

Why Is the Momentum Factor Lagging so Badly in 2023?

A rotation in Morningstar factor index leadership demonstrates how momentum investing can stumble amid market reversals.

Morningstar Inc.

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Morningstar global factor index¹ returns reveal a dramatic reversal in equity market leadership over the past 18 months. Stocks exhibiting "quality" characteristics are leading this year after falling further than the broad market in 2022. By contrast, the value and low-volatility factors held up relatively well in the difficult conditions of 2022 but have struggled on a relative basis so far in 2023. Momentum stands out for underperforming in 2022 and lagging in 2023, living up to its reputation for stumbling as a result of changes in market direction.

Exhibit 1 Factor Leadership Has Rotated Between 2022 and 2023

Morningstar Global Factor Index	2023 Return (%)	2022 Return (%)
Quality	13.7	-23.9
Broad Equity Market	7.6	-18.0
Yield	6.0	-7.3
Value	3.7	-6.0
Size	1.4	-15.5
Low Volatility	0.1	-9.7
Momentum	-2.3	-19.4

Source: Morningstar Direct. Broad Equity Market is represented by the Morningstar Global Target Market Exposure Index. Global Factor Index Returns are displayed in net return USD terms. Data as of May 31, 2023. The factor indexes were launched in early 2023, so 2022 returns are back-cast.

Key Takeaways

- ▶ After struggling in 2022, quality companies were underestimated and undervalued. They have led the market in 2023.
- ▶ Low-volatility stocks have lived up to their reputation for displaying resilience in risk-off market environments (2022) but sluggishness in up markets (2023).
- ▶ Momentum—the best-performing factor for the trailing 10 years—underperformed in both 2022 and 2023, demonstrating its susceptibility to getting tripped up by changes in market direction.
- ▶ A "periodic table" of factor returns shows that leadership is constantly in flux. Factor investment requires patience—cyclicality is a feature, not a bug.

¹ For a full discussion of index methodology, see:

https://assets.contentstack.io/v3/assets/bltabf2a7413d5a8f05/bltf940943fa1076e2e/646770861ffff2f8a9b56ad/20230519_Factor_Indexes_Rulebook.pdf

What's Behind the Quality Flip-Flop?

The shares of highly profitable companies with strong balance sheets have performed better historically than less-profitable, more indebted counterparts, according to academic research on the quality factor.² Why? Investors may underestimate the long-term durability of strong cash flows.

This phenomenon helps explain quality's 2023 rebound. **Microsoft** MSFT, **Meta Platforms** META, **Nvidia** NVDA, **Alphabet** GOOGL, and **Tesla** TSLA are among the largest current constituents of Morningstar's global quality factor indexes. All have posted huge gains so far this year. This marks a dramatic turnaround from 2022 when market sentiment toward technology-related stocks soured. Share price depreciation in 2022 was variously pinned on growth stocks' sensitivity to rising interest rates and their high valuations coming into the year.

Exhibit 2 Strong-Performing Quality Stocks in 2023 Were All Big Losers in 2022

Morningstar Global Quality Factor Index - Top 5 2023 Contributors	2023 Return %	2022 Return %
Microsoft*	37.6	-27.9
Alphabet	39.3	-39.1
Tesla	65.6	-65.0
Nvidia**	158.9	-50.3
Meta Platforms	120.0	-64.2

Source: Morningstar Direct. Data as of May 31, 2023. The factor indexes were launched in early 2023, so 2022 data is back-cast.

*Microsoft was added to the Morningstar Global Quality Factor Index in December 2022.

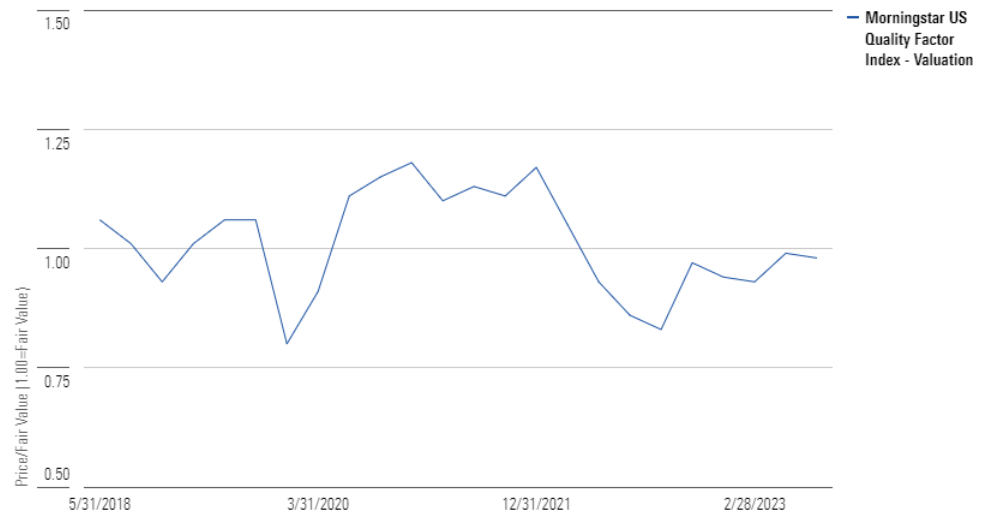
**Nvidia was added to the Morningstar Global Quality Factor Index in June 2022.

If quality stocks carried the burden of high expectations in 2022, they were undervalued entering 2023—at least according to the forward-looking assessments of Morningstar Equity Research. The shares of each of the five companies shown above were trading at significant discounts to Morningstar analysts' estimates of their intrinsic value at the start of this year. Morningstar's senior U.S. market strategist Dave Sekera wrote that stocks were trading at a rarely seen discount to our valuations in "2023 Stock Market Outlook: Near-Term Turbulence, but Clearer Skies Ahead."³

The exhibit below displays how valuations for quality stocks have fluctuated. Morningstar equity analyst-assigned price/fair value estimates are aggregated to the level of the Morningstar US Quality Factor Index. The U.S.-focused index is examined because analyst coverage is at roughly 93% of index weight, as opposed to 80% for the global version. When the graph moves above 1.00, it means the index constituents are considered overvalued in aggregate.

² For academic work on quality see: <http://nrm.simon.rochester.edu/research/OSoV.pdf> and http://www.econ.yale.edu/~shiller/behfin/2013_04-10/assess-frazzini-pedersen.pdf

³ Sekera, D. "2023 Stock Market Outlook: Near-Term Turbulence, but Clearer Skies Ahead." Morningstar. Dec. 30, 2022. <https://www.morningstar.com/articles/1131091/2023-stock-market-outlook-near-term-turbulence-but-clearer-skies-ahead>

Exhibit 3 Quality Stocks Went From Overvalued in 2021 to Undervalued in 2022 to Fairly Valued in 2023

Source: Morningstar Direct. Data as of May 31, 2023. The factor indexes were launched in early 2023, so 2022 data is back-cast.

Underestimated and undervalued coming into 2023, quality stocks were poised for a rebound. Strong earnings results for many quality names highlighted the durability of their profits and cash flows. Artificial intelligence, a dominant market theme in 2023, has provided a massive boost to companies like Nvidia and Microsoft. Changing interest-rate expectations could also be a tailwind.

Inflation has also been offered as an explanation for quality's 2023 strength. New York University professor Aswath Damodaran, speaking on Morningstar's *The Long View* podcast, addressed the 2023 success of the "FANGAM" stocks (Facebook [now Meta], Apple AAPL, Nvidia, Google [now Alphabet], Amazon.com AMZN, and Microsoft):

*If you think about those stocks, they are the quintessential pricing power stocks ... There's nothing stopping them, they're unregulated, and they have complete competitive advantages. The more pricing power you have, the better equipped you are as a company to deal with inflation.*⁴

That said, inflation was also raging in 2022 when quality stocks underperformed. Market dynamics can be hard to decipher. A range of variables, some macro some micro, is always interacting. Just as it's hard to identify asset classes and economic sectors that perform well in a particular environment, short-term factor behavior can also be unpredictable.

⁴ Benz, C. & Ptak, J. "Aswath Damodaran: A Valuation Expert's Take on Inflation, Stock Buybacks, ESG, and More." Morningstar's *The Long View* podcast. May 16, 2023.

Low Volatility: Resilient in 2022, Sluggish in 2023

Stocks with low past volatility have tended to offer better risk-adjusted performance than those with high volatility, according to academic research.⁵ Unlike with many factors, there isn't a clear risk-based explanation for this effect, as low-volatility stocks tend to carry lower risk than most. Investor behavior is typically cited. Professional investors narrowly focused on returns and unable to leverage their portfolios may crowd into volatile stocks, which have greater upside potential. Retail investors can do the same when looking for lotterylike upside. As a result, not only are low-volatility stocks more resilient during risk-off market environments, but they may offer a favorable long-term risk/reward trade-off.

Resilience during a risk-off environment describes the outperformance of the low-volatility factor in 2022. As a price-based factor, low volatility is faster moving than quality and is more comparable across sectors. So, the Morningstar low-volatility factor indexes are less constrained in their sector weights. Favorable sector positioning and security selection within sectors help explain factor outperformance in 2022. Below-market weights in consumer cyclicals and technology stocks were advantageous. Exposure to Merck MRK, Novartis NVS, Berkshire Hathaway BRK.B, and Coca-Cola KO also helped. These stocks were all included because of their scores on a composite of historical volatility measures.

Exhibit 4 The Low-Volatility Factor Benefited From Sector Positioning and Security Selection Within Sectors in 2022

Portfolio : Morningstar Gbl Low Vol Ftr NR USD Benchmark : Morningstar Gbl TME NR USD Currency : US Dollar Cash : USTREAS T-Bill Auction Ave 3 Mon											
Attribution 1/1/2022 - 12/31/2022											
	Weights %		Rescaled Weights %		Return %		Contribution %		Attribution Effect		
	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Portfolio	Benchmark	Morningstar Sector Allocation %	Selection %	Active Return %
Basic Materials	3.57	4.65	3.58	4.65	(18.01)	(9.69)	(0.83)	(0.43)	(0.07)	(0.34)	(0.41)
Communication Services	5.49	7.72	5.36	7.70	(7.89)	(34.84)	(0.45)	(3.01)	0.47	1.44	1.90
Consumer Cyclical	1.85	11.02	1.86	11.03	(8.10)	(31.49)	(0.25)	(3.77)	1.43	0.54	1.97
Consumer Defensive	16.56	7.49	16.59	7.50	(4.82)	(6.00)	(0.89)	(0.42)	1.11	0.19	1.31
Energy	2.23	4.76	2.24	4.77	(2.06)	42.45	(0.02)	1.38	(0.89)	(0.76)	(1.65)
Financial Services	23.18	16.19	23.22	16.21	(4.27)	(9.33)	(0.92)	(1.45)	0.58	1.09	1.66
Healthcare	15.87	12.35	15.90	12.37	(1.96)	(5.59)	(0.06)	(0.66)	0.17	0.23	0.40
Industrials	7.38	10.00	7.39	10.02	(9.21)	(11.46)	(0.81)	(1.15)	(0.19)	0.17	(0.03)
Real Estate	4.06	2.78	4.07	2.79	(25.48)	(24.04)	(1.17)	(0.69)	(0.05)	(0.04)	(0.10)
Technology	11.32	19.96	11.34	19.99	(27.32)	(32.28)	(4.05)	(7.13)	1.29	0.69	1.98
Utilities	8.43	2.96	8.43	2.97	(5.51)	(3.79)	(0.45)	(0.10)	0.65	(0.17)	0.48
Attribution Total	99.96	99.90	100.00	100.00	(9.90)	(17.42)	(9.90)	(17.42)	4.48	3.05	7.53

Source: Morningstar Direct. The factor indexes were launched in early 2023, so 2022 data is back-cast.

⁵ For academic work on low volatility see: <http://nm.simon.rochester.edu/research/UDE.pdf>
<https://pages.stern.nyu.edu/~lpederse/papers/BettingAgainstBeta.pdf>

Fast-forward to 2023 and low-volatility stocks have found themselves out of favor. Light exposure to technology has undermined returns for the low-volatility factor indexes, and so has above-market exposure to financial-services stocks. Constituents such as **UnitedHealth Group UNH**, **Bank of America BAC**, and **AT&T T** have all dragged on returns.

Momentum: A Powerful Force, but Sometimes a Step Behind

Momentum strategies target stocks with strong recent returns, based on the premise they are likely to continue to outperform.⁶ There's substance to the strategy. Prices may adjust more slowly than they should to new information, as investors often initially underreact. Once a trend is established, more investors often jump onto the bandwagon, further fueling price momentum.

A pitfall of momentum investing, however, is that it is prone to underperformance after inflection points when market direction changes. This helps explain the Morningstar momentum factor indexes' underperformance in both 2022 and so far in 2023. Below is a list of stocks jettisoned from the Morningstar Global Momentum Factor Index at its December 2022 reconstitution. Apple, Microsoft, Tesla, Nvidia, and others failed to qualify for index inclusion because of a relative slowdown in their returns. These names will be familiar from Page 2 of this paper as among the biggest winners of 2023.

Exhibit 5 Several Stocks That Would Go On to Become Big Winners Exited the Momentum Index in December 2022

Morningstar Global Momentum Factor Index - Top Constituents Deleted (Dec' 2022)	Index Weight
Apple	7.8
Microsoft	4.9
Tesla	3.5
Costco	1.9
Pfizer	1.4
Procter & Gamble	1.2
Nvidia	1.2
Toyota Motor	0.8
Broadcom	0.8
Prologis	0.6

Source: Morningstar Direct. Morningstar Data as of December 2022. Factor indexes were launched in early 2023, so 2022 data is back-cast.

So, what has been included in the Morningstar Global Momentum Factor Index in 2023? Below are the current top 10 momentum index constituents.

⁶ For academic work on momentum see: <https://www.jstor.org/stable/2328882> and <https://www.jstor.org/stable/2329556>

Exhibit 6 The Momentum Index Has Missed Out on the "FANGAM" Rally of 2023

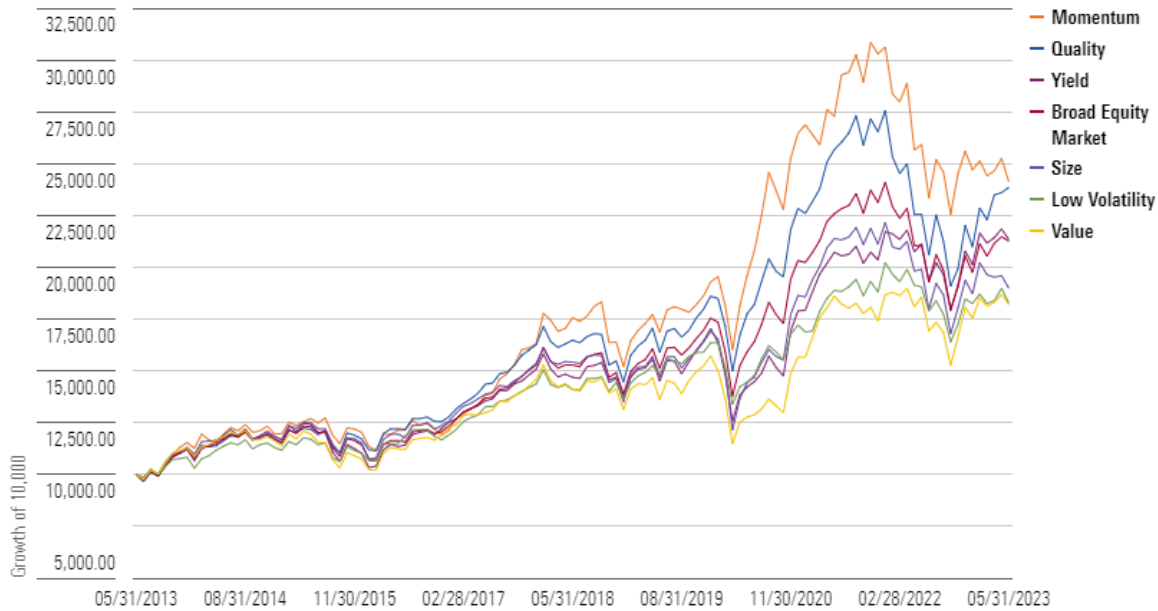
Morningstar Global Momentum Factor Index - Top 10 Constituents	
Constituents	2023 Return (%)
Exxon Mobil	-5.8
Chevron	-14.50
Shell	0.2
Eli Lilly	18.1
UnitedHealth	-7.8
Merck	0.2
ConocoPhillips	-14.5
IBM	-6.3
AbbVie	-13.0
AstraZeneca	8.7

Source: Morningstar Direct. Data as of May 31, 2023.

So, momentum has been left a step behind in 2023. In chasing yesterday's winners, it was left out of sync with a new market regime. It recalls the age-old investment wisdom: Past performance is no guarantee of future results.

Why would anyone invest this way? For the trailing 10-year period, it was the best-performing of Morningstar's six global factor indexes. Momentum is a powerful force in markets that can work for long periods. Until it doesn't.

Exhibit 7 Momentum Is the Best-Performing Factor Over the Past 10 Years. Quality and Yield Have Also Outperformed. Value Has Lagged Badly.



Source: Morningstar Direct. Data as of May 31, 2023. The factor indexes were launched in early 2023, so historical data is back-cast.

Factors Require Patience

When Morningstar global factor index returns are examined on a calendar-year basis going back to 2013, momentum emerges as a frequent winner. It was the best performer in four of the 10 years, the most of any single factor. When markets are less choppy and more unidirectional, momentum investing can thrive. That said, it was also the worst performer in 2016 and 2021—years in which value and yield rebounded.

Exhibit 8 Factor Leadership Is Constantly in Flux, With All Factors Capable of Going From Top to Bottom and Vice Versa



Source: Morningstar Direct. Data as of May 31, 2023. The factor indexes were launched in early 2023, so historical data is back-cast.

What's clear from this exhibit is that factor investing requires patience and, sometimes, intestinal fortitude. Investors concerned about recent market dynamics should remember that factor cyclicity is a feature not a bug. When it comes to factors, success is measured in decades not years. 🚦

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