



Fact, Fiction,
and Momentum
Investing

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Overview

Momentum works in the long term, particularly when combined with other negatively correlated strategies, such as value. In this report, the authors of *Fact, Fiction, and Momentum Investing*, from *The Journal of Portfolio Management's 40th Anniversary Issue*, dispel some of the common misconceptions about momentum investing. Read on for practical insights into how to best approach momentum investing.

Practical Applications

- **The momentum premium persists.** It exists for over 200 years of US stock market data and in over 40 countries.
- **Combine momentum with value.** Combining momentum investing with negatively correlated strategies such as value investing can produce some of the highest risk-adjusted returns over time.
- **Diversify to hedge it in a downturn.** Momentum alone can suffer at rare times, so investors can hedge by combining it with value exposure.

Practical Applications Report

Though momentum investing has been around for a long time, it has endured a number of widely held misconceptions. Some common errors are that it works mainly on the short side, that its returns are small and sporadic, that it is limited to small-cap securities, and that its trading costs are too high. But investors need to study the academic literature, apply publicly available empirical data and connect the dots: The momentum premium persists.

This article, by longtime proponents of momentum and value investing, gets its arms around the academic research and highlights the positive performance of momentum investing in the US and other markets, and even in other asset classes. Showing that the momentum premium can be observed over 200 years of data, for dozens of financial markets and for different asset classes, the authors bust the 10 most common myths about momentum investing.

Clifford Asness

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Cliff is a Founder, Managing Principal and Chief Investment Officer at **AQR Capital Management** in Greenwich, Connecticut. He is an active researcher and has authored articles on a variety of financial topics for many publications, including *The Journal of Portfolio Management*, *Financial Analysts Journal* and the *Journal of Finance*.

He has received three Bernstein Fabozzi/Jacobs Levy Awards for Best Article in *The Journal of Portfolio Management*, in 2004, 2005 and 2014. *Financial Analysts Journal* has twice awarded him the Graham and Dodd Award for the year's best paper, and has also recognized his work with the Graham and Dodd Best Perspectives and Readers' Choice awards. In 2006, the CFA Institute presented Cliff with the James R. Vertin Award, which is periodically given to individuals who have produced a body of research notable for its relevance and enduring value to investment professionals.

Prior to cofounding AQR Capital Management, Cliff was a managing director and director of quantitative research for the asset management division of Goldman Sachs. He is on the editorial board of *The Journal of Portfolio Management*, the governing board of the Courant Institute of Mathematical Sciences at New York University, the board of directors of the Q-Group and the board of the International Rescue Committee. He received a BS in economics from the Wharton School and a BS in engineering from the Moore School of Electrical Engineering at the University of Pennsylvania, graduating summa cum laude in both. He received an MBA with high honors and a PhD in finance from the University of Chicago, where he was Eugene Fama's student and teaching assistant for two years (so he still feels guilty when trying to beat the market).



Key Definitions

Momentum Investing

An investment strategy that buys or overweights securities that performed well versus their peers and underweights or shorts securities that underperformed.

Using **KENNETH FRENCH**'s well-known data set, almost half of momentum's premium comes from the **long side** versus the **short side**.

Using AQR Capital data of live trades between **1998** and **2013**, momentum does not show unsustainably high trading costs.

The aim is to show that “anyone repeating these myths, in any dimension, after reading this piece is simply ignoring the facts,” the authors say in the article. The co-authors are **AQR Capital Management** Managing Partner **Clifford Asness**, his partners and colleagues **Andrea Frazzini** and **Ronen Israel**, and **Tobias Moskowitz**, the Fama Family Professor of Finance at the **University of Chicago Booth School of Business**.

The authors give us a comprehensive overview of the literature, results from their own empirical studies, and perspective on why misconceptions about momentum investing persist. They acknowledge that the momentum strategy by itself has not fared as well over the past few years. Smart investors need to combine momentum with other strategies, notably value investing, to produce positive risk-adjusted returns over the long term, say the authors.

You can read about the myths—why they persist and how they are debunked—in the full article. Here are some highlights:

- The momentum premium is evident in over 200 years of US market data; for example, between 1927 and 2013, there was an 8.3% annual average spread of recent winners over recent losers.
- Using Kenneth French's well-known data set, almost half of momentum's premium comes from the long side versus the short side.
- The momentum premium is significant among large-cap stocks, which is of only slightly smaller magnitude than small-cap stocks.
- Using AQR Capital data of live trades between 1998 and 2013, momentum does not show unsustainably high trading costs.

Questions And Answers

What led you to debunk the myths of momentum investing now?

Asness: These myths have been around for a long time, but they continue to be repeated despite a large body of evidence and literature refuting them. We decided it was time to bring all that evidence and research together to comprehensively attempt to dismantle these myths.

Which myths seem to be the most confusing for institutional investors, and why? Have you had to explain away a lot of these misconceptions for your clients?

Israel: I think the three myths that are most misunderstood among institutional investors are whether momentum survives transaction costs, whether there is any theory behind momentum, and (this is related) if the returns will go away. We spend a lot of time providing answers to these important questions, using both empirical evidence and academic theory.

There's been a fair amount of research done in this area. Why is it that momentum investing isn't more widespread among investors?

Frazzini: Part of the issue is that while there is a lot of evidence refuting these myths, the research is spread out and not tied together cohesively. Our paper attempts to address exactly that, which should hopefully provide for greater, widespread understanding of the facts and the issues in a unified way.



OTHER RESEARCHERS WRITING ABOUT MOMENTUM

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Columbia University
- ✓ **NARASIMHAN
JEGADEESH**,
Emory University
- ✓ **SHERIDAN TITMAN**,
University of Texas at Austin
- ✓ **MARK GRINBLATT**,
UCLA

*Asness, Frazzini, Israel,
Moskowitz—*

Their wives and kids
get a little bored of
hearing about value and
momentum.

What makes momentum investing different or beneficial? What are the key takeaways that you'd like readers of your article to grasp?

Frazzini: We don't think momentum is different. Rather, we think it is a style of investing on equal footing with other styles—like value—based on long-term, strong empirical evidence and, equally important, solid economic intuition. It is a strong strategy on its own, but more important, it helps diversify a portfolio with exposure to other styles, like value.

Given the poor results of the strategy during market crashes, as in 2009, is more study needed? What can momentum investors do to better position themselves?

Moskowitz: Actually, momentum investing didn't suffer during the market crash. Momentum suffered after the market crash, beginning in late March/early April 2009, when there was a sharp reversal in the market. We know that momentum can suffer during periods of sharp reversals, as the strategy is betting on a continuation of performance. The best way for a momentum investor to protect against these scenarios is to diversify with other styles, like value.

Who are other authors whose work on momentum investing you like?

Moskowitz: There are a number of great researchers out there working on these topics, including a few of our colleagues at AQR: **John Liew**, **Lasse Pedersen** and **Antti Ilmanen**. **Kent Daniel** of Columbia University has also done a lot on momentum, specifically looking at the bad times for the strategy. **Narasimhan Jegadeesh** of Emory University and **Sheridan Titman** of the University of Texas at Austin were co-authors on the original study on momentum and both continue to write about it today. **Mark Grinblatt** at UCLA is another name who has written some seminal work (and was Moskowitz's Ph.D. advisor).

Q: Our subscribers like to learn a little more about the authors: what do you read for fun? Or, what do you like to do to relax when not doing research/working?

All Authors: This is it. This is all we do. This is our fun. We also spend time with our wives and kids, though they get a little bored of hearing about value and momentum, unfortunately. Perhaps we will grow as people some day, or they will adapt to us. We are clearly hoping for the latter.

Q: What's next on the research front? What areas are you working on?

Asness: The four of us are currently working on a related paper: *Fact, Fiction and Value Investing*. Similar to what we did for momentum here, we think we can help dispel a lot of the myths around value investing. We take the same approach by outlining 10 myths of value investing, then proceeding to dismantle them by bringing together the research and evidence that refutes these myths.

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Andrea is a Principal at **AQR Capital Management**. He is a senior member of the firm's Global Stock Selection team, focusing on research and portfolio management of its Long/Short and Long-Only equity strategies.

Andrea has published in top academic journals and won several awards for his research, including the Bernstein Fabozzi/Jacobs Levy Award from **The Journal of Portfolio Management**, the Amundi Smith Breeden Prize, the Fama-DFA Prize, the Barclays Global Investors (BGI) Michael Brennan Award and the PanAgora Crowell Prize.

Prior to joining AQR, Andrea was an associate professor of finance at the University of Chicago's Graduate School of Business and a Research Associate at the National Bureau of Economic Research. He also served as a consultant for DKR Capital Partners and J.P. Morgan Securities. He earned a BS in economics from the University of Rome, III. an MS in economics from the London School of Economics and a PhD in economics from Yale University.



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Ronen is a Principal at **AQR Capital Management**. His primary focus is on portfolio management and research at the firm. He was instrumental in helping to build AQR's Global Stock Selection group and its initial algorithmic trading capabilities, and he now also runs the Global Alternative Premia group, which employs various investing styles across asset classes.

Ronen has published in the **Journal of Financial Economics** and elsewhere, and sits on the executive board of the **University of Pennsylvania's Jerome Fisher Program in Management and Technology**. He has been a guest speaker at Harvard University, Columbia University, the University of Chicago, the University of Virginia and New York University, and is a frequent conference speaker.

Prior to joining AQR, Ronen was a senior analyst at Quantitative Financial Strategies. At the University of Pennsylvania, Ronen earned a BS in economics from the Wharton School and a BAS in biomedical science from the School of Engineering and Applied Science. He also holds an MA in mathematics, specializing in mathematical finance, from Columbia.



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Toby is the Fama Family Professor of Finance at the **University of Chicago Booth School of Business** and a Managing Director at **AQR Capital Management**. He contributes to research on asset pricing and investment issues related to domestic and international strategies for AQR's Global Alternatives Premia team. He is also a research associate at the National Bureau of Economic Research.

Toby has won numerous awards for his academic research, including the Amundi Smith Breeden and Brattle Prizes from **The Journal of Finance**, the Barclays Global Investors (BGI) Michael Brennan Award for the best paper in the **Review of Financial Studies**, twice, the Whitebox Paper Prize and the Swiss Finance Outstanding Paper Award. In 2007, Toby was awarded the Fischer Black Prize by the American Finance Association, which recognizes the best financial economist under the age of 40, and in 2011 he received the Ewing Marion Kauffman Prize Medal for Distinguished Research in Entrepreneurship from the Kauffman Foundation, which recognizes the largest contribution to entrepreneurial research from scholars under the age of 40.

Toby's work has often been cited in print and broadcast media, and, notably, in a 2005 speech by former Federal Reserve Chairman Alan Greenspan. He earned a BS in industrial management/engineering with honors and an MS in finance from Purdue University, as well as a PhD in finance from UCLA.