FRANKLIN TEMPLETON INVESTMENTS

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Smart Beta: Index Investing, Evolved

Global investing—literally and figuratively—is foreign to many US investors. That's why some have taken a passive approach that's designed to track the performance of an index such as the MSCI All Country World Index (MSCI ACWI Index). Consisting of approximately 2,500 stocks, the MSCI ACWI Index weights each stock by market capitalization (share price multiplied by the number of shares outstanding).

For several decades, market capitalization-weighted indexes like the MSCI ACWI Index (for global investing) and the S&P 500 Index (for US large-cap investing) have served as the foundation of a passive approach to investing, with many investors viewing them as an efficient way to gain broad exposure to a wide variety of equity markets. Yet today, more advanced approaches to index construction may help improve on this traditional approach.

One such methodology, called Smart beta, constructs indexes based on criteria other than market capitalization—with approaches that range from relatively simple to more complex. Exchange-traded funds (ETFs) are then designed to track these custom indexes.

This article will help provide an understanding of Smart beta, some of its benefits and how it may be used as part of an investment portfolio.

Broad Market Exposure, with Shortcomings

Did you know that the largest 2% of stocks in the MSCI ACWI Index comprise 25% of the index's weight? Traditional indexes weight stocks based on each company's overall market capitalization, meaning the largest, highest-priced companies make up the largest portion of an index. These indexes also increase their allocations to stocks that rise in price and reduce their allocations to those that fall in price—without consideration for whether the stocks are over- or under-valued, which could lead to heavier concentrations of overvalued securities. These are just two examples of concentrations that may occur in a capitalization-weighted index portfolio. (See "Traditional Indexing Has Some Shortcomings.")

> **"As index investing has evolved, new methods of index construction have emerged, offering additional ways for investors to gain exposure to specific areas of the market."**

As index investing has evolved, new methods of index construction have emerged, offering additional ways for investors to gain exposure to specific areas of the market. One such approach is called Smart beta. It is based on quantitative methodologies originally designed for large institutional investors that have recently become available in ETFs designed for individual investors.

Traditional Indexing Has Some Shortcomings

Large- and mega-cap stocks

Largest 2% of companies in the MSCI ACWI Index account for 25% of the index

Over-valued stocks

Of the 10 largest stocks in the MSCI ACWI Index, 70% appear overvalued*

Sector weights

Increases in sector concentration such as technology or commodities have at times created additional risk, dragging down overall index performance

Geographic weights

The three largest countries in the MSCI Emerging Markets Index account for over 50% of the index

Source: FactSet, MSCI, as of 12/31/17.

*1/1/08–12/31/17. Based on current price-to-earnings (P/E) versus 10-year average P/E.

Understanding Smart Beta

Smart beta portfolios range from fairly straightforward to quite complex. One of the simplest approaches holds securities in equal weights rather than weighting them by market capitalization.

Others take a quantitative approach that systematically analyzes, selects, weights and rebalances portfolio holdings based on certain characteristics—called factors—with some focusing on a single factor and others combining factors in a single portfolio.

As far back as the 1930s, professional investors began to recognize that stocks with different attributes tended to perform better than others. Then, starting in the 1970s, academic research demonstrated that certain factors have at times produced higher returns than the overall market.

Today, these quantitative factor methodologies form the foundation for Smart beta indexes, and ETFs have been built to track their performance.

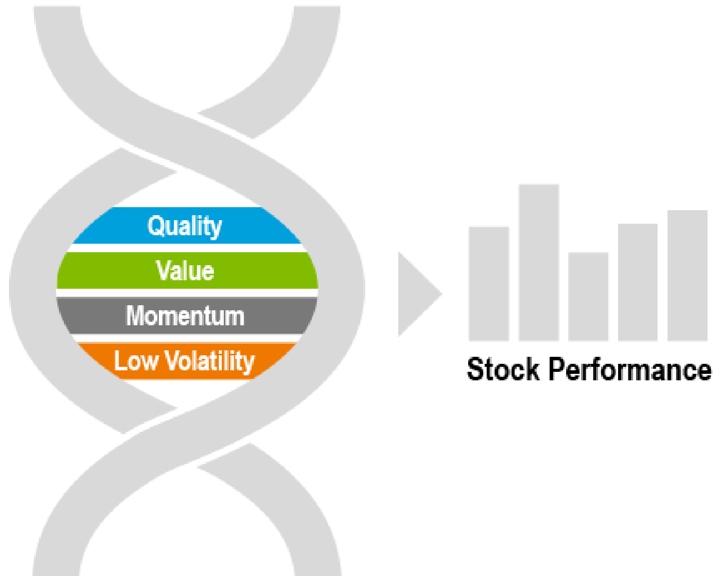
What Is a Factor?

A factor is a primary characteristic of an investment that explains a stock's behavior over long periods of time. Think of a factor as a DNA marker of an investment that causes it to respond to certain events, driving it to behave the way it does over time.

Stocks can be grouped based on the primary factors they share. Some factors have provided investors with positive returns above and beyond market indexes over the long term—called a "return premium"—while other factors have been more closely associated with stock risk.

The list below describes some of the factors that have provided a return premium over time. These same factors have also become the foundation for factor indexes.

Factors: The DNA Markers of Stock Performance



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A Look at Individual Factors

Factor	Description
Quality	Companies with stable earnings growth, strong balance sheets and efficient use of assets
Value	Stocks that are attractively priced relative to historical and forecasted valuations and historically have paid attractive dividends
Momentum	Companies that have demonstrated strong performance over the past six to 12 months
Low Volatility	Stocks that have demonstrated lower-than-average variability of returns

A Case in Point: The Quality Premium

It's probably no surprise that, over time, the stock prices of high-quality companies have increased more than other stocks. While quality can be defined in different ways, it is designed to identify well-managed companies with a history of relatively stable earnings growth that's based on wise decisions about how to deploy capital. Some of the measures used to identify quality companies include return on equity (ROE), debt to equity, earnings variability, net income, operating cash flow, return on assets and leverage, among others.

The chart to the right illustrates how a hypothetical investment in high-quality stocks as measured by the MSCI ACWI Quality Index would have gained more than an investment in the broader MSCI ACWI Index over the time period shown.

Every Factor Has Its Day

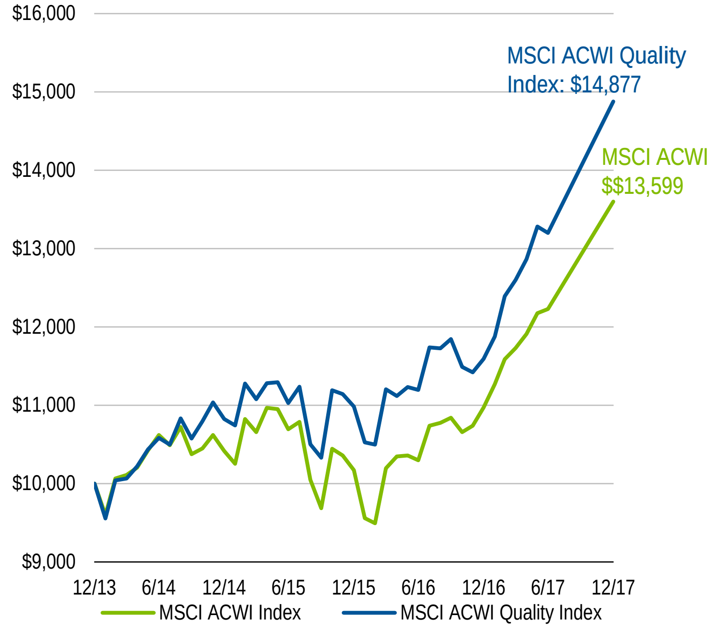
Some investors may be inclined to choose one or two factors for investments, but this approach can also come with its ups and downs. (See "Individual Factor Performance Has Fluctuated from Quarter to Quarter.")

Quality, Value, Momentum or Minimum-Volatility stocks by themselves have moved in and out of favor as markets have changed. Momentum, for example, was the top performer in Q1 and Q2 of 2015, but by Q1 of 2016, it was the worst performer. These swings in performance can be unsettling to many investors, causing them to sell and miss out on potential rebounding performance.

Quality Matters

MSCI ACWI Quality Index vs. MSCI ACWI Index

December 31, 2013–December 31, 2017



Source: Morningstar. Returns assume reinvestment of dividends and are adjusted for withholding taxes. The information above is for illustrative purposes only and does not represent any ETF's actual performance. Indexes are unmanaged, and one cannot invest directly in an index. **Past performance is not an indicator or guarantee of future performance.**

It's understandable, then, that most investors don't have the fortitude to ride out these ups and downs. By contrast, attempting to move in and out of individual factor investments in anticipation of market changes may be challenging, so a multi-factor approach could be an attractive option for long-term investment goals.

Individual Factor Performance Has Fluctuated from Quarter to Quarter

Quarterly Returns %: MSCI Factor Indexes (USD)

Q1 2015–Q4 2017

Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q4 2017
Momentum 4.66	Momentum 0.59	Min Vol -4.20	Momentum 6.83	Min Vol 6.05	Momentum 5.18	Quality 5.90	Value 4.91	Momentum 9.04	Momentum 7.06	Quality 7.45
Min Vol 4.12	Value 0.49	Quality -6.22	Quality 6.44	Quality 2.16	Min Vol 4.98	Value 5.50	Momentum -1.18	Quality 8.87	Quality 4.93	Momentum 6.83
Quality 2.50	Quality -0.32	Momentum -8.95	Min Vol 5.25	Value 0.98	Value 1.50	Momentum 0.93	Quality -2.03	Min Vol 5.96	Min Vol 3.71	Value 4.99
Value 0.35	Min Vol -1.53	Value -10.16	Value 4.22	Momentum -0.14	Quality 0.09	Min Vol -0.11	Min Vol -2.77	Value 5.04	Value 3.08	Min Vol 4.88

Source: FactSet, MSCI. **Past performance is not an indicator or a guarantee of future performance.** Quality is represented by the MSCI ACWI Quality Index; Value is represented by the MSCI ACWI Value Index; Momentum is represented by the MSCI ACWI Momentum Index; Volatility is represented by the MSCI ACWI Minimum Volatility Index. The information above is for illustrative purposes only and does not represent any ETF's actual performance. Returns data represents quarterly total returns and assumes reinvestment of interest or dividends and are adjusted for withholding taxes. Indexes are unmanaged, and one cannot invest directly in an index. They do not reflect any fees, expenses or sales charges.

Applying Multiple Factors: Innovation in Index Design

Because individual factor performance may vary considerably from quarter to quarter, combining several factors in a single index—particularly those with historical records of low correlations—may result in lower volatility and more consistent, diversified sources of return.

Like single-factor Smart beta, multi-factor portfolios draw on decades of academic research. Beyond that, they draw on analysis of how various factors interact. This analysis allows a manager to diversify among factors in a way that seeks to reduce risk and increase return potential over time.

Additional research also helps guide the relative weights of factors in a Smart beta ETF portfolio—which may help pursue specific portfolio attributes and investment outcomes.

An investor who holds a more advanced, multi-factor portfolio may be better diversified, does not need to time factor cycles, and doesn't incur the costs that come with switching from one product to another.

Just as an investor might benefit from holding multiple stocks to diversify away stock-specific risk, that same investor could benefit from this more advanced approach to factor investing.

Combining Active and Passive Investing

A Smart beta portfolio starts with a list of stocks included in a cap-weighted index. Factor analysis then identifies the subset of stocks that exhibit a desired factor—or combination of factors—that reflect the manager's research and analysis (referred to as a "Custom Index"). The portfolio then tracks the Custom Index. (See "Creating a Smart Beta Portfolio.")

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For example, the MSCI ACWI Index is the basis for some popular cap-weighted index funds. It's also the foundation for some multi-factor Smart beta portfolios.

The difference is that with Smart Beta, a manager's research and multi-factor analysis has been applied to the stocks in the MSCI ACWI Index to produce a more focused custom index that features exposure to the desired factors.

Think of a Smart beta ETF as an advancement in the binary world of passive and active management. It combines the appeal and intuition of a passive approach—transparency, diversification, a rules-based methodology and lower costs—with active management insights.

Creating a Smart Beta Portfolio

1. **Start with Cap-Weighted Index**

2. **Apply Factor Methodology**

3. **Create Custom Index**

4. **Smart beta ETF Tracks Index**

Put Smart Beta to Work

Smart beta ETFs can be used in a number of ways and may be useful for a wide variety of investor portfolios. Two examples:

- **Replace cap-weighted index-based funds:** Multi-factor Smart beta ETFs offer exposure to the same investment universe as cap-weighted index funds while targeting specific exposures. For investors who use passive investments at the core of their portfolios, Smart beta ETFs offer an efficient way to seek better long-term risk-adjusted returns.
- **Complement actively managed funds:** Smart beta ETFs can complement actively managed mutual funds. This approach may help improve overall risk-adjusted returns over time while the investor continues to benefit from the expertise of the active mutual fund manager along with a rules-based methodology that's built on active management insights.

Conclusion

Challenging times have led many investors to focus on a manager's performance versus both his peers and his benchmark—as both market and economic conditions have continually changed.

For many years quantitative, factor-based strategies were available only to large institutional investors. Today, factor research, as well as advances in investment product design, have made these more advanced, index-based strategies available to individual investors.

We believe this advancement in index construction and portfolio design represents an opportunity for investors to seek better investment performance over time, with less volatility—something any investor may find attractive.

IMPORTANT LEGAL INFORMATION

All investments involve risks, including possible loss of principal. Performance of a smart beta ETF may vary significantly from the performance of an underlying index, as a result of transactions costs, expenses and other factors. The information contained in this document is for illustrative purposes only. Indexes are unmanaged, and one cannot invest directly in an index. Diversification does not guarantee profit or protect against loss in declining markets.

ETFs trade like stocks, fluctuate in market value and may trade at prices above or below the ETF's net asset value. Brokerage commissions and ETF expenses will reduce returns.

Investors should carefully consider a fund's investment goals, risks, charges and expenses before investing. To obtain a summary prospectus and/or prospectus, which contains this and other information, talk to your financial advisor or visit libertyshares.com. Please carefully read a prospectus before you invest or send money.

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