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STRATEGIC BETA STRATEGIES

Do They Work Outside Our Borders?

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Strategic beta strategies, also known as "smart beta" or "alternative beta," have grown in popularity over the past several years. Advisors increasingly have used these strategies as replacements for active management.[1] Much of the research on these strategies has focused on large-cap domestic allocations, and much of the appeal has been their outperformance relative to their market-cap index equivalents (Davidow 2018).

The question that I often hear is, "Do these strategies work outside our borders?" Do strategic beta strategies outperform their market-cap equivalents in international and emerging markets?

This article shares some of the research about how a few of these strategies would have performed over the past 15 years. Specifically, it reviews the following questions:

- Do strategic beta strategies deliver a similar experience in international and emerging markets?
- Are some factors more persistent than others?
- How do sector allocations, market capitalization, and country exposures vary by strategy?
- How have the strategies performed over time relative to market-cap benchmarks?

Over the past couple years, a proliferation of strategic beta strategies has come to market. Based on 2018 data from Morningstar Research, there were 879 strategic beta exchange-traded products, with more than $849 billion in assets under management (AUM).[2] AUM grew at a rate of 39 percent over the previous two years, nearly twice the rate of the overall market. Part of the appeal has been the potential for delivering excess return relative to the traditional market-cap benchmarks (S&P 500®, Russell 2000®, FTSE 100, MSCI EAFE®, etc.).

The industry often uses "strategic beta" and "factor investing" interchangeably, but not all strategic beta strategies are based on factor research.

Many of these strategies have delivered excess return by exploiting known factors from academic literature (e.g., value, size, quality, low volatility, and momentum, among others). Other strategies merely rely upon back-tested data that show strong hypothetical results. This analysis focuses on strategies that are based on academic rigor, examines 15 years of data, and uses historical index data to provide an apples-to-apples comparison.

FACTOR INVESTING

With the proliferation of strategic beta strategies, investment research company Morningstar in 2014 introduced a new taxonomy to help advisors distinguish among the various types of strategies. Morningstar groups strategies by "return-oriented," "risk-oriented," and "other." Return-oriented strategies, such as value, momentum, and quality, are designed to deliver excess returns relative to market-cap indexes. Risk-oriented strategies, such as low volatility and minimum variance, are designed to have lower risk than the overall market. "Other" is a catch-all for strategies that are neither return- nor risk-oriented.

The industry often uses "strategic beta" and "factor investing" interchangeably, but not all strategic beta strategies are based on factor research. The term "factor" describes characteristics of a group of securities that can explain return and risk. In recent years, a plethora of new strategies has come to market claiming to have identified new factors. MSCI has conducted extensive research on factor investing and offered the following perspective:

> *While many factors have been shown to have statistical significance in explaining variations in risk and returns, not all of these factors offer risk premia relative to CAPM pricing. Risk premia factors are those which represent exposure to systematic sources of risk that have historically earned a long-term premium. We have so far identified six risk premia factors: Value, Low Size, Low Volatility, High Dividend Yield, Quality and Momentum. These factors have been empirically tested in years of*

Figure 1

EVALUATING SELECT COUNTY AND REGIONAL RETURNS BY YEAR

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Germany 64.8%	Australia 32.0%	Emerging Markets 34.5%	Spain 50.2%	Emerging Markets 39.8%	Japan -29.1%	Emerging Markets 79.0%	Nordic Countries 26.0%	United States 2.0%	Germany 32.1%	United States 32.6%	United States 13.4%	Japan 9.9%	Canada 25.5%	Emerging Markets 37.8%
Spain 59.2%	Spain 29.6%	Canada 28.9%	Nordic Countries 40.4%	Germany 35.9%	Switzerland -29.9%	Australia 76.8%	Canada 21.2%	United Kingdom -2.5%	Nordic Countries 23.4%	Germany 32.4%	World 4.7%	Nordic Countries 3.0%	Australia 11.7%	France 29.9%
Emerging Markets 56.3%	Nordic Countries 28.5%	Japan 25.6%	Germany 36.8%	Canada 30.2%	United States -37.1%	Canada 57.4%	Emerging Markets 19.2%	Switzerland -6.05%	France 22.8%	Spain 32.3%	Canada 2.2%	United States 1.3%	United States 11.6%	Germany 28.5%
Canada 55.4%	Emerging Markets 26.0%	Australia 17.5%	France 35.4%	Australia 29.8%	Spain -40.1%	Nordic Countries 48.5%	Japan 15.6%	World -6.9%	Australia 22.3%	France 27.7%	Switzerland 0.7%	Switzerland 1.2%	Emerging Markets 11.6%	Spain 27.7%
Australia 51.4%	Canada 22.8%	Switzerland 17.1%	Emerging Markets 32.6%	Spain 24.7%	World -41.9%	Spain 45.1%	United States 15.5%	Australia -10.8%	Switzerland 21.5%	Switzerland 27.6%	Emerging Markets -1.8%	France 0.8%	World 8.5%	Nordic Countries 26.8%
Nordic Countries 44.7%	United Kingdom 19.6%	Nordic Countries 16.7%	Australia 32.5%	Nordic Countries 22.2%	France -42.7%	United Kingdom 43.4%	Australia 14.7%	Spain -11.2%	Emerging Markets 18.6%	Japan 27.4%	Australia -3.2%	Germany -1.3%	France 6.0%	World 24.6%
France 41.0%	France 19.2%	World 11.4%	United Kingdom 30.7%	France 14.0%	Canada -45.2%	World 35.4%	World 13.2%	Canada -12.2%	World 16.8%	Nordic Countries 26.5%	Japan -3.7%	World -1.8%	Germany 3.5%	Japan 24.4%
Japan 36.2%	Germany 16.7%	France 10.6%	Switzerland 28.2%	World 12.2%	Germany -45.5%	France 33.7%	Switzerland 12.9%	Japan -14.2%	United States 16.1%	World 23.4%	Spain -4.4%	United Kingdom -7.5%	Japan 2.7%	Switzerland 23.6%
Switzerland 35.0%	Japan 16.0%	Germany 10.5%	World 21.5%	United Kingdom 8.34%	United Kingdom -48.3%	United States 27.1%	Germany 9.3%	France -16.0%	United Kingdom 15.3%	United Kingdom 20.7%	Nordic Countries -4.8%	Australia -9.8%	United Kingdom -0.0%	United Kingdom 22.4%
World 34.6%	World 15.8%	United Kingdom 7.4%	Canada 18.4%	Switzerland 6.1%	Australia -50.0%	Switzerland 26.6%	United Kingdom 8.8%	Nordic Countries -17.1%	Canada 9.9%	Canada 6.4%	United Kingdom -5.4%	Emerging Markets -14.6%	Spain -0.5%	United States 21.9%
United Kingdom 32.1%	Switzerland 15.6%	United States 5.7%	United States 15.3%	United States 6.0%	Nordic Countries -53.0%	Germany 26.6%	France -3.2%	Germany -17.5%	Japan 8.4%	Australia 4.3%	France -9.0%	Spain -15.4%	Nordic Countries -3.1%	Australia 20.2%
United States 29.1%	United States 10.7%	Spain 4.9%	Japan 6.3%	Japan -4.1%	Emerging Markets -53.2%	Japan 6.4%	Spain -21.1%	Emerging Markets -18.2%	Spain 4.7%	Emerging Markets -2.3%	Germany -9.76%	Canada -23.6%	Switzerland -4.0%	Canada 16.9%

Source: Morningstar Direct and Schwab Center for Financial Research. This chart represents a hypothetical investment and is for illustrative purposes only. Data is from January 1, 2003–December 31, 2017. Geographical performance is represented by annual total returns of the following: MSCI AC World, MSCI USA, MSCI Japan, MSCI United Kingdom, MSCI Switzerland, MSCI Germany, MSCI France, MSCI Canada, MSCI Australia, MSCI Nordic Countries, MSCI Spain, MSCI EM (Emerging Markets). Indexes are unmanaged, do not incur fees or expenses, and cannot be invested in directly. Past performance is no guarantee of future results.

academic research and there are solid explanations on why they have historically provided risk premia (Alighanbari 2014).

Factor investing dates to the 1960s, following the introduction of the capital asset pricing model (CAPM), which describes the relationship between systematic risk (i.e., volatility) and expected returns. Eugene Fama and Kenneth French built on CAPM, introducing in the 1990s their three-factor model, which added size and value factors to the market risk factors in CAPM. Meanwhile, Barra (now part of MSCI) has been researching factors since the 1970s. The point is that research on factor investing is extensive, going back decades. The reason we're so fascinated by factor investing today is that exchange-traded funds (ETFs) can capture these factors in rules-based structures, so they're now easily accessible for advisors and investors.

INVESTING OUTSIDE THE UNITED STATES

There is a world of potential opportunities outside our borders. However, it is challenging to evaluate individual securities, geopolitical risks, and economic development per country. Picking individual companies and countries presents a number of issues. Most investors would be better served by owning a diversified basket of securities. This can be accomplished by owning separately managed accounts (SMAs), mutual funds, or ETFs, each of which has unique pros and cons.

Advisors can attempt to pick which countries and companies will flourish in one environment and which to avoid in another, or diversify their exposures across the world. For example, Canada and Australia were the two top-performing countries in 2016 on a year-over-year basis, and the bottom two in 2017 (see figure 1). Canada and Australia enjoy an abundance of natural resources. When the world is consuming these resources to build roads, bridges, and skyscrapers, they benefit from increased demand. When demand tapers due to global slowdown, these economies suffer. Other global economies are similarly affected by their own industries, resources, and trade.

We often think of international and emerging markets as homogenous groups, but each country is affected by its own unique set of economic and geopolitical challenges. Figure 1 shows the changes in market leadership from one period to the next. Note that the emerging markets represent many countries,

Table 1

STRATEGIC BETA STRATEGIES IN EMERGING MARKETS: SECTOR WEIGHTINGS

	Materials	Consumer Discretionary	Financials	Consumer Staples	Health Care	Utilities	Telecom	Energy	Industrials	Tech
Low Volatility	5.8%	6.5%	**30.6%**	8.3%	1.6%	2.9%	7.9%	8.7%	3.9%	22.3%
Momentum	9.2%	9.3%	26.6%	4.7%	1.7%	2.3%	4.4%	7.6%	5.5%	25.2%
Quality	11.9%	9.0%	**5.9%**	10.2%	3.9%	4.8%	8.3%	8.8%	6.2%	22.5%
Fundamental	11.6%	6.1%	21.7%	4.2%	0.1%	2.9%	8.7%	**22.1%**	3.1%	18.6%
Market Cap	8.2%	9.6%	26.6%	6.7%	2.5%	3.0%	5.7%	**8.4%**	5.9%	19.8%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Emerging Momentum Index; Quality – FTSE Emerging Quality Index; Fundamental – Russell RAFI Emerging Markets Large Company Index; Low Volatility – FTSE Emerging Low Volatility Index; Market-Cap – FTSE Emerging Index. Sector allocations are subject to change without notice. Data for the Real Estate Global Industry Classification Standard sector is unavailable.

Table 2

STRATEGIC BETA STRATEGIES: SIZE

	Mega	Large	Mid	Small	Micro
Low Volatility	**62.2%**	30.4%	**7.0%**	0.4%	0.0%
Momentum	57.8%	32.0%	9.6%	0.6%	0.0%
Quality	47.6%	37.9%	13.5%	1.0%	0.1%
Fundamental	**62.5%**	29.3%	**7.6%**	0.5%	0.0%
Market Cap	53.0%	34.8%	11.3%	0.9%	0.0%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Emerging Momentum Index; Quality – FTSE Emerging Quality Index; Fundamental – Russell RAFI Emerging Markets Large Company Index; Low Volatility – FTSE Emerging Low Volatility Index; Market-Cap – FTSE Emerging Index. Data is subject to change without notice. Market capitalization may vary without notice. Market-capitalization breakpoints, determined by Morningstar Direct: Mega cap, over $78.3 billion; Large cap, between $17.3 billion and $78.3 billion; Mid cap, between $3.6 billion and $17.3 billion; Small cap, between $1.1 billion and $3.6 billion, Micro cap between $0 and $1.1 billion.

including China, Russia, Brazil, and India, among others. By definition, these countries are less developed and consequentially carry additional risk.

Investors probably are better served in owning a diversified basket of international and emerging-market securities, and—if there is strong conviction—tactically overweighting a country or region. Advisors can hire SMA managers who have demonstrated skill and proficiency in identifying strong companies and avoiding weak ones, or they can buy a number of broad-based index strategies. They can choose to "own the market" in the traditional market-capitalization fashion, or they can select from a variety of strategic beta strategies designed to provide a different experience.

EMERGING MARKETS

Over the past several years, strategic beta strategies have been sought as a way of improving the market experience, by delivering either excess returns or lower risk than the overall market. Many of these strategies exploit known factors that have been shown to improve the market experience over time. Institutions have been using factor investing for decades. Now many of these strategies are available in ETFs and have become core building blocks for advisors. Advisors can use these innovative strategies as either long-term strategic allocations or as tactical tools to take advantage of a particular market environment.

Although many of these strategies claim to outperform their market-cap equivalents, they do it in a very different fashion.

Although many of these strategies claim to outperform their market-cap equivalents, they do it in a very different fashion. It's important to evaluate the underlying index construction methodologies. Fundamental is a value-tilting strategy that screens and weights securities based on fundamental measures such as sales, cash flow, and dividends plus buybacks. Conversely, momentum is a growth-oriented strategy that weights securities based on how well they've performed recently.

To dig a little deeper, let us evaluate how a few strategic beta strategies have performed in emerging markets. First, let's compare the sector allocations of these strategies relative to the market-cap index. The market-cap index provides the largest weighting to the company with the greatest total market value of outstanding shares; strategic beta strategies weight securities based on their respective rules-based methodologies.

Table 1 shows big differences in the sector weightings across strategies as applied to emerging markets. The low volatility strategy overweights financials (30.6 percent) and the quality strategy underweights financials (5.9 percent). Also, based on energy company valuations, the fundamental strategy

Table 3

STRATEGIC BETA STRATEGIES IN EMERGING MARKETS: COUNTRY WEIGHTINGS

	Country Weights					
Low Volatility	China 23.2%	Taiwan 20.6%	India 9.9%	S. Africa 9.7%	Malaysia 6.0%	Other 30.6%
Momentum	**China 38.9%**	Brazil 10.6%	Taiwan 10.1%	India 9.4%	S. Africa 8.3%	Other 22.8%
Quality	China 28.8%	Taiwan 18.3%	India 12.1%	Brazil 10.5%	S. Africa 6.0%	Other 24.4%
Fundamental	**China 19.6%**	S. Korea 18.8%	Russia 12.7%	Taiwan 12.0%	Brazil 11.6%	Other 25.4%
Market Cap	China 32.5%	Taiwan 13.1%	India 10.6%	Brazil 9.1%	S. Africa 8.2%	Other 26.5%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Emerging Momentum Index; Quality – FTSE Emerging Quality Index; Fundamental – Russell RAFI Emerging Markets Large Company Index; Low Volatility – FTSE Emerging Low Volatility Index; Market-Cap – FTSE Emerging Index.

Figure 2

STRATEGIC BETA STRATEGIES IN EMERGING MARKETS: YEARLY RETURNS

Low volatility Momentum Quality Fundamental Market cap

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	15 Year Annualized Return
84.1%	36.1%	43.9%	36.3%	44.2%	-46.8%	82.6%	23.3%	-13.3%	19.9%	0.1%	2.8%	-13.5%	33.7%	36.5%	16.0%
55.0%	32.2%	40.9%	35.7%	43.3%	-47.5%	79.8%	22.7%	-13.7%	18.9%	-0.2%	1.6%	-13.7%	13.5%	32.5%	14.4%
54.0%	27.9%	36.2%	35.3%	43.2%	-51.3%	73.9%	22.3%	-15.2%	18.2%	-1.0%	1.5%	-15.2%	13.3%	31.4%	14.2%
49.7%	27.9%	35.1%	34.8%	39.7%	-52.9%	73.8%	20.7%	-16.2%	17.9%	-3.5%	0.0%	-15.9%	13.1%	30.9%	13.3%
48.9%	26.7%	33.9%	33.1%	36.1%	-54.4%	73.4%	19.8%	-19.0%	17.1%	-4.9%	-10.3%	-18.0%	10.8%	27.5%	12.8%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Emerging Momentum Index; Quality – FTSE Emerging Quality Index; Fundamental – Russell RAFI Emerging Markets Large Company Index; Low Volatility – FTSE Emerging Low Volatility Index; Market-Cap – FTSE Emerging Index. Performance information for the Low Volatility, Momentum, Quality, and Fundamental indexes includes back-tested performance data. Back-tested performance data are hypothetical and done with the benefit of hindsight. Past performance of a back-tested model is not a guarantee that the model will produce similar results in the future. Past performance is no guarantee of future results.

dramatically overweights the energy sector relative to the market-cap index (22.1 percent versus 8.4 percent, respectively).

A look at market capitalization shows some subtle differences across these strategies (table 2). Fundamental and low volatility have the highest allocations to mega-cap stocks (62.5 percent and 62.2 percent, respectively) and the lowest allocations to mid-caps (7.6 percent and 7.0 percent, respectively). This is a byproduct of the underlying company characteristics, not an intentional forward-looking bet.

If we evaluate the underlying country allocations, we see some similarities among the top countries—but the weightings are quite different (table 3). China is the largest country allocation across the selected strategies; however, the allocations range from 19.6 percent for fundamental to 38.9 percent for momentum.

The difference in allocations can lead to dramatically different results. In fact, based on the different index construction methodologies and the different sector weightings, market capitalizations, and country allocations, these strategies deliver widely varying returns on a year-over-year basis.

Figure 2 shows the changes in market leadership across these strategies. Each of these strategies outperformed the market-cap index in aggregate, but each experienced periods of underperformance as well. Similar to performance in U.S. markets, momentum strategies have done very well recently, but over the past 15 years fundamental has delivered the best results in emerging markets.

INTERNATIONAL MARKETS

As noted above, the difference in weighting methodology has led to dramatically different results across various strategic beta strategies. Based on the index construction methodologies, we saw big differences among sector allocations, market capitalization, and performance results. We can similarly examine international strategic beta strategies, evaluating some of the bets and biases exhibited by a select group of strategic beta strategies. Comparing the sector allocations shown in table 4 shows some big differences from the market-cap benchmark. In particular, the quality strategy has a 4.7-percent weighting to financials, versus the market-cap benchmark with 22.4 percent. The

Table 4

STRATEGIC BETA STRATEGIES IN INTERNATIONAL MARKETS: SECTOR WEIGHTINGS

	Materials	Consumer Discretionary	Financials	Consumer Staples	Health Care	Utilities	Telecom	Energy	Industrials	Tech
Low Volatility	5.6%	8.0%	21.8%	14.8%	11.4%	3.9%	4.1%	7.0%	13.5%	6.14%
Momentum	10.2%	11.5%	27.4%	7.5%	5.8%	2.6%	2.5%	4.9%	14.6%	10.8%
Quality	7.7%	13.9%	**4.7%**	11.4%	12.7%	3.3%	4.4%	2.5%	18.5%	11.8%
Fundamental	10.3%	12.5%	19.4%	9.3%	6.3%	5.3%	5.8%	**12.3%**	13.4%	4.1%
Market Cap	8.4%	11.9%	**22.4%**	10.4%	9.0%	3.0%	3.5%	**6.3%**	14.2%	7.8%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Developed ex US Momentum Index; Quality – FTSE Developed ex US Quality Index; Fundamental – Russell RAFI Developed ex US Large Company Index; Low Volatility – FTSE Developed ex US Low Volatility Index; Market-Cap – FTSE Developed ex US Index. Sector allocations are subject to change without notice. Data for the Real Estate Global Industry Classification Standard sector is unavailable.

Table 5

STRATEGIC BETA STRATEGIES IN INTERNATIONAL MARKETS: SIZE

	Mega	Large	Mid	Small	Micro
Fundamental	57.5%	33.0%	9.1%	0.3%	0.1%
Quality	**45.6%**	39.1%	**15.1%**	0.2%	0.0%
Momentum	57.3%	33.2%	9.5%	0.1%	0.0%
Low Volatility	**66.7%**	26.9%	**5.4%**	0.0%	0.0%
Market Cap	55.9%	33.3%	10.7%	0.1%	0.0%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Developed ex US Momentum Index; Quality – FTSE Developed ex US Quality Index; Fundamental – Russell RAFI Developed ex US Large Company Index; Low Volatility – FTSE Developed ex US Low Volatility Index; Market-Cap – FTSE Developed ex US Index. Data is subject to change without notice. Market capitalization may vary without notice. Market-capitalization breakpoints, determined by Morningstar Direct: Mega cap, over $78.3 billion; Large cap, between $17.3 billion and $78.3 billion; Mid cap, between $3.6 billion and $17.3 billion; Small cap, between $1.1 billion and $3.6 billion, Micro cap between $0 and $1.1 billion.

Table 6

STRATEGIC BETA STRATEGIES IN INTERNATIONAL MARKETS: COUNTRY WEIGHTINGS

International Developed Country Weights						
Low Volatility	United Kingdom 17.1%	**Japan 12.9%**	Canada 10.5%	France 9.8%	Germany 9.7%	Other 40.1%
Momentum	**Japan 25.7%**	United Kingdom 12.6%	France 8.7%	Germany 7.5%	Switzerland 6.1%	Other 39.3%
Quality	**Japan 23.9%**	Switzerland 11.9%	France 10.1%	**United Kingdom 9.0%**	Germany 7.9%	Other 37.3%
Fundamental	**Japan 22.8%**	**United Kingdom 19.2%**	Germany 9.8%	France 9.4%	Canada 7.0%	Other 31.8%
Market Cap	**Japan 22.7%**	United Kingdom 14.9%	France 8.5%	Germany 8.3%	Canada 7.1%	Other 38.5%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Developed ex US Momentum Index; Quality – FTSE Developed ex US Quality Index; Fundamental – Russell RAFI Developed ex US Large Company Index; Low Volatility – FTSE Developed ex US Low Volatility Index; Market-Cap – FTSE Developed ex US Index.

fundamental strategy has nearly a double weighting to energy compared with the market-cap index (12.3 percent vs. 6.3 percent, respectively). The difference in the weightings is a byproduct of the screening and weighting methodology.

From a market-capitalization perspective (table 5), low volatility has the highest allocation to mega-cap stocks and the lowest exposure to mid-cap. This makes intuitive sense, because a low-volatility strategy naturally would gravitate toward larger, more mature companies. Quality has the lowest exposure to mega-caps and the highest exposure to mid-caps.

A comparison of country allocations (table 6) shows many of the same top country allocations among the strategies—but with substantial differences in the percentage allocations. Low volatility has a 12.9-percent allocation to Japan and the other strategies have allocations in excess of 22 percent. Fundamental has the highest allocation to the United Kingdom (19.2 percent) and quality has the lowest (9.0 percent). The top five countries account for more than 68 percent of the fundamental strategy and less than 60 percent of the low-volatility strategy.

Figure 3

STRATEGIC BETA STRATEGIES IN INTERNATIONAL MARKETS: YEARLY RETURNS CONCLUSION

Low volatility · Momentum · Quality · Fundamental · Market cap

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	15 Year Annualized Return
56.7%	23.6%	16.2%	29.2%	21.2%	-38.6%	35.4%	11.7%	-2.7%	19.6%	26.8%	-0.3%	-0.3%	8.6%	28.8%	10.8%
40.3%	22.7%	14.9%	28.2%	17.5%	-38.8%	34.7%	10.2%	-8.0%	17.8%	22.5%	-1.0%	-1.3%	3.4%	27.9%	10.0%
37.5%	20.9%	14.8%	27.9%	15.2%	-39.5%	33.4%	9.9%	-11.6%	16.7%	20.6%	-4.0%	-1.9%	3.2%	26.3%	9.9%
35.4%	19.9%	14.3%	27.2%	14.6%	-42.0%	33.3%	9.5%	-12.0%	15.6%	20.0%	-4.2%	-1.9%	1.6%	24.5%	9.2%
34.7%	14.2%	19.8%	26.8%	13.9%	-43.3%	28.4%	7.3%	-12.8%	15.4%	17.8%	-5.2%	-4.5%	0.6%	23.3%	9.0%

Source: Morningstar Direct and Schwab Center for Financial Research. Data is as of December 31, 2017. Strategies are representative of the following indexes: Momentum – FTSE Developed ex US Momentum Index; Quality – FTSE Developed ex US Quality Index; Fundamental – Russell RAFI Developed ex US Large Company Index; Low Volatility – FTSE Developed ex US Low Volatility Index; Market-Cap – FTSE Developed ex US Index. Performance information for the Low Volatility, Momentum, Quality, and Fundamental indexes includes back-tested performance data. Back-tested performance are hypothetical and done with the benefit of hindsight. Past performance of a back-tested model is not a guarantee that the model will produce similar results in the future. Past performance is no guarantee of future results.

With the large differences noted above, it shouldn't be surprising that these strategies deliver dramatically different results over time. To illustrate this point, we evaluate the yearly results from 2003 through 2017 (figure 3). Each of these strategies was both the best- and worst-performing strategy in a given year. Fundamental performed the best in 2003, 2013, and 2016—and the worst in 2011 and 2015. Quality did best in 2007, 2008, and 2017—but was the worst in 2003, 2004, 2005, 2012, and 2013.

CONCLUSION

As we examine select strategic beta strategies across the international and emerging markets, we see experiences similar to those observed in domestic markets. A large degree of variability across the different types of strategies leads to dramatically different results. In both the international and emerging markets, the selected strategies outperformed the respective market-cap benchmarks over the long run. The yearly results show a natural rotation of market leadership from one strategy to the next.

This analysis focused on strategies that rely upon academic rigor and historical index results going back at least 15 years. We're not suggesting that all strategic beta strategies will deliver the same results.

We would encourage advisors to follow the methodology used in this article. Begin by understanding the underlying index construction methodology for the strategy under consideration. Next, evaluate some of the bets and biases by analyzing the sector allocation, market capitalization, and country allocations. Lastly, evaluate performance relative to the market-cap equivalent index. This methodology can be used in evaluating all strategic beta strategies.

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ENDNOTES

1. At the Core: Advisor Views on Investment Trends, October 2018, https://www.aboutschwab.com/images/uploads/inline/Schwab_At_the_Core_Advisor_Views_on_Investment_Trends_deck_1018-87BM.pdf.
2. Morningstar Direct, October 31, 2018.

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