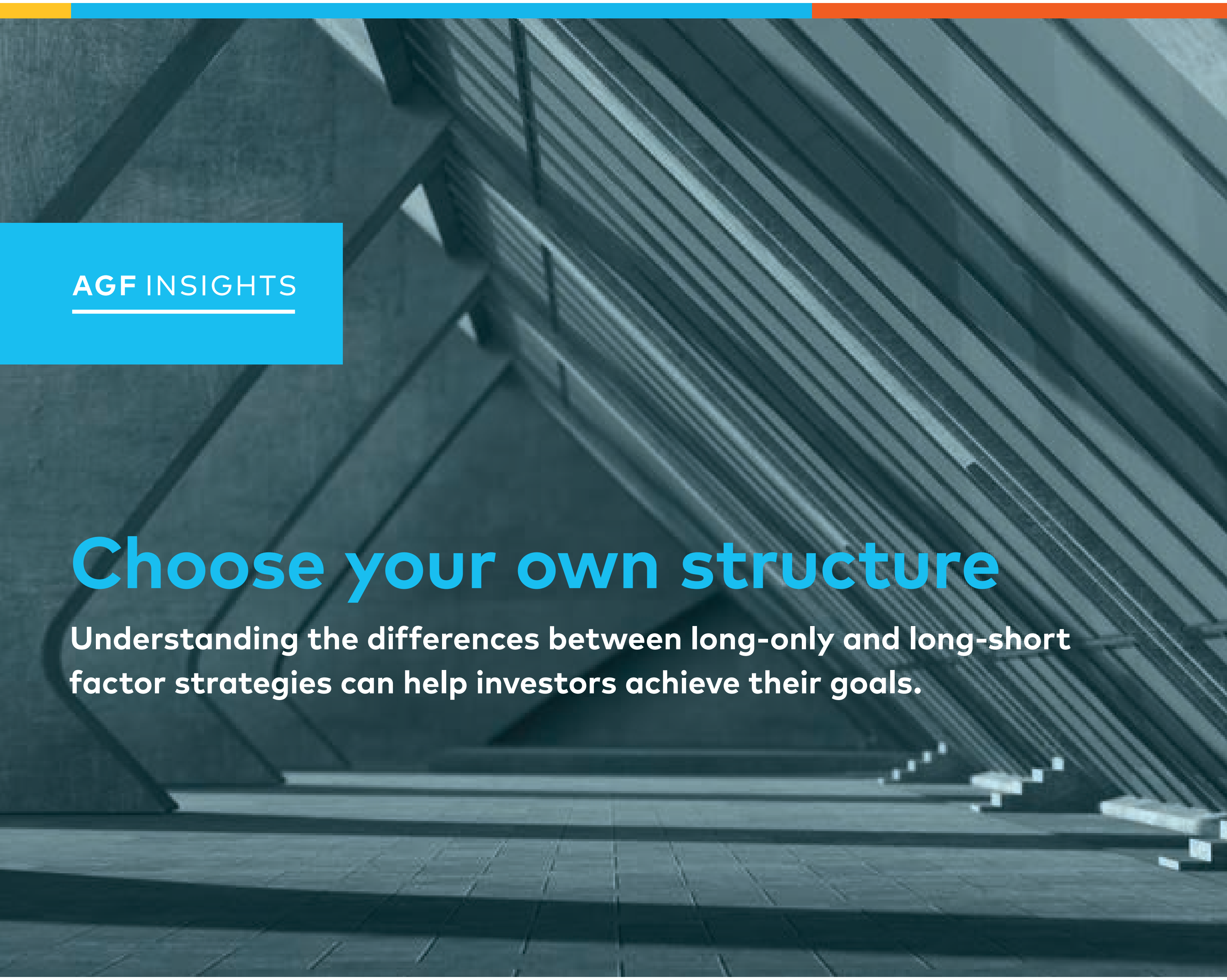


AGF INSIGHTS

Choose your own structure

Understanding the differences between long-only and long-short factor strategies can help investors achieve their goals.

By Mark Stacey and Bill DeRoche

The recent growth in popularity of factor-based investing approaches has prompted an increase in the number of product offerings from index providers and asset managers alike, leading to a misconception that factor-based approaches to investing may be interchangeable. In actuality, factor strategies can be achieved in both long-only and long-short portfolio implementations with very different outcomes. Understanding an investor's performance objective and risk targets as well as the role of the strategy within a portfolio can be key considerations when evaluating factor-based approaches, including the decision between a long-only or long-short implementation.

What is factor-based investing?

A factor is an attribute, characteristic, or feature of a security that is known to be correlated with past returns and is expected to be correlated with future returns. Factor-based investing begins by identifying the key "factors" driving higher returns over time of equity or fixed-income securities and then evaluating and selecting securities for investment based on these attributes. Widely utilized style factors include value, momentum, size, quality and volatility.

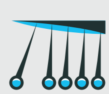
Although factor-based investment approaches have garnered significant attention in recent years, the concepts guiding these approaches have been around for some time. Based on the modern portfolio theory framework developed in the 1960s, the Capital Asset Pricing Model (CAPM) was the first model to describe the market with a single risk factor associated with it. This was beta, which is defined as the sensitivity of an asset's return to the market's return. CAPM was expanded on in the 1970s with the introduction of arbitrage pricing theory (APT), in which there are a set of risk factors that capture systematic risks that investors should be compensated for bearing. Since this early research, value, momentum, size, quality and volatility have all been postulated by academic theory to be valid factors in investing.

Investors who take a factor-based approach are seeking to identify securities that exhibit characteristics of these factors to gain exposure to the risk premia in an effort to either capture excess return or reduce risk. Generally, to do this, investors begin with a stock selection model – ranking securities in a given universe from best to worst based on a fundamental characteristic or characteristics. This model will suggest which securities the investor should be overweight (the highest ranked securities) and which securities the investor should be underweight (the lowest ranked securities). Next, the ranked securities are fed into a risk model, which isolates and identifies the statistical risk factors of the investable universe, and determines a security's risk contribution to the overall portfolio. An optimization tool is then used to determine the appropriate weight for each portfolio holding by balancing a security's expected contribution to excess return with its contribution to risk. Constraints are added to the optimization process to ensure a well-diversified portfolio that matches the investor's objective is constructed.

In factor investing, an investor's alpha model, which is designed to provide excess or abnormal rates of return, as well as its risk model and optimizer may all remain the same across their investment strategies; the only changes are to the constraints. The constraints dictate how effectively the investor can apply their model to a portfolio, and their ability to achieve their desired outcome. Adding constraints is a tradeoff between model implementation and risk, with the most powerful constraint in portfolio construction being the long-only constraint.

Value

A stock with a market price that is below the company's intrinsic value. Over time, stocks with a lower price relative to their intrinsic value have outperformed.



Momentum

A stock that has recently trended upward tends to continue rising.

Size

Small-capitalization stocks tend to outperform large capitalization stocks over time.

Quality

Stocks that are of a higher quality tend to outperform poorer quality stocks over time.

Volatility

Stocks with a lower volatility tend to outperform higher volatility stocks over time.

How does a long-only factor strategy work?

In a long-only factor strategy, an investor owns, or is long, all of the securities in their portfolio. The securities that are ranked highest, or best, by the model will be overweight relative to a benchmark. The securities that are ranked lowest, or worst, will either be underweight relative to the benchmark, or not owned in the portfolio at all. The rankings are based on the stocks' factor exposures. Excess return is generated by having exposure to the factors that are believed to provide long-term upside opportunities. The resulting portfolio will have some exposure to the factors preferred by the model but the largest contributor to portfolio return will still be the overall market. Investors have some ability to control the sources of risk in the portfolio, however the long-only strategy constrains the implementation of the model.

As it more explicitly controls the sources of portfolio risk and return, a long-short strategy may enable a more effective implementation of a factor strategy by removing the long-only constraint.

How does a long-short factor strategy work?

A long-short investment strategy differs from a long-only investment strategy in that an investor can also "short" securities in the portfolio. Removing the long-only constraint in a portfolio means that the securities ranked poorly by the model can be more than simply underweighted relative to the benchmark or absent from the portfolio, rather investors can actually short these names and benefit from their price depreciation. This results in the security exhibiting an effectively negative weight in the portfolio.

A long-short approach can improve the investor's ability to implement their model's desired factor exposures and limit the exposure to other risks, namely the market. This is measured by the Transfer Coefficient (TC), the degree to which the model's suggestions are actively applied in the portfolio. A portfolio with a long-short implementation will have a higher TC and therefore a higher expectation of value added from active management due to the investor's increased flexibility.

> "Short-selling" is when an investor borrows securities and immediately sells them, hoping to buy them back at a later time at a lower price, retaining the difference in price as profit. This action allows the investor to benefit from a decline in the security's price, but can also result in losses if the price increases beyond the original purchase price. Short-selling can result in a loss of some or all of the initial investment.

In a long-short factor investment strategy, instead of the market being the greatest driver of return, return is generated by capturing the spread between factor exposures on the long and short sides. As these sides do not always move in unison, a manager has an ability to create alpha as long as the long positions outperform the short positions. By having this additional tool to create alpha, an investor can better tailor the return stream of the portfolio to their desired outcome.

While the long-short factor investment strategy is efficient in theory, from a practical standpoint there are many additional aspects for investors to consider before either implementing the strategy themselves or hiring a manager. In order to implement a long-short strategy, a prime brokerage relationship (i.e. counterparty that facilitates short positions through stock borrowing and lending) is needed as well as the ability to manage a margin account, which comes with additional fees and complexities. There are also significant regulatory restrictions around shorting that need to be taken into consideration. Due to the complicated nature of long-short investing, many investors instead opt to hire a manager, which should only be done after performing proper due diligence. Without this, investors open themselves up to potentially devastating losses. This is because shorting has significant risk associated with it; a short seller profits if a security's price declines, but if the price increases, losses can theoretically be unlimited and far greater than the initial investment. Investors can work to prevent this by properly vetting the manager to ensure that they are both experienced and knowledgeable in shorting securities.

Within long-short factor investing, there are a range of strategies that focus on meeting different investor needs. For instance, if an investor is looking for exposure to equity markets, or an investment with a beta of 1, they should consider a "130-30" strategy. For a 130-30 strategy, an investor will start with the benchmark portfolio and allocate an additional 30% of the portfolio's value to the best ranking securities from the model resulting in a long position that is 130% of the portfolio's value, and short-sell the worst ranking securities in the model resulting in a short position that is 30% of the portfolio's value. Alternatively, if an investor is looking for a complementary product to their existing portfolio that eliminates beta, or market risk exposure, they should consider a market-neutral solution. A market-neutral strategy neutralizes the portfolio's exposure to market risk by combining long and short equity positions with roughly equal beta exposure.

Why would the investor choose one strategy over the other?

The choice between whether to implement a long-only or a long-short strategy comes down to understanding an investor's objective.

- If the investor is interested in gaining exposure to equity markets, they should consider a strategy with beta exposure, including long-only or 130-30 approaches.
- A long-short approach suits investors who desire reduced market exposure while being exposed to a blend of other risk premia.
- Alternatively, if an investor is looking for a complement to their equity portfolio, including alternative hedging tools or pure factor exposure, they should consider a market-neutral approach where beta is effectively eliminated and exposure to other factors is enhanced.

Comparison of the Strategies	
Long-only factor investing	• Relatively easy to target factors • When equity markets are performing well, portfolio is exposed to this upside • The long-only constraint limits the investor's ability to express desired factor exposures, resulting in a low transfer coefficient • The investor has a limited ability to control sources of risk in the portfolio with a significant proportion of risk coming from the market
Long-short factor investing	• Additional source of alpha as the investor seeks to capture positive returns from both the upside of long trades and downside of short trades • The investor can implement their factor model more effectively, resulting in a higher transfer coefficient • The investor has an increased ability to control the sources of risk in the portfolio. They can significantly change the portfolio's risk profile and target desired exposures more efficiently • Relatively more complicated to understand and implement • Unlimited risk associated with shorting securities • Short selling comes with additional costs. Short sellers must pay margin interest and borrowing costs, and they are responsible for paying any dividends or distributions paid out by the borrowed stock • There are significant regulatory restrictions in certain jurisdictions, especially for registered products

Long-only vs long-short factor investing

Mark Stacey, MBA, CFA
SVP, Co-Chief Investment Officer, Highstreet,* and Head of AGFiQ Portfolio Management

Mark joined Highstreet Asset Management Inc. (Highstreet) in 2011 and today leads the firm's investment management functions. He is also responsible for portfolio management of the Highstreet Canadian small cap and Canadian equity mandates. Mark has 14 years of investment experience applying quantitative and qualitative management techniques to the portfolio management process.

Prior to joining Highstreet, Mark was Vice-President, Equities at London Capital Management for six years where he managed a variety of core, value and growth-oriented Canadian and U.S. portfolios.

* Highstreet Asset Management, an AGF company. A registered Advising Representative in Canada with Highstreet Asset Management Inc., a subsidiary of AGF Investments Inc.

Bill DeRoche, MBA, CFA
Chief Investment Officer, AGF Investments LLC, and Head of AGFiQ Alternative Strategies

Bill DeRoche is Chief Investment Officer and Portfolio Manager at AGF Investments LLC (formerly FFCM LLC).*

Bill is co-founder of AGF Investments LLC, a Boston-based investor advisory firm founded in 2009 and subsidiary of AGF Management Limited. He is a leader of AGF's quantitative investment platform, known as AGFiQ. AGFiQ's team approach is grounded in the belief that investment outcomes can be improved by assessing and targeting the factors that drive market returns. Bill has long-tenured expertise employing quantitative factor-based strategies and alternative approaches to achieve a spectrum of investment objectives.

Previously, Bill was a Vice-President at State Street Global Advisors (SSgA), serving as head of the firm's U.S. Enhanced Equities team. His focus was on managing long-only and 130/30 U.S. strategies, as well as providing research on SSgA's stock-ranking models and portfolio construction techniques. Prior to joining SSgA in 2003, Bill was a Quantitative Analyst and Portfolio Manager at Putnam Investments. Bill has been working in the investment management field since 1995. Prior to 1995, Bill was a Naval Aviator flying the Grumman A-6 Intruder as a member of Attack Squadron Eighty-Five aboard the USS America (CV-66).

* An investment professional with AGF Investments LLC (formerly FFCM LLC), a U.S.-registered investment advisor firm and affiliate of AGF Investments Inc.

For more information, please visit AGF.com.

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There is a risk that the Target Index will not construct a portfolio that limits the Fund's exposure to general market movements, in which case the Fund's performance may reflect general market movements. Further, if the portfolio is constructed to limit the Fund's exposure to general market movements, during a "bull" market, when most equity securities and long-only equity ETFs are increasing in value, the Fund's short positions will likely cause the Fund to underperform the overall U.S. equity market and such ETFs.

Shares are not individually redeemable and can be redeemed only in Creation Units. The market price of shares can be at, below or above the NAV. Market Price returns are based upon the midpoint of the bid/ask spread at approximately 4:00PM Eastern time (when NAV is normally determined), and do not represent the returns you would receive if you traded shares at other times. Fund returns assume that dividends and capital gains distributions have been reinvested in the Fund at NAV. Some performance results reflect expense subsidies and waivers in effect during certain periods. Absent these waivers, results would have been less favorable.

The owners of Shares may purchase or redeem Shares from the Fund in Creation Units only, and the purchase and sale price of individual Shares trading on an Exchange may be below, at or above the most recently calculated NAV for such shares.

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