The case for global small- and mid-cap investing

Small- and mid-cap stocks, particularly those that are global, have provided compelling returns. Still, most individual investors remain largely biased in their equity allocations toward large- and mega-cap stocks. In this white paper, we make the case for global small- and mid-cap stocks and explain why we believe active management is important to exploit the inefficiencies inherent in this portion of the market.

The past five years have been a difficult environment for equity investors. The markets have been on a roller-coaster ride and redemption patterns have been consistently high. This implies that many equity investors have missed out on the rally since the markets generally bottomed in March 2009, and may have lasting scars from the steep losses incurred in 2008 and the elevated volatility levels we’ve seen since then.

In addition, the much-publicized “lost decade” from 2000 to 2009 has done little to instill confidence that equities can once again provide attractive long-term returns for investors. In fact, this decade is often misunderstood. Large-cap stocks did perform poorly during this period, with the Russell 1000 Index returning a cumulative –4.80% and the S&P 500 Index returning a cumulative –9.10%, according to Morningstar. However, many other asset classes performed well. The small-cap Russell 2000 Index, for example, returned a cumulative 41.26% during the decade.

Contributors
— Joseph Axtell, CFA, portfolio manager

There are many potential advantages to investing in small-cap stocks. Historically, small-cap stocks have provided better long-term returns than large-cap stocks, as we will show.

Much less publicized (and perhaps less understood by many investors) is both the appeal of mid-cap stocks and the case for going global in the small- and mid-cap space. Despite the potential advantages of investing in small- and mid-cap stocks, most individual investors remain largely biased in their equity allocations toward large- and mega-cap stocks.

Small- and mid-cap benchmarks
While there are many benchmarks for the small- and mid-cap investing arena, all with various biases, we believe those shown in the table below are a good representative sample as they are among the most widely followed in their respective markets.

<table>
<thead>
<tr>
<th>Russell Midcap Index</th>
<th>Russell 2000 Index</th>
<th>S&amp;P Developed SmallCap Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic representation</td>
<td>Domestic</td>
<td>Domestic</td>
</tr>
<tr>
<td>Market capitalization</td>
<td>Mid</td>
<td>Small</td>
</tr>
<tr>
<td>Weighted average market capitalization</td>
<td>$11.4 billion</td>
<td>$1.8 billion</td>
</tr>
<tr>
<td>Market-capitalization range</td>
<td>$441.7 million to $29.2 billion</td>
<td>$33.7 million to $5.3 billion</td>
</tr>
<tr>
<td>Stocks</td>
<td>820</td>
<td>2,004</td>
</tr>
</tbody>
</table>

Source: FactSet as of 12/31/13.
The case for small- and mid-cap investing

Domestic small-cap investing has found an established and well-earned home in the allocations of many retail and institutional investors, and for good reason: Small-cap stocks historically have provided strong absolute performance. They outperformed mid- and large-cap stocks in 2013, for example. Going back even further yields similar results: Since 1926, small-cap stocks have outperformed large-cap stocks by 238 basis points annually, according to Morningstar as of 12/31/13 (based on the IA SBBI U.S. Small Cap Stock Index and IA SBBI S&P 500 Index). Even more impressive has been the outperformance of mid-cap stocks over time: They have outperformed small- and large-cap stocks over every longer time period as of 12/31/13. Figure 1 illustrates.

Figure 1: Historical performance of small-, mid- and large-cap stocks

This outperformance makes sense given that small- and mid-cap stocks tend to exhibit higher earnings and cash-flow growth, true drivers of long-term stock performance. Figure 2 shows Institutional Brokers’ Estimate System (IBES) forecasts for the long-term growth of large-, mid- and small-cap stocks. IBES collects earnings estimates from research analysts at major financial firms in order to forecast long-term growth.

Figure 2: Long-term earnings per share (EPS) growth forecasts

Source: Russell Investments and IBES as of 2/28/14. This data is for illustrative purposes only. Large-cap stocks are represented by the Russell 1000 Index, small-cap stocks by the Russell 2000 Index and mid-cap stocks by the Russell Midcap Index. There is no guarantee that forecasts will be realized.

This outperformance makes sense given that small- and mid-cap stocks tend to exhibit higher earnings and cash-flow growth, true drivers of long-term stock performance. Figure 2 shows Institutional Brokers’ Estimate System (IBES) forecasts for the long-term growth of large-, mid- and small-cap stocks. IBES collects earnings estimates from research analysts at major financial firms in order to forecast long-term growth.

Figure 3: Historical volatility of small-, mid- and large-cap stocks

Source: Morningstar as of 12/31/13. Volatility is historical and is not an indication of future volatility. This data does not represent the performance of any Deutsche Asset & Wealth Management product. Volatility is represented by standard deviation. Large-cap stocks are represented by the Russell 1000 Index, small-cap stocks by the Russell 2000 Index and mid-cap stocks by the Russell Midcap Index. It is not possible to invest directly in an index. See page 8 for index definitions.
The compelling long-term returns of small- and mid-cap stocks, however, have come with some drawbacks—notably the perception of being more “risky.” Modern portfolio theory defines risk as volatility, or the variation in return patterns over time. Examining the volatility of small- and mid-cap stocks relative to large-cap stocks shows that the former have indeed been more volatile over every major time period as of 12/31/13. Figure 3 illustrates.

Of course, volatility is only one form of risk, and while it provides a basis for an academic measure of risk, it does not address other (and perhaps more tangible) forms of risk. From an investment point of view, perhaps the most basic form of risk is the probability of losing principal. When examining risk from this perspective, while past performance does not guarantee future results, we can make an interesting observation: Small-cap stocks had positive performance over every rolling 10-year period starting in June of 1930, as Figure 4 illustrates. Of course, this looks at one rolling time period (10-year). Small-cap stocks did have negative performance over other periods.

Figure 4 illustrates the performance of small-cap stocks over six different periods, the shortest being three months and the longest being 10 years. During rolling three-month periods from 1930 through 2013, small-cap stocks produced a negative return 33% of the time. That number decreased over longer periods, however. During rolling 10-year periods, small-cap stocks produced a negative return 0% of the time. In fact, the only time small-cap stocks produced a negative return over a 10-year period was March and May of 1940. This suggests that a long-term investment horizon could potentially provide a measure of principal protection.

Indeed, we believe after three years the performance potential of small-cap stocks may outweigh their volatility. Therefore, in our opinion, investors with time horizons of greater than three years may wish to consider allocating a portion of their equity portfolios to small-cap stocks (assuming that allocation is consistent with their goals, of course).
2 | The potential advantages of going global with small- and mid-cap investing

Since the bursting of the U.S. housing bubble and the ensuing global economic slowdown, it has become clear that the growth of gross domestic product (GDP) in developed countries may remain subdued in the near term. With favorable demographic trends and less overall debt at both the consumer and national levels, much of the world’s growth is expected to come from outside of the economies that have provided leadership over the last several decades. Figure 6 highlights the importance of implementing a global investment approach that has the ability to capture the greatest growth opportunities.

In addition to providing geographical flexibility, investing in the global small-cap segment of the market can dramatically increase the available stocks from which to assemble a portfolio, as Figure 7 illustrates. There are 6,011 holdings in the S&P Developed SmallCap Index (which represents the global small-cap universe), while there are only 1,610 holdings in the MSCI World Index (which represents the global large-cap universe) as of 12/31/13, according to FactSet. The expanded universe of investable companies offered by moving down the market-cap range increases the opportunity for global small-cap managers to identify great businesses.

Going global in one’s small- and mid-cap investments has been beneficial in the past, as Figure 8 illustrates. Over the 10-year period ending 12/31/13, global small-cap investors have enjoyed higher returns and lower volatility than domestic-only small-cap investors. At the same time, global small-cap investors have enjoyed comparable return and volatility to domestic-only mid-cap investors.

![Figure 6: Forecast GDP growth, world regions](source)

Source: Deutsche Asset & Wealth Management as of 11/18/13.

![Figure 7: Number of companies in global small- and large-cap indices](source)

Source: Deutsche Bank as of 12/31/13.

![Figure 8: Global small-cap stocks vs. domestic small- and mid-cap stocks](source)

Source: Morningstar as of 12/31/13. Performance is historical and does not guarantee future results. This data does not represent the performance of any Deutsche Asset & Wealth Management product. Volatility is represented by standard deviation. Global small-cap stocks, domestic small-cap stocks and domestic mid-cap stocks are represented by the S&P Developed SmallCap Index, Russell 2000 Index and Russell Midcap Index, respectively. Stocks of small- and mid-cap companies involve greater volatility than securities of larger, more-established companies. It is not possible to invest directly in an index. See page 8 for index definitions. Performance over other time periods may not been as favorable.
3 | Why active management?

We believe there are substantial opportunities for active managers to outperform passive managers in the small- and mid-cap space. Most Wall Street analyst coverage is confined to large-cap stocks, as Figure 9 illustrates. As a result, many smaller but well-run companies with exciting growth prospects are simply not covered by Wall Street. This lack of analyst coverage tends to make small-cap stocks a less efficient portion of the market, presenting more opportunities for mispricing. Despite the sheer volume of companies to analyze, an experienced portfolio manager with appropriate resources can potentially profit from these mispricings to deliver longer-term outperformance.

Because of the relative lack of analyst coverage, active small-cap managers have outperformed their benchmarks more often than large-cap managers, as Figure 10 illustrates.

Using 2013 as an example, 45% of small-cap managers outperformed their benchmark vs. 42% for large-cap managers. Longer time periods showed a similar pattern.

In addition, Figure 11 illustrates that the average level of outperformance by small-cap managers was greater over every time period. For example, when looking at the one-year period, we found that for those managers who have outperformed their benchmarks (namely, 45% of small-cap managers and 42% of large-cap managers), the average level of outperformance was 5.38% for small-cap managers vs. 3.96% for large-cap managers. The longer time periods show a similar pattern: Of those small-cap managers who outperformed their benchmarks, the average level of outperformance tended to be greater than that of large-cap managers. Of course, past performance does not guarantee future results.

Figure 9: Average analyst coverage per stock by market capitalization

<table>
<thead>
<tr>
<th>Market Capitalization</th>
<th>Average Analyst Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than $100 billion</td>
<td>28</td>
</tr>
<tr>
<td>$50 to $100 billion</td>
<td>25</td>
</tr>
<tr>
<td>$10 to $50 billion</td>
<td>21</td>
</tr>
<tr>
<td>$5 to $10 billion</td>
<td>15</td>
</tr>
<tr>
<td>$4 to $5 billion</td>
<td>12</td>
</tr>
<tr>
<td>$3 to $4 billion</td>
<td>11</td>
</tr>
<tr>
<td>$2 to $3 billion</td>
<td>9</td>
</tr>
<tr>
<td>$1 to $2 billion</td>
<td>7</td>
</tr>
<tr>
<td>$500 million to $1 billion</td>
<td>6</td>
</tr>
<tr>
<td>$250 million to $500 million</td>
<td>4</td>
</tr>
<tr>
<td>Less than $250 million</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: FactSet as of 12/31/13.

Figure 10: Percentage of time small-cap vs. large-cap funds outperformed their benchmarks

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Small-cap Funds</th>
<th>Large-cap Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-year</td>
<td>45%</td>
<td>42%</td>
</tr>
<tr>
<td>3-year</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>5-year</td>
<td>62%</td>
<td>30%</td>
</tr>
<tr>
<td>10-year</td>
<td>54%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: Morningstar as of 12/31/13. Performance is historical and does not guarantee future results. For Figure 10, we compared the return of all small-cap Morningstar categories (Small Growth, Small Value, Small Blend) to the return of the Russell 2000 Index, and the return of all large-cap Morningstar categories (Large Growth, Large Value, Large Blend) to the return of Russell 1000 Index. We sorted by time periods, then divided the number of funds that outperformed their benchmark by the total number of funds. For Figure 11, we calculated the average return of all small-cap Morningstar funds (Small Growth, Small Value, Small Blend) and large-cap Morningstar funds (Large Growth, Large Value, Large Blend) that outperformed their benchmarks (the Russell 2000 Index and Russell 1000 Index, respectively) over multiple time periods. We then calculated the average performance relative to the benchmark for each period. Stocks of smaller companies involve greater volatility than securities of larger, more-established companies. The data does not represent the performance of any Deutsche Asset & Wealth Management product. Index returns assume reinvestment of all distributions and do not reflect any fees or expenses. It is not possible to invest directly in an index. See page 8 for index definitions.
Today’s opportunities in small- and mid-cap stocks

There are a number of reasons that small- and mid-cap stocks are particularly compelling in today’s market environment: They have performed well coming out of recessions; they have performed well in inflationary environments; and investors are underweight small-cap stocks, especially global small-cap stocks. Let’s look at each reason in more detail.

Small-cap stocks have performed well coming out of recessions

In addition to the compelling return potential small-cap stocks offer, they also have historically performed better than large-cap stocks coming out of market downturns.

**Figure 12** shows the returns of global small-cap stocks and large-cap stocks coming out of the last two economic downturns. Small-cap stocks recovered from the bursting of the technology bubble by returning 47% in 2003 vs. 31% for large-cap stocks. Subsequently, small-cap stocks also recovered more quickly from the recent financial crisis by returning 39% in 2009 vs. 27% for large-cap stocks.

There are a few reasons why small-cap stocks are able to recover more quickly than large-cap stocks coming out of recessions. Small-cap companies are generally more nimble and able to modify their strategies and reposition products quicker than larger corporations. As a result, small-cap companies can quickly add to their work force and increase production when economic activity begins to improve.

Small-cap stocks have performed well in inflationary environments

Most economists are not currently overly concerned about inflation. The consumer price index (CPI), a widely used gauge of consumer spending, rose 1.5% for the one-year period ending 12/31/13 and so-called core inflation (which eliminates volatile food and energy costs) rose 1.7%. That places core inflation under the U.S. Federal Reserve Board’s (Fed’s) target of 2%—and the 2% to 2.5% annualized rates prevailing before the Great Recession of 2008 and 2009. However, we believe the longer term threat from inflation remains very real.

The Fed, in an attempt to stimulate the U.S. economy, has engaged in significant quantitative easing that has created more money, and in doing so, can potentially dilute the purchasing power of the U.S. dollar.

Historically, small-cap stocks have performed well relative to other asset classes during times of high inflation. From 1974 through 1981, the last period when the U.S. economy experienced high inflation, small-cap stocks were able to offset inflation’s impact on returns by delivering annual returns of more than 27%, well in excess of the 9.3% rise in inflation. **Figure 13** illustrates.
Investors are under-invested in small-cap stocks, especially global small-cap stocks

Despite the merits of global small- and mid-cap investing as discussed earlier, investors have allocated only a tiny sliver of their portfolios to these strategies, as Figure 14 illustrates. Although it is difficult to identify the reason, it seems plausible that many investors remain overly committed to large-cap stocks based on two primary factors: familiarity and the perception of lower risk. After all, it is easier for investors to relate to the merits of holding a Coca-Cola or an Exxon Mobil in a portfolio than a small, unfamiliar company. Similarly, it is easier to conceive of a smaller and less familiar company having greater risk of business failure than a household name. However, we believe investors should be aware of the increased risk-adjusted returns that small- and mid-cap investments have provided over time.

Figure 13: Small-cap stocks have performed well in inflationary environments, 1974–1981

<table>
<thead>
<tr>
<th>Inflation</th>
<th>Real estate</th>
<th>Commodities</th>
<th>Domestic large-cap stocks</th>
<th>International stocks</th>
<th>Domestic small-cap stocks</th>
<th>U.S. government bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.3%</td>
<td>12.1%</td>
<td>6.8%</td>
<td>8.0%</td>
<td>9.7%</td>
<td>27.1%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Source: Morningstar as of 12/31/13. Performance is historical and does not guarantee future results. The values of equity investments are more volatile than those of other securities. Fixed-income investments are subject to interest-rate risk, and their values will decline as interest rates rise. The data does not represent the performance of any Deutsche Asset & Wealth Management product. Inflation is represented by the Ibbotson Associates (IA) SBBI U.S. Inflation Index. Real estate is represented by the FTSE NAREIT All REIT Index. Commodities are represented by the S&P GSCI. Domestic large-cap stocks are represented by the S&P 500 Index. International stocks are represented by the MSCI EAFE Index. Domestic small-cap stocks are represented by the IA SBBI U.S. Small Cap Stock Index. U.S. government bonds are represented by the IA SBBI U.S. Intermediate-Term Government Bond Index. Equity index returns assume reinvestment of all distributions. Index returns do not reflect any fees or expenses. It is not possible to invest directly in an index. See page 8 for index definitions. The values of equity investments are more volatile than those of other securities. Fixed-income investments are subject to interest-rate risk, and their value will decline as interest rates rise. Commodities are long-term investments and should be considered part of a diversified portfolio; market-price movements, regulatory changes, economic changes and adverse political or financial factors could have a significant impact on performance. Stocks of smaller companies involve greater volatility than securities of larger, more established companies.
Conclusion

Small- and mid-cap investing has historically produced solid long-term investment results relative to large-cap stocks. Going global has only amplified those results. We realize that past performance does not guarantee future results, but the historical data is nonetheless compelling. Despite this outperformance, however, investors have been underinvested in small-cap stocks, often dramatically, as evidenced by the tiny sliver of assets that global small-cap funds have attracted. One reason for this disparity is the fear of increased risk. We have shown that while small-cap stocks do, in fact, exhibit more volatility relative to large-cap stocks, a long-term investment horizon could potentially provide a measure of principal protection. As we have noted, we believe after three years the performance potential of small-cap stocks may outweigh their volatility. Thus, investors with time horizons of greater than three years may wish to consider allocating a portion of their equity portfolios to small-cap stocks (assuming that allocation is consistent with their goals, of course). Investors in such stocks have not experienced negative 10-year returns since the pre-WWII era.

Moreover, today’s market environment may prove favorable for small- and mid-cap investing. Small-cap stocks have traditionally performed well in the periods immediately following recessions. In addition, they have proven to be surprisingly good inflation-fighters by performing well in periods of high inflation. Although recent inflation readings have remained relatively low, we believe the longer term threat from inflation remains very real.

We urge investors to consider devoting a larger portion of their equity allocations to small- and mid-cap stocks. The greater inefficiencies in smaller market-capitalization ranges have historically provided ample grounds for successful active managers to outperform passive only strategies, in our opinion.

Index definitions

The consumer price index (CPI) tracks U.S. inflation. The FTSE NAREIT All REIT Index tracks the performance of REITs. The Ibbotson Associates SBBI (IA SBBI) S&P 500 Index tracks the performance of S&P 500 Index stocks. The Ibbotson Associates SBBI (IA SBBI) U.S. Inflation Index tracks U.S. inflation. The Ibbotson Associates SBBI (IA SBBI) U.S. Intermediate Term Government Bond Index tracks the performance of five-year U.S. Treasury bonds. The Ibbotson Associates SBBI (IA SBBI) U.S. Small Cap Stock Index tracks the performance of small-capitalization stocks in 22 countries. The MSCI EAFE Index tracks the performance of stocks in select developed markets outside of the United States. The MSCI World Index tracks the performance of stocks in select developed markets around the world, including the United States. The Russell 1000 Index tracks the performance of the 1,000 largest stocks in the Russell 3000 Index, which consists of the 3,000 largest U.S. companies as measured by market capitalization. The Russell 2000 Index tracks the performance of the 2,000 smallest stocks in the Russell 3000 Index. The Russell Midcap Index tracks the performance of the mid-cap segment of the U.S. equity universe. The S&P 500 Index tracks the performance of 500 leading U.S. stocks and is widely considered representative of the U.S. equity market. The S&P Developed SmallCap Index tracks the performance of small-capitalization stocks in 22 countries. The S&P Goldman Sachs Commodity Index (GSCI) is a composite index of commodity sector returns representing an unleveraged, long-term investment in commodity futures.

Term definitions

One basis point equals 1/100 of a percentage point. Gross domestic product (GDP) is the value of all goods and services produced by a country’s economy. Standard deviation is often used to represent the volatility of an investment. It depicts how widely an investment’s returns vary from the investment’s average return over a certain period.

The opinions and forecasts expressed herein by the authors, do not necessarily reflect those of Deutsche Asset & Wealth Management and are as of April 2014.

Important risk information

Investing in foreign securities, particularly those of emerging markets, presents certain risks, such as currency fluctuations, political and economic changes, and market risks. Stocks of smaller and mid-size companies involve greater risk than securities of larger, more-established companies. Stocks may decline in value.

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