How AQR's New Fund Adds Value - An Alternative Approach to Alternatives: Investing with Style

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by Larry Swedroe

The conventional justification for alternative investments has been their ability to effectively diversify against core equity and fixed-income allocations. But, in many cases, the empirical data doesn't lend much support to that view. A new fund provides a different way to obtain returns from sources that have low to negative correlation to stocks and bonds, as well as each other – an alternative to alternative investment vehicles.

Traditionally, portfolios have been dominated by public equities and bonds. The risks associated with the equity portion of those portfolios are typically dominated by exposure to market beta. And because equities are more risky than bonds, beta's share of the risk in a traditional 60/40 portfolio is actually much greater than 60%. In fact, it can be 80% or more.

The severe financial crisis of 2008 led many investors, including institutions, to search for alternatives. Among the usual suspects were private equity and hedge funds. Unfortunately, evidence demonstrates that the correlation to equities of both these alternatives is quite high. For example, Niels Pedersen, Sebastien Page and Fei He – authors of the study "Asset Allocation: Risk Models for Alternative Investments" from the May/June 2014 issue of the *Financial Analysts Journal* – found that the correlation of private equity and hedge funds to stocks was 0.71 and 0.79, respectively. Most of the returns to those types of alternative investments are explained by their returns to stocks (the same beta risk they are trying to diversify). This is the same conclusion that Cliff Asness, Robert Krail and John Liew reached in their 2001 study, "Do Hedge Funds Hedge?"

Making matters worse, alpha has proved very elusive. The historical evidence on the performance of private equity and hedge funds is not good, a fact presented in my book *The Only Guide You'll Ever Need to Alternative Investments*. Other traditional alternatives, such as real estate investment trusts (REITs) and infrastructure, also have a relatively high correlation with stocks. Among traditional alternatives, the only two that showed almost no correlation to stocks were commodities and timberland.

For investors seeking other alternatives, AQR Capital Management recently introduced the AQR Style Premia Alternative fund (QSPIX).[1] The goal of this fund is to capture four premia that many investors desire – value, carry, momentum and defensive.

Traditional long-only mutual funds capture only a portion of the desired premia and leave their portfolios dominated by beta. QSPIX, however, is a long-short fund able to capture more of the premia. It invests across four styles (or factors), each of which is supported by the academic literature. Thus, the fund allows investors greater exposure to factors that have delivered premia without having any net exposure to beta (equity risk). Each of the four styles is backed by both economic theory and decades of data showing long-term performance across geographies and asset classes.

Further support for factor-based investing strategies is provided by Antti Ilmanen and my colleague, Jared Kizer, in their recent paper, "The Death of Diversification Has Been Greatly Exaggerated" from the Spring 2012 edition of the *Journal of Portfolio Management*. The paper, which won the prestigious Bernstein Fabozzi/Jacobs Levy Award for the best paper of the year, made the case that factor diversification has been much more effective at reducing portfolio volatility and market directionality than asset-class diversification.

Styles

Here are the four styles or sources of premia that QSPIX captures:

- **Value**: The tendency for relatively cheap assets to outperform more expensive ones. It's implemented across stocks, industries, bonds, interest rates, currencies and commodities.
- **Momentum**: The tendency for an asset's recent relative performance to continue in the near future. It's implemented across stocks, industries, bonds, interest rates, currencies and commodities.

- **Carry**: The tendency for higher-yielding assets to provide higher returns than lower-yielding assets. It's implemented across bonds, interest rates, currencies and commodities.

- **Defensive**: The tendency for lower-risk and higher-quality assets to generate higher risk-adjusted returns. It's implemented across stocks, industries and bonds.

The fund accesses each style through long-short portfolios across multiple asset groups.

The groups are:

- Stocks and industries: 2,000 stocks across major markets.

- Country equities: 20 countries from developed and emerging markets.

- Bonds: 10-year futures in six developed markets.

- Interest-rate futures: Short-term interest rate futures in five developed markets.

- Currencies: 22 currencies in developed and emerging markets.

- Commodities: Eight commodities futures.

Correlations

Not only have each of the styles provided a premium, but they all have exhibited low to negative correlations to beta and to each other. For the period from 1990 through 2013:

- The monthly correlations of the value, momentum, carry and defensive styles to market beta have been approximately 0, 0, 0.3 and 0, respectively.

- Relative to bonds, the monthly correlations of the value, momentum, carry and defensive styles have been 0, 0.1, 0.1 and 0.2, respectively.

- The monthly correlation of value to the momentum, carry and defensive styles has been -0.6, -0.1 and -0.1, respectively.

- The monthly correlation of momentum to the carry and defensive styles has been 0.2 and 0.1, respectively.

- The monthly correlation of carry to the defensive style has been 0.1.

Implementation

Each strategy is implemented using a clearly defined, transparent process. The process employs liquid securities, which help to keep transaction costs low. The historical data for securities exhibiting those factors demonstrate that, while each style within its asset class (or group) has shown a premium on its own, the diversification benefit has led to the whole being greater than the sum of its parts.

In short, the composite performs better than the components. For example, the hypothetical Sharpe ratio for the carry factor from 1990 through 2013 was about 0.7 for fixed income, currencies and commodities. The composite Sharpe ratio for the carry factor across these asset classes was about 1.2. Note that all of these Sharpe ratios are based on gross returns, and thus overstate the actual results. However, the important point is that the composite results are superior to component results.

Target allocations

As noted above, the fund accesses the four style premia across multiple groups, or asset classes. The five groups and their target risk allocations are:

- 30% equities across stocks and industries.

- 20% equity indices.

- 15% currencies.
- 20% bonds.
- 15% commodities.

This results in an implied style allocation that is:

- 34% value.
- 34% momentum.
- 18% defensive.
- 14% carry.

Those percentages represent the relative sources of expected return across the four style premia.

Use of leverage

The fund uses leverage in targeting an annual volatility of 10%. The use of leverage is adjusted over time, adapting to market conditions. The expectation is that the fund will produce equity-like returns, but with about half the volatility of the market. Over the long term, the average use of leverage is expected to provide investors with $3-4 of both long and short positions for each dollar invested.

Using QSPIX

The equity-like expected return (about 7% net of fees) makes QSPIX an excellent diversifier, reducing the tail risk relative to long-only portfolios. If an investor uses the fund to reduce their allocation to the equity side of their portfolio, the expectation should be for an increased Sharpe ratio – similar portfolio returns with lower portfolio volatility (risk).

Another option is to take the allocation to QSPIX from the bond side. The historical evidence indicates that you should expect to see an increase in returns, but about the same Sharpe ratio – both the returns and volatility increase.

For investors looking to boost the expected returns from their bond portfolios, this is superior to adding either term or credit risk. They would be assuming different risks rather than more of the same kinds already being taken.

Location

Due to relatively high turnover and the tax treatment of futures, the fund should only be considered for tax-advantaged accounts.

Expense ratio

The fund's expense ratio is currently 1.5%, which is relatively high, and much higher than any other fund we at Buckingham utilize. There is also a version (QSPRX) of the fund available to retirement plans, where the expense ratio will be a bit lower at 1.4%.

It's the value added that matters for a fund, not just costs. As mentioned, a long-only fund provides exposure to only a portion of a given style premium – generally about half. A $1,000 investment in a long-only fund would mean that you'd have a long position of $1,000. But because QSPIX is a long-short fund, a $1,000 investment, without considering leverage, gives you a $1,000 long position and a $1,000 short position for a total position of $2,000. Therefore, a $1,000 investment is actually gaining exposure to $2,000 in risk positions.

Thus, the way to view the expense ratio of QSPIX is that you are paying 0.75% for the long position and 0.75% for the short position, each of which is expected to provide about half the premium. In addition, this is a multi-style (factor) fund. It provides exposure not to just one style in a single asset class, but to four different (and low to negatively correlating) styles across six groups (stocks and industries, country stock indices, bonds, interest rates, currencies and commodities) and four asset classes (stocks, bonds, commodities and currencies). Thus, you are gaining the benefits of diversification across styles (factors).

There's also a version of the fund (QSLIX) that targets half the volatility (5% instead of 10%) of QSPIX. The fee is lowered to 0.85%. Thus, you are paying more than half the fee to earn half the return with half the volatility. It would make more sense to just buy half the amount of the original version charging 1.5%. This is just a framing problem.

Summary

The authors of the aforementioned study, "Asset Allocation: Risk Models for Alternative Investments," concluded that risk premia diversify more efficiently than traditional alternative investments. They also concluded that the returns of an equally dollar-weighted risk premium portfolio are comparable to those of an endowment portfolio (with allocations to venture capital and hedge funds) except with far less risk.

Those authors cited two studies that found a simple 1/n diversification strategy (equally weighting the factors you're diversifying across) was as good as any of the other methods tested. This type of strategy is referred to as risk parity.

While diversifying across factors might not be as exciting or glamorous as investing in alternatives, it's the strategy that's most likely to allow you to achieve your investment goals.

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1. Disclosure: I have a significant personal investment in the fund and it was approved by the investment policy committee of my firm, Buckingham, as an option in my firm's 401(k) plan. The fund is not in Buckingham's model allocations and is used in client portfolios on a case-by-case basis.

