INSIGHT.DATA.CLARITY.

20th February 2023

2023 AND BEYOND

An Enduring Case for Global Macro Strategies

Executive Summary

In this paper we present six themes that broad consensus believe will be defining in 2023 and beyond. Specifically, the performance of global macro strategies in high inflationary regimes; during monetary tightening cycles; in economic recessions, periods of heightened volatility; and when there are increased correlations between major asset classes. In addition, the rise of geopolitical tensions make global macro strategies, which are inherently flexible, likely to be among the best positioned to capture any market dislocation that could follow.

Contact details

Call us +33 1 49 49 59 49

Email us cfm@cfm.com

The year that was

In the decade pre-Covid, investors operated against the backdrop of a common global factor, namely interest rates at or near the lower zero bound, often combined with vast quantitative easing (QE) programmes. This acted as a boon for nearly all asset classes, flattering most asset managers. After Covid, however, speedy acceleration of inflation and central banks' ensuing response, albeit arguably delayed, removed this common factor.

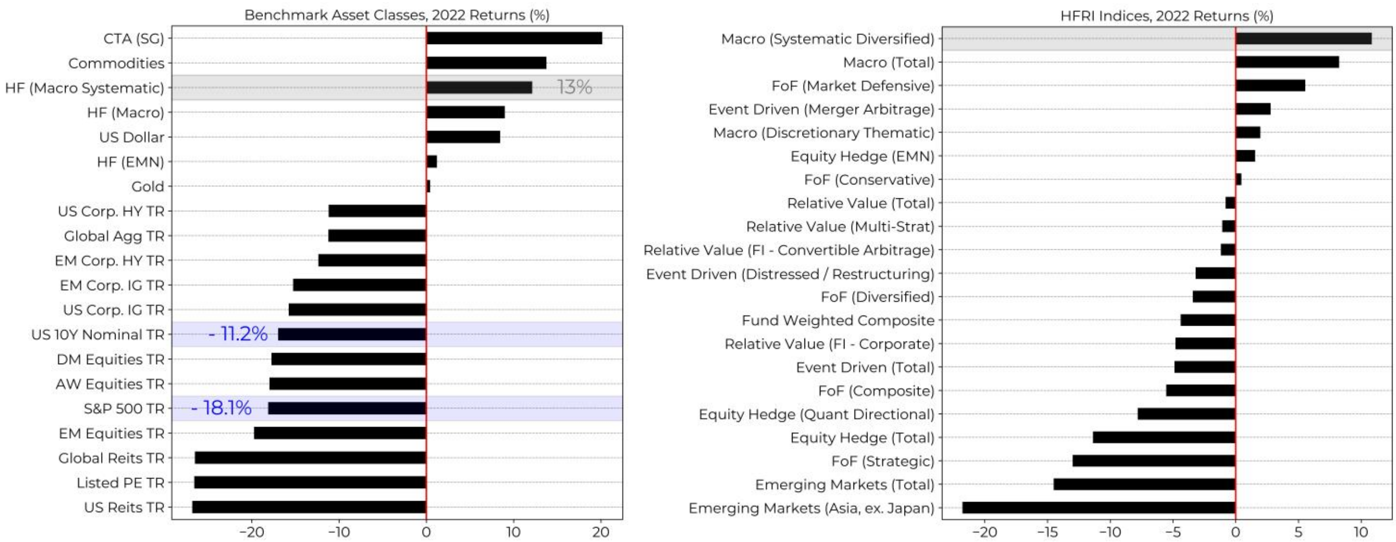
This shift in the investment environment prompted an increased dispersion among asset classes, concomitant with shifting geoeconomic and geopolitical dynamics. Global financial markets – and especially equity markets – as such, faced a bevy of risks and uncertainties going into 2022.

That year, as it turned out, is one that asset managers of just about all stripes would be desperately keen to forget.

Most equity markets registered double-digit losses, while fixed income also failed to play its role as traditional diversifier. In fact, there were precious few corners of the market investors could find shelter.

While many hedge fund strategies also laboured through a lackluster year on aggregate, macro strategies, however, posted commendable gains. These strategies – able to take positions in a relative value or directional construct and also able to execute a vast array of trades designed to take advantage of the changing environment – were well-positioned to successfully navigate the changing regime.

In fact, of the main hedge fund styles, CTAs and macro strategies fared best in 2022 – far outpacing both equity and bond markets (and, for that matter, near all other major asset classes) – see figure 1.



Source: Bloomberg, GFD, HFRI, CFM

Fig 1. Barely any major asset class delivered positive returns in 2022 – see the left-hand plot. Most equity markets ended the year significantly in the red, while fixed income markets also failed to offer protection. The Bloomberg Global Aggregate index famously recorded its worst annual return since its inception in 1990. The returns of hedge funds, in the right-hand plot, while marginally negative on aggregate (the HFRI Fund Weighted Composite Index delivered -4.2% in USD terms[1]), saw a sizeable dispersion. Macro strategies' returns were, however, more clustered, and mostly positive.

[1] All HFRI hedge fund index returns are reported net of fees

The years to come

The macro environment was a discerning driver of financial markets in 2022. At the start of 2023, and in no particular order, investors are having to evaluate the likely trajectory of inflation, guesstimate the consequent response from central banks, consider if and when a recession (in the US and elsewhere) may manifest, examine geopolitical tensions, and caution against heightened political partisanship amongst others.

In short, macroeconomic themes are to remain a key driver in 2023, and likely beyond.

This is evident, for example, when considering references to macro themes. While the volume and analyses of macro-related themes from media outlets have increased, on the 'micro' front, this macro-focused patter has seen an equally discernable increase. In figure 2 below we plot the total aggregated number of macro-themed mentions in US corporate communications since 2010. Management have ostensibly become much more uneasy about the macroeconomic backdrop – this reflected in the increased prevalence of references to these themes.

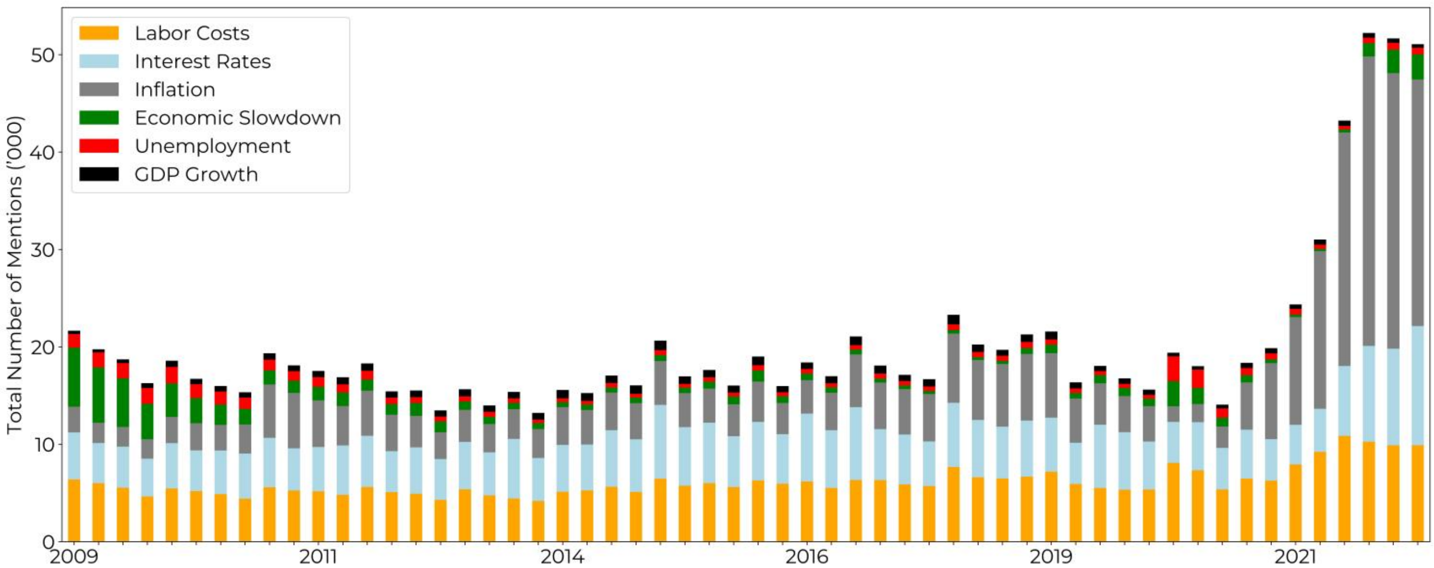


Fig 2. We search all corporate communications (earnings calls, guidance calls etc.) for a set of pre-defined macro-economic related themes (as tagged by Bloomberg), count the number of mentions, and aggregate across all companies. While the frequency of mentions remained relatively constant between 2010 and 2021, there has been a marked increase in corporates highlighting these themes from the end of 2021 onwards.

In this paper we highlight why we believe alternative strategies, but especially global macro strategies are set to remain a valuable addition to an investment portfolio. We make the case vis-à-vis six themes that broad consensus expects to be the most burning issues in 2023 and beyond.

I. Inflation

Inflation was one of the most closely watched macro drivers of 2022. We are likely to see a repeat in 2023, not least because this will be dictatory to central bank policy. Whilst inflation in the US and elsewhere has receded, massive uncertainty remains as to the trajectory of prices in 2023. It would be premature to argue that cooling inflationary pressure is a settled matter. Moreover, irrespective of the exact trajectory, inflation – especially in the US and Europe – remains well above central banks' mandates, with policy makers likely to remain cautiously on the hawkish side of the spectrum.

This will not be the forum to consider and debate a long list of probable inflation or deflationary drivers. Rather, relying on historical features, we extend a procedure from a previous note and analyse how global macro strategies might perform compared to other traditional benchmark asset classes within different inflationary 'regimes'.[2]

Our technique identifies inflationary regimes by calculating a rolling 7-year Z-score of YoY changes, as well as the difference of YoY changes in inflation. The former captures whether the inflation level over a specific window is above/below its longer-term mean, the latter whether the rate of change in inflation (or second derivative) is above/below its longer-term mean. Using this removes the need for any arbitrary inputs beyond timescales.

In figure 3 we show the average annualised returns of various traditional benchmark asset classes and alternatives within periods of high and low inflation. Amongst the major asset classes and hedge fund strategies, macro strategies have historically been one of the top performers when inflation was higher or lower than its longer-term mean.

This is consistent with an expectation that global macro strategies are among the best primed to capture dispersion across regions and especially inflation-sensitive asset classes – notably fixed income and short-term interest rates. Given the prospect of near-term central bank heterogeneity (the US Fed likely to pause, while e.g., the European Central Bank (ECB) having signaled a much more hawkish posture), and the inflation-recession balancing act hardly settled, macro strategies are expected to continue in successfully navigating this environment.

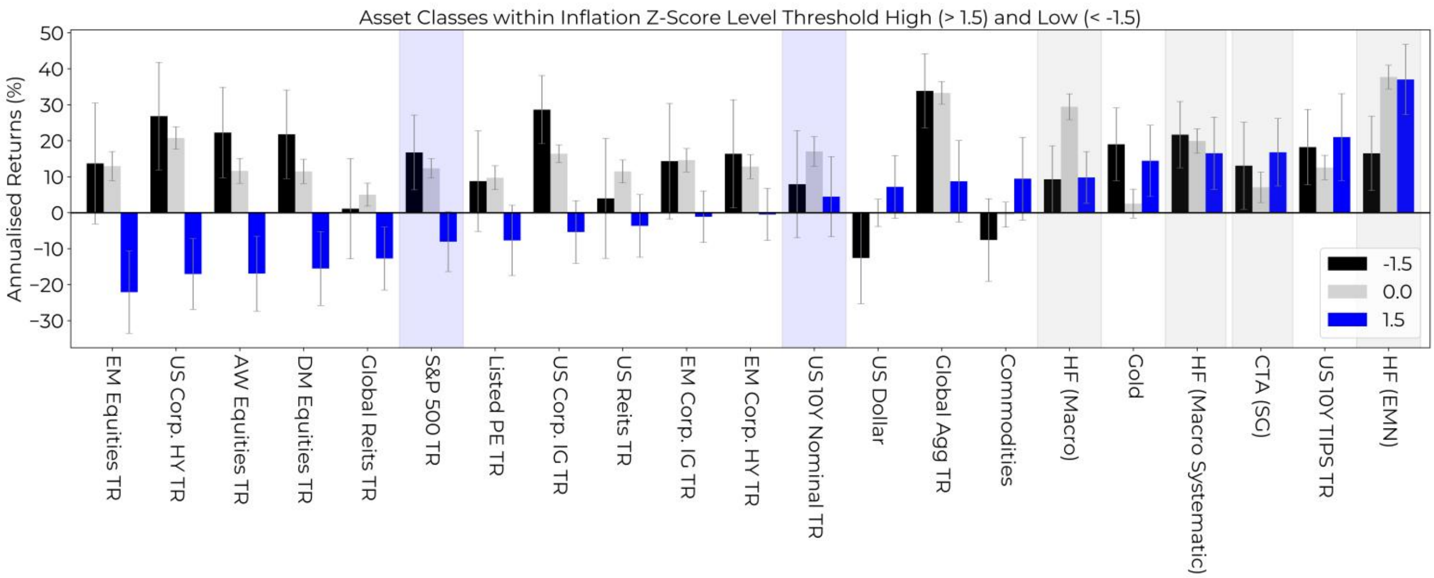


Fig 3. The annualised returns of key asset classes within high and low inflationary level 'regimes' (the same set of asset classes as used in figure 1 and using monthly returns set at the volatility of the S&P 500 TR so as to be able to compare risk-adjusted returns). We determine a Z-score threshold of 1.5 (-1.5) standard deviations as regimes of high (low) levels of inflation. Zero is the regime where the inflation is considered 'stable', i.e., fluctuating between 1.5 and -1.5. The annualised returns are ranked from best (right-hand-side of the plot) to worst (left-hand-side) as a function of high levels of inflation (1.5, the blue bars). A few noteworthy observations: Most traditional asset classes deliver negative returns in a regime where inflation is high, bar commodities, TIPS and alternatives. Systematic Hedge Fund strategies (as well as CTAs and equity market neutral strategies) have historically outperformed most all traditional asset classes during this regime, and, moreover, display a certain 'convexity' of returns – that is to say also delivering positive returns during periods of low levels of inflation.

II. Monetary policy

Necessarily linked to inflation – and expected inflation – central banks have responded assertively by raising interest rates to multi-decade highs. Moreover, despite best efforts to anticipate any dovish-shift from especially the Fed (which have

[2] We direct interested readers to our paper *Inflationary Regimes and Asset Class Performance* in which our technique of identifying inflationary 'regimes' can be leveraged to inspect the average performance of benchmark asset classes during high, low, accelerating, and decelerating periods of inflation. The paper is available here.

repeatedly professed it will be data-driven), it is likely that interest rates in most developed nations will remain at (or even rise slightly above) current levels in the near-term. At time of writing, the market-implied policy rate for the Fed one year ahead was hovering at 4.9% (higher than the current upper bound of the Fed funds rate of 4.75%), i.e., markets are expecting interest rates to remain at or above current levels for at least the next year.

Asset classes feature different levels of sensitivity to interest rates for various reasons that will be left beyond the scope of this paper. However, managers can take a cue from historical patterns to anticipate how different asset classes may behave during periods of central bank interest rate adjustments. In the same spirit as above, we assess the performance of various asset classes during periods of interest rate changes, the results in figure 4.

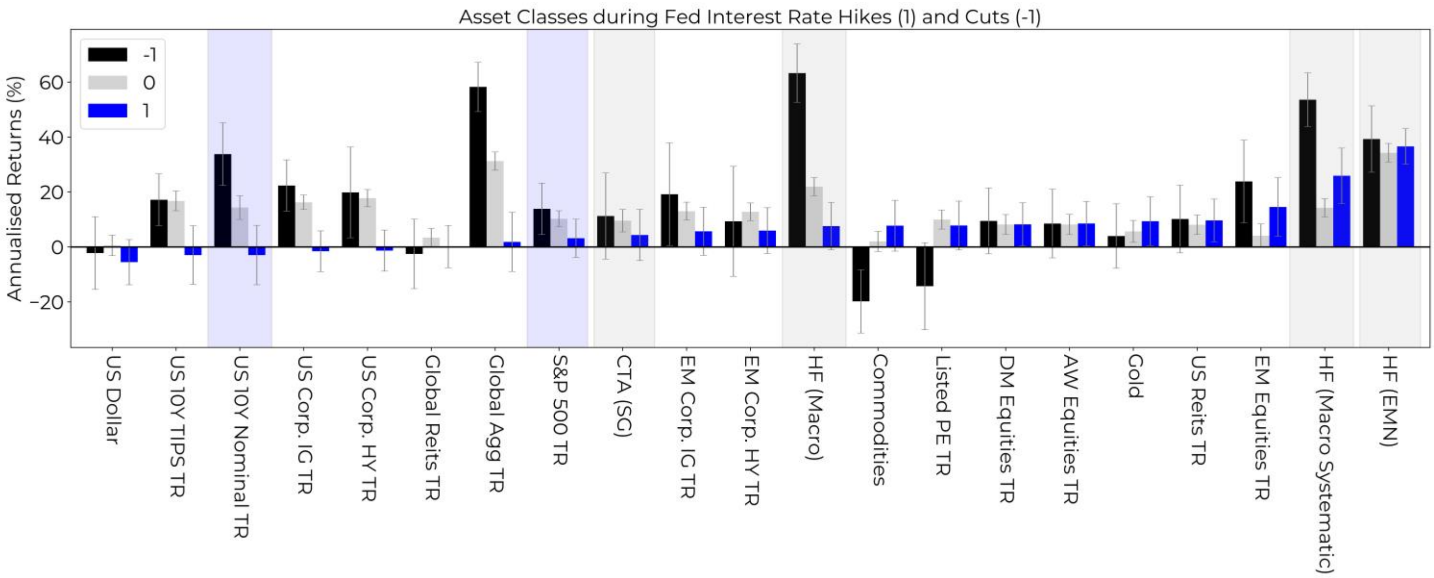


Fig 4. The annualised returns of key asset classes (all set to the volatility of the S&P 500 TR so as to be able to compare risk-adjusted returns) within periods of US Fed funds rate increases and decreases. The average annualised returns are ranked from best (right-hand-side of the plot) to worst (left-hand-side) as a function of when the US Federal funds rate increased (hikes, 1, the blue bars). During these periods, macro systematic strategies (as well as equity market neutral (EMN) strategies) fared best. These strategies also outperformed during periods of interest rate cuts (-1, the black bars). Zero indicates those periods when the Fed funds rate remained unchanged.

III. Economic growth

Another hotly debated topic is the various, probable 'landings' in the economic cycle. Again, this paper is not intended to scrutinise all the arguments for and against any recession. However, it is worth pointing to one popular indicator that is said to presage recessions – an inverted yield curve. This indicator has made headlines of late given the deep inversion of many localised spreads. The 2y-10y as well as 3m-10y spread are inverted – and have been inverted together since November 2022. We tested the historical robustness of this indicator in predicting a recession and found strong statistical evidence of its accuracy. [3]

Another consideration irrespective of when (and if, and how severe) any next recession might strike, is the willingness, and ability of governments to again come to the rescue. Governments might be reticent to provide stimulus packages that approach anything near what was observed during Covid, not least because most major developed countries now have debt-to-GDP ratios in excess of 100% (and in some cases, now far in excess – e.g., Japan, but also the United States whose debt-to-GDP ratio is hovering at 120%). This might make any recession more protracted, if not more severe – countering a recency-bias amongst investors that fiscal stimulus would again be deployed.

[3] Interested readers are encouraged to review our paper, *Using the Yield Curve to Forecast Recessions … do you feel lucky?* available on our website.

Following the same approach as the analyses above, we investigate how macro strategies, all else being equal, typically perform during recessionary periods. We calculate the average annualised returns of the major asset classes (as used throughout above) during periods of recession as classified, post facto, by the Business Cycle Committee of the US National Bureau of Economic Research (NBER). Apart from most US and global FI proxies, systematic macro strategies delivered positive returns during recessionary periods (as well as during expansionary periods) – see figure 5.

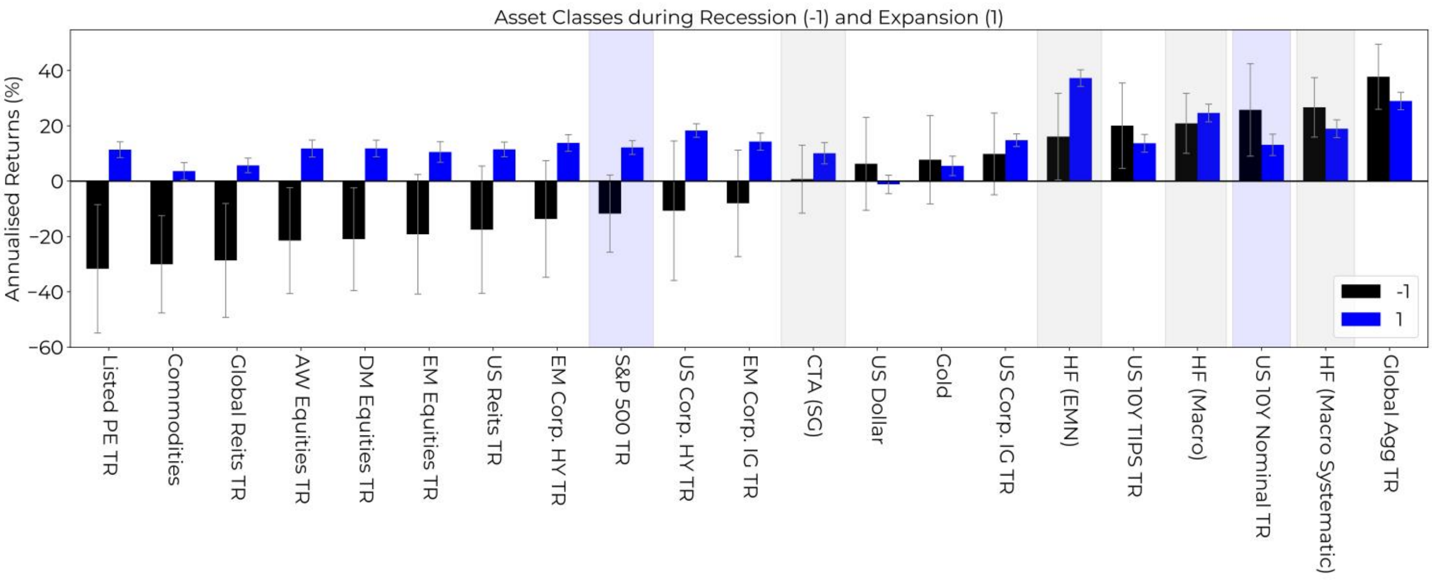
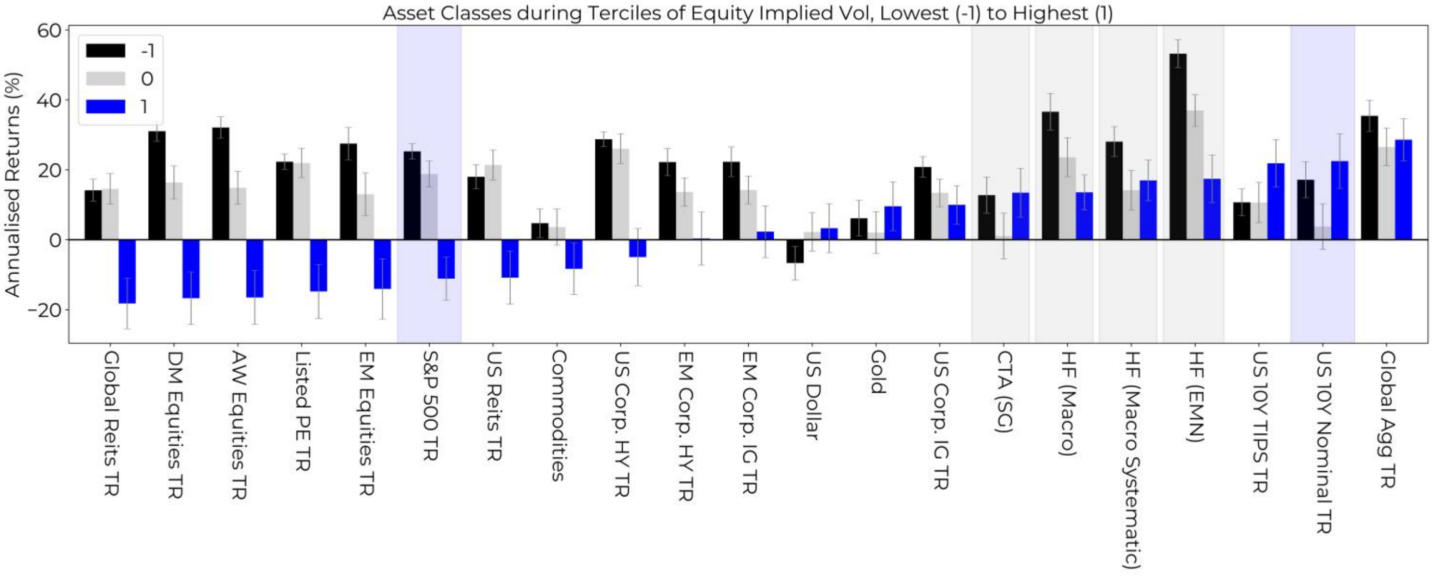


Fig 5. *The average annualised returns of each asset class (all set to the volatility of the S&P 500 TR so as to be able to compare risk-adjusted returns) ranked from best (right-hand-side of the plot) to worst (left-hand-side) according to how the asset class performed during a recession (labelled -1, the black bars). Safe-haven bonds and investment grade credit showed positive returns in recessionary periods, as did alternatives. Systematic global macro strategies not only delivered positive returns during recessionary periods, but also outperformed the fixed income asset classes during periods of economic expansion (labelled 1, the blue bars). Commodities fared particularly poorly during recessions – as one would expect, as did equities and especially REITs and private equity (here listed PE firms are used as proxy).*

IV. Volatility

There was no shortage of market-moving macro events in 2022, and 2023 is gearing up to follow suit. This given the uncertainty around the key drivers of macro performance, including inflation and economic growth as discussed above. 'Macro volatility', as measured by say the standard deviation of macroeconomic variables, have also increased. The 'great moderation' that originated in the mid-1980s, and which featured benign fluctuations in the US business cycle was upended during Covid with ripple effects still present. The complexity of the current market backdrop is also resulting in a lot of guesswork, and projection misses – reflected in the elevated spread between e.g., expected and actual economic data prints. This all results in higher levels of volatility across assets classes.

Again, in the context of drawing on historical evidence, one would expect global macro strategies to have outperformed during periods of elevated volatility and the data bear out this expectation – macro strategies outperform equities and global fixed income when the implied volatility of these asset classes is respectively higher – see figure 6. The expectation of higher volatility in the coming years should, as such, continue to provide attractive trading opportunities for macro managers.



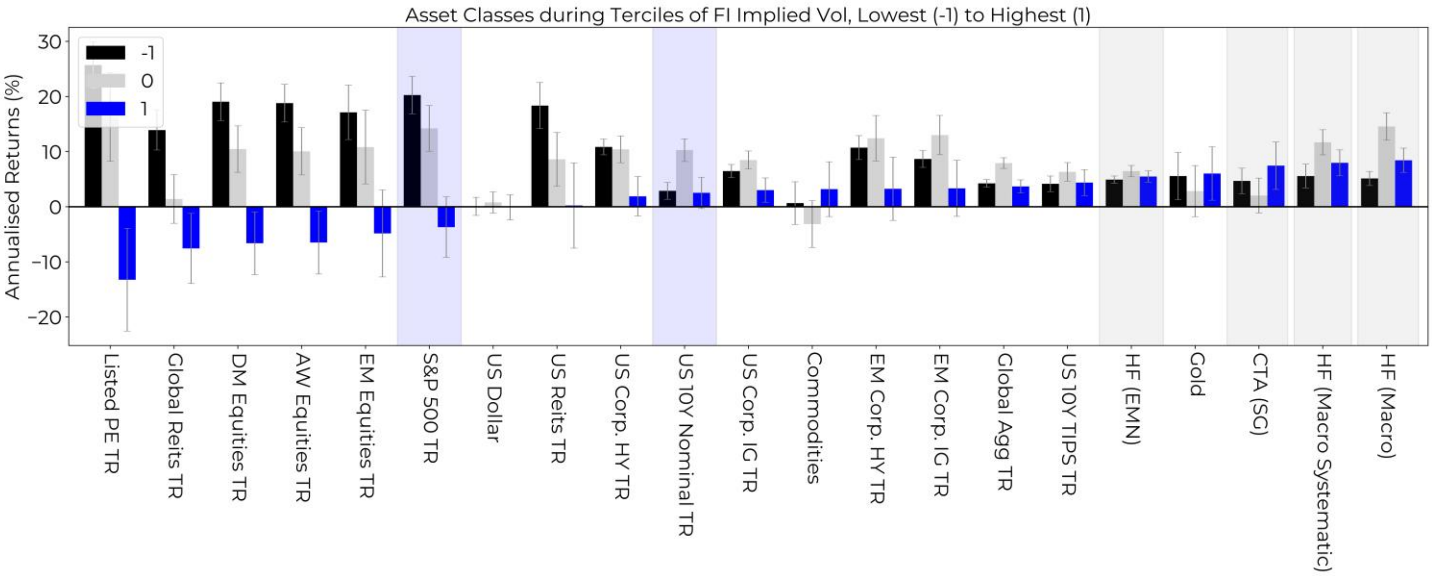


Fig 6. To compare the performance of equity and fixed income markets with macro strategies during periods of elevated volatility (all set to the volatility of the S&P 500 TR so as to be able to compare risk-adjusted returns), we take the level of both the VIX and MOVE[4] Indices and sort into terciles, the 1st tercile being when volatility is lowest (black bars, labelled -1) and 3rd tercile when inflation is highest (blue bars, labelled 1). We then sort the performance by highest volatility right-to-left for the VIX (MOVE) in the top (bottom) plot. Due to the leverage effect, the S&P 500 performs worse when equity implied volatility is higher, while the US 10-year and fixed income proxies performed best. However, systematic macro strategies (as well as equity market neutral strategies) performed comparably .and outperformed fixed income when volatility was lower. For fixed income volatility, we observe EMN and macro strategies' outperformance of near all other asset classes during periods where volatility is highest.

V. Correlations

In figures 3 and 5 above, we observe how equities feature negative, and similar performance across regions during periods of recession and decelerating inflation, while fixed income – on aggregate over the full sample – typically provided protection. Equities feature comparable performance on account of a high level of correlation between them, while the negative correlation between equities and fixed income has made bonds hitherto a mainstay ballast in portfolios.

[4] The ICE BofA MOVE Index is a weighted average of implied volatility on key tenors on the US yield curve, considered the VIX for fixed income.

There are, however, two worrying developments that should provide pause. Not only has the mean cross correlation between equity markets been steadily increasing (inter-market correlation) – which reduces the diversification potential across regions, but, as we have written previously, the negative correlation between bonds and equities has reduced and even turned positive of late[5].

There are several ways to illustrate the effect of increased correlation between equities and fixed income – the two major asset classes in many institutional portfolios – as well as how systematic macro strategies, which have, and continue to show low correlation with traditional benchmark asset classes act as a stable diversifier. In figure 7 we plot the 50% worst monthly returns of the S&P 500 since 2020, along with the concomitant returns of both the Bloomberg Global Aggregate and Systematic Macro Hedge Fund index. For most of this period fixed income failed to protect – especially during those months where the S&P 500 registered its worst performance. Macro systematic hedge funds, however, delivered – bar a few exceptions – positive returns when equity and fixed income markets both sold off.

There has been much debate about the longevity of the traditional 60-40 portfolio, more so after the near-record negative returns such a portfolio registered in 2022. The environment that bolstered the efficacy and popularity of such an allocation, primarily low volatility, low inflation, low real yields, and central banks stepping in whenever trouble was brewing are not evidently set to endure.

An allocation to global macro strategies, however, with the ability to be long or short in each market; generating a high level of diversification by trading across many asset classes; and the ability to focus risk on the markets where opportunities are greatest contribute to its uncorrelated characteristic and can act as a diversifying pillar.

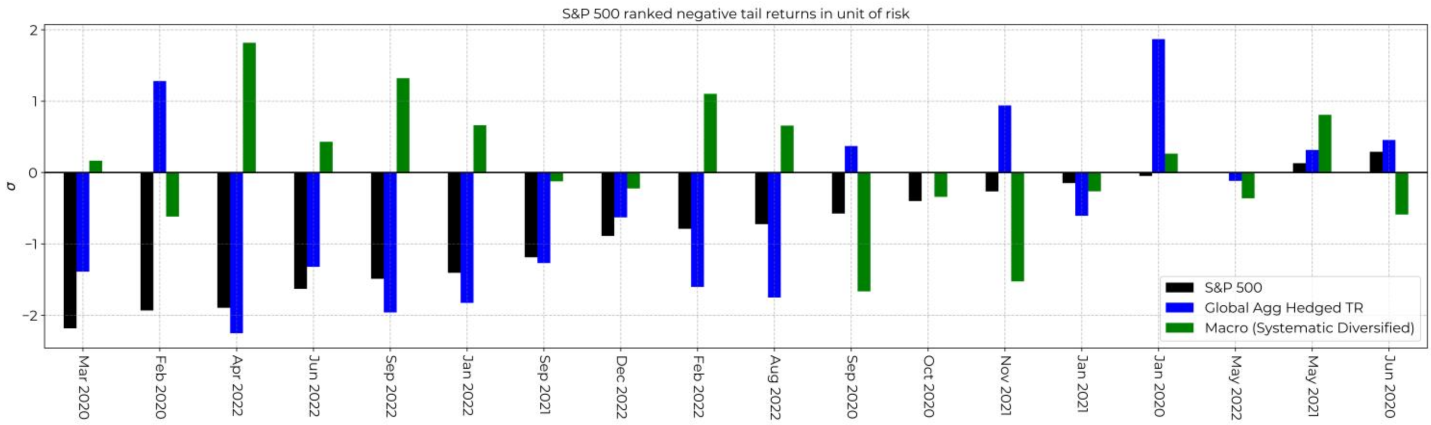


Fig 7. The plot shows the 50% worst monthly returns of the S&P 500, and concomitant returns of the Global Agg and systematic macro strategies in units of risk since 2020 (the returns of each have been normalised using a 24-month window of standard deviation). During this period, fixed income failed to provide downside protection – or hedge equity exposure – which have been a particularly painful period for the classic 60-40 portfolio. However, thanks to the uncorrelated returns of systematic macro strategies, these funds provided protection especially during the largest equity sell offs.

VI. Political and Geopolitical Risks

Two themes need stressing.

First is increased political partisanship which, in and of itself, is a very noticeable manifestation of growing populism (and nationalism). Concluding that politics have become more polarised is a merited inference based on data from e.g., polling campaigns; prevalence of tight election races; as well as sentiment in mainstream and social media. However, with the advent and development of various alternative data sets, one can now, more than ever, quantify developments in this field. This allows for a more systematic monitoring as well as, ultimately, the incorporation within the investment process.

[5] Please refer to our paper *Bond-Equity Correlations. Are the times a-changin'?* available here.

In the context of the US political landscape, for example, we measured – using Congressional voting records – the evolution of political fragmentation since the founding of the Republic. We found, irrespective of proxy, that US politics are at-or-near record levels of political fragmentation in both the House and the Senate[6]. See figure 8 left. This is significant, because higher levels of political partisanship, inter-and intra-party, is understood – with a healthy amount of academic literature confirming – to propagate various negative drags, not only on economic growth, but on policy making in general.

At a juncture where more, not less political cohesion is required, this is a worrying development. Consider for example the looming debt-ceiling discussion in the US...

The second theme is a much more polarised geopolitical landscape.

There is scope for many 'Black Swan' events, not least an escalation of hostilities in Ukraine, a US-China strategic détente, and an Iranian regime collapse. There are also a bevy of possibly more worrying 'Gray Rhinos' – highly probable, high impact events, yet being underestimated. Chief among which an escalation of aggressive posturing by China towards Taiwan, and a nuclear break-out by Iran. Again, here, an increasing number of data sources and techniques to quantify and track geopolitical dynamics are becoming available. Taking the example of just one such bespoke geopolitical risk data source, we observe that geopolitical risk is hovering near record highs. See figure 8 right.

The above, considered in combination with sticky inflation and moderating growth, can act in unison to reinforce these risks. With such a macro tinderbox, any small spark is likely to generate and exacerbate already higher levels of volatility. It is therefore unsurprising, and arguably necessary, that political (and geopolitical) risk become an ever more important metric that demands investor attention.

Global macro strategies can not only exploit this information but stand to benefit from increased volatility and dispersion in a market driven by political and geopolitical uncertainty and manifestation of any such risk-driven events.

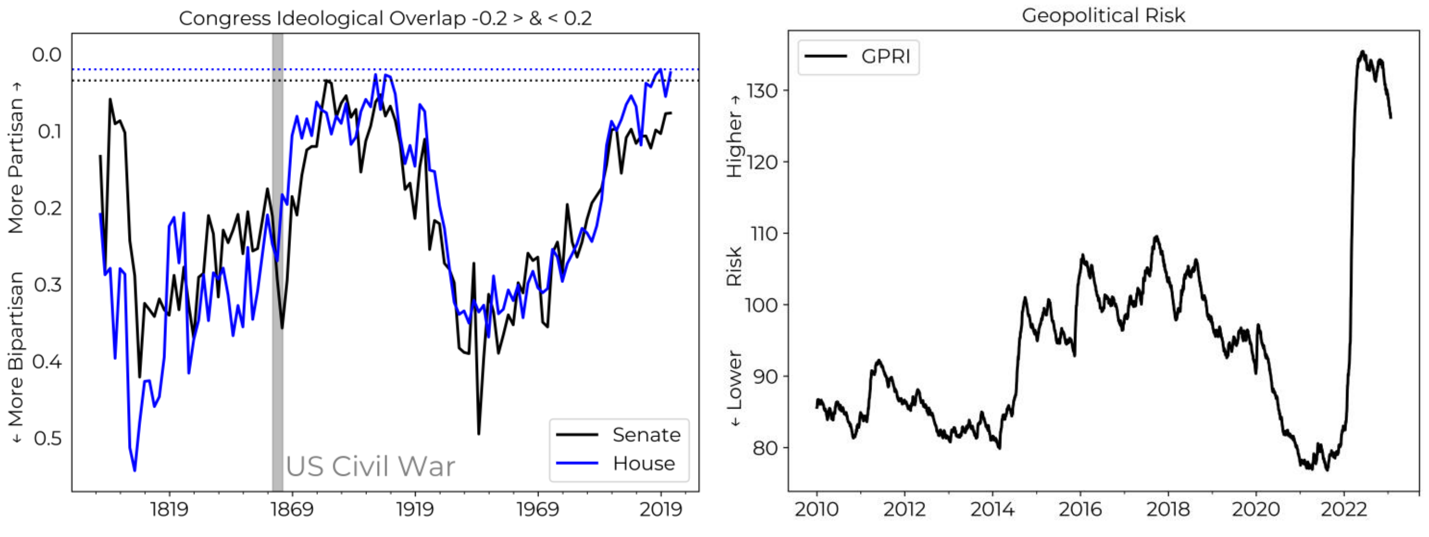


Fig 8. Using a novel dataset of Congressional voting records we calculated various measures of partisanship, in both the House and the Senate. On the left-hand side, we plot what we term an 'Ideological Overlap' measure, showing that US political partisanship, is at or near all-time highs since the founding of the Republic. This high level of partisanship is present alongside a remarkable increase in global geopolitical risk. On the right-hand side, we plot a measure of geopolitical risk created by economists at the US Federal Reserve who use text analysis on a corpus that includes most major news outlets. We show here their daily 'Geopolitical Risk Index' (GPRI) which we smoothed with a one year (250-day) rolling ema.[7]

[6] Interested readers are encouraged to read our paper *Partisanship in the US Congress. Has the US reached peak political fragmentation*? in which we propose various alternatives for calculating political partisanship in the US along with exploring the effect of increased partisanship on financial markets. The paper is available here.

[7] There is a burgeoning 'alternative data' industry that makes available data sources in addition to traditional fundamental and price data, geopolitical risk being just one of these. The GPRI is one such source and in addition to a headline global geopolitical risk index, their database includes country-level as well as theme-specific indices. Further details can be found on the Federal Reserve's website here.

Conclusion

Investors are having to grapple with a disparate set of indicators that, following the Covid pandemic, continue to muddy the outlook for the global economy. There is, however, amongst this uncertainty, some consensus as to the investment environment for the near future. For one, inflation remains too high in most countries, but central bank rate changes and any consequent market volatility don't happen in lockstep across countries, nor regions. Any policy surprises – not unlikely given the uncertainty of inflation direction, along with central bank divergence, will generate volatility and interest rate differential opportunities.

Associated is economic growth that has been moderating, but, again, there is disparity among nations, which will trigger dissimilar fiscal and monetary responses across geographies resulting in higher levels of volatility across asset classes.

A lack of political cohesion, along with geopolitical tension can generate wild swings in the market, create uncertainty, and, moreover, increase the dispersion of potential outcomes.

All and any of the above discussed themes could yet deliver surprises, creating more uncertainty and volatility.

In this environment, macro strategies – which have a flexible mandate in going long or short and, typically, hold a highly diversified portfolio of all asset classes – have more opportunities to generate uncorrelated returns with minimal dependency on the direction of risk assets.

It is our view that the outlook for the global macro industry remains favourable, given the uncertainty around some of the key drivers discussed here, including inflation, economic growth, and geopolitics. Historically, macro funds have delivered attractive risk-adjusted returns with low correlation to traditional stocks and bonds, particularly during periods of market dislocation.

In conclusion, we believe global macro strategies to be not only a good all-weather mainstay in any portfolio, but given the current outlook, also an obvious strategy to consider going into 2023 and beyond.

.

Disclaimer

CFM has pioneered and applied an academic and scientific approach to financial markets, creating award winning strategies and a market leading investment management firm.

Contact us

Capital Fund Management S.A.
23, rue de l'Université, 75007
Paris, France
T +33 1 49 49 59 49
E cfm@cfm.com

CFM International Inc.
The Chrysler Building, 405 Lexington Avenue - 55th Fl.,
New York, NY, 10174, U.S.A
T +1 646 957 8018
E cfm@cfm.com

Capital Fund Management LLP
2nd Floor, Bank Building, Smithson Plaza, 26 St James's Street,
London SW1A 1HA, UK
T +44 207 659 9750
E cfm@cfm.com