

Factor Views

Themes from the quarterly Quantitative Solutions Research Summit

Authors



Yazann Romahi
Chief Investment Officer,
Quantitative Solutions,
J.P. Morgan Asset Management



Garrett Norman
Investment Specialist,
J.P. Morgan Asset Management



Gareth Turner
Investment Specialist
J.P. Morgan Asset Management

In brief

- Factors performed well and closed out an extremely strong year, highlighting their potential diversification role relative to market betas, as traditional asset classes suffered one of the worst years in history.
- Equity factors continued to climb, led by value and quality, with an aggregate blend of factors extending all-time highs in our data set going back over three decades.
- The merger arbitrage factor also hit new highs and continued to serve as a diversifying source of returns even in volatile equity markets.
- Macro factors gave back gains for a second consecutive quarter as a number of trends exhibited early in 2022 reversed course or bounced about through the end of the year.
- We maintain our positive outlook for factors in aggregate. We believe equity factors, such as value and quality, are well supported by current valuations, and other factors, such as merger arbitrage and macro carry, appear modestly attractive.

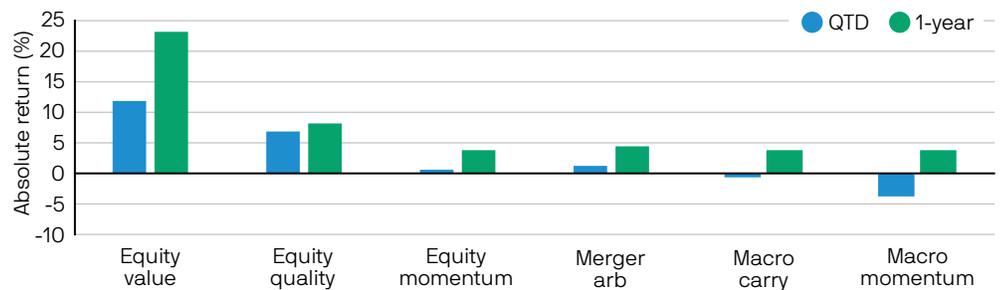
Overview

Global equity markets found relief in the fourth quarter as investors welcomed signs that inflationary pressures might be moderating. However, on the whole, 2022 was one of the most challenging years on record for traditional investors.

The S&P 500 suffered its worst year of performance since the 2008 global financial crisis (GFC) and its seventh worst since 1928. Meanwhile, U.S. Treasuries

Factors performed well over Q4 and 2022, particularly equity value and quality

EXHIBIT 1: QUANTITATIVE SOLUTIONS LONG/SHORT FACTOR RETURNS



Source: J.P. Morgan Asset Management; data as of December 31, 2022. Note: Factors presented are long/short. Equity factors are represented as 100% long notional exposure, macro factors as aggregation of 5% volatility subcomponents.

experienced their worst year of performance since 1928; for corporate bonds, it was the second worst year.¹

Regional diversification provided investors virtually no protection: Global equity markets declined just as much as U.S. equities in 2022, while fixed income markets declined more in aggregate globally than in the U.S. And traditional cross-asset class diversification failed: 2022 was the only year since 1928 in which both stocks and bonds declined more than 10%. With seemingly nowhere for investors to hide in traditional assets, factors’ strong performance and diversification benefits stood in stark contrast.

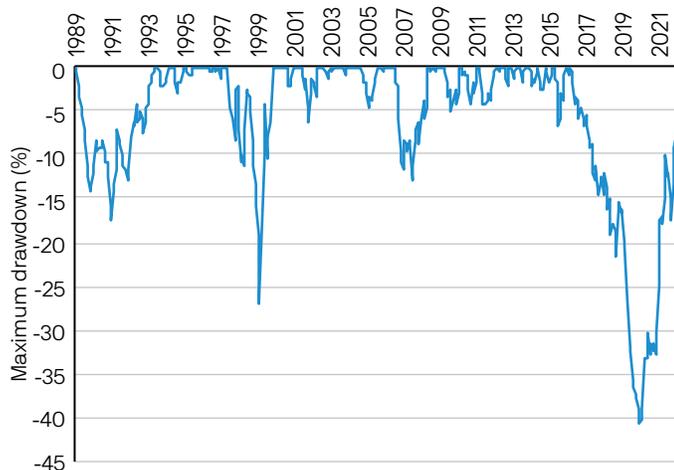
The factors that we invest in performed well throughout 2022, closing out the year on a high note even as market currents shifted across equity, fixed income and commodities. The equity value and quality factors led gains as markets gravitated toward stocks with strong underlying fundamentals (Exhibit 1). All told, factors enjoyed their second best year since the GFC²—strength we expect should continue through 2023.

¹ Aswath Damodaran, “Historical Returns on Stocks, Bonds and Bills: 1928–2022,” NYU Stern School of Business, December 2022.

² Interestingly, the best year for factors since the 2008 global financial crisis came in 2021, when risk assets were rallying instead of falling.

The latest value drawdown was twice as deep as prior ones and has not been fully recovered

EXHIBIT 2: VALUE FACTOR DRAWDOWNS, 1990–2022 (%)



Source: FactSet, J.P. Morgan Asset Management; data as of December 31, 2022

Factors in focus

Equity factors: Another leg higher

Equity factors in aggregate had a banner year in 2022. Value and quality led the way in Q4 as value posted its fourth-strongest quarter and calendar year since 1990, when our records begin. The quality factor posted its sixth strongest quarter and 11th best year. Momentum returns were more modest but still positive in the quarter and year.

Value has now rallied for much of the past two years, raising two questions: Can the rally continue? And if so, for how long? To try to answer these questions, we consider the current drawdown and recovery vs. other significant value cycles and compare the current valuation of the value factor to history. Both perspectives give us grounds for optimism.

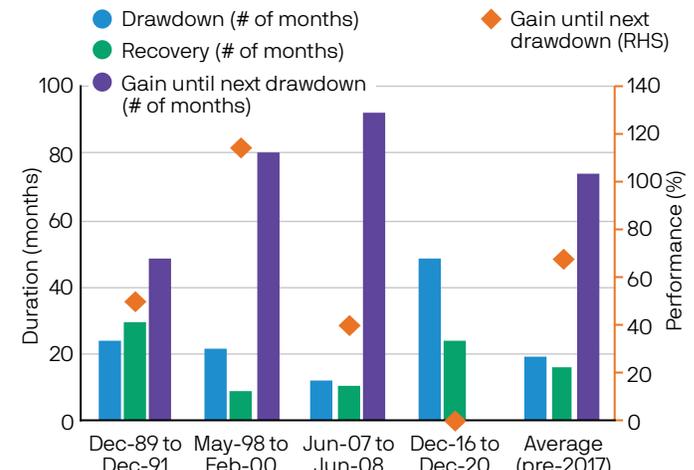
Historical analogues for drawdowns and recoveries

Since 1990, the value factor as we define it³ has experienced drawdowns of 10% or greater four times. The recent drawdown is a standout—roughly twice as steep and long as the average of the prior three (Exhibit 2). This drawdown is also notable for its two-phased path.

³ We define the value factor based on book yield, forward earnings yield, cash flow yield and dividend yield. Our definition is constructed to be region and sector neutral.

Value rallies have typically continued long after a drawdown was fully retraced

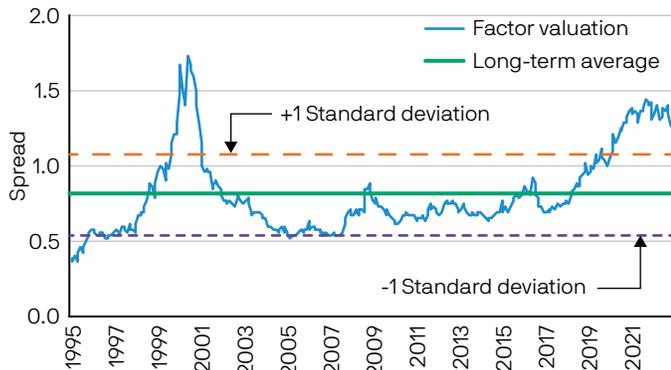
EXHIBIT 3: HISTORICAL VALUE DRAWDOWNS AND RECOVERIES



Source: J.P. Morgan Asset Management; data as of December 31, 2022.

Historical performance and valuations suggest potential for further value factor strength

EXHIBIT 4A: VALUE FACTOR HISTORICAL VALUATIONS



Source: J.P. Morgan Asset Management; data as of December 31, 2022.

In its first leg down, in 2017–19, value declined more slowly and steadily than more expensive growth stocks. It then plunged for a second time early in the COVID-19 pandemic as a speculative rally took hold of equity markets.⁴

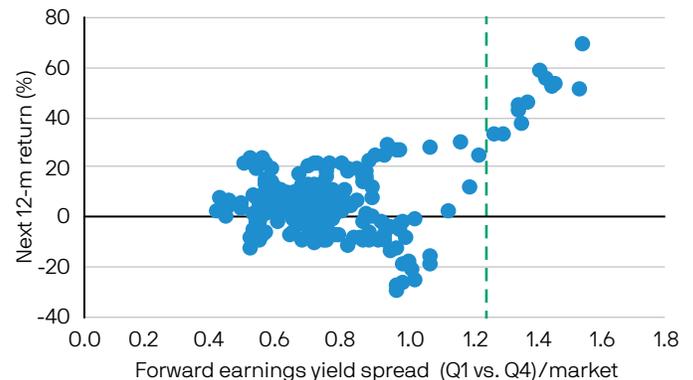
Since the end of 2020, the value factor has rallied sharply. By January 2022, it had erased the COVID-19 portion of the drawdown. Value would still need to gain a further 8.3%, however, to surpass its prior high-water mark. In previous value cycles, the drawdown and recovery periods were roughly symmetrical (sometimes recoveries were even faster), suggesting that the value factor may have another year or so to regain that 8.3%.

What might come after that for the value factor? After the last three major drawdowns and recoveries (admittedly a limited sample), the value factor went on to rally for about six years and rose around 50% before the next drawdown began (Exhibit 3). This should not be unexpected. We consider value a compensated factor, meaning it rewards investors over time.⁵ On a historical basis, we would therefore not be surprised if the current value rally were to continue well beyond the end of the current drawdown.

⁴ Our value factor fell 7.5% in March 2020 as COVID-19 cases spiked and Europe and the U.S. went into lockdowns; it fell an additional 19.5% through the remainder of 2020 as unprecedented monetary and fiscal stimulus led to a rally in low quality, expensive stocks.

⁵ Our value factor has been positive in 57% of the months from 1990–2022 and 73% of the calendar years.

EXHIBIT 4B: VALUE PERFORMANCE BY VALUATION SPREAD, 1995-2022



Current valuations

Despite rallying significantly, the value factor still appears exceedingly inexpensive relative to its history: It was only cheaper at the height of the 2001 dot-com bubble (Exhibit 4A). While the value factor is inexpensive globally, it is in the 99th percentile for cheapness in U.S. equity markets, based on data going back to 1990. This low valuation is a result of value outperforming more expensive growth stocks’ earnings almost as much as their share price and returns. Importantly, the last time that value was this cheap, the factor returned 30% over the next year, 51% over the next two years and 66% over the next three years (Exhibit 4B). For all these reasons, we see strong potential for value factor performance in the coming quarters and years.

Merger arbitrage factor continues to exhibit steady, positive performance

The merger arbitrage factor extended the third quarter’s positive trend in Q4, reaching a new all-time high. The factor was remarkably resilient throughout 2022, posting positive returns amid challenging market conditions in Q1 and Q3, holding up well enough in the equity market pullback in Q2 and rallying alongside equities in Q4.

And risk-adjusted returns remain attractive, with volatility of 2.8% over the past two years vs. a long-term average of 4.8%.

M&A activity has fallen significantly from 2021 and early 2022 as macro uncertainty and structural changes in rates and financing conditions have kept companies

from pursuing new transactions. The number of mergers announced across developed markets is now well below average post-GFC levels and near the lows seen at the onset of COVID-19.

Spread levels, however, remain attractive at above their post-GFC average, likely benefiting in part from a higher nominal rate environment. In addition, the proportion of friendly deals—which close at a much higher rate than hostile deals—has surged as hostile deal activity has waned, suggesting potentially strong risk-adjusted returns ahead. Yet scaling up exposure to the merger arbitrage factor has become more challenging; investors must be comfortable taking on more deal-specific idiosyncratic risk. We think the opportunity set is neutral/above average.

Macro factors: Mixed as commodity losses offset gains elsewhere

While macro factors performed well in 2022, performance was front-loaded in nature: a strong H1 and a mixed-to-negative Q3 and Q4 as a few key trends reversed. Time-series momentum and G10 currency (FX G10) momentum were leading detractors from overall Q4 macro factor performance. Equity positioning within the time-series momentum factor was challenged by the bounce in equity markets off of mid-October lows, while the trend of U.S. dollar strength began to reverse from peak levels as U.S. inflation data softened, negatively impacting FX positioning.

Reversals of other recent currency trends further challenged the FX G10 momentum factor, with the Canadian dollar giving back relative gains and the euro and yen among the strongest-performing currencies.

Commodity momentum also gave back some of 2022's gains, largely because relative value momentum positioning was caught offside as energy markets weakened.

Carry factors held up better during Q4. Long positioning in Gilts vs. Bunds buoyed fixed income carry, while FX carry and commodity carry were less exposed to the macro trend reversals. Carry spreads remain attractive across fixed income markets, where they are generally above their short- and long-term averages; they are neutrally valued across currency and commodity markets.

Trend factors have shaken out to more neutral positions following recent reversals across asset classes. Equity positioning is now slightly long after having been negative for much of 2022, and fixed income shorts are much smaller than earlier in the year.

Concluding remarks

Despite factors' strong 2022 performance, our outlook is only slightly less bullish. We continue to see generally attractive prospects for a wide range of factors—equity value, especially, across the globe and equity quality in the U.S. market—and we maintain our positive outlook on merger arbitrage and macro carry. We expect the environment for traditional asset class exposures to remain uncertain and believe that factors can play an important complementary role in a broader portfolio context.

Factor opportunity set

The table below summarizes our outlook for each of the factors accessed by the Quantitative Solutions platform. It does not constitute a recommendation but, rather, indicates our estimate of the attractiveness of factors in the current market environment.

FACTOR VIEWS VS. LAST QUARTER:



		Rationale	
Equity	Momentum	Downgrade	Neutral on valuation (decrease from last quarter), neutral on dispersion
	Valuation	Upgrade	Attractive on valuation, attractive on dispersion
	Quality	Upgrade	Attractive on valuation (driven by U.S. markets), attractive on dispersion
	Size	Downgrade	Neutral on valuations
Event-driven	Merger arb	No change	Attractive on deal premia, attractive on % of friendly deals, negative on activity level (decrease from last quarter)
Macro	Carry	No change	Neutral on FX spreads, positive on fixed income spread, neutral on commodity spread
	Momentum	Downgrade	Neutral on FX price dispersion, neutral on commodity price dispersion, attractive on significant price trends

Source: J.P. Morgan Asset Management; for illustrative purposes only.

Our framework for evaluating factor outlooks is centered on the concepts of dispersion, valuation and the opportunity for diversification. For equity factors, we measure dispersion and valuation spreads between top-quartile and bottom-quartile stocks on a market-, region- and sector-neutral basis. For event-driven factors, we measure implied carry and the level of corporate activity as indicative of the ability to minimize idiosyncratic stock risk. For macro factors, we measure the dispersion or spread between top-ranked and bottom-ranked markets, as well as the number of significantly trending markets.

Glossary

- **Equity momentum:** Long/short global developed stocks based on price change and earnings revisions; sector and region neutral
- **Equity value:** Long/short global developed stocks based on book-to-price, earnings yield, dividend yield, cash flow yield; sector and region neutral
- **Equity quality:** Long/short global developed stocks based on financial risk, profitability and earnings quality; sector and region neutral
- **Equity size:** Long/short global developed stocks based on market capitalization; sector and region neutral
- **Merger arb:** Long target company and short acquirer (when offer involves stock component) in announced merger deals across global developed markets
- **Event-driven (other):** Conglomerate discount arbitrage, share repurchases, equity index arbitrage, post-reorganization equities and shareholder activism
- **Macro carry:** FX G10 carry, FX emerging market carry, fixed income term premium, fixed income real yield, commodity carry
- **Macro momentum:** FX cross-sectional momentum, commodity cross-sectional momentum and time-series momentum across equity, fixed income and commodity markets

Quantitative research focused on innovation

Harnessing our firm's deep intellectual capital and broad investment capabilities, we provide our clients with a diverse suite of beta strategies to help build stronger portfolios.

- Empower better investment decisions through **unique insights** and **proprietary research** on strategic and alternative beta.
- Deploy the talents of an investment team dedicated to quantitative research and portfolio construction.
- Invest across a broad spectrum of strategic and alternative beta strategies, created specifically to address client needs.
- Partner with one of the world's leading asset managers and tap into two decades of **industry innovation**.

Next steps

For more information, contact your J.P. Morgan representative.

J.P. Morgan Asset Management

277 Park Avenue | NY 10172

Important Disclaimer

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be taken as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own financial professional, if any investment mentioned herein is believed to be appropriate to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not reliable indicators of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide.

To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our privacy policies at <https://am.jpmorgan.com/global/privacy>.

This communication is issued by the following entities:

In the United States, by J.P. Morgan Investment Management Inc. or J.P. Morgan Alternative Asset Management, Inc., both regulated by the Securities and Exchange Commission; in Latin America, for intended recipients' use only, by local J.P. Morgan entities, as the case may be. In Canada, for institutional clients' use only, by JPMorgan Asset Management (Canada) Inc., which is a registered Portfolio Manager and Exempt Market Dealer in all Canadian provinces and territories except the Yukon and is also registered as an Investment Fund Manager in British Columbia, Ontario, Quebec and Newfoundland and Labrador. In the United Kingdom, by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions, by JPMorgan Asset Management (Europe) S.à r.l. In Asia Pacific ("APAC"), by the following issuing entities and in the respective jurisdictions in which they are primarily regulated: JPMorgan Asset Management (Asia Pacific) Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited, each of which is regulated by the Securities and Futures Commission of Hong Kong; JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), this advertisement or publication has not been reviewed by the Monetary Authority of Singapore; JPMorgan Asset Management (Taiwan) Limited; JPMorgan Asset Management (Japan) Limited, which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia, to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Commonwealth), by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919). For all other markets in APAC, to intended recipients only.

For U.S. only: If you are a person with a disability and need additional support in viewing the material, please call us at 1-800-343-1113 for assistance.

Copyright 2023 JPMorgan Chase & Co. All rights reserved.

PROD-0123-1422194-AM-PI-FV-1Q23 | 0903c02a81f7ad8f