First Ascent Asset Management

UNDERSTANDING THE FACTOR SELECT PORTFOLIOS

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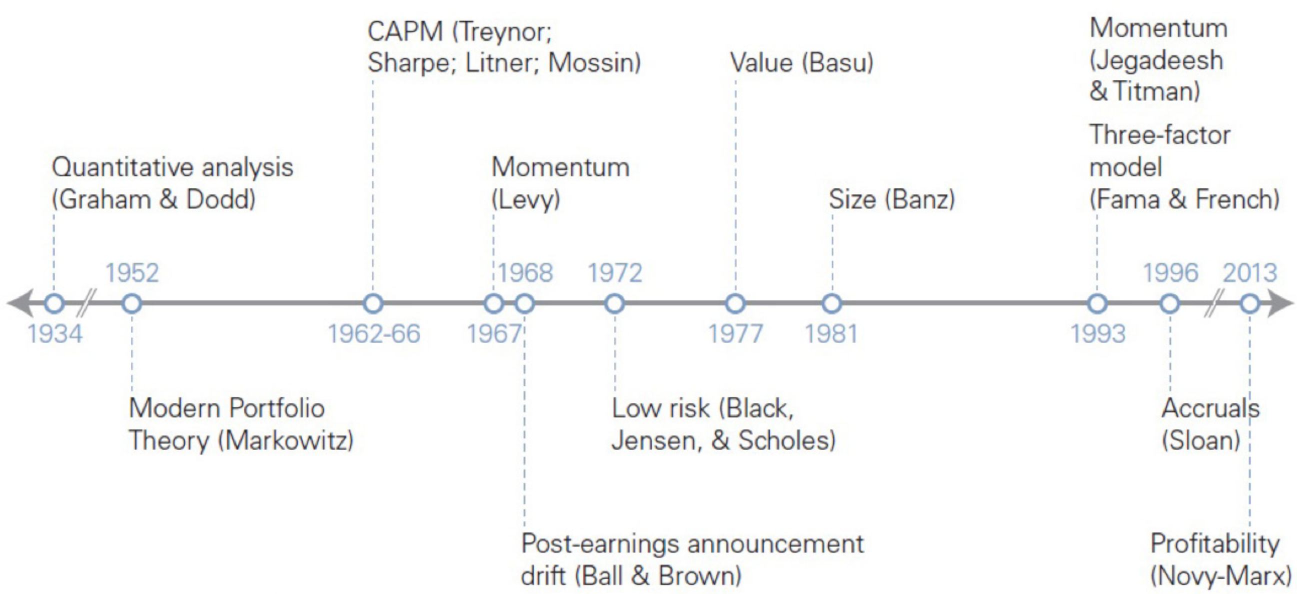
What Are Factors?

Factors are distinct and quantifiable characteristics common to a group of securities that help explain differences in their returns from the returns of other securities that are not in the group. These characteristics give rise to similar patterns of performance over time.

Decades of academic research has identified hundreds of factors. There are so many of them, in fact, that they are sometimes referred to as the "factor zoo."



Source: GSAM. For illustrative purposes only.

These factors have been studied closely by academics. Their goal is to screen out those that are mere anomalies in the historical data and identify those with a sound statistical basis, a plausible rationale, and favorable performance and/or risk reduction qualities.

Very few factors have stood up to the scrutiny of the researchers. Only a relative handful of factors are now considered robust enough to have both a reasonable chance of persisting into the future and a positive impact on long-term portfolio performance.

The factors with strong academic support include "value," "size," "quality," and "momentum." These are the factors that First Ascent emphasizes in the Factor Select portfolios.

It is important to understand that academic research does not prove that favorable factor characteristics will persist into the future. It only suggests that, based on past performance patterns and the strength of each factor's theoretical underpinnings, they seem likely to.

Even factors that are generally considered to be robust do not always result in outperformance. Factors tend to be cyclical. In fact, individual factors can go for years without producing any performance advantage at all. Their benefits tend to be lumpy in the sense that they are manifested intermittently. When taken in the aggregate over longer time periods, however, these periods of outperformance have produced a quantifiable performance advantage.

Some factors have low correlations to each other. That is, when one factor is experiencing a period of outperformance, another factor may be experiencing a period of underperformance. This provides the potential to diversify among factors to produce a more stable return stream.

Why Do Factors Work?

The explanations for why particular factors work tend to fall into one of three categories. They are either based on rewarded risk, behavioral bias, or structural impediments.

Risk-based explanations suggest that performance advantages associated with some factors are, in effect, compensation for bearing certain risks. For example, holding stocks of out of favor companies that are trading at a low price relative to the value of the business based on its financial fundamentals may be perceived as riskier than holding stocks of in-favor companies. This could partially explain the performance advantage associated with the "value" factor.

Behavioral explanations suggest that investors make systematic errors in their decisions about investing. For example, investors tend to extrapolate recent events into the future. This could partially explain the performance advantage associated with the "momentum" factor.

Investors have a behavioral tendency to chase exciting, hot-dot stocks, many of which fail or perform erratically. They tend to ignore boring stocks that lack the sizzle of their more glamorous counter-parts, but have strong financial fundamentals. A portfolio consisting solely of these boring plodders, in tortoise-and-hare-like fashion, often has the edge over the long haul and can partially explain the performance advantage of the "quality" factor.

Explanations based on structural impediments suggest that constraints placed on certain types of investors tend to prevent them from exploiting available opportunities. For example, some pension plans may be restricted from investing in stocks of smaller companies, potentially creating opportunities for those who are not subject to this constraint. This could partially explain the performance advantage associated with the "size" factor.

Below is a summary of possible reasons why the factors emphasized in the Factor Select portfolios have historically been associated with performance advantages:

Possible Performance Advantages
of Common Factors

	Rewarded Risk	Behavioral Biases	Structural Impediments
Momentum	✓	✓	
Value	✓	✓	
Quality		✓	
Size	✓		✓

The Factor Select Building Blocks

The Factor Select portfolios focus on four factors:

Value: stocks that are trading at low prices relative to their intrinsic values or similar peers

Size: stocks of companies with relatively small market capitalizations

Quality: stocks of companies with low debt, high earnings quality, and strong profitability

Momentum: stocks of companies whose stocks have been rising in value recently

First Ascent emphasizes these four factors because of the strength of the research supporting their expected persistence into the future. The statistical evidence is substantial and the theoretical rationale for each makes sense and appears to have explanatory power.

In addition, these four factors have relatively low correlation with each other as shown below:

Cross Correlations of Excess Returns
(January 2000 - December 2018)

	Momentum	Value	Quality	Size
Momentum	1.00			
Value	**-0.38**	1.00		
Quality	**0.17**	**-0.43**	1.00	
Size	**-0.10**	**0.30**	**-0.45**	1.00

Correlations of factor excess returns over the S&P 500. Momentum is represented by MSCI USA Momentum Index. Quality is represented by MSCI USA Sector Neutral Quality Index. Value is represented by MSCI USA Value Index. Size is represented by MSCI USA Risk Weighted Index. Equal Weighted is the equal weighted annual return of each index. Source: Morningstar.

This low correlation provides us the opportunity to diversify among these factors to generate a more stable return stream. As you can see below from the “Excess Returns over MSCI USA,” historically an equal weighted portfolio consisting of these four factors resulted in a portfolio with strong returns and lower volatility than any of the factors individually.

Excess Returns over MSCI USA

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Momentum 2.55	Momentum 13.59			Quality 5.89			Quality 5.49							
Size 1.34	Equal Weighted 3.88	Value 6.65	Momentum 11.78	Size 3.14		Size 3.60	Size 4.31		Momentum 2.19	Size 2.61	Momentum 7.98		Momentum 15.92	
Equal Weighted 0.90	Size 1.96	Size 2.07	Quality 4.04	Equal Weighted 1.76		Momentum 2.76	Momentum 4.10		Quality 1.69	Momentum 1.32	Quality 3.29	Value 5.26	Equal Weighted 1.78	
Quality 0.52	Value 0.27	Equal Weighted 0.40	Equal Weighted 1.30	Value 1.75	Size 4.17	Equal Weighted 1.01	Equal Weighted 3.35		Equal Weighted 0.63	Equal Weighted 0.06	Equal Weighted 1.78	Size 1.88	Quality 0.59	Momentum 2.89
Value -0.81	Quality -0.3	Quality -2.54	Size -5.08	Momentum -3.75	Quality -2.20	Value -1.08	Value -0.50	Momentum -1.04	Value -0.29	Value -1.08	Size -0.88	Equal Weighted -0.39	Size -2.84	Equal Weighted -0.40
		Momentum -4.57	Value -5.54		Equal Weighted -4.16	Quality -1.25		Size -1.09	Size -1.07	Quality -2.63	Value -3.26	Quality -2.24	Value -6.53	Size -0.69
					Value -9.10			Value -1.14				Momentum -6.48		Quality -1.13
					Momentum -9.50			Equal Weighted -1.66						Value -2.68
								Quality -3.36						

Each factor is represented by an index. Momentum: MSCI USA Momentum Index. Quality: MSCI USA Sector Neutral Quality Index. Value: MSCI USA Value Index. Size: MSCI USA Risk Weighted Index. Equal Weighted: equal weighted annual return of each index.

The How and Why of the Factor Select Portfolios

HOW. Here’s how we build and manage the Factor Select portfolios.

We provide added exposure to the value, size, quality, and momentum factors relative to their weightings in market cap-weighted benchmarks.

We provide a balanced exposure to the four factors. We seek to avoid extreme factor tilts, but provide enough exposure to make our tilts meaningful.

We don’t favor one factor over another and make no factor allocation changes. Factors are approximately equal-weighted, although weightings shift with market movements.

Factor tilts are expressed only in the equity portion of the portfolios. We don’t make factor tilts in the fixed-income portion yet, although we may in the future as more definitive research and better products for implementation become available.

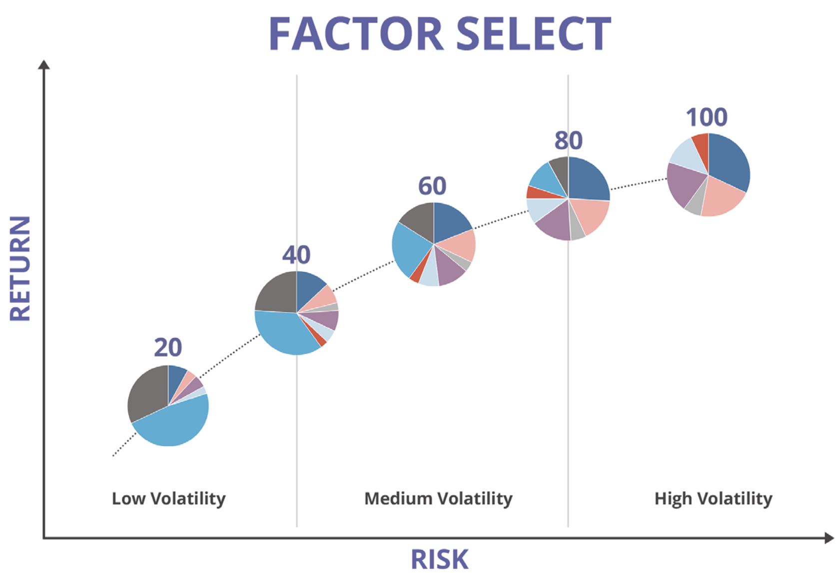
We use an open architecture approach in selecting funds for our portfolios. We do not favor any one fund family. We seek quality and diversity among the funds we use.

Keeping expenses low is a key component of our approach to factor investing. The internal expenses of our Factor Select portfolios currently range from 0.11% to 0.23%.

We seek to maintain broad global diversification with relatively few portfolio holdings. Each Factor Select portfolio currently has only 5 to 8 positions.

The portfolios are managed to minimize trading. Rebalancing frequency may vary, but our default position is to rebalance annually.

Factor Select portfolios are offered at five risk levels. Each of the five portfolios has both a non-taxable and a tax-sensitive version.



WHY. Here's why we build and manage the Factor Select portfolios.

We incorporate four factors into the construction of our portfolios because academic research suggests that each has the potential to improve portfolio return characteristics, and together they provide the opportunity for greater diversification and more stable returns over time.

We believe a balanced, but meaningful exposure to factors is best for clients. Too much factor exposure, as well as too little, can create problems.

All-in portfolios that provide a high factor exposure can have high tracking error to the market. Like hot salsa, this may be more than most clients can tolerate. The high tracking error can create anxiety and feelings of regret that lead a client to abandon the strategy.

Portfolios with only a slight factor exposure reduce tracking error, but minimize the benefits of factors. Like mild salsa, there is simply not enough there to make a difference. The added work and expense involved in introducing a minimal factor tilt just isn't justified by the results.

Think of our balanced factor exposures as the medium salsa approach. There's enough there to make a difference and noticeably enhance the favor, but not so much as to overwhelm the client who must live through the experience created by the Factor Select portfolios.

We don't believe in market timing and that belief extends to factors. Although factors do go in and out of favor, we do not believe it is possible to successfully and consistently alter the holdings in our portfolios to take advantage of this cyclicality. Therefore, we maintain approximately equal weighting among the four factors and make no factor allocation changes.

We believe that our open architecture approach to building and managing the Factor Select portfolios is also a benefit to clients. First, it dramatically expands the universe of funds we can consider for our portfolios. This allows us to draw on the expertise, research, and resources of many knowledgeable and experienced firms. The input and support of the various firms we work with has helped refine and shape our approach to managing our portfolios.

Second, open architecture allows us to select the most appropriate investment vehicles for our portfolios. We are not relegated to using products from a single firm and are free to use either ETFs or mutual funds, depending upon the circumstances. We have chosen, for now, to use only ETFs in the Factor Select portfolios because they provide us with the best opportunity to achieve the factor exposures we want efficiently and at the lowest price.

Third, not every firm defines factors the same way. These differing definitions result in variations in performance. The graphic below shows how differences in factor definitions can result in dramatic differences in performance among funds emphasizing the same factor. By using funds from firms that define factors differently, we get an added diversification benefit.

2018 Total Return

Value

Alpha Architect US Quant Value ETF (QVAL)	**-16.6%**
DFA US Large Value Fund (DFLVX)	**-11.7%**
Deep Value ETF (DVP)	**-5.5%**

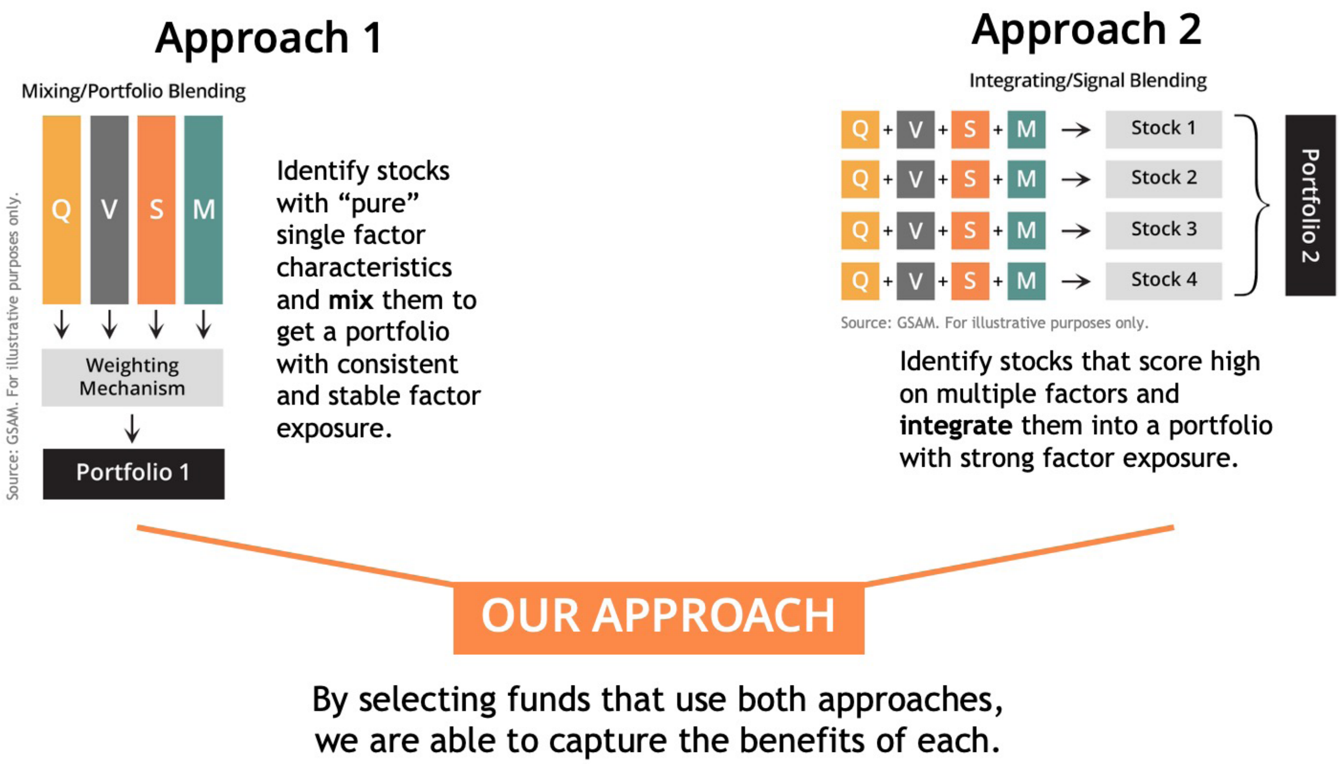
Momentum

SPDR Russell 1000 Momentum Focus ETF (ONEO)	**-12.0%**
AQR Large Cap Momentum Style Fund (AMOMX)	**-3.8%**
Invesco S&P 500 Momentum ETF (SPMO)	**-0.15%**

Source: Morningstar. Performance is presented gross of fee and does not reflect the payment of certain fees, but is net of expense ratios charged directly by investment funds utilized. Client returns would have been reduced by the investment advisory fees and any other expenses that would have been incurred in the management of an investment advisory account. Investments are not guaranteed and are subject to investment risk, including possible loss of the principal amount invested. Past performance is no guarantee of future results. Please see fund prospectus' for additional information.

Finally, not every firm combines factors in the same way. For example, as shown in the graphic below (Approach 1), some firms seek to identify stocks with strong single-factor characteristics and combine them to get a portfolio with the desired factor exposure.

Other firms (Approach 2) seek to identify stocks that demonstrate multiple factor characteristics and integrate them into a portfolio that has the desired factor exposure. Using firms that use different approaches to provide exposure to the same factors can provide an added diversification benefit.



All First Ascent portfolios are managed using what we call an "elegantly simple" approach that is designed to help clients keep more of what they earn. A driving principle behind this approach is to minimize portfolio costs and expenses whenever possible consistent with the best interests of our clients. For this reason, we:

- meticulously review the internal expenses of all the funds we use
- keep the number of positions in our portfolios low to reduce trading costs
- limit trading and rebalancing to eliminate unnecessary transaction costs.

The Team Behind the Factor Select Portfolios

The investment committee that manages the Factor Select portfolios is a highly experienced team of investment professionals. It includes 5 CFA charter holders, a Ph.D. economist, a client-facing CFP®/CIMA/CAIA practitioner, and a J.D.

A majority of the committee consists of independent members. They bring added objectivity and new perspectives to the committee's deliberations.

Internal Investment Committee Members

Scott MacKillop, JD
Chief Executive Officer

Patrick Krulik, CFA
Chief Investment Officer

Over 135 Years Combined Investment Experience

Independent Investment Committee Members

Geoff Selzer, CFA

Mary Kathryn Campion, Ph. D, CFA, AIFA

Shane Morrow CFP®, CIMA, CAIA, CFA Level II Candidate

Merrill Stillwell, CFA

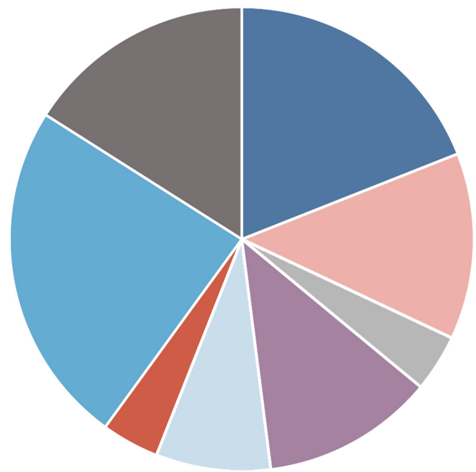
Charles Burgess, CFA

Benefits of the Factor Select Portfolios

The Factor Select portfolios provide investment advisors a way to access professionally managed portfolios for their clients that combine the following benefits:

Factor Select

- Globally Diversified
- Multi-Factor Exposure
- Balanced Factor Weighting
- Open Architecture
- Low Fees and Expenses



WANT TO LEARN MORE?

For further information about First Ascent's
Factor Select portfolios please contact us at:

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firstascentam.com

First Ascent is a federally registered investment advisor.