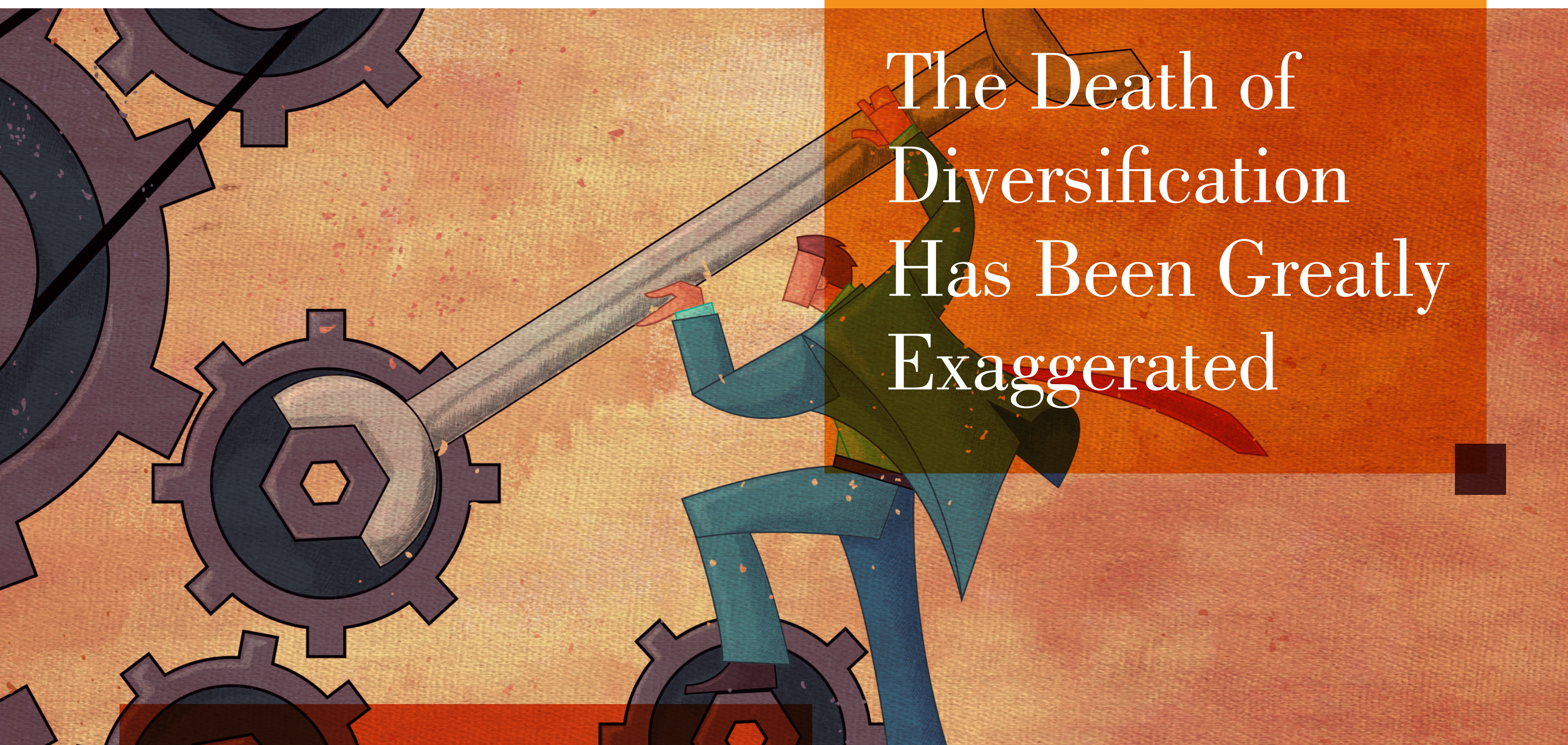
Volume 1 № 2
www.practicalapplications.com

Practical Applications
Institutional Investor Journals



The Death of Diversification Has Been Greatly Exaggerated

ANTTI ILMANEN AND JARED KIZER

Institutional Investor Journals
The Voices of Influence | iijournals.com

Practical Applications of

The Death of Diversification Has Been Greatly Exaggerated

Practical Applications
Institutional Investor Journals

Antti Ilmanen and Jared Kizer
Source: *The Journal of Portfolio Management*, Vol. 38, No. 3.
Report Written By: Betsy Massar
Keywords: Factor Modeling, Asset Allocation, Risk Budgeting, AQR Capital Management, Buckingham Asset Management, Bernstein Fabozzi/Jacobs Levy Awards

Overview

Large institutions have been gravitating toward factor-based asset allocation as an alternative to traditional asset class diversification. This award-winning article illustrates that most well-known factors have near zero correlation and that even naive factor-based diversification can substantially reduce portfolio volatility. It explains how this approach will help institutions evaluate their investment managers.

Practical Applications

- **Surprise!** To start, identify what systemic factor tilts already exist in the portfolio by using a historical series of returns and a basic regression model. The findings may be a surprise.
- **It's not "all or nothing."** Investors need not turn their asset-class portfolios into 100% multifactor portfolios.
- **Focus on risk and be dynamic.** Shift some of the focus from dollar allocations to risk allocations and extend portfolio analysis to include dynamic strategy styles.
- **Long/short investors take note.** The benefits of diversification into and across risk factors are greatest for portfolios with shorting and leverage.

Practical Applications Report

Asset class diversification doesn't work as well as we want it to. This is one of the key lessons of the global financial crisis of 2007–2009. During that time, almost every long-only asset class (except very high-quality sovereign bonds) moved in one direction—down.

TO THE RESCUE

Diversification into and across factors has been much more effective in reducing portfolio volatility and market directionality than asset class diversification, according to **Antti Ilmanen** and **Jared Kizer**. They make the case in ***The Death of Diversification Has Been Greatly Exaggerated***, which was published in the Spring 2012 issue of ***The Journal of Portfolio Management***. The article concludes that benefits are greatest for long/short investing, which requires shorting and leverage, but are also meaningful in a long-only context.

Key Definitions

Factor-Based asset allocation

The allocation of assets into and across factors in an attempt to mitigate volatility and asset correlation in a portfolio. It is an alternative to allocating into and across asset classes, which can result in exposure to the same underlying risks.

Risk factors

Anything that affects a portfolio's risk level. Factors include but are not limited to the following: **equity premium**, **size premium**, **value premium**, **momentum premium**, **term premium** and **default premium**.

Ilmanen is a Managing Director at *AQR Capital Management* in London. Kizer is Director of Investment Strategy at *Buckingham Asset Management* in St. Louis. Their article was awarded Best Article in the 14th Annual **Bernstein Fabozzi/Jacobs Levy Awards**, having been chosen from all ***Journal of Portfolio Management*** articles published in the previous 12 months.

WHAT ARE WE TALKING ABOUT HERE?

What are these factors, and why look at them? "The factors are systemic rules-based strategies that have actually generated returns above the risk-free rate," Kizer explains. Using data since 1927, academics and financial researchers have identified six different strategies that have generated excess returns over the long term, he reports.

Many of these strategies are well known by now:

1. **Equity premium**—historical excess return over government debt;
2. **Size premium**—excess return of small-cap stocks to large-cap stocks;
3. **Value premium**—excess return of stocks with low-valuation ratios over growth stocks;
4. **Momentum premium**—return of stocks with relatively high recent returns minus return of stocks with relatively low recent returns;
5. **Term premium**—performance of long-term government bonds relative to short-term government bonds; and
6. **Default premium**—how much investment-grade bonds have outperformed government bonds of similar maturities.

> "Our ideas aren't brand new. We actually just extended some of the work that's being done around risk parity research."
>
> —Jared Kizer

HIGHER RETURNS, LOWER VOLATILITY

The beauty of factor investing is that it can reduce volatility as well, the authors report. The correlation across these six factors since 1927 has been near zero, their data show. Correlations do not seem to spike when equity markets decline—the time when diversification is needed most, they show.

The authors offer empirical evidence that a factor-diversified portfolio has a substantially higher **Sharpe ratio** than even a global asset class-diversified portfolio. Using data from 1973 to 2010, Ilamen and Kizer compared a portfolio of five U.S. domestic and international asset classes with a portfolio of four dynamic styles that they felt had the widest academic support.

These factors comprised the value and momentum styles, along with the carry style, based on yield-seeking currency and fixed-income strategies among liquid macro assets. The portfolio also included the trend style, going long or short 60 liquid assets (such as equity index futures, fixed-income futures, currency forwards and commodity futures) based on past-year returns. The results confirmed what Ilmanen and Kizer had suspected—higher returns and lower volatility.

> "Our paper simply explores what might be the best building blocks to use for getting that better diversification."
>
> —Jared Kizer

A SERENDIPITOUS PARTNERSHIP

Kizer read Ilmanen's book, ***Expected Returns: An Investor's Guide to Harvesting Market Rewards***, and contacted him directly. "I suggested that we write a paper that took further some of his ideas in the book," he explains.

Kizer explains that he and Ilmanen thought that it would be interesting to compare the traditional approach to allocation with diversification directly across these factor returns over historical periods. Kizer's previous article, ***Index Fundamentalism Revisited—Redux***, published in the Winter 2005 issue of ***The Journal of Portfolio Management***, gave him some credibility as a potential collaborator, he admits.

That article examined the outperformance of Vanguard's actively managed mutual funds to its index funds and concluded that the outperformance was the result of a tilt toward the value style rather than alpha from active management. Referring to authors and well-known academics, Kizer says of Ilmanen, "More times than not, you'd be amazed at the approachability of some of these professionals. Antti could not have been friendlier."

> “More times than not, you’d be amazed at the approachability of some of these professionals.”
>
> —Jared Kizer

JUST THE BEGINNING

Kizer considers the team’s findings to be just the beginning of a broader discussion about diversification, risk and returns. “Our ideas aren’t brand new. We actually just extended some of the work that’s being done around risk parity research. Our paper simply explores what might be the best building blocks to use for getting that better diversification.”

WHY WOULDN’T YOU

The authors are hopeful that the article will spur investors to examine their current portfolios to see how they fit into the factor structure. The empirical results are compelling, but the article points to a number of reasons investors may not be adopting a factor-based strategy:

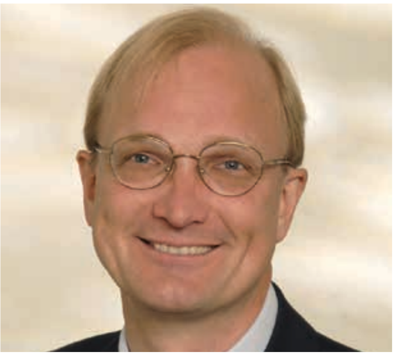
- Lack of familiarity
- Distrust in sustainability of factor premia
- No consensus on which factors to include
- Aversion to shorting and leverage

Ilmanen and Kizer encourage managers to first examine their portfolios to determine if they unwittingly include any tilts toward factors. “If you perform a style type of analysis, you can better understand what you’ve been capturing historically. It’s a fairly straightforward, easy starting point,” he notes. “You might end up seeing that you’ve had a value or growth bias, or just capturing the equity premium.”

By doing a thorough examination, investors can better understand what might be systematic investment exposures to styles, and what might be pure alpha, Kizer explains.

This knowledge will also help them better evaluate their managers, as they separate out what part of portfolio performance comes from systematic tilts toward factors and what part comes from true investment insight, he points out.

To order reprints of this report, please contact Dewey Palmieri at dpalmieri@iijournals.com or 212-224-3675.



Antti Ilmanen

antti.ilmanen@aqr.com

Antti is a Managing Director at ***AQR Capital Management (Europe) LLP***. Since starting as a central bank portfolio manager in Finland in 1986, Antti has worn many hats to bridge academic finance and practitioner investing.

Having earned a finance PhD in 1994 from the University of Chicago, he spent a decade at Salomon Brothers/Citigroup. From 2004 to 2011, Antti was a Senior Portfolio Manager at Brevan Howard, a macro hedge fund.

Antti has published extensively in finance and investment journals as well as a book, ***Expected Returns*** (Wiley, 2011). Antti advises Norway's Government Pension Fund Global and the Government of Singapore Investment Corporation.

Jared Kizer

jkizer@bamstl.com

Jared is Director of Investment Strategy at ***Buckingham Asset Management, LLC***. He was an Investment Advisor Associate and then an Investment Advisor at Buckingham from 2003 to 2008. He rejoined Buckingham in 2010. During the intervening two years, Jared was an Investment Strategies Analyst at NISA Investment Advisors, a firm in St. Louis that manages fixed-income portfolios for institutional clients.

In 2008, Jared co-authored ***The Only Guide to Alternative Investments You'll Ever Need*** with financial author Larry Swedroe. Jared has written several articles on such topics as retirement planning and investment policy. His work has been published in ***The Journal of Portfolio Management, Journal of Indexes*** and **indexuniverse.com**. Jared has also made appearances on local and national television, including Bloomberg Television.

Jared holds an MA in finance from Washington University in St. Louis. He is a Chartered Financial Analyst.