



Adapting to a New Investment World

Investors face new opportunities and challenges as we head into 2023.

November 2022

KEY INSIGHTS

- While 2022 was challenging, with both global equity and fixed income markets falling in tandem, the future may bring higher expected returns but also higher volatility.
- We believe that investors should consider five ways to adapt to the new investment world. We explain each of these in detail in the following article.
- We believe that a well-managed, well-diversified multi-asset strategy could be an efficient one-stop solution to potentially benefit from all five suggested approaches.

Introduction: 2022—A Difficult Year for Investors

This year has been disappointing for investors in public markets. Equity and fixed income investments across the globe have fallen sharply after strong returns, particular to equity markets, leading up to and after the coronavirus pandemic. What made 2022 especially challenging was that both equity and fixed income markets fell in tandem, making it very difficult to diversify portfolios. Figure 1 illustrates this, using returns of US equities and US Treasuries for calendar years since 1928. This year is a clear outlier in a historical context.

Figure 2 highlights the five worst years since 1992 for a portfolio of 50% global equities and 50% global bonds. We consider portfolios made up solely of global equities and global bonds, represented by the MSCI All Country World Index (ACWI) measured

in euros (EUR) and the Bloomberg Global Aggregate Index hedged to EUR, respectively, throughout this paper. While many other investment types are possible within a multi-asset portfolio, we believe the overall findings would be generally similar.

It is noticeable that the losses on such a supposedly 'balanced' portfolio in 2022 would have been close to those seen in 2008 during the depths of the global financial crisis. Unlike other difficult years, the decline in 2022 hit both global equities and global bonds.

A Changing Investment Environment

Falling markets have brought one silver lining, however. Valuations in equity and fixed income markets, which stood at multiyear highs for many markets as we entered 2022, have fallen back sharply.

The yields on US 10-year Treasuries had only been lower 13% of the time over the 15 years to the end of 2021, but this has



Michael Walsh
Multi-Asset Solutions Strategist



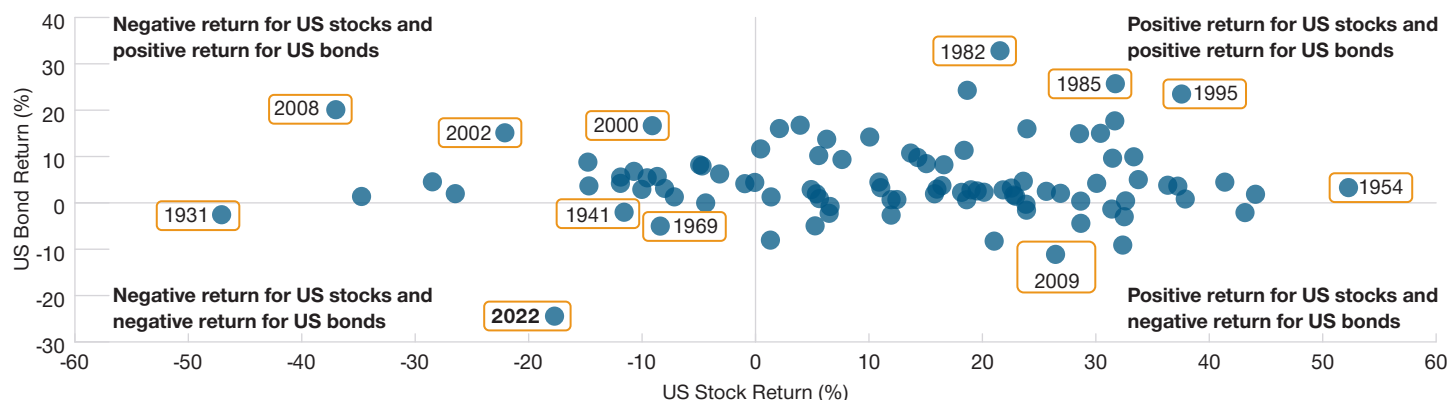
Yoram Lustig
Head of Multi-Asset Solutions, EMEA

“Unlike other difficult years, the decline in 2022 hit both global equities and global bonds.”

— Michael Walsh
Multi-Asset Solutions Strategist

Calendar Year Total Returns of the S&P 500 and US 10-Year Treasury

(Fig. 1) For the period 1928 through 2022 (to 30 September)



As of 30 September 2022.

Past performance is not a reliable indicator of future performance.

Based on annual total returns measured in US dollars (USD).

Sources: S&P 500 Index and US 10-year Treasury (see Additional Disclosures). Analysis by T. Rowe Price.

now changed drastically. Government bond yields, credit spreads and equity valuation multiples now generally look close to, or below, average levels seen over the period.

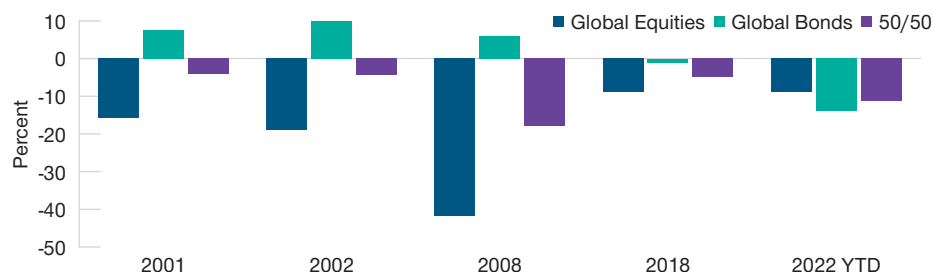
Lower valuations today translate to higher expected returns in the future. For fixed income, there is a strong link between yields and expected total returns. Higher government bond yields and increases in credit spreads for both investment-grade and high yield bonds have moved longer-term expected returns to investors higher.

Our equity return expectations combine three key elements: (1) dividend yields, (2) expectations for inflation and real profit growth and (3) repricing or changes in valuations over a five-year forecast period. The key driver of changes to these elements over 2022 relates to expected future valuation multiples.

Lower multiples imply more space for positive increases in the future, boosting equity returns. For equity markets outside the US, many valuation measures are now as low as they have been for the last decade or more.

Returns of Global Equities, Global Bonds and a 50/50 Mix

(Fig. 2) For selected years 1992–2022



As of 31 October 2022.

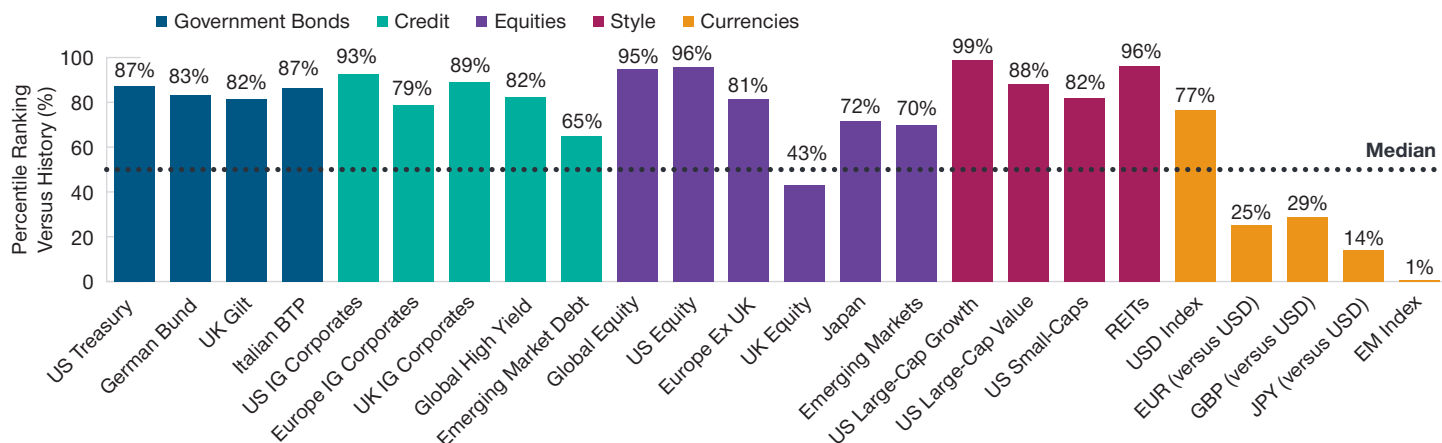
Past performance is not a reliable indicator of future performance.

Global equities—MSCI ACWI in EUR, global bonds—Bloomberg Global Aggregate Index hedged to EUR. A 50/50 mix portfolio is assumed to rebalance annually.

Sources: Index data sourced from Bloomberg and MSCI (see Additional Disclosures). Analysis by T. Rowe Price.

Valuation Comparison for Major Asset Types

(Fig. 3) Percentile rankings versus past 15 years, as of 31 December 2021



As of 31 December 2021.

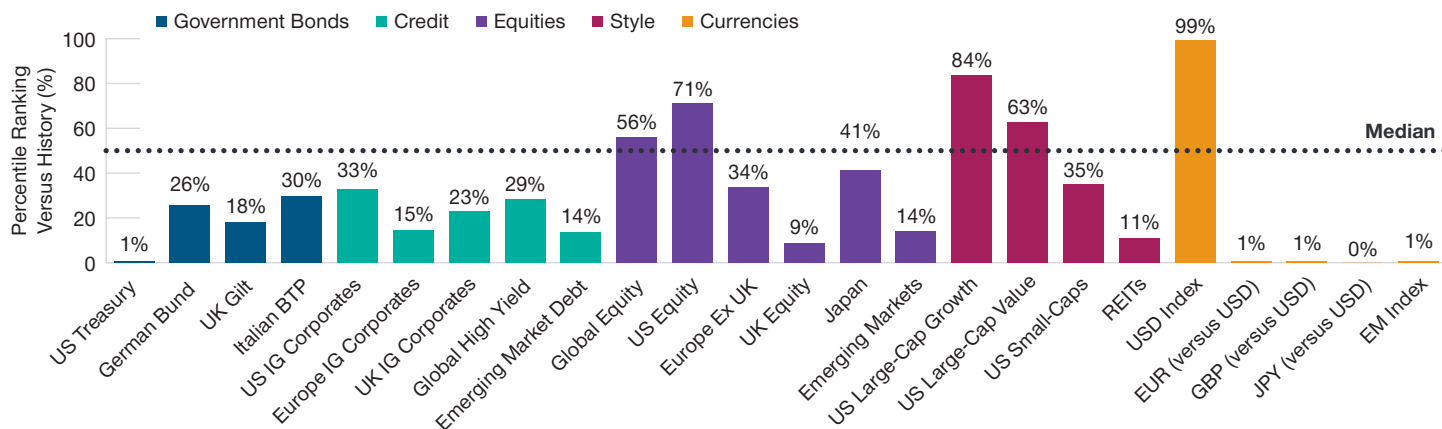
Past performance is not a reliable indicator of future performance.

Indices: US 10-year Treasury, German 10-year bund, UK 10-year gilt, Italian 10-year BTP, Bloomberg US Corporate Aggregate, Bloomberg EuroAgg Corporate, Bloomberg Global Aggregate Corporate–United Kingdom, Bloomberg Global High Yield, Bloomberg EM USD Aggregate, MSCI AC World, S&P 500, MSCI Europe ex UK, MSCI UK, MSCI Japan, MSCI EM, Russell 1000 Growth, Russell 1000 Value, Russell 2000, FTSE EPRA/NAREIT Developed, US Dollar Index, EUR spot, GBP spot, JPY spot and JPM EM Currency Index.

Sources: T. Rowe Price analysis using data from FactSet Research Systems Inc. All rights reserved. Source for Bloomberg index data: Bloomberg Index Services Limited, MSCI and Standard & Poor's (see Additional Disclosures).

Valuation Comparison for Major Asset Types

(Fig. 4) Percentile rankings versus past 15 years, as of 31 October 2022



As of 31 October 2022.

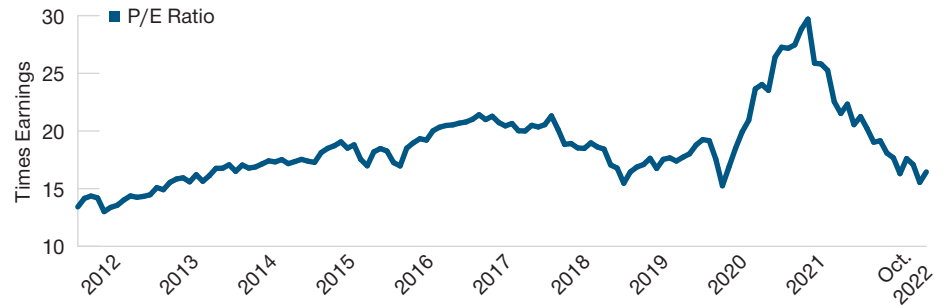
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Indices: US 10-year Treasury, German 10-year bund, UK 10-year gilt, Italian 10-year BTP, Bloomberg US Corporate Aggregate, Bloomberg EuroAgg Corporate, Bloomberg Global Aggregate Corporate–United Kingdom, Bloomberg Global High Yield, Bloomberg EM USD Aggregate, MSCI AC World, S&P 500, MSCI Europe ex UK, MSCI UK, MSCI Japan, MSCI EM, Russell 1000 Growth, Russell 1000 Value, Russell 2000, FTSE EPRA/NAREIT Developed, US Dollar Index, EUR spot, GBP spot, JPY spot and JPM EM Currency Index.

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Price/Earnings Ratio for the MSCI All Country World Index

(Fig. 5) For the period January 2011–October 2022



As of 31 October 2022.

For illustrative purposes only.

Source: MSCI ACWI data from Bloomberg (see Additional Disclosures).

This combination of rising bond yields and falling equity valuations means that expected returns have increased sharply for multi-asset portfolios. This change in potential returns is more than just a reset of the positive investor sentiment seen since the pandemic. Rising policy rates are driving higher returns on cash and increasing yields on high-quality government bonds. Uncertainty over future monetary policy, economic growth and geopolitical events has risen sharply, driving investors to demand higher risk premiums for lending by buying bonds and buying shares.

Investors looking to generate a particular nominal level of return over the long term may now need to allocate less to risky assets. If we consider our 50/50 portfolio of global equities and global

bonds at the end of 2021, targeting an expected return of 4% per annum over the next five years would have required an allocation of 67% to global equities. The same expected return would have a required allocation of 43% to global equities by the fourth quarter of 2022.

On the downside, market risk has increased; given the removal of monetary policy support in most major economies, we believe this is likely to be a structural change. Since the global financial crisis, central banks have flooded the system with liquidity, soothing investor worries and mitigating volatility. They are now focused on fighting inflation and withdrawing liquidity from markets, often leading to more nervous investors and violent price moves. We believe that recent levels of

Expected Returns on Different Mixes of Global Equities and Global Bonds

(Fig. 6) Comparing end 2019, end 2021 and end Q3 2022 data

Expected Return	End 2019	End 2021	Q3 2022
30% global equities, 70% global bonds	1.6%	1.9%	3.3%
50% global equities, 50% global bonds	2.4%	3.1%	4.3%
70% global equities, 30% global bonds	3.3%	4.2%	5.4%

For illustrative purposes only. **Figures refer to simulated past performance and that past performance is not a reliable indicator of future performance.**

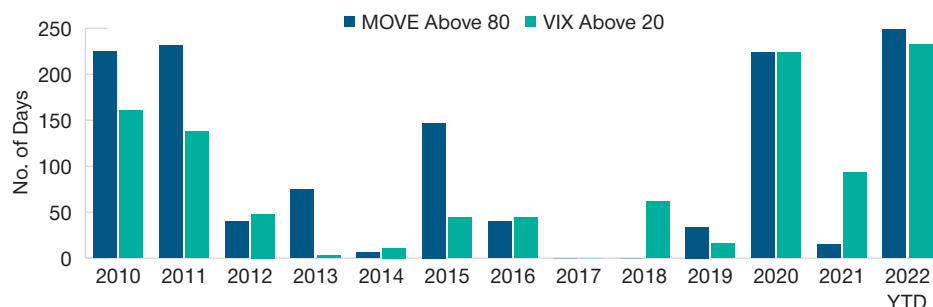
Figures are calculated in EUR. Based on total returns, gross of fees. Based on T. Rowe Price 5-year capital markets assumptions as of January 2020, January 2022 and September 2022, respectively.

“We believe that recent levels of volatility are the new normal and that the period from 2012 to 2019 is likely to have been an outlier....

— Yoram Lustig
Head of Multi-Asset Solutions,
EMEA

A Comparison of Market Volatility Levels

(Fig. 7) Number of days per calendar year where VIX index was above 20 and MOVE index was above 80, 2010–2022 (to 31 October)



As of 31 October 2022.

Past performance is not a reliable indicator of future performance.

VIX—Chicago Board of Exchange Options Volatility Index is a measure of estimates of the volatility of the S&P 500 Index, based on options markets. MOVE—ICE BofA MOVE Index is a measure of estimates of the volatility of US Treasuries of different maturities, based on options markets.

Source: Index data sourced from Bloomberg (see Additional Disclosures). Analysis by T. Rowe Price.

volatility are the new normal and that the period from 2012 to 2019 is likely to have been an outlier, as suggested by Figure 7. It is unlikely that investors are prepared for this. As a result, their portfolios may display a wider variance of returns than they expect.

When investors forecast volatility based on this historical period as the basis to construct portfolios, it creates an issue. Outcomes for portfolios which have been built with one volatility regime in mind may be riskier than is desirable in a new, more turbulent, environment.

Figure 8 shows the allocation to global equities in a portfolio of global equities and global fixed income which would

have delivered volatility of 7% per annum and 10% over two time periods: 2010 through 2019 and 2020 through 2022 to date.

Figure 8 shows the impact that increased volatility of asset classes would have even at the multi-asset portfolio level. A portfolio with around three-quarters in global equities would have delivered a volatility of returns of about 10% per annum over the 2010s. Since the end of 2019, the volatility of such a portfolio would have been over 15% per annum—a jump of more than 50%. If this persists, investors are likely to need to either accept higher risk or reduce exposure to return-seeking assets.

Experience of Different Mixes of Global Equities and Global Fixed Income

(Fig. 8) For periods 2010–2019 and 2020–2022 (to 31 October)

Allocation to Global Equities	2010–2019	2020–2022 to Date
7% volatility p.a.	53.5%	21.0%
10% volatility p.a.	76.5%	41.0%

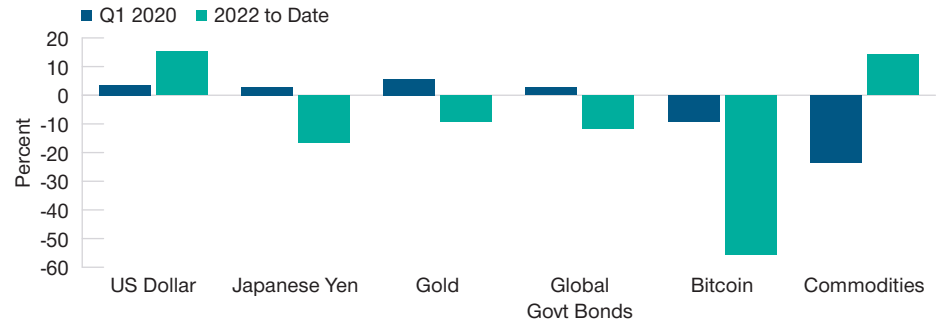
For illustrative purposes only.

Figures are calculated in EUR. Based on total returns, gross of fees. Calculations are based on standard deviation of monthly returns and assume monthly rebalancing.

Source: Index data sourced from Bloomberg and MSCI (see Additional Disclosures). Analysis by T. Rowe Price.

Experience of Different ‘Safe Havens’

(Fig. 9) Comparing Q1 2020 and 2022 (to 31 October)



As of 31 October 2022.

For illustrative purposes only. **Past performance is not a reliable indicator of future performance.**

Based on total returns, gross of fees. Calculations are in USD, except for Japanese yen and global government bonds, which are shown hedged to EUR.

Sources: Index data sourced from Bloomberg, MSCI, and Deutsche Bank (see Additional Disclosures).

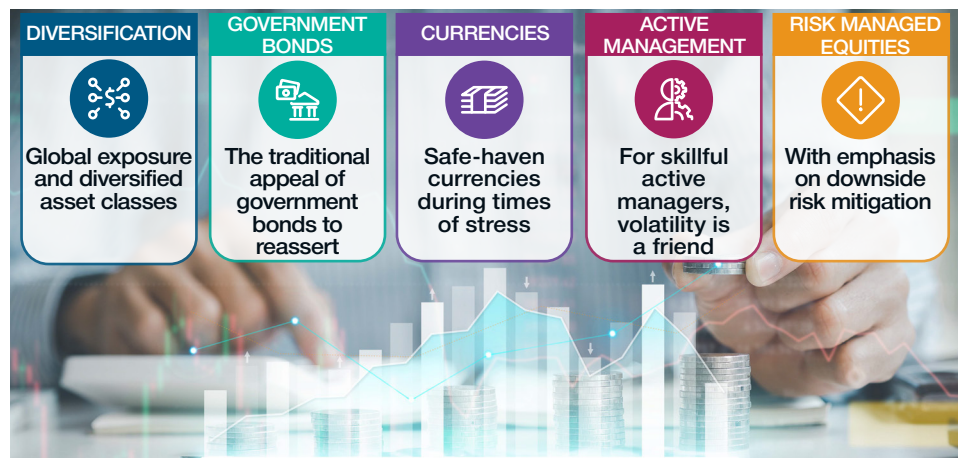
Analysis by T. Rowe Price.

This year may also force a rethink of what diversification and risk management mean in a more uncertain environment—quite simply, there has been almost nowhere for investors to hide. As Figure 9 shows, the benefits of some historical safe havens such as high-quality government bonds, gold and the Japanese yen were minimal compared to the experience during the early days of the coronavirus pandemic, for example. The US dollar was a rare exception.

By contrast, areas such as UK equities, select emerging markets and China government bonds held up well in terms of performance. But, even for investors in these countries, the benefits of home bias were limited. UK government bonds were amongst the worst-performing major bond markets so far in 2022, while Chinese equities have also considerably underperformed their global peers during the year to date.

How Should Investors Rethink Their Portfolios in 2023?

Five ways to adapt to a new investment world



Source: T. Rowe Price.

“We see the use of downside mitigation and volatility management techniques gaining interest as market turbulence persists.

— Michael Walsh
Multi-Asset Solutions Strategist



1. Global exposure and diversified asset classes: We believe this spread of returns and ongoing volatility across major markets show the importance of investing globally and having the flexibility to take advantage of a wide opportunity set actively. Returns over recent months show that no single asset type (government bonds, alternatives or precious metals) will always provide an anchor for multi-asset portfolios. In our view, looking to ‘diversify the diversifiers’ is sensible.



2. The traditional appeal of government bonds to reassert: After the recent rise in yields, government bonds may reassume their traditional role of safe haven during a very negative economic or geopolitical outcome. If market sentiment turns very negative, particularly if there is a flight to quality because of a sudden economic or geopolitical shock, the ‘return of capital’ appeal of US Treasuries, German bunds or Japanese government bonds is likely to reassert itself. More broadly, tapping the global government bond market, while systematically hedging overseas currency exposure, offers diversification and a wider investment opportunity set. In addition, inflation-linked bonds are one of the few assets offering cash flows which increase in line with inflation.



3. Safe-haven currencies during times of stress: Allocations to safe-haven currencies (such as the US dollar, Swiss franc and Japanese yen) may add to portfolio diversification at times of stress. Exposure may be obtained through tailoring the currency hedging programme within global fixed income mandates, for instance.



4. For skillful active managers, volatility is a friend: For skillful active managers, volatility is a friend. It creates opportunities as prices move away from intrinsic values. In particular, more conservative strategies which

provide genuinely uncorrelated exposure to traditional liquid markets, or even seek out opportunities to offer return streams diversified from these, have shown their worth during the year.

Utilising a mix of high-quality fixed income, select ‘risk-off’ currencies, inflation-linked assets, proven actively managed defensive and uncorrelated assets is more likely to help shield investors from what may be an increasingly volatile journey to come.



5. Equities but with emphasis on downside risk mitigation: For long-term investors, investing in equities has been one of the best ways to generate attractive returns; as we have shown, prospective returns for global equities look more attractive than they have in some years. However, to get to the long term, investors need to survive the short term. Higher volatility in equity markets is likely to mean a bumpier journey.

To help smooth the ride, investors should consider techniques which would allow them to retain exposure to shares while looking to mitigate severe downside outcomes. We see the use of downside mitigation and volatility management techniques gaining interest as market turbulence persists.

In particular, our diversified tail-risk mitigation (DTRM) programme uses derivative overlays to mitigate volatility and downside risks, focused on minimising the drag on performance.

Such programmes can be used either at the component level or across the overall multi-asset portfolio.

One advantage of DTRM is that it uses strategies that could work in different stress situations and different types of risks. This year has shown the impact that unanticipated geopolitical events can have on investments. This encourages the wider use of risk measurement beyond simple volatility measures in considering possible

Illustrative Performance of DTRM Programme as Part of a 50% Global Equity, 50% Global Fixed Income Portfolio

(Fig. 10) For period February 1999–September 2022

	All Components	ACWI	Global Aggregate (Hedged)	50% Global Equity, 50% Global Fixed Income
Return	4.40%	6.10%	2.90%	5.10%
Volatility	4.90%	14.60%	3.10%	8.80%
Return/Volatility	0.88	0.42	0.93	0.58
Equity Beta	0.29	1.00	-0.01	0.60
Correlation With Equity	0.86	1.00	-0.05	0.99
Maximum Drawdown	-10.00%	-53.40%	-15.40%	-30.20%

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Figures are calculated in EUR. Based on total returns, gross of fees. All components return is based on a portfolio made up of 50% MSCI ACWI in EUR and 50% Bloomberg Global Aggregate hedged to EUR and rebalanced monthly.

Sources: Index data sourced from Bloomberg and MSCI (see Additional Disclosures). Analysis by T. Rowe Price.

portfolio outcomes. Scenario analysis can be particularly useful to consider the effect that potential geopolitical events might have on portfolios and understanding if there are vulnerabilities to particular outcomes.

Conclusion

This year has been disappointing for investors, with only a handful of assets generating positive returns. With higher market volatility likely here to stay, we believe it makes sense to prepare portfolios for a more turbulent environment. However, it is not all

bad news. Jumps in government bond yields, wider credit spreads and lower equity valuations mean the prospects for portfolio returns in the longer term have improved.

We believe the best way to adapt to the new investment world could be through a multi-asset approach. This would allow investors to benefit from skillful active management; investing across global equity, fixed income and currency markets and including strategies with a focus on downside risk mitigation.

Additional Disclosures

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