Momentum & Factor Models

Lesson Explainer

The Concept

Momentum is the observed tendency for assets that have recently performed well to keep outperforming, and for recent laggards to keep lagging - the mirror image of mean reversion. It's one of the most studied patterns in academic finance, though not guaranteed and prone to sharp reversals.

A factor is a specific, measurable characteristic historically associated with different returns across securities. Momentum is one factor; others include value, quality, and size.

A factor model builds a portfolio systematically around one or more of these characteristics - ranking a universe and holding the top slice - rather than relying on any single stock-specific thesis.

Illustrative Example: Ranking a Universe by 6-Month Momentum

A simple momentum factor ranks stocks by trailing 6-month return and holds the top slice.

Stock	6-Month Return	Rank	Illustrative Action
Stock A	**+42%**	**1**	**Hold (Top Momentum)**
Stock B	**+31%**	**2**	**Hold (Top Momentum)**
Stock C	+8%	3	No Position
Stock D	-6%	4	No Position
Stock E	-19%	5	No Position (Bottom)

Stocks A and B are held not because of any specific business view, but purely because their trailing return ranks them at the top - the same rule applied systematically across a whole universe.

5 Things to Know About Momentum & Factors

1. Momentum and mean reversion aren't contradictions - they operate over different timeframes.

2. Momentum crashes are a known, documented risk, especially around market turning points.

3. Factors can underperform for long periods - value lagged growth for much of the 2010s.

4. Factor investing is diversification across bets, not stocks - hold many names, not a few.

5. Factors can crowd - many funds chasing the same definitions can itself become a risk.

4 Things to Check Before Trusting a Factor Strategy

• Define the lookback precisely - 3, 6, or 12-month momentum ranks names very differently.

• Set a rebalancing rule - decide how often to re-rank and how much turnover that implies.

• Diversify across names - the edge comes from many small bets, not a concentrated handful.

• Plan for drawdowns in the factor itself - expect extended underperformance stretches.

> **Worth knowing:**
> this explains the historical, academic evidence behind momentum and factor investing using illustrative numbers - it isn't personalized financial advice, and no strategy here is a recommendation to trade. Past patterns are never guaranteed to repeat.

Quiz — Answer the questions, then check the key on the next page

1. What does a momentum strategy bet on?

A. That a stretched price will snap back to its average
B. That assets which have recently performed well will keep outperforming
C. That all stocks will converge to the same return
D. That interest rates determine all stock returns

2. What is a "factor" in this context?

A. A company's stock ticker symbol
B. A type of brokerage account
C. A specific, measurable characteristic historically associated with different returns
D. A government regulation on trading

3. In the illustrative example, why were Stocks A and B held?

A. Their trailing 6-month return ranked them at the top of the universe
B. They had the lowest P/E ratios in the universe
C. They paid the highest dividends
D. They were the largest companies by market cap

4. What is a documented risk specific to momentum strategies?

A. They require no rebalancing at all
B. They can only be used on bonds
C. They are immune to market downturns
D. "Momentum crashes" - sharp, sudden reversals, particularly around market turning points

5. Why does the lesson recommend diversifying across many names in a factor strategy?

A. Because factors only work with exactly one stock
B. Because diversification eliminates all risk entirely
C. Because the statistical edge comes from holding many names, not a few
D. Because regulators require a minimum number of holdings

Answer Key

1. What does a momentum strategy bet on?

Correct answer: B. That assets which have recently performed well will keep outperforming

Momentum is the tendency for recent winners to keep outperforming - the mirror image of mean reversion.

2. What is a "factor" in this context?

Correct answer: C. A specific, measurable characteristic historically associated with different returns

Momentum, value, quality and size are all examples of factors.

3. In the illustrative example, why were Stocks A and B held?

Correct answer: A. Their trailing 6-month return ranked them at the top of the universe

A momentum factor strategy ranks purely on trailing return, regardless of any company-specific view.

4. What is a documented risk specific to momentum strategies?

Correct answer: D. "Momentum crashes" - sharp, sudden reversals, particularly around market turning points

Momentum strategies have historically suffered sharp, sudden reversals known as momentum crashes.

5. Why does the lesson recommend diversifying across many names in a factor strategy?

Correct answer: C. Because the statistical edge comes from holding many names, not a few

Factor investing works as diversification across many small, uncorrelated bets, not concentrated theses.