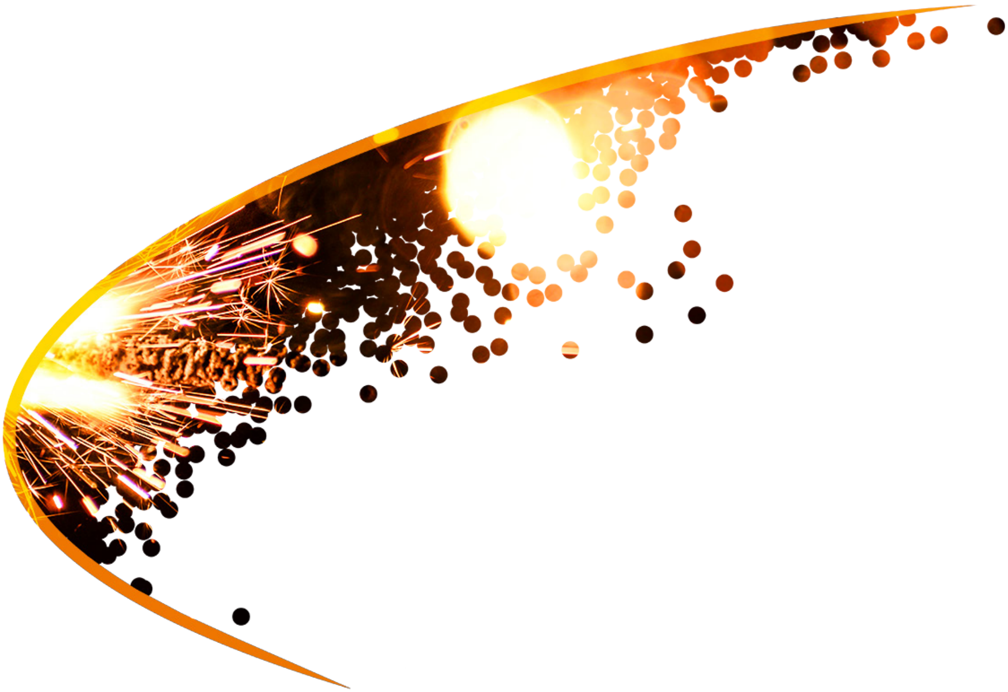


TRENDS AND OPPORTUNITIES

SHOCK THERAPY:

PORTFOLIO SOLUTIONS FOR THIS YEAR'S MARKET TURMOIL

Portfolio Construction and Strategy (PCS) Insights

CONTENTS

Adam Hetts, CFA
Global Head of Portfolio Construction and Strategy

Matthew Bullock
EMEA Head of Portfolio Construction and Strategy

Mario Aguilar De Irmay, CFA
Senior Portfolio Strategist

Sabrina Geppert
Senior Portfolio Strategist

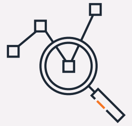
PCS TRENDS & OPPORTUNITIES

PORTFOLIO CONSTRUCTION AND STRATEGY

AN INVESTMENT EDGE FOR BETTER PORTFOLIOS

Tailored analysis and insight on investment portfolios

Our global team of expert strategists deliver custom insights and risk-modelling to help you meet your clients' needs.



Expert perspective

Understand the risk exposure of portfolios across and within asset classes.

Genuine partnership

Work with portfolio strategists to help stay on track with your clients' long-term objectives.

Practical insights

Access research-led, actionable insights to better inform your asset allocation.

Connect with us

To learn more about Janus Henderson Portfolio Construction and Strategy, contact your sales director or explore more at **janushenderson/pcs**

SHOCK THERAPY

PORTFOLIO SOLUTIONS FOR THIS YEAR'S MARKET TURMOIL

Throughout the year, the Portfolio Construction and Strategy Team has written extensively on the need to stay the course during volatile market times and to maintain a diversified portfolio even when it is tempting to succumb to fear. No matter where you are in the world, investors have grappled with severe market shocks driven by slowing growth, inflation, and interest rate volatility.

Europe is also grappling with an energy shortage just when governments have pledged to reduce carbon emissions. The push for greater sustainable energy production while at the same time trying to keep the lights on leaves policy makers and investors with a significant moral dilemma.

In this edition of Trends and Opportunities, we aim to offer some therapy for those shocks by providing a long-term perspective on the markets and economy and focusing on strategies that we believe will be long-term winners. We examine strategies – including quality equities, alternatives, and balanced funds – which we believe may help investors ride out the market volatility and be well positioned for a market recovery. We also look at sustainable options that aim to generate positive investment returns while considering the future of the planet.

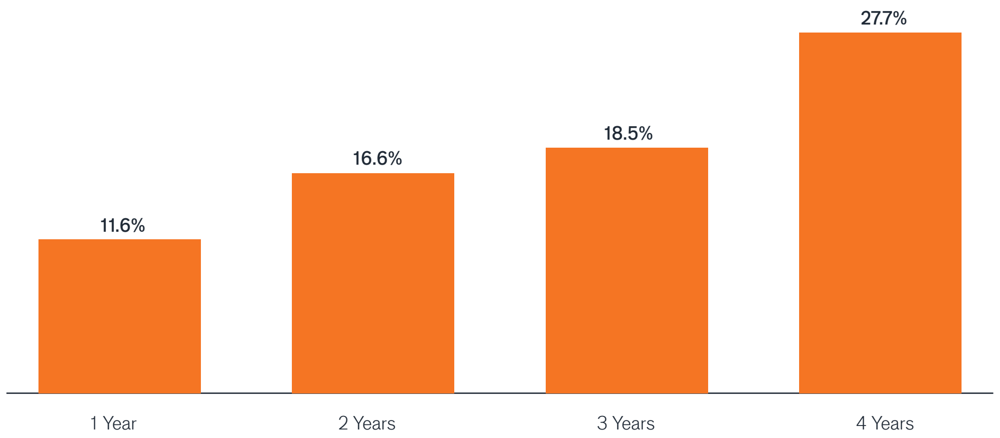
Putting volatility in historical context

After living through this year's volatility, 'shock' is probably an understatement. On the bright side, while the history of global equities tells us there is likely to be more pain to come, it also tells us that patient investors have historically experienced more upside than downside over the long term. Since 1972, every time the MSCI World Index has lost more than 20% of its value, the next 12 months have resulted, on average, in a positive gain of 11.6% and a full recovery has always occurred within four years (with a 27.7% cumulative return). For context, the average time to recovery is 3.5 years. Given this year's sequence of market events, investors should take the current landscape as a blank slate and take advantage of new opportunities.

No one can call the bottom, but anyone can call a dip: for medium- and long-term investors, the question shouldn't be if they should take advantage, but how.

PCS TRENDS & OPPORTUNITIES

Average cumulative MSCI World performance after 20% drawdown



Source: Janus Henderson Portfolio and Construction, Bloomberg, as at 31 August 2022.

The slowing growth, inflation, and interest rate volatility we are currently experiencing are generating market shocks of unusual prominence and magnitude. These shocks will likely drive ongoing volatility to which investors, unfortunately, will need to grow accustomed.

To help investors overcome that trifecta of market shocks, the Portfolio Construction and Strategy Team is focused on providing 'shock therapy' in the form of portfolio solutions tailored to today's new investing paradigm, while addressing the ubiquitous asset allocation gaps and concentrations we see in investor portfolios every day though our consultations with financial professionals.

In this Trends and Opportunities report, we highlight portfolio solutions focused on:

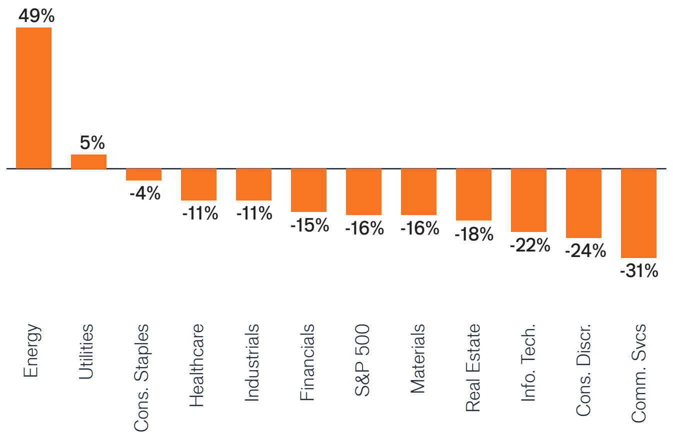
- **US Equity:** quality is a virtue
- **Technology:** why invest in tech stocks now?
- **Sustainable Investing:** 2022 - a defining moment
- **Alternatives:** the right time, the right place?
- **Balanced Strategies:** manage market vertigo with a balanced approach

EQUITY: US

QUALITY IS A VIRTUE

US Equity style, size, and sector returns

	Value	Core	Growth
Large	-9.8%	-16.9%	-23.2%
Mid	-11.8%	-16.5%	-25.1%
Small	-12.2%	-17.2%	-22.3%



Source: Morningstar, YTD returns through 31 August 2022; style/size table based on Russell indices, sector chart based on GICS sectors of S&P 500 Index.

The Quality Equity MOAT: A framework to battle stagflation

	Key Risk	Defense
Margins	Inflation	Wide margins, pricing power
Ownership	Slowing Growth	Nimble management to navigate a downturn
Advantages	Slowing Growth	Competitive advantages and durable growth opportunities
Tenacity	Rate Volatility	Low leverage and/or long-term financing

YTD Recap

- As widely expected, rising rates and inflation have taken the largest toll on growth (down -23.2% YTD), which has shown roughly twice the downside of value (-9.8%).
- At a sector level, that same pressure on growth shows in the underperformance of Communication Services (-31%) and Information Technology (-22%), and with Consumer Discretionary (-24%) also suffering due to its particular sensitivity to economic conditions.
- Even in the face of slowing growth, classically cyclical sectors have performed relatively well (e.g., Energy +49%, Industrials -11%, Financials -15%, Materials -16%).

Outlook

- As multiple compression now gives way to a focus on earnings as the key determinant of stock performance, investors need to be mindful that not all earnings are created equal: the composition of earnings could carry significant forward-looking implications as companies battle global supply chains, financing costs, fickle consumer demand, and other headwinds.
- Earnings forecasts do not fully reflect company-level challenges ahead, and focus should turn to idiosyncratic risks and opportunities.
- With so much bad news priced into equities, there is proportionately more upside opportunity than downside risk remaining.

PCS Perspective

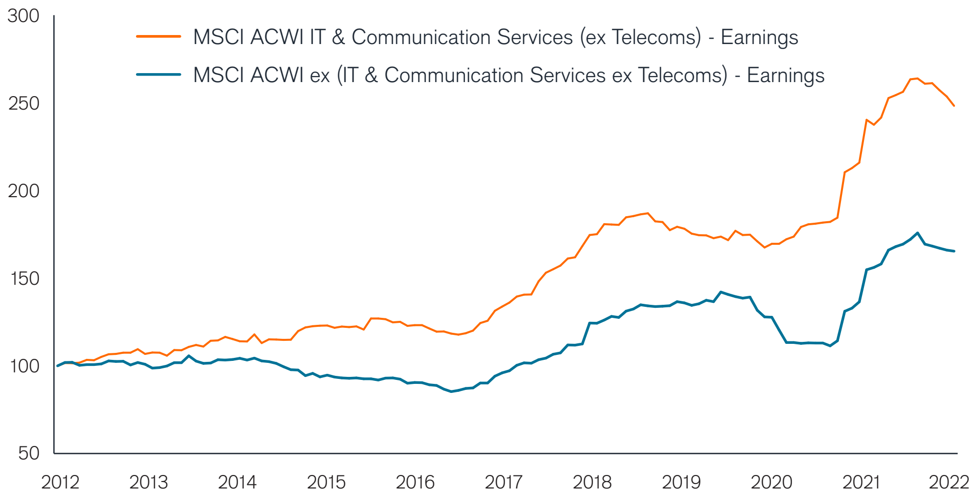
- The unique nature of this year's sell-off has given rise to an equally unique recovery environment, marked by many fits and starts, where sector and style decisions shouldn't be made according to a typical recovery playbook.
- Those typical playbooks depend on superficial categories – e.g., growth vs. value, cyclical vs. defensive – which have lost relevance for this unique recovery.
- Instead, think mechanically and map today's biggest risks to the moving parts of individual companies: e.g., margins, leverage, competitive landscape, management strategy.
- To simplify this extremely complex task, our MOAT framework for quality equity investing seeks to identify individual stocks which mitigate – and even capitalise on – today's biggest risks so that investors can defend against stagflation and be prepared for the subsequent upside.

EQUITY: TECHNOLOGY

WHY INVEST IN TECH STOCKS NOW?

Superior earnings growth

Tech sector earnings vs. non-tech earnings (%)



Source: Janus Henderson Investors, Bernstein, as at 31 August 2022.

Note: Rebased to 100 at 31 May 2012. Tech sector earnings chart compares earnings in the MSCI ACWI IT & Communication Services (ex Telecoms) Index to the MSCI ACWI (ex IT & Communication Services ex Telecoms) Index. Based on trailing earnings. Prior to December 2018, the custom index of MSCI ACWI IT & Communication Services includes companies that were originally in the Technology sector and companies that are currently in the Communication Services sector.

Strongest balance sheet & free cash flow

Tech demonstrates balance sheet strength

Sector	Net cash as % of market cap	EV/FCF Yield
Information Technology	**-1%**	**3**
Healthcare	-9%	5
Consumer Staples	-13%	4
Consumer Discretionary	-15%	4
Materials	-16%	6
Energy	-17%	9
Communication Services	-19%	5
Industrials	-26%	4
Utilities	-65%	2

Source: Janus Henderson Investors, Credit Suisse, as at 11 July 2022. Data is for MSCI World Sector Indices excluding the Financials sector. Net cash shows total cash on the balance sheet minus debt, cash shows purely the cash on the balance sheet. 'Net cash as % of market cap' is a measure of the net cash on a company's balance sheet as a percentage of its total market capitalisation. EV/FCF yield is the reciprocal of the Trailing Enterprise Value (EV)/ Trailing Free Cashflow (FCF).

PCS TRENDS & OPPORTUNITIES

YTD Recap

- Rising interest rates and inflation highlighted weaknesses amongst tech companies' business models, which have enjoyed easy monetary conditions for over a decade to fund growth.
- While the technology sector was hit hardest, the market has shown a preference for profit-making companies that can be more resilient in a higher-rate environment.
- Some of the decade's best tech performers suffered YTD losses of over 50%, bringing down their PE ratios to levels comparable to slower-growth consumer staples, with the S&P 1500 IT Index PE at 22.2 vs 21.0 for the S&P 1500 Consumer Staples Index.

Outlook

- Higher rates make funding difficult and expensive. Unprofitable tech firms must take drastic measures and reduce cash burn to survive. Amongst such firms we expect reductions in headcount, marketing, and R&D budgets.
- Higher quality, more profitable firms can reinvest profits into R&D, taking market share from those struggling.
- Despite the macroeconomic outlook, technology retains a critical role in the future of society, and we expect the sector to have the ability to rebound as uncertainty subsides. The winners during this challenging environment are likely to generate significant profits and share price gains.

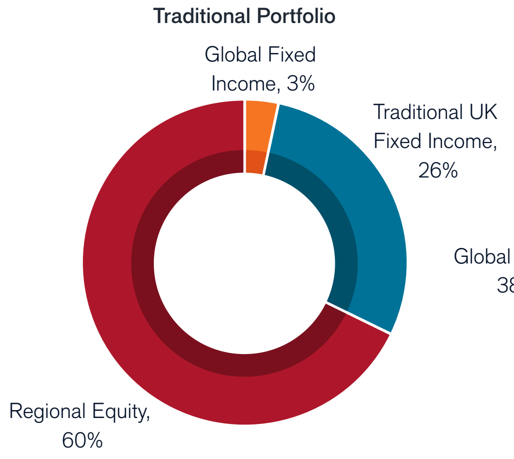
PCS Perspective

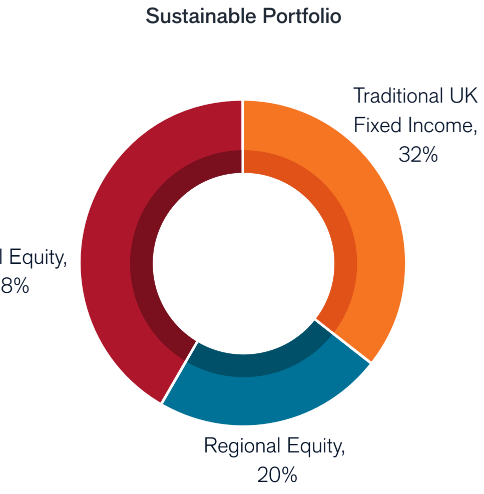
- We believe it is time to rethink tech exposure in portfolios. Cash is king and fundamentals matter more than they have in the past 10 years. A prudent approach would be to focus on investing in firms that are profitable or with a self-sufficient and clear path to profitability.
- Technology is a highly fragmented market where unprofitable and/or highly leveraged companies can make up a significant proportion of the index.
- Consider active strategies that focus on profitable companies with the ability to grow market share and possibly acquire loss-makers, increasing their longer-term growth potential.
- While we expect more volatility and potential for further downward earnings revisions, price drops along the way can provide opportunities to re-establish an allocation to technology.

SUSTAINABLE INVESTING

2022 – A DEFINING MOMENT

Average advisors' traditional vs. sustainable moderate allocation, 2020 and YTD risk and return



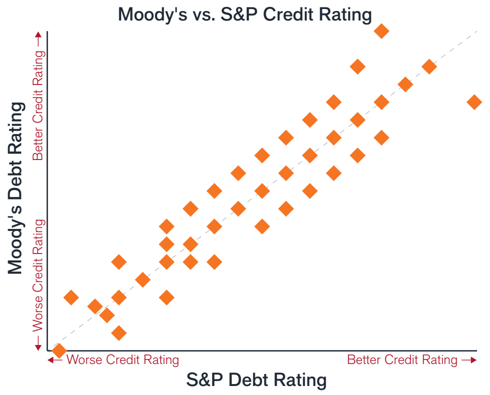


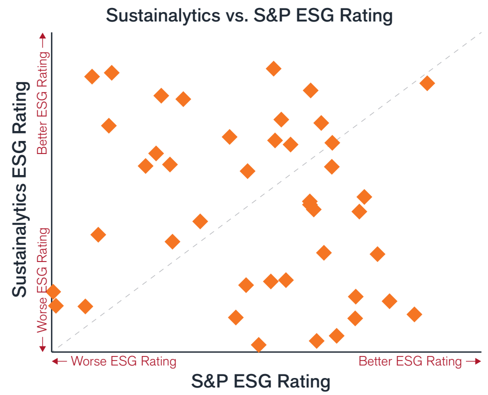
	2020	H1 2022
Return	10.0%	-8.8%
Risk	16.2%	12.9%

	2020	H1 2022
Return	12.1%	-10.5%
Risk	13.7%	15.9%

Source: Janus Henderson Portfolio Construction and Strategy, as at 30 June 2022. Past performance does not predict future returns. Average UK advisor allocation based on data shared with the PCS team by UK financial advisory clients.

Credit ratings vs. sustainability ratings: a lack of consistency





Source: Janus Henderson Portfolio Construction and Strategy, S&P, Moody's, Morningstar.

PCS TRENDS & OPPORTUNITIES

YTD Recap

- Europe is grappling with an energy shortage just when governments have pledged to reduce carbon emissions. The move towards greater sustainable energy production while trying to 'keep the lights on' leaves policy makers and investors with a significant moral dilemma.
- Following a strong year of risk-adjusted returns and large inflows in 2021, sustainable portfolios have come under pressure in 2022, largely due to their growth-orientated nature.
- On top of tumbling returns, the Russia-Ukraine war has led sustainable investors to reassess how they ultimately define sustainability and to reconsider how best to achieve sustainable goals while navigating a global energy and food crisis.

Outlook

- Despite regulators' efforts to harmonise ESG data and to tackle 'greenwashing', inconsistent, incomplete, contradictory, and backward-looking ESG ratings will remain a headache for investors and a challenge to thoroughly assess sustainable assets in portfolios.
- The asset management industry is yet to offer a sufficient number of sustainable strategies within asset classes and countries, particularly those that focus on the UK, emerging markets or value-oriented strategies. Such strategies are essential building blocks for a well-diversified and robust portfolio.

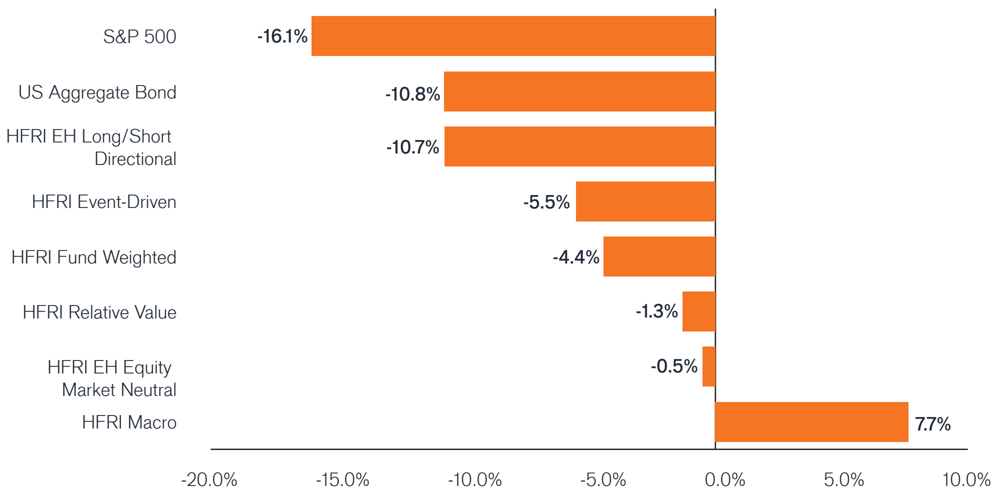
PCS Perspective

- Sustainability remains a diverse investment theme and this year's events have highlighted the moral dilemma of economies to move towards greater sustainable energy production while at the same time 'trying to keep the lights on'.
- With no off-the-shelf ESG solution available for every investor, we believe that tailor-made active solutions, proprietary tools and research, coupled with experience and expert judgement are essential when trying to build successful ESG portfolios.
- We believe that sustainable investing offers the opportunity for investors to add long-term value. An active and forward-looking approach is key when navigating constant change and short-term noise in the ESG space. Relying on passive strategies comes with unintended risks and biases, which could diminish the diversification benefits of a well-constructed portfolio.

ALTERNATIVES

THE RIGHT TIME, THE RIGHT PLACE?

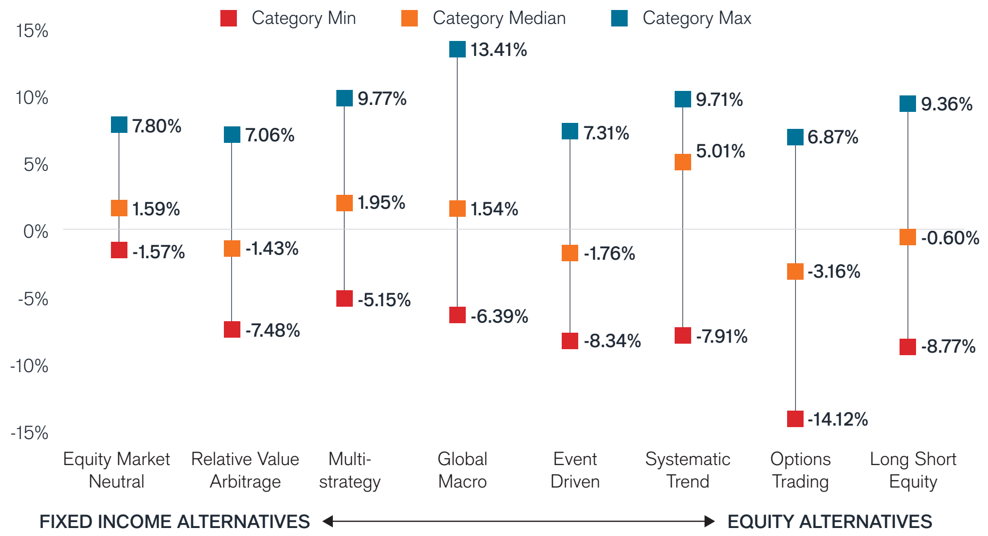
Broad range of outcomes



Source: Morningstar, HFR, Inc., and Janus Henderson PCS. Period: YTD to 31 August 2022.

Due diligence is mandatory – wide dispersion in performance outcomes

Trailing 5 year returns



Source: Morningstar and Janus Henderson PCS. Period: 5 years from Sept 2017 to August 2022.

PCS TRENDS & OPPORTUNITIES

YTD Recap

- As the world's major central banks have focused on fighting inflation, against a backdrop of slowing economic growth and latent geopolitical risks, both bonds and equities have sold off.
- Alternatives have delivered, on average, lower drawdowns and less volatility than equities and fixed income. In YTD, the broad HFRI Fund-Weighted Index posted a -6.0% return versus -16.1% for the S&P 500 Index and a -10.8% for the US for the Bloomberg US Aggregate Bond Index.
- As expected in volatile environments, there was significant return dispersion across different HFR alternative strategy indices.

Outlook

- Alternative investments, and the uncorrelated returns they can generate, offer a potentially attractive proposition for clients looking to diversify their portfolios and reduce volatility.
- The macroeconomic outlook remains murky. The return potential for both equities and bonds remains highly uncertain amidst potentially higher inflation and interest rates than those experienced in many years.
- Unconstrained strategies that benefit from higher rates and/or volatility (Long/Short, Relative Value, Global Macro, and Trend Following) could offer diversified sources of returns, helping to defend portfolios in this environment.

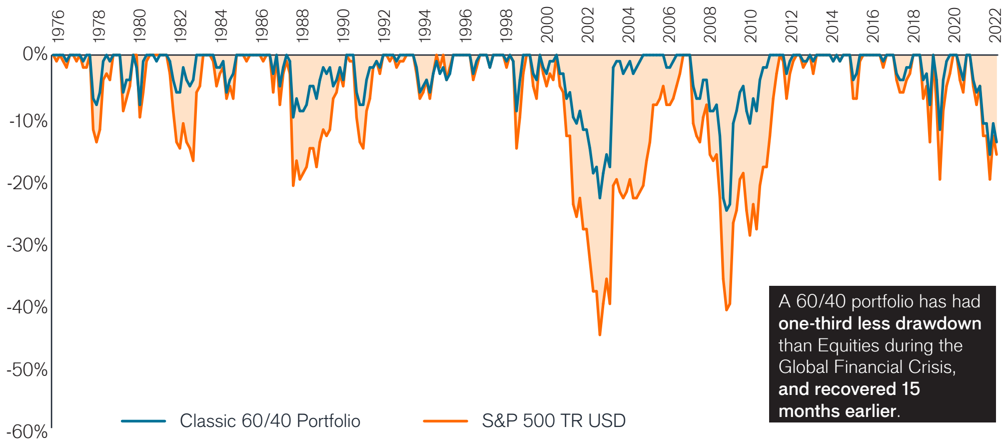
PCS Perspective

- The importance of alternative investments has intensified this year and we believe they will form an even more critical role in portfolio construction going forward.
- We think investors need to identify what role an allocation to alternatives can perform in their portfolios, whether that be to diversify away from equities and fixed income or potentially dampen overall portfolio volatility.
- The current environment highlights the importance of allocating to different alternative strategies to improve diversification. Combining two or more alternative strategies can also potentially aid in dampening a portfolio's overall volatility and limiting drawdowns.
- Be intentional about funding allocations and use strategies that will target the areas of your portfolio that most concern you.

BALANCED STRATEGIES

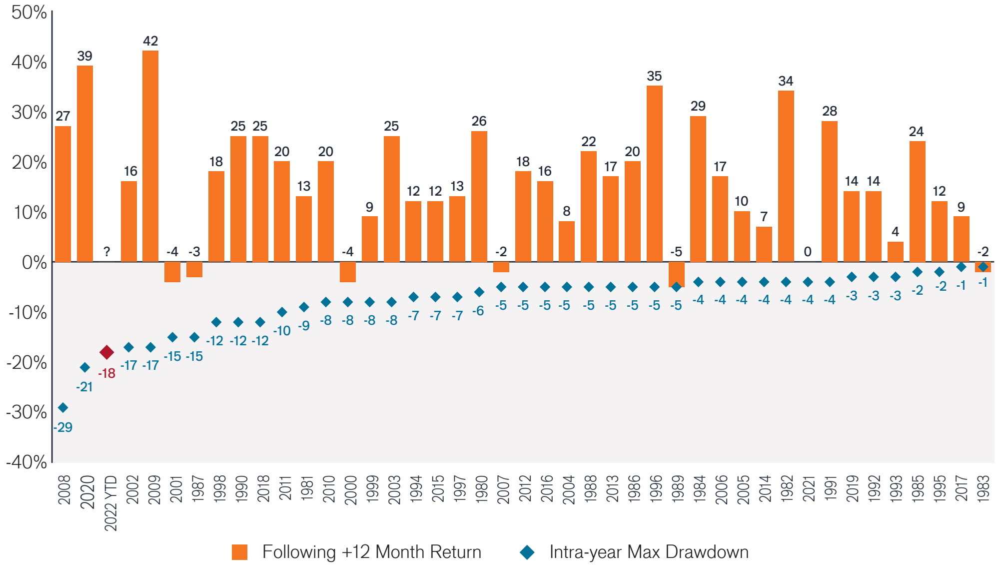
MANAGE MARKET VERTIGO WITH A BALANCED APPROACH

Diversification and risk mitigation: The 60/40 portfolio historically experienced lower drawdowns and faster recoveries



Source: Bloomberg, Portfolio Construction and Strategy, as at 31 August 2022.[1]

60/40 portfolio intra-year declines in perspective



Source: Morningstar, Portfolio Construction and Strategy, as as at 31 August 2022.

YTD Recap

- During the first half of the year, equities entered into bear market territory as a result of rising global inflation, geopolitical conflict, and central banks embarking on a regime of quantitative tightening (QT).
- Unfortunately, this strong shift to QT sent bond returns sharply negative alongside equities, resulting in underwhelming performance for the classic '60/40' equity/bond portfolio.
- In fact, the 60/40 has seen its worst six-month drop since 1988 and its second-worst year (so far) in total returns since the Global Financial Crisis (-16.1% in the first half of 2022 vs. -22.1% in 2008).[1]

Outlook

- The sell-off in both equity and fixed income markets can largely be attributed to the shift from a quantitative easing to a tightening environment, and we believe much of the repricing has already occurred.
- A successful allocation to a balanced fund may help investors maneuver these difficult markets by encouraging them to stay the course and avoid the temptation of market timing.
- Although returns have been painful, a double-digit decline in a 60/40 portfolio is not uncommon. History shows us that investors who were patient with their portfolios during corrections were often rewarded with a rebound within the 12 months following a bear market.

PCS Perspective

- Balanced strategies comprise a large, diverse category of managers that can be primarily used in three different ways, with three different risk considerations:
  1. To outsource an entire portfolio: Consider pairing differentiated managers to reduce idiosyncratic risk
  2. As a core portfolio: Counterintuitively, seek out managers with higher correlations to a typical 60/40 allocation, indicating higher core and lower satellite exposures, but with solid alpha generating credentials.
  3. As a tactical overlay: Avoid managers categorized as merely 'static' or 'dynamic' and focus on 'flexible' (i.e., largely unconstrained) managers to maximise diversification.
- A successful 60/40 'balanced' allocation needs a clear intention as to its role in the broader portfolio, including risk behaviour, time horizon, and objective, as well as a thorough due diligence of its regional, sector, and asset class exposures.

ABOUT THE PORTFOLIO CONSTRUCTION AND STRATEGY TEAM

The PCS Team performs customized analyses on investment portfolios, providing differentiated, data-driven diagnostics. From a diverse universe of thousands of models emerge trends, themes and potential opportunities in portfolio construction that we believe will be interesting and beneficial to any investor.

FOR MORE INFORMATION, PLEASE VISIT JANUSHENDERSON.COM

Janus Henderson INVESTORS

CCAT_3719_0922_PCS_EMEA