



Olivia Engel, CIO
Active Quantitative Equity

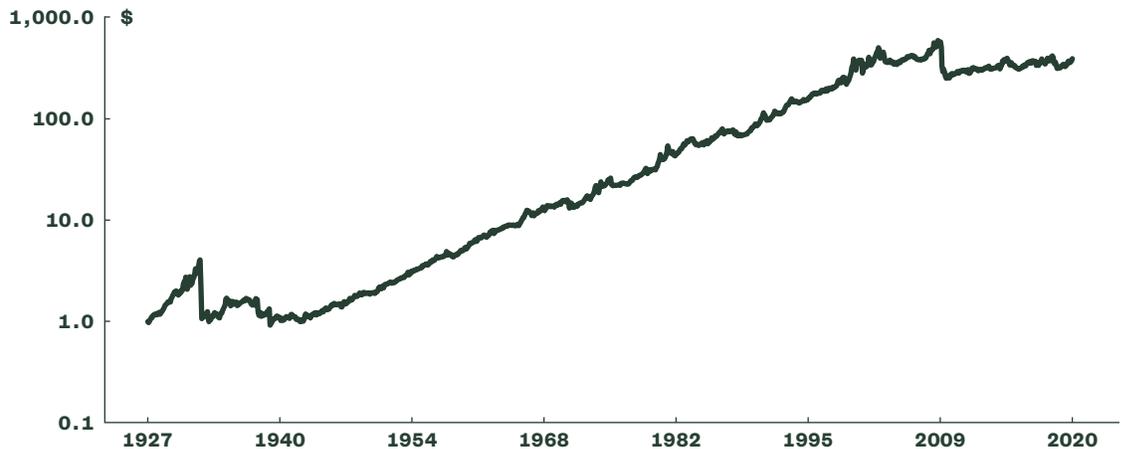
Price Momentum Crashes — Should We Worry?

November’s big negative return for price momentum was a reminder for investors to also hold exposures that are uncorrelated with momentum signals.

At its worst point in November, a simple 10x1 price momentum factor portfolio¹ was down around 9%. It recovered into the end of November, ending up nearly flat for the month. And while a flat return may typically not be worth writing about, the two days that delivered the 9% drop deserve further scrutiny.

Going back to 1925, a Winners Minus Losers (WML) portfolio,² whose results we use here to represent “price momentum,” had two disastrous return periods — one in 1932 and one in 2009. On both occasions, price momentum crashed during the huge rebound that followed a major negative stock market return. In both cases, the loss sustained by the price momentum portfolio during the crash (and rebound) did not recover for many, many years. See Figure 1.

Figure 1
Theoretical Cumulative Growth of \$1 Invested in WML (Momentum) Portfolio Since 1927
Monthly



Source: Ken French Data Library as of 31 October 2022.

Other historical occurrences of a monthly decline of 9% or worse for a price momentum portfolio, excluding the two episodes described above, show a maximum drawdown between 11% and 46% and an average of around two years to recover the loss.

The distribution of returns for price momentum is negatively skewed. This means, the worst negative returns are typically a lot bigger than the best positive returns. So the large negative drawdown over the two days in November is within expectations for the momentum signal.

Given the observed tendency for momentum to exhibit this negatively skewed characteristic, we believe it's important to combine momentum with other, uncorrelated signals. Signals like value tend to have a positive skew and generally have low or negative correlation with momentum's returns.

The Bottom Line

Because momentum quickly recovered to flat in November, we avoided a true price momentum crash, but the event is a cautionary tale for investors. Given the difficulty of predicting the timing of price momentum declines, it's wise to invest using a diversified set of signals that contain complementary payoff profiles.

When AQE researches new signals to add to our models, we always look for uncorrelated signals. In this instance, based on near-term and long-term characteristics, we seek measures of sentiment other than price momentum — with different payoff profiles that optimize total portfolio performance.

Endnotes

- 1 10x1 Momentum is a signal calculated using stock price total return over prior 10 months, excluding the most recent month, and return is calculated as a quintile spread within the developed market large cap universe of MSCI World constituents.
- 2 WML is calculated using prior 2 to 12 month returns; returns are sourced from Ken French Data Library.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager* with US \$3.26 trillion[†] under our care.

* Pensions & Investments Research Center, as of December 31, 2021.

[†] This figure is presented as of September 30, 2022 and includes approximately \$55.12 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

ssga.com

Marketing communication

State Street Global Advisors Worldwide Entities

For use in EMEA: The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This communication is directed at professional clients (this includes eligible counterparties as defined by the appropriate EU regulator) who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to

such persons, and persons of any other description (including retail clients) should not rely on this communication.

Important Risk Information

Investing involves risk including the risk of loss of principal.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

This document contains certain statements that may be deemed forward-looking

statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. Investing involves risk including the risk of loss of principal.

The views expressed are the views of Active Quantitative Equity through December 13, 2022, and are subject to change based on market and other conditions.

Quantitative investing assumes that future performance of a security relative to other securities may be predicted based on historical economic and financial factors, however, any errors in a model used might not be detected until the fund has sustained a loss or reduced performance related to such errors.

Equity securities may fluctuate in value and can decline significantly in response to the activities of individual companies and general market and economic conditions.

Actively managed funds do not seek to replicate the performance of a specified index. An actively managed strategy may underperform its benchmarks. An investment in the strategy is not appropriate for all investors and is not

intended to be a complete investment program. Investing in the strategy involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

The trademarks and service marks referenced herein are the property of their respective owners.

© 2022 State Street Corporation.
All Rights Reserved.
ID1317203-5351367.1.IGBL.RTL 1222
Exp. Date: 12/31/2023