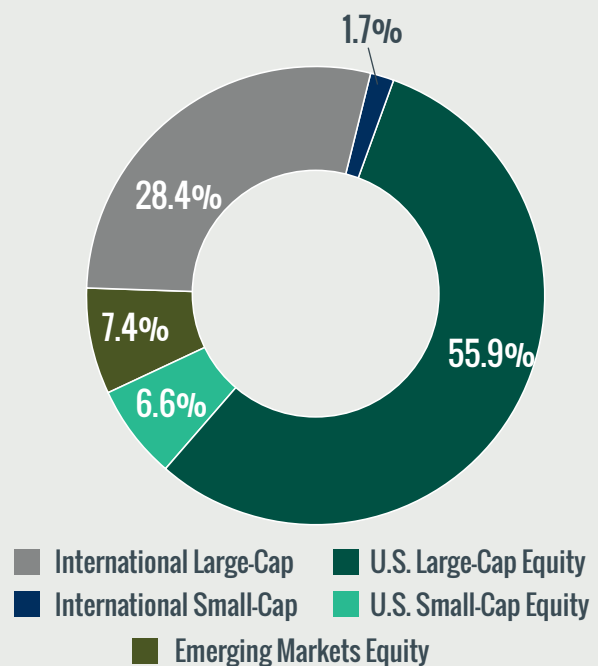
Allocations in Equity Mutual Funds



Source: Morningstar, 07/31/15
Allocations based on total assets in Morningstar categories

Chart 4

Allocations in Equity Separate Accounts



Source: Morningstar, 07/31/15
Allocations based on total assets in Morningstar categories

¹ Source: Factset, MSCI as of 07/31/15.

Domestic and international small-cap stocks have similar attributes

Good absolute return potential

For the last few decades, U.S. investors have been attracted to domestic small-cap stocks because of their strong returns. Since its inception in early-1979, the Russell 2000 Index (U.S. Small-Cap) has earned an annualized return of 11.8% (as of 07/31/15).

Despite weak international markets over the last few years, international small-cap stocks offer good absolute return potential. As shown below, international small-cap has significantly outperformed its large-cap counterpart over the trailing one-, three-, five-, and ten-year basis. Over ten years, the annualized outperformance is more than 160 basis points. We think the outperformance is a testament to the small-cap risk premium, which is raised in the more fragmented, less efficient international markets.

Table 1
Annualized Returns for Periods Ending 07/31/15

Index	1 Year	3 Year	5 Year	10 Year
MSCI ACWixUS SC	-3.08%	11.40%	7.58%	6.76%
MSCI ACWixUS ²	-4.57%	8.83%	5.85%	5.13%
Russell 2000® Index	12.03%	17.90%	15.27%	7.61%
Russell 1000® Index	11.24%	18.02%	16.45%	7.93%

Source: Factset **Past performance is no guarantee of future results.**

Good risk-adjusted returns

Not only do non-U.S. small-cap stocks offer good absolute return potential, historically over three-, five-, and ten-year periods they have offered good risk-adjusted returns—even better than those of large-cap international stocks. Table 2 highlights Sharpe ratios for these same indices¹.

Another interesting characteristic of the small-cap stock universe, is that neither the Russell 2000 Index nor the MSCI ACWixUS SC have generated a negative 10-year return since their respective inception dates (based on rolling ten-year returns). Conversely, the Russell 1000 Index has done so 7% of the time since 1979.

Table 2
Sharpe Ratios for Periods Ending 07/31/15

Index	3 Year	5 Year	10 Year
MSCI ACWixUS SC	1.07	0.48	0.27
MSCI ACWixUS	0.86	0.38	0.20
Russell 2000	1.45	0.92	0.32
Russell 1000	2.12	1.38	0.44

Source: Factset. **Past performance is no guarantee of future results.**

¹ Sharpe ratio is a measure of risk-adjusted return that compares excess return above a risk-free rate to standard deviation. Standard deviation is used as a measure of an investment's volatility.

² Source: Factset, MSCI as of 07/31/15.

³ Source: Morningstar, Factset as of 7/31/15. **Past performance is no guarantee of future results.**

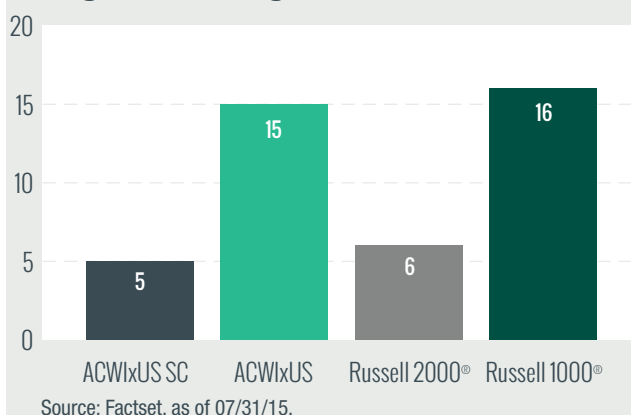
Attractive Alpha Potential for Active Managers

As we've seen, the global small-cap stock universe includes approximately 6,100 stocks, dwarfing the large-cap market, which consists of approximately 3,000 stocks (as of 07/31/15). As a result, active managers have the opportunity to construct unique investment portfolios that may differ significantly from their funds' benchmarks. The investment universe of almost 4,300 non-U.S. small-cap stocks should allow active small-cap international managers greater diversification potential and flexibility in portfolio construction.

Small-cap stocks also offer investment managers an opportunity to exploit a less-covered segment of the capital markets. Since large-cap stocks have significant Wall Street coverage and have become increasingly efficient, the ability to add value in this space is restricted. In the small-cap universe, however, only five analysts, on average, cover each MSCI ACWixUS SC stock—even fewer than the average of six analysts covering each Russell 2000 stock. This compares with an average of 15 analysts for MSCI ACWixUS stocks and 16 analysts for the stocks in the Russell 1000 Index². More than 20% (or 876 companies) in the Index have no analyst coverage². This dearth of coverage provides active small-cap managers an opportunity to exploit mispricings before they are recognized by others. Additionally, the majority of active managers have shown the ability to achieve even stronger returns than the Index. Over the trailing five years, more than 84% of Foreign Small/Mid-blend Funds beat the MSCI ACWixUS SC. Over ten years, nearly 60% beat the Index³.

- ▶ **876 out of 4267 companies in ACWixUS SC have no analyst coverage**
- ▶ **84% of Foreign Small/Mid Blend Funds beat the ACWixUS SC over the last 5 years**
- ▶ **Nearly 60% beat the Index over 10 years**

Chart 5
Average Analyst Coverage



Comparable Correlation Benefits

In addition to good historical returns and strong alpha potential, international small-cap stocks also provide good diversification when paired with other broad market indexes. Since the inception of the MSCI ACWixUS SC in June 1994 through July 31, 2015, it has produced a correlation coefficient of +0.73 with the Russell 1000 Index, +0.73 with the Russell 2000 Index, and 0.00 with the Barclays U.S. Aggregate Index. Over the same time period, the Russell 2000 Index produced a correlation of +0.83 with Russell 1000 Index and -0.07 with the Barclays U.S. Aggregate Index. Just as lower correlation may be a benefit to U.S. small cap investors, international small cap offers similar diversification advantages to a portfolio.

Similar Risk Profile

Some investors may perceive international small-cap stocks to be more risky than their U.S. small-cap counterparts. Certainly, this segment shares the same types of risks, such as currency and political risk, with all the international markets. International small-cap stocks may be somewhat more vulnerable to political risk, because their performance is often more closely aligned with the economy of their home country than is the performance of large multinational corporations. Nevertheless, some political risk is associated with all non-U.S. investments. We believe diversification and proven management skill are the best ways to manage political risk.

Liquidity is another perceived risk. As is the case when investing in U.S. small-cap equities, investors need to be proactive in managing liquidity and capacity. This makes it imperative that active portfolio managers diligently oversee their investment portfolios to ensure adequate liquidity.

Another perception is that international small-cap stocks have significantly higher volatility than other segments. This is partly true because non-U.S. small-cap stocks do have higher standard deviations than large-cap stocks (both U.S. and non-U.S.). Their standard deviation, however, is essentially comparable to that of U.S. small-cap stock, particularly over long time periods. (Table 4) Some also consider non-U.S. small-cap stocks to be a “low-quality” segment of the global equity markets. As a result, it is perceived to be inherently more risky. The reality is that international small-cap stocks have better quality statistics and forward growth expectations than domestic small-cap stocks. (Table 5)

Whether viewing forward growth, ROE, ROA or debt ratios, non-U.S. small-cap equities look very attractive when compared with U.S. small-cap equities.

Table 3
Correlations

Based on monthly returns: 06/1994 to 07/2015

Index	MSCI ACWixUS SC	MSCI ACWixUS	Russell 1000®	Russell 2000®	Barclays U.S. Aggregate
MSCI ACWixUS SC	1.00	0.93	0.73	0.73	-0.00
MSCI ACWixUS	0.93	1.00	0.84	0.76	0.01
Russell 1000®	0.73	0.84	1.00	0.83	0.01
Russell 2000®	0.73	0.76	0.83	1.00	-0.07
Barclays U.S. Aggregate	-0.00	0.01	0.01	-0.07	1.00

Source: Factset. **Past performance is no guarantee of future results.**

Table 4
Standard deviation for periods ending 07/31/15

Index	3 Year	5 Year	10 Year
MSCI ACWixUS SC	10.60	15.70	20.48
MSCI ACWixUS	10.22	15.07	18.78
Russell 2000® Index	12.31	16.50	19.43
Russell 1000® Index	8.47	11.86	14.93

Source: Factset. **Past performance is no guarantee of future results.**

Table 5

Characteristic (as of 07/31/15)	MSCI ACWixUS SC	Russell 2000 Index
Forward EPS Growth	16.0	14.8
ROE	11.6	6.6
ROA	6.0	1.5
LT Debt / Capital	27.0	31.5

Source: Factset. **Past performance is no guarantee of future results.**

Forward earnings per share (EPS) growth—Growth of forecasted, or estimated, portion of a company's profit allocation to each outstanding share of common stock.

Return on Equity (ROE)—The amount of net income returned as a percentage of shareholders equity.

Return on Assets (ROA)—An indicator of how profitable a company is relative to its total assets. Calculated by dividing a company's annual earnings by its total assets.

Long-term debt-to-capital ratio—A measurement of a company's financial leverage, calculated as the company's long-term debt divided by its total capital.

The potential advantages of international small-cap over U.S. small-cap

Faster Growth Potential

U.S. and international small-cap stocks have many positive similarities that may benefit investors. However, international small-cap stocks have several distinct advantages over U.S. small-cap stocks. First, international small-cap stock offers exposure to faster growth outside the U.S. Over the coming years, many analysts are anticipating that non-U.S. economic growth will exceed U.S. economic growth. The International Monetary Fund predicts U.S. GDP will grow at an annualized rate of 2.7% over the next five years¹. Conversely, the 45 countries represented in the MSCI ACWixUS SC Index have an average expected GDP growth rate of 3.0%, with more than half expected to generate higher growth than the U.S. over the next five years¹.

More Opportunity for Active Managers to Outperform

Another advantage that international small-cap stocks have over U.S. small-cap stocks is the size and diversity of the universe, and the ability of active managers to potentially take advantage of this breadth. The international small-cap investment universe is much larger than the U.S. small-cap space. It includes approximately 4,300 stocks across 45 countries, while the U.S. small-cap segment only includes approximately 2,000 stocks—all located in one country.

Incorporating international small-cap stocks into a portfolio

U.S. investors would have benefited from international small-cap exposure in recent years. Chart 6 highlights the hypothetical return and standard deviation over the last ten years of three equity portfolios with varying allocations to international small-cap stocks. All three have a “typical” 60/40 breakdown between U.S. equity and non-U.S. equity. The first does not allocate to international small-cap stocks, the second allocates 5% to international small-cap and the third has a 10% allocation.

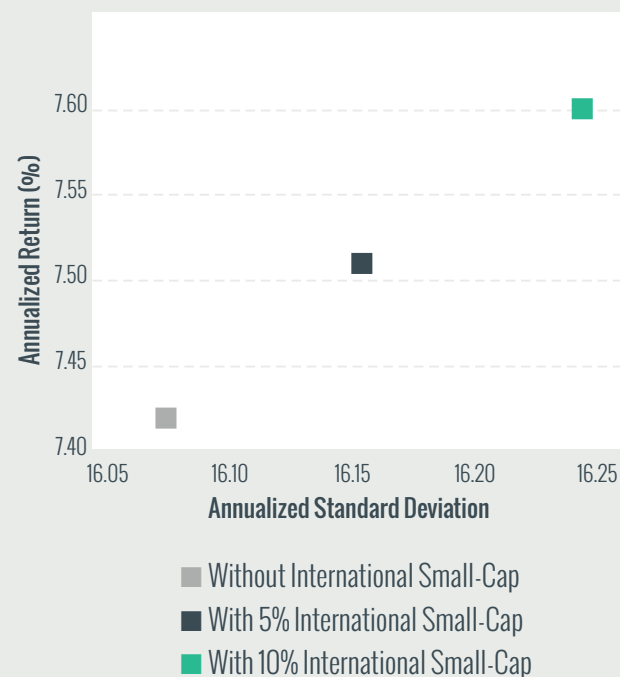
Investors could have increased the 10-year annualized return of their equity sleeve by 9 bps by including only a 5% allocation to small-cap international stocks. Gaining 9 bps with only a 5% allocation shows the return potential international small-cap stocks offer investors. Greater allocations to international small-cap stocks would have produced commensurately greater returns, as a 10% allocation would have increased the annualized return by 18 bps. We believe this return improvement is still significant given the weakness in international markets over the prior few years.

The annualized standard deviation also increased as investors allocated more to international small-cap stocks. However, based on Sharpe ratios, investors would have been appropriately rewarded

¹ International Monetary Fund World Economic Outlook—April 30, 2015

Chart 6

Risk vs. return in three hypothetical equity portfolios



Domestic large-cap	Domestic small-cap	International dev. large-cap	Emerging markets	International small-cap
50%	10%	35%	5%	0%
50%	10%	30%	5%	5%
50%	10%	25%	5%	10%

Source: Factset, 10 years ending 07/31/15. These hypothetical portfolios are shown for illustrative purposes only and do not represent the performance of any actual investment products.

Past performance is no guarantee of future results. Domestic large-cap, domestic small-cap, international developed large-cap, emerging markets, and international small-cap equities, are represented by the Russell 1000, Russell 2000, MSCI EAFE, MSCI Emerging Markets, and MSCI ACWixUS SC indices, respectively.

for taking the slightly greater risk associated with international small-cap stocks. The portfolio without international small-cap stocks would have had a Sharpe ratio of +0.38 over the last ten years. The one with a 5% allocation would have had a Sharpe ratio of +0.38 and the 10% allocation would have had a +0.39 Sharpe ratio. The differential is modest due to underperformance of international equities in recent years. However, it does confirm the added risk was compensated with greater return. In uncertain times, with lower forward return expectations, international small-cap stocks may help investors meet their target return without additional uncompensated risk.

Summary

International small-cap stocks may provide a meaningful enhancement to an already diversified global equity portfolio. An allocation to international small-cap stocks offers:

- ▶ **Good historical risk-adjusted returns**
- ▶ **Exposure to faster growth outside the U.S.**
- ▶ **Potentially enhanced diversification**
- ▶ **Considerable alpha potential for active managers to capture**
- ▶ **Characteristics similar to domestic small-cap stocks**

Investors should reexamine their current allocation to determine how much international small-cap stocks exposure they have truly gained via their other international equity holdings. Industry data would suggest that most investors currently have roughly a 7% underweight to international small-cap stocks relative to the percentage international small cap stocks represent in the global equity market. We believe a reasonable objective is to allocate 5%–10% of the total equity portion of a portfolio to international small-cap stocks. Investors who already invest in U.S. small-cap stocks are likely comfortable with the risks associated with international small-cap stocks, and allocating to international small-cap stocks may be a logical next step. An allocation to international small-cap stocks may offer investors the potential to generate higher absolute and risk-adjusted returns.

DISCLOSURES

The views expressed constitute the firm's judgment as of September 15, 2015, and are subject to change based on market, economic or other conditions. These opinions are not intended to be a forecast of future events, a guarantee of future results or investment advice. All data referenced is from sources deemed to be reliable but cannot be guaranteed as to accuracy or completeness.

All investments are subject to risk including possible loss of principal.

Investments in small-capitalization companies are subject to risks such as erratic earnings patterns, competitive conditions, limited earnings history and a reliance on one or a limited number of products.

Investments in international securities are subject to certain risks of overseas investing including currency fluctuations and changes in political and economic conditions, which could result in significant market fluctuations. These risks are magnified in emerging markets.

Diversification does not guarantee a profit or protect against a loss in declining markets.

The MSCI All Country World Index ex-USA Small Cap covers all investable small-cap securities with a market capitalization below that of the companies in the MSCI Standard Indices (excluding USA), and targets approximately 14% of each market's free-float adjusted market capitalization.

The MSCI All Country World Index ex USA is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The index consisted of 44 country indices comprising 23 developed and 21 emerging market country indices. The developed market country indices included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom. The emerging market country indices included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

The MSCI EAFE® Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI EAFE Index consists of the following 22 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 21 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

All MSCI data is provided 'as is'. The products described herein are not sponsored or endorsed and have not been reviewed or passed on by MSCI. In no event shall MSCI, its affiliates, or any MSCI data provider have any liability of any kind in connection with the MSCI data or the products described herein. Copying or redistributing the MSCI data is strictly prohibited.

The Russell 2000® Index is composed of the 2000 smallest stocks in the Russell 3000® Index and is widely regarded in the industry as the premier measure of small-cap stock performance.

The Russell 1000® Index measures the performance of approximately 1,000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

The Russell 2000 and 1000 Indices are trademarks of Russell Investments. Russell is a trademark of Russell Investments.

The Barclays U.S. Aggregate Index is an index of the U.S. investment-grade fixed-rate bond market, including both government and corporate bonds.

Indices are unmanaged, are not available for investment, and do not incur expenses.

AMG Funds are distributed by AMG Distributors, Inc., a member of FINRA/SIPC.



AMG Funds

www.amgfunds.com | 800.368.4410