

# MOMENTUM: A REVIEW

As of September 30, 2026



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## Executive Summary

Momentum — the tendency for assets that have performed well (poorly) over the recent past to continue performing well (poorly) over the subsequent months — is one of the most extensively documented and most puzzling regularities in empirical finance. Unlike many financial strategies that have seen initial success only to dissipate with widespread adoption, the momentum phenomenon continues to persist. First formalized in U.S. equities by Narasimhan Jegadeesh and Sheridan Titman, momentum has since been replicated across equity markets worldwide and across bonds, currencies, commodities, and index futures, and continues to survive adjustment for the standard risk factors that explain most other return patterns. This paper summarizes (1) what the momentum factor is, (2) where it has been documented, (3) the leading explanations for its persistence, and (4) the market regimes in which momentum strategies tend to thrive or fail.

## 1. What Is Momentum?

In asset pricing, momentum refers to the empirical pattern that securities with strong relative performance over a lookback window of approximately three to twelve months tend to continue outperforming over the following three to twelve months, while recent laggards tend to continue lagging. The canonical test is Jegadeesh and Titman's 1993 study, which ranked U.S. stocks on trailing three-to-twelve-month returns, formed a portfolio long the winners and short the losers, and found that the strategy earned average excess returns of roughly one percent per month. This result has since been replicated many times. The idea itself is considerably older than its formal documentation. David Ricardo, the nineteenth-century economist and successful stock-exchange speculator, is traditionally credited with two golden rules "cut short your losses", and "let your profits run on" as recorded in James Grant's *The Great Metropolis* (1838). That is a serviceable description of trend following, set down more than 150 years before Jegadeesh and Titman tested it.

A useful distinction is between cross-sectional (relative) momentum, which ranks assets against one another within a market, and time-series (absolute) momentum, which asks only whether an asset's own trailing return is positive or negative and sizes a position accordingly. The latter framework, developed by Tobias Moskowitz, Yao Hua Ooi, and Lasse Pedersen, extends momentum to a trend-following strategy applied to a single asset's own history rather than relative to peers.

Momentum is generally classified as a distinct "risk factor" or systematic anomaly because momentum profits are not explained away by exposure to other traditional factors such as market beta, size, or value. Eugene Fama and Kenneth French, whose three-factor model absorbed most other known anomalies, explicitly noted that momentum remained the "main embarrassment" for their model, and it was later added to standard factor models — most prominently as the WML ("winners-minus-losers") factor in Mark Carhart's four-factor model of mutual-fund performance. Whether momentum reflects a genuine risk

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premium (compensation for bearing some systematic risk) or a market inefficiency exploitable through behavioral biases remains actively debated, a question addressed directly in Section 3.2.

## 2. Which Asset Classes Exhibit Momentum?

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A defining feature of momentum, and one reason it is taken seriously as an actual risk factor rather than a data-mined U.S. equity curiosity, is its breadth. The most influential cross-sectional study is Clifford Asness, Tobias Moskowitz, and Lasse Pedersen's "Value and Momentum Everywhere," which documented statistically significant momentum premia in eight distinct markets and asset classes simultaneously, including:

- Individual stocks in the United States, the United Kingdom, continental Europe, and Japan
- Equity index futures across countries
- Government bonds
- Currencies
- Commodity futures

They further found that momentum returns are more highly correlated across these disparate asset classes than the underlying passive asset-class exposures are to one another — evidence of a common global factor rather than eight unrelated coincidences. The same research documents that value and momentum are negatively correlated with each other, both within and across markets, which is one reason the two factors are often combined in multi-factor portfolios.

Separately, time-series momentum, that is, an asset's price movement relative to its own past movement, has also been shown to work broadly. Moskowitz, Ooi, and Pedersen found that an asset's own trailing twelve-month excess return predicts its future excess return across equity index, currency, commodity, and government bond futures over more than two decades of data, and that a diversified time-series momentum portfolio delivered strong performance even during equity market crises such as 2008, when many other strategies suffered. Momentum has also been documented internationally at the individual-stock level outside the United States — for example, Dutch scholar Geert Rouwenhorst confirmed the effect in European equities, and subsequent research extended it to most Asian markets, with Japan noted as a persistent exception where momentum has historically been weak or absent.

## 3. Why Does Momentum Persist? Behavioral and Risk-Based Explanations

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Momentum is difficult to reconcile with the standard efficient-markets view: if prices already reflect available information, a purely mechanical rule based on past returns should not forecast future returns. Three broad camps of explanation have emerged.

### 3.1 Behavioral (underreaction and delayed overreaction) explanations

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The dominant behavioral explanations argue that investors process new information too slowly or with systematic biases, so prices adjust to news only gradually, producing a predictable drift that momentum

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strategies capture. The familiar Wall Street maxim “the trend is your friend” expresses the same basic idea. Once a trend is established, it often persists longer than investors expect.

- Conservatism bias — Nicholas Barberis, Andrei Shleifer, and Robert Vishny built a model in which a representative investor is slow to update beliefs in the face of new public information (a bias documented in psychology as “conservatism”), which generates short-run underreaction to earnings and other news followed by longer-run overreaction as trends are eventually extrapolated too far.
- Gradual information diffusion — Harrison Hong and Jeremy Stein proposed a model in which stock-specific information diffuses gradually across heterogeneous investors who cannot fully infer it from prices, so news is incorporated into prices slowly, generating short- to medium-term momentum. Hong, Terence Lim, and Stein later found empirical support: momentum is stronger among stocks with low analyst coverage and weaker among large, closely followed firms, consistent with slower information diffusion in less-followed names.
- Overconfidence and self-attribution — Kent Daniel, David Hirshleifer, and Avanidhar Subrahmanyam modeled investors who are overconfident about their private information and exhibit biased self-attribution, taking too much credit for outcomes that confirm their views and too little blame for those that do not. This combination produces initial underreaction to information followed by continued overreaction as confirming public news arrives, again generating momentum in the short-to-intermediate term followed by long-run reversal.

These behavioral models were formulated in part to explain the coexistence of intermediate-horizon momentum with the longer-horizon reversal effect documented earlier by Werner De Bondt and Richard Thaler, in which extreme past losers over three-to-five-year windows tend to outperform extreme past winners — momentum and long-term reversal are generally treated as complementary aspects of the same underreaction/overreaction cycle rather than contradictory findings.

## 3.2 Risk-based and rational counterarguments

A separate body of literature argues that momentum profits compensate investors for bearing systematic risk rather than reflecting mispricing. Suggested risk channels include time-varying exposure to macroeconomic or growth-option risk, and funding-liquidity risk: Asness, Moskowitz, and Pedersen show that momentum returns across asset classes are partly linked to shocks in global funding liquidity, proxied by measures such as the TED spread, implying that at least part of the premium reflects compensation for exposure to liquidity crunches rather than pure behavioral error. Momentum’s persistence despite three decades of publication and “limits to arbitrage” arguments — trading costs, capacity constraints, and the crash risk discussed in Section 5 — are also cited as reasons that sophisticated capital has not fully competed the anomaly away.

## 3.3 Investor flows and the reinforcement channel

A third strand of the literature connects momentum to the movement of investor capital rather than to beliefs alone. Erik Sirri and Peter Tufano documented that fund flows respond asymmetrically to past performance. Investors move money into strong recent performers far more aggressively than they withdraw it from weak ones, a pattern practitioners describe more colloquially as “chasing the hot dot”. Because those inflows must be invested, they tend to push up the prices of assets that have already risen,

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which in turn attracts further inflows, the self-reinforcing loop George Soros termed “reflexivity”. Dimitri Vayanos and Paul Woolley formalize this mechanism, showing that flows between funds can generate momentum at intermediate horizons and reversal at longer ones, and Dong Lou finds that flow-induced trading predicts returns in the cross-section. The same channel operates in reverse, Joshua Coval and Erik Stafford document forced selling by funds facing redemptions, which helps explain why the unwind of a crowded trend is typically faster and more violent than its formation.

A related literature addresses why the pattern is not simply competed away. Hersh Shefrin and Meir Statman, and subsequently Terrance Odean, documented the disposition effect where investors tend to sell winners too early and hold losers too long. Mark Grinblatt and Bing Han link this bias directly to momentum, showing that the resulting drag on price adjustment produces the same underreaction that momentum strategies capture. Viewed in that light, the oldest sayings in the market “cut short your losses, let your profits run on” and “the trend is your friend” are prescriptions to override a documented and persistent behavioral tendency. That such rules have survived for two centuries without being arbitrated away is itself evidence of how difficult they are to follow on a discretionary basis, and forms a substantial part of the argument for implementing them systematically.

## 4. Market Conditions Favorable to Momentum

Momentum strategies tend to perform best when trends are allowed to persist without abrupt reversals. Conditions associated with stronger momentum performance include:

- Calm, steadily trending markets — Momentum performs well when volatility is low to moderate and the market grinds in one direction rather than whipsawing, because the strategy is systematically long the recent winners and short the recent losers and has no mechanism for anticipating sharp reversals.
- Continuation (‘up-state’) markets — Michael Cooper, Roberto Gutierrez, and Allaudeen Hameed found that momentum profits are markedly higher following periods when the broad market itself has been rising as opposed to following market downturns, linking momentum’s profitability to the recent market state.
- Ample cross-sectional dispersion — Momentum benefits from a wide spread in trailing performance between winners and losers, since the strategy’s return is essentially a bet on that spread persisting; wide, orderly dispersion (rather than dispersion driven by a single panicked cluster of stocks) tends to accompany stronger results.
- Slow information diffusion segments — Consistent with Hong, Lim, and Stein’s findings, momentum has historically been stronger among smaller-capitalization stocks with thin analyst coverage, where information takes longer to become fully reflected in prices, than among larger, heavily-followed names.
- Diversification across markets and asset classes — Asness, Moskowitz, and Pedersen found only modest correlation of momentum returns within an asset class relative to across asset classes in the same direction. As a result, a momentum program that is diversified across equities, bonds, currencies, and commodities has historically produced a more stable return stream than a single-market momentum bet.

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## 5. Market Conditions Unfavorable to Momentum

Momentum's weaknesses are, in a sense, the mirror image of its strengths, and they can be severe. The most influential study of momentum's downside is Kent Daniel and Tobias Moskowitz's "Momentum Crashes," which shows that although momentum has high average returns and Sharpe ratios historically, its return distribution is strongly negatively skewed: infrequent but severe crashes punctuate an otherwise attractive track record.

- **Panic states and market rebounds** — Daniel and Moskowitz find that momentum crashes cluster in "panic" states: periods following sharp market declines when market volatility is elevated. In addition, the crashes themselves tend to occur just as the broad market is rebounding sharply. In these episodes, the losers that a momentum strategy is short (which by then behave like out-of-the-money call options, since severely distressed firms carry high, positively skewed sensitivity to a market recovery) can rally violently, inflicting large losses on the short side of the trade.
- **Sharp trend reversals** — Because momentum is inherently a bet that recent winners keep winning and recent losers keep losing, any environment featuring a fast V-shaped reversal — a bear-market bottom followed by an immediate, powerful rally, as in 2009 or in early 2020 — tends to be the single worst environment for the strategy, since the very names it is short are the ones that snap back hardest. As a result, the strategy is susceptible to policy risk, where government or regulatory interventions cause abrupt market shifts. The asymmetry is familiar to practitioners in shorthand form as evidenced by the Wall Street adage "tops are rounded, bottoms are V-shaped". Uptrends typically roll over gradually as buying interest fades, while declines driven by fear and forced liquidation are fast, and the reversals that end them are equally abrupt. Bob Farrell's widely circulated market rules make the same observation, noting that rapidly rising or falling markets tend to travel further than expected but do not correct by moving sideways.
- **High and rising volatility** — Momentum's exposure to the market is asymmetric and time-varying: Daniel and Moskowitz show a momentum portfolio's beta in down markets differs sharply from its beta in up markets (roughly double in magnitude in their sample). As a result, periods of volatility spikes tend to coincide with the strategy's worst realized outcomes, even though volatility itself is only partly a sufficient predictor on its own.
- **Crowding and factor-momentum feedback** — Sina Ehsani and Juhani Linnainmaa's research on "factor momentum" suggests that a meaningful share of individual-stock momentum can be traced to autocorrelation in the returns of other established factors. If the factors underlying a momentum trade become crowded and their own autocorrelations break down or reverse, momentum returns can deteriorate for reasons that have little to do with any single stock's fundamentals.
- **Weak-diffusion or low-transparency markets** — Japan is widely regarded as a low transparency market. Momentum has historically been notably weak in the Japanese equity market despite working in most other developed and many emerging markets. This persistent anomaly has been noted in the international momentum literature (following Rouwenhorst and later Chui, Titman, and Wei) and remains only partially explained.

Because crashes are partly forecastable from lagged market returns and volatility, Daniel and Moskowitz show that a dynamic momentum strategy which scales down exposure in identifiable panic states can

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roughly double the strategy's historical Sharpe ratio relative to a static, constant-exposure implementation — evidence that the timing of momentum exposure, not just the signal itself, materially affects investor outcomes.

## Conclusion

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Momentum stands out among documented return anomalies for the breadth of evidence behind it: it appears across equities, bonds, currencies, and commodities, in developed and most emerging markets, and it resists explanation by conventional risk models. The leading behavioral theories — conservatism-driven underreaction, gradual information diffusion, overconfidence with biased self-attribution and flow-based reinforcement arguments — offer complementary rather than competing accounts of why prices adjust to news too slowly, allowing trends to persist long enough for momentum strategies to profit. That same mechanism, however, leaves momentum exposed to sharp, discontinuous reversals, particularly coming out of market panics, which is why disciplined risk management around volatility and crash risk is treated in the academic and practitioner literature as inseparable from the momentum factor itself. It is worth noting that the factor's central prescriptions long predate their formal documentation. Market folklore arrived at cut short your losses, let your profits run on more than a century and a half before the empirical literature confirmed it. What the academic work contributes is not the insight but the evidence, the breadth of the effect, the conditions under which it fails, and the discipline required to harvest it.

## References

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- Asness, C. S., Moskowitz, T. J., & Pedersen, L. H. (2013). Value and Momentum Everywhere. *The Journal of Finance*, 68(3), 929–985.
- Barberis, N., Shleifer, A., & Vishny, R. (1998). A Model of Investor Sentiment. *Journal of Financial Economics*, 49(3), 307–343.
- Carhart, M. M. (1997). On Persistence in Mutual Fund Performance. *The Journal of Finance*, 52(1), 57–82.
- Chui, A. C. W., Titman, S., & Wei, K. C. J. (2010). Individualism and Momentum around the World. *The Journal of Finance*, 65(1), 361–392.
- Cooper, M. J., Gutierrez, R. C., & Hameed, A. (2004). Market States and Momentum. *The Journal of Finance*, 59(3), 1345–1365.
- Coval, J. D., & Stafford, E. (2007). Asset Fire Sales (and Purchases) in Equity Markets. *Journal of Financial Economics*, 86(2), 479–512.
- Daniel, K., & Moskowitz, T. J. (2016). Momentum Crashes. *Journal of Financial Economics*, 122(2), 221–247.

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Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor Psychology and Security Market Under- and Overreactions. *The Journal of Finance*, 53(6), 1839–1885.

De Bondt, W. F. M., & Thaler, R. (1985). Does the Stock Market Overreact? *The Journal of Finance*, 40(3), 793–808.

Ehsani, S., & Linnainmaa, J. T. (2022). Factor Momentum and the Momentum Factor. *The Journal of Finance*, 77(3), 1877–1919.

Fama, E. F., & French, K. R. (1996). Multifactor Explanations of Asset Pricing Anomalies. *The Journal of Finance*, 51(1), 55–84.

Grant, J. (1838). *The Great Metropolis*, Vol. II. Philadelphia: E. L. Carey & A. Hart, 81-82.

Grinblatt, M., & Han, B. (2005). Prospect Theory, Mental Accounting, and Momentum. *Journal of Financial Economics*, 78(2), 311–339.

Hong, H., & Stein, J. C. (1999). A Unified Theory of Underreaction, Momentum Trading, and Overreaction in Asset Markets. *The Journal of Finance*, 54(6), 2143–2184.

Hong, H., Lim, T., & Stein, J. C. (2000). Bad News Travels Slowly: Size, Analyst Coverage, and the Profitability of Momentum Strategies. *The Journal of Finance*, 55(1), 265–295.

Jegadeesh, N., & Titman, S. (1993). Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency. *The Journal of Finance*, 48(1), 65–91.

Lou, D. (2012). A Flow-Based Explanation for Return Predictability. *The Review of Financial Studies*, 25(12), 3457–3489.

Moskowitz, T. J., Ooi, Y. H., & Pedersen, L. H. (2012). Time Series Momentum. *Journal of Financial Economics*, 104(2), 228–250.

Odean, T. (1998). Are Investors Reluctant to Realize Their Losses? *The Journal of Finance*, 53(5), 1775–1798.

Rouwenhorst, K. G. (1998). International Momentum Strategies. *The Journal of Finance*, 53(1), 267–284.

Shefrin, H., & Statman, M. (1985). The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence. *The Journal of Finance*, 40(3), 777–790.

Sirri, E. R., & Tufano, P. (1998). Costly Search and Mutual Fund Flows. *The Journal of Finance*, 53(5), 1589–1622.

Soros, G. (1987). *The Alchemy of Finance* (Ch. 1-2). New York: Simon & Schuster.

Vayanos, D., & Woolley, P. (2013). An Institutional Theory of Momentum and Reversal. *The Review of Financial Studies*, 26(5), 1087–1145.

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