Janus Henderson INVESTORS

MARKET GPS 2023

INVESTMENT OUTLOOK

- Equities: Follow the data, not the drama
- Fixed Income: Ingredients in the mix for a more appetising 2023
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EQUITIES INVESTMENT OUTLOOK

Equities: Follow the data, not the drama

Matt Peron
Director of Research | Portfolio Manager

Matt Peron explains why tighter financial conditions should lead to a mid-cycle adjustment in the U.S. rather than recession and how equities investors – by focusing on quality growth companies – can dampen headwinds posed by softer earnings.

Key takeaways

- With much of the underlying economy on steady footing and no apparent source of systemic risk, the U.S. economy is likely facing a mid-cycle adjustment rather than a deep contraction.
- Although the damage caused by compressing valuation multiples has mostly run its course, equities investors still need to brace for earnings downgrades as the global economy slows.
- By focusing on quality companies with strong balance sheets and sustainable, organic growth prospects, investors have the potential to lower their exposure to any broader equity market losses.

Throughout 2022, equities investors have had difficulty reconciling the corporate sector's sturdy financials with the expectation that aggressive monetary tightening will lead to materially slower economic growth. Complicating matters are investors' thus-far unanswered prayers that the Federal Reserve (Fed) and other central banks may not be fully committed to their hawkish path and could either pivot at the first sign of inflation easing or get cold feet when facing recession. This unfounded optimism has been on display during a series of ephemeral rallies of at least 6% during the course of the year while stocks' downward trend remained intact.

We believe investors must come to grips with the fact that the era of ultra-low rates providing a tailwind for equities is coming to an end. And although the path toward policy normalization will continue to be bumpy – especially while inflation remains elevated – there are signs that the most dire predictions of a sustained bear market and economic gloom, particularly in the U.S., are overblown. After having capitalized on low rates and pandemic-era stimulus, both consumer and corporate balance sheets are in good shape, earnings have proven surprisingly resilient, and the U.S. labor market continues to show strength.

Given this backdrop, we expect that additional rate increases – albeit at a possibly slower pace – should result in the U.S. experiencing a mid-cycle adjustment rather than a steep economic downturn. This possibility alone is an indication of the Fed's diminished role in supporting asset prices. Consequently, investors would be well served to reference their market-cycle playbooks when determining how to position their equity allocations.

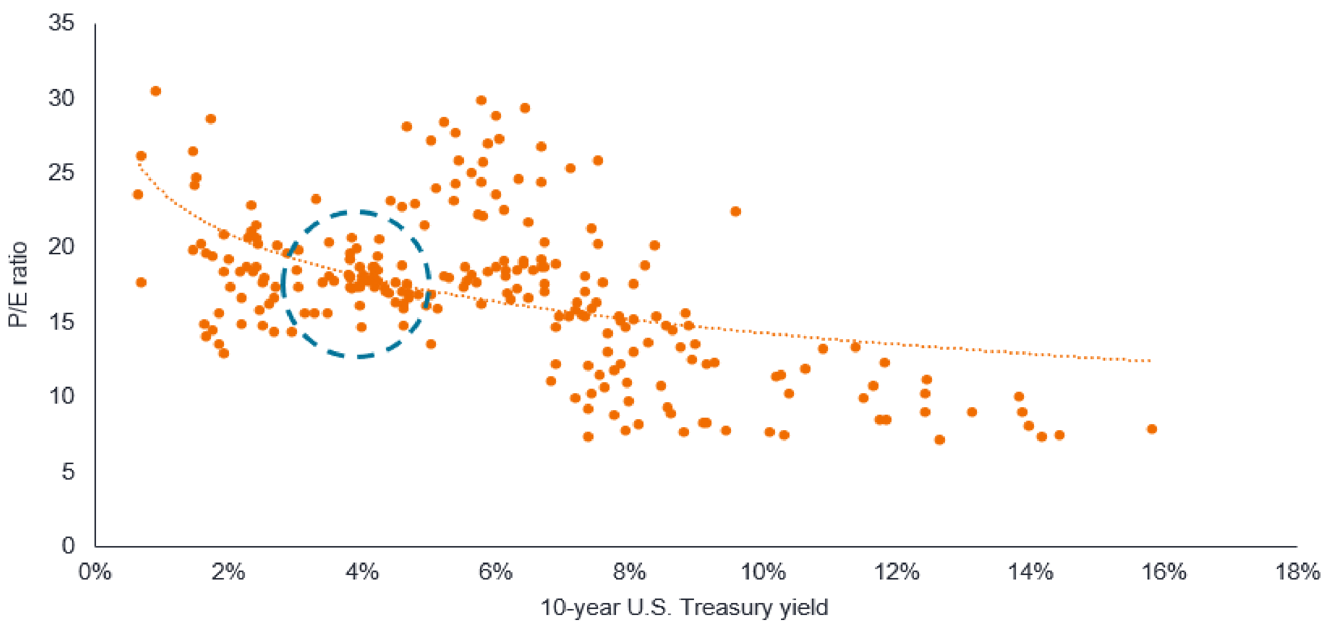
Inevitably, a slowing economy and higher cost of capital will weigh on corporate prospects. To weather this period, we believe investors should prioritize companies that exhibit *quality*. These businesses, with their sound balance sheets and ability to generate stable earnings throughout the market cycle, should prove more resilient than weaker peers and could propel them to emerge from a downturn in a stronger competitive position.

A painful, but necessary, rerating

The negative equity returns of 2022 were largely driven by multiple compression as previously elevated price-to-earnings (P/E) ratios were brought back to earth. Much of this was due to the math of higher discount rates decreasing the present value of a company's expected earnings streams. The pace at which rates reset was startling, but the result was not. During a decade of suppressed interest rates, equity valuations soared as companies borrowed on the cheap and investors bid up riskier asset classes in the search for yield and growth. But by October, the full-year 2022 P/E ratio of the S&P 500® Index had slid 30% to 16. This level, however, aligns with what we would expect with the cost of capital – as represented by the yield on the 10-year U.S. Treasury – at 4.0%, which is roughly the midpoint of its recent range.

Figure 1: Relationship between 10-year U.S. Treasury yield and S&P 500 P/E ratio

Over the longer term, a 4.0% yield on the 10-year Treasury tends to align with a forward P/E ratio of roughly 16.



Source: Bloomberg, as at 10 November 2022. Regression based on monthly data of 10-year U.S. Treasury yields and trailing 12-month P/E ratios of S&P 500, which is highly correlated with forward-looking multiples.

With valuation multiples having fallen to – and in some cases below – historical averages and the 10-year yield seemingly finding a ceiling, we believe the headwind of P/E compression has mostly run its course. That does not mean stocks are out of the woods, however. Aggregate S&P 500 earnings estimates for 2022 and 2023 have only been revised downward by 3.4% and 5.0%, respectively. With the economy slowing, we believe these estimates will likely come down further. The story is similar for global equities – perhaps even more so, given the additional headwinds of Europe's acute energy crunch and, in the case of Asia, persistent rolling COVID-related lockdowns in China.

The labor market: the next shoe to drop?

While the U.S. economy grew at a 2.6% annualized rate in the third quarter, signs of softening have emerged. Higher borrowing costs resulted in both goods purchases and residential construction weighing on growth, with inventories also detracting. This may portend the type of drawdown of completed goods that occurs during economic downturns. Reinforcing this is the Institute for Supply Management's new orders subindex of its manufacturing index having remained below the inventory subindex since May.

Other indicators also signal a weakening economy. A leading measure of broader money has contracted by 1.0% since its March peak as liquidity is slowly drained from the system. Additionally, the yield on the 2-year U.S. Treasury has been higher than that of the 10-year since July. While such yield curve inversions don't guarantee an economic slowdown, the more recent 3-month/10-year inversion is unsettling, as these often precede an imminent economic contraction.

The labor market has yet to flash caution, but with the Fed committed to taming inflation, we believe that unemployment will eventually have to rise. Payroll gains in goods-producing industries have already begun to soften, likely due to the combination of the hangover from extensive purchases during the pandemic and rising borrowing costs acutely hitting big-ticket items. Services payrolls, however, have yet to show meaningful slowing. Given that wages are a major contributor to the services sector, which accounts for 80% of the U.S. economy, we doubt the Fed can achieve its inflation goals without reducing the upward wage pressure that has seen year-over-year hourly earnings growth average above 5.0% in 2022.

Earnings' dose of reality

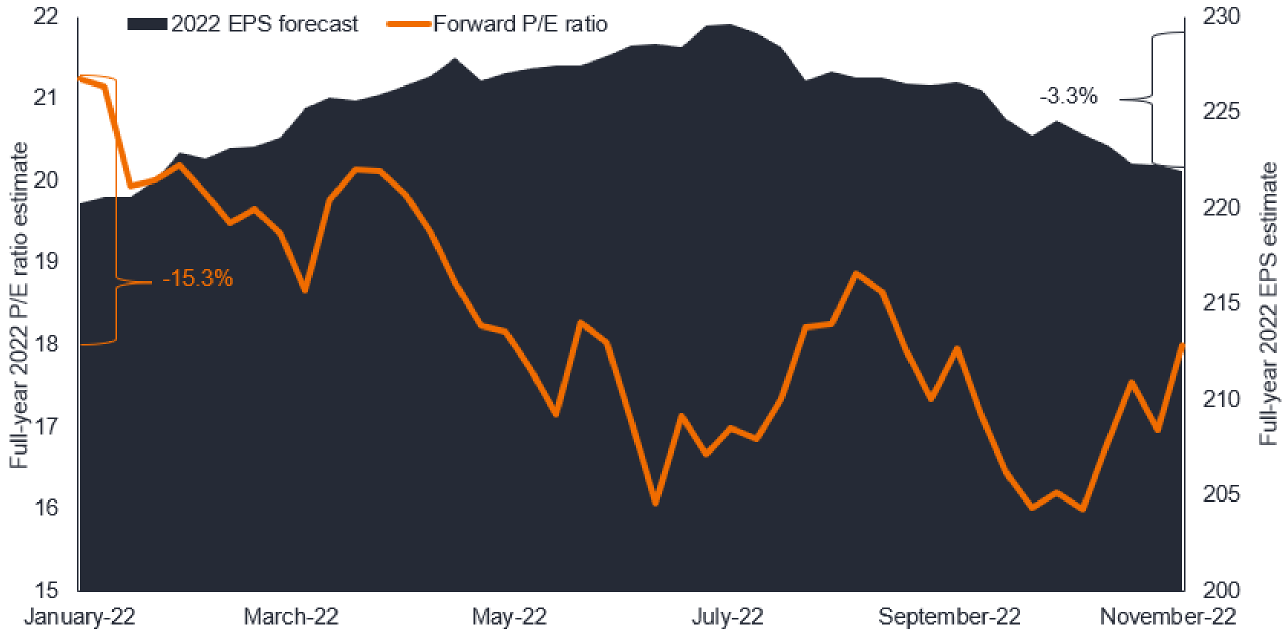
It may be uncomfortable to fathom, but even after 2022's roughly 20% losses on U.S. and global equities indices, investors should likely brace for more near- to mid-term volatility. The question is, what could drive stock losses to extend from -20% to -30%? There are myriad possibilities, most of which would be manifested through weaker earnings. Although consumption has been buoyant, as flush household savings are drawn down – especially if a slowing labor market impedes workers' ability to demand higher wages – the U.S. economy could lose the incremental bump provided by this important driver. Reduced household spending would likely aggravate the current inventory buildup, further causing goods producers to curtail output. We've seen this in the past as the race to catch up with post-recession demand leads to intense production just as central banks begin to tap the brakes on an overheating economy.

Many economies are already facing an inventory-driven slowdown. At worst, we believe this may result in a mild inventory recession. But in our view, it is more likely that, with much of the economy still on sound footing, the U.S. and other countries that have exhibited economic resilience will likely experience a mid-cycle adjustment in 2023. Importantly, we don't foresee a more ferocious balance-sheet recession as there are no obvious potential sources of systemic vulnerability.

Downside risks to our outlook do exist. Chief among them is policy error on behalf of monetary authorities. The Fed understands that leading indicators have already rolled over. This is likely behind the market expecting rate hikes to occur at a slower cadence through mid-2023. Still, should a supply-side shock – e.g., energy or food – emerge or the wage-price spiral prove difficult to break, the Fed may have to increase its policy rate higher than the roughly 5.0% now priced in by futures markets. On some level, higher rates would assure at least a mild recession. Other central banks are in a more precarious situation as they face the stagflationary environment of high prices and a contracting economy.

Figure 2: 2022 S&P 500 Index P/E ratios and earnings per share (EPS) estimates

Falling P/E multiples have been quicker to price in a higher-rate, lower-growth environment than earnings estimates, and we believe that additional downside risk to stocks will likely come from investors having to tone down their 2022 and 2023 profits expectations.



Source: Bloomberg, as at 10 November 2022.

Prudently defensive

While we believe downward earnings revisions could result in additional equities losses, our view that a recession is not imminent means that investors would not necessarily need to completely avoid risky assets. As revenues fall and margins are squeezed, we think investors should seek companies with steady earnings streams and low levels of debt. These are the hallmarks of "quality" that, in our view, should outperform the broader market in times of economic weakness.

While quality is considered a factor in its own right, we believe the concept of steady cash flows and fortified balance sheets is style- and market cap-agnostic; these companies exist across the equities universe. Companies with unstable fundamentals were able to hide during the era of low rates as they could roll over debt and yield-starved investors indiscriminately bought the market. With the full amplitude of the market cycle returning as central banks step away from supporting asset prices, a company's inability to generate sufficient cash flows to fund existing operations and future investment is at risk of being exposed. And although many stocks can exhibit "quality" characteristics, we believe this trait is naturally aligned with the growth category. High-quality growth companies tend to prioritize the organic growth – and thus cash flow generation – that enables them to invest in promising initiatives throughout the business cycle. In contrast, companies that rely on debt to finance future growth are vulnerable in periods of rising rates and slowing growth. Not surprisingly, highly-levered businesses whose valuations rest on far-off cash flows have been among the year's worst performers.

Figure 3: Equity factor peak-to-trough returns in recent recessions

In recent recessions, quality has outperformed other factors.

Event	Peak	Trough	Value	Growth	Quality	Momentum	Minimum volatility
1990-1991 recession	Jul 1990	Mar 1991	-3.9%	-0.8%	5.0%	0.3%	-4.6%
Tech bubble & 9/11	Mar 2001	Nov 2001	-7.3%	-2.9%	1.6%	-9.1%	-1.7%
Global Financial Crisis	Dec 2007	Jun 2009	-38.3%	-35.8%	-28.2%	-44.0%	-29.2%
COVID-19 pandemic	Feb 2020	Apr 2020	-9.5%	1.5%	1.5%	-1.0%	-3.4%

Source: Bureau of Economic Analysis, Janus Henderson Investors. Peak-to-trough returns measured on factor-based components of the MSCI World Index.

Looking through the valley

Focusing on quality companies is likely a prudent tactic until the future path of inflation and interest rates becomes more visible. At some point over the mid-term, however, investors will have the opportunity to look past the turbulence and assess which businesses are likely to thrive on the other side. For that to occur, we believe a clearing event will be necessary. A prime candidate would be capitulation by the retail investors who have been a force in markets over the past two years. These investors have been committed to stocks, largely bullish, and likely behind the bear-market rallies of 2022. But their enthusiasm may change should earnings expectations be revised materially downward. As stated, we expect this to occur in coming months as the market, in our view, has yet to fully price in the ramifications of higher borrowing costs, an inventory drawdown, and – quite possibly – rising unemployment.

For active investors, such clearing events present the opportunity to identify companies whose flagging stock prices have become disconnected from their promising long-term prospects. Given the forward-looking nature of markets, this disconnect can occur well before the economy – or earnings – finds a bottom. As illustrated in Figure 4, P/E ratios have the tendency to diverge from the downward trajectory of earnings as investors begin to see signs of a recovery once inventory overhangs start to ease and lending conditions loosen.

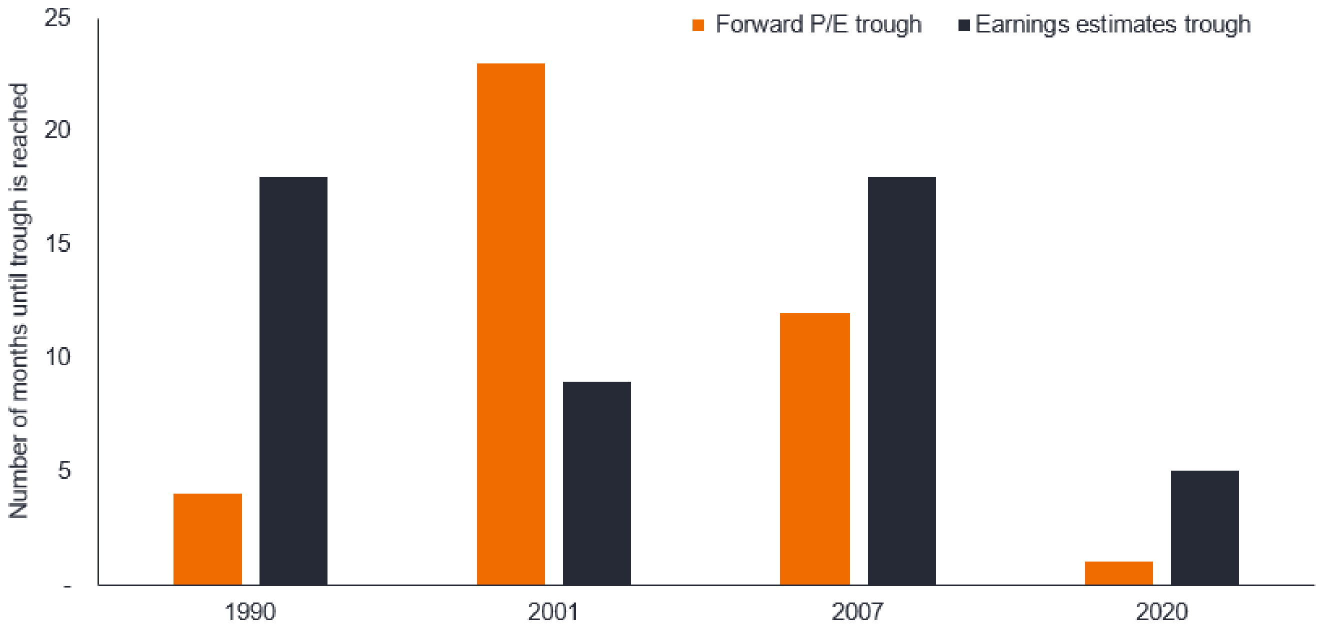
A new market era

Even with our relatively sanguine view that we are facing a mid-cycle adjustment rather than recession, it's clear that the economy is slowing. And given the oft-cited long and variable lags of monetary policy, we believe the slowdown will continue for the next several months. As the market seeks a bottom, investors should be on the lookout for names whose valuations have already dipped to attractive levels but that still exhibit the characteristics of quality and sustainable growth over the longer term. This is analogous to the investment philosophy of growth at a reasonable price (GARP). Such names, in our view, should prove more resilient in a downturn and also in the new era that likely awaits investors.

As for that era, we believe it will look different than the past 15 years. Inflation-adjusted, or "real," interest rates will likely stay positive. A higher cost of capital means corporate managers must act more judiciously when making investment decisions. Investors, too, will have to adapt by focusing on companies with the potential to consistently grow earnings and generate positive cash flows rather than those that survive only by rolling over cheap debt. Valuations will matter more as well; it won't be a pure "value" market, but rather "value aware." Consequently, investors may want to keep the concept of GARP at the ready – not only in 2023, but beyond.

Figure 4: Months to forward P/E ratios and earnings troughs in recent recessions

With the exception of the dotcom bubble, when high valuations took considerable time to compress, S&P 500 forward-looking P/E ratios tend to find a bottom before downwardly revised earnings as investors begin to position themselves for recovery.



Source: Bloomberg, Janus Henderson Investors, as at 10 November 2022. S&P 500 Index data. Months to trough based on when previous cycle peak was reached.

Footnotes and definitions

Unless otherwise noted, all data sourced from Bloomberg as at 11 November 2022.

10-year Treasury yield: the interest rate on U.S. Treasury bonds that will mature 10 years from the date of purchase.

Bear market: A financial market in which the prices of securities are falling. A generally accepted definition is a fall of 20% or more in an index over at least a two-month period. The opposite of a bull market.

Clearing event: The market is cleared when the price brings demand and supply into balance. A clearing event occurs when supply and demand are equal.

The Fed, or Federal Reserve: the central banking system of the United States.

The Institute for Supply Management (ISM's) manufacturing index or Purchasing Managers' Index is considered a key indicator of the state of the U.S. economy. It indicates the level of demand for products by measuring the amount of ordering activity at the nation's factories.

Growth at a reasonable price (GARP) investors seek companies that are undervalued (value investing) with solid sustainable growth potential (growth investing).

MSCI World Index℠ reflects the equity market performance of global developed markets.

Monetary policy: The policies of a central bank, aimed at influencing the level of inflation and growth in an economy. It includes controlling interest rates and the supply of money. **Monetary tightening** refers to central bank activity aimed at curbing inflation and slowing down growth in the economy by raising interest rates and reducing the supply of money. **Monetary stimulus** refers to a central bank increasing the supply of money and lowering borrowing costs.

Multiple: A metric that measures some aspect of a company's financial well-being, in this case, how much investors are willing to pay per dollar of earnings, as computed by the price-to-earnings (P/E) ratio.

Price-to-earnings (P/E) ratio: A popular ratio used to value a company's shares, compared to other stocks, or a benchmark index. It is calculated by dividing the current share price by its earnings per share. The **Forward P/E ratio** uses the forecasted earnings per share of the company over the next 12 months for calculating the price-earnings ratio.

Risk assets: Generally refers to assets that have a significant degree of price volatility, such as equities, commodities, high-yield bonds, real estate, and currencies.

S&P 500 Index reflects U.S. large-cap equity performance and represents broad U.S. equity market performance.

Stagflation: A relatively rare situation where rising inflation coincides with anaemic economic growth.

Systemic risk: The risk of a critical or harmful change in the financial system as a whole, which would affect all markets and asset classes.

Valuation Multiple is a ratio that reflects the valuation of a company in relation to a specific financial metric. Valuation multiples and the use of standardized financial metrics allow for comparisons of value among companies with different characteristics, most notably size.

Yield: The level of income on a security, typically expressed as a percentage rate. For equities, a common measure is the dividend yield, which divides recent dividend payments for each share by the share price. For a bond, this is calculated as the coupon payment divided by the current bond price.

Yield curve: A graph that plots the yields of similar quality bonds against their maturities. In a normal/upward sloping yield curve, longer maturity bond yields are higher than short-term bond yields. A yield curve can signal market expectations about a country's economic direction.

Yield curve inversion: A yield curve inverts when long-term interest rates drop below short-term rates, indicating that investors are moving money away from short-term bonds and into long-term ones.

IMPORTANT INFORMATION

Equity securities are subject to risks including market risk. Returns will fluctuate in response to issuer, political and economic developments.

MARKET GPS 2023

FIXED INCOME INVESTMENT OUTLOOK

Fixed Income: Ingredients in the mix for a more appetising 2023

Jim Cielinski
Global Head of Fixed Income

Jim Cielinski believes 2023 should bring relief on rates as central bankers recognise their servings of policy tightening are dampening inflation but the corporate outlook is set to be more challenged.

Key takeaways

- 2022 was a miserable year for most fixed income markets, but the pain caused by rising yields and widening spreads has arguably been front-loaded, creating attractive entry points.
- Inflation should peak and decline as 2023 progresses, giving relief on rates, but the economic damage caused by tighter financial conditions is likely to weigh on corporates, demanding a more selective approach within credit markets.
- We believe bonds should regain their traditional role as a diversifier and, with yields offering competitive levels of income, the asset class is likely to regain favour with investors.
- In our view, the liquidity-driven phase of the bond meltdown is over; we must now contend with the fundamental phase.

Béchamel bankers: policy tightening and transmission

Anyone who has made a béchamel or white sauce will recognise the dilemma facing central bankers. At first the combination of milk, butter, and flour remains a runny liquid. You stir over the heat, but it refuses to thicken. So you add more flour. Nothing happens. You add more flour. Still no response. The temptation is to keep adding flour, but there is a risk. The compounding effect of all that flour, together with the heat, creates a reaction, and all at once the sauce turns far too thick and lumpy.

Central bankers' policy tightening is the flour and the transmission mechanism (how that tightening feeds through to the economy) is the heat. The outlook for the global economy in the year ahead is lumpy as tighter financial conditions provoke material growth slowdowns and recessions. Yet, for many parts of the fixed income market, 2023 could prove to be a far more appetising year.

Too hot to handle: dampening excesses in the economy

The past year was unpleasant for fixed income as inflation soared and the distortions to asset prices created by quantitative easing unwound. As central banks stepped back from repressing yields, price discovery returned. Bond yields rose sharply, producing some of the worst total returns in the history of fixed income.[1]

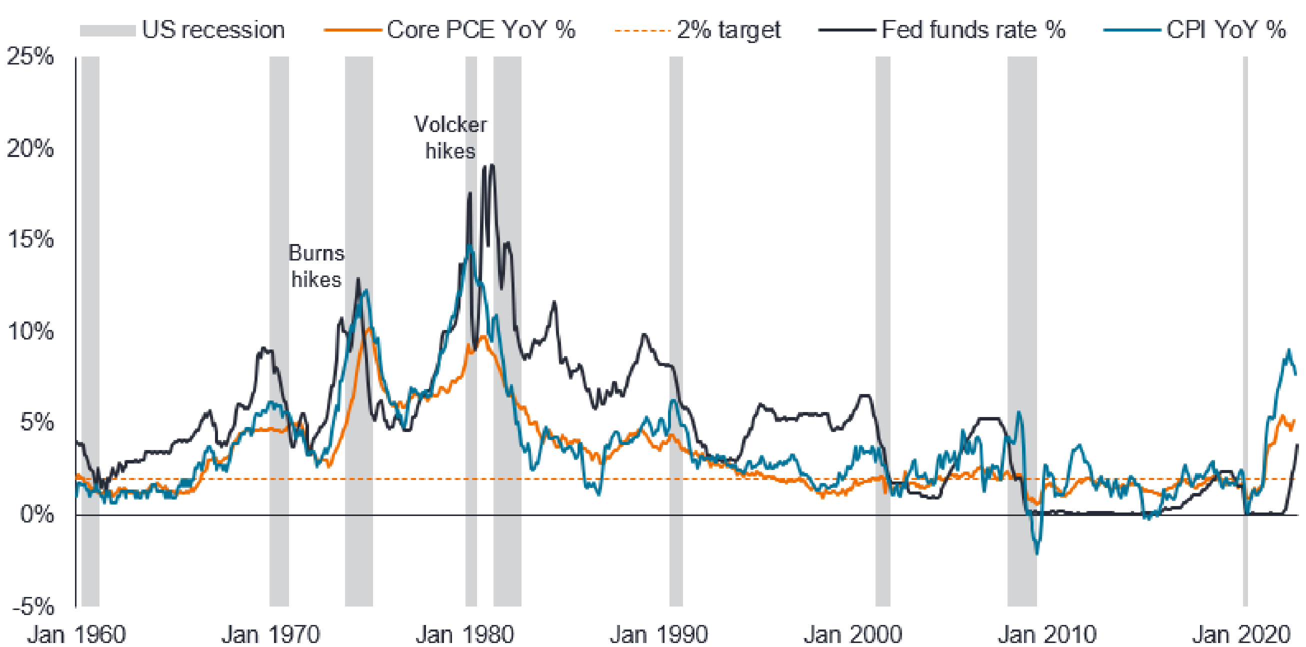
Yet, the pain in fixed income markets has arguably been front loaded, much like the US Federal Reserve (Fed) front loaded its interest rate hikes with consecutive 75 basis-point increments. We should not expect the same in 2023. The starting point of higher yields and wider credit spreads should offer a healthier outcome for bond investors.

How central bankers calibrate monetary policy to control inflation without causing too much economic damage will dominate markets and we can expect market volatility to persist around their announcements. Previous inflationary episodes are instructive. As Figure 1 shows, the fast pace of US rate hikes in 2022 has only previously been seen under Fed Chairmen Arthur Burns in the mid-1970s and Paul Volcker in 1979 and 1980 – both periods of rampant inflation.

Two things are worth noting:

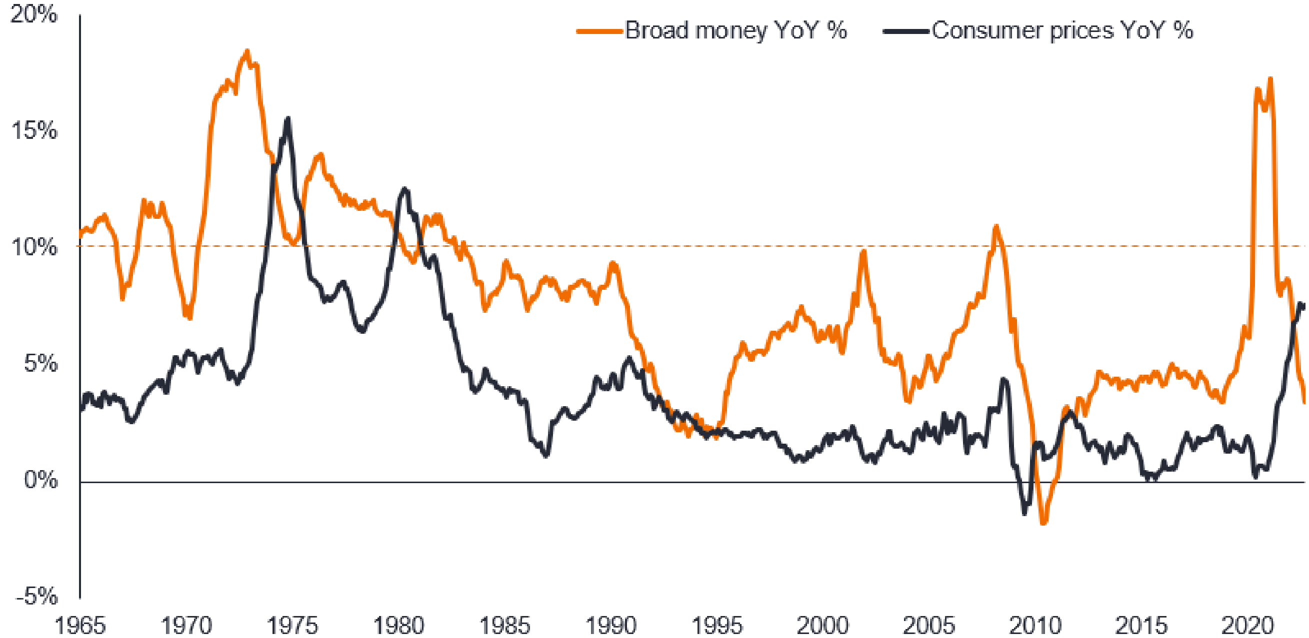
- **Both Burns and Volcker began easing when the economy weakened only to raise rates again when inflation remained high.** This may incline today's Fed to retain rates at a high level to avoid repeating this mistake.
- **Rates have historically not peaked until inflation moves below the fed funds rate.** So while we expect the Fed to slow the pace of hikes and pause rate increases in coming months, a cut will have to wait until inflation moderates significantly.

Figure 1: US inflation and interest rate history



Source: Bloomberg, FRED, 31 January 1960 to 11 November 2022. Federal funds effective rate %, PCE = Core Personal Consumption Expenditures Price Index (excluding energy and food) year-on-year (YoY) % change, CPI = Headline Consumer Price Index YoY % change.

Figure 2: Why this is not an inflation replay of the 1970s



Source: Refinitiv Datastream, Janus Henderson Investors, 31 January 1965 to 30 September 2022. G7 Consumer Price Index YoY % change, **G7** Broad Money Growth YoY % change. G7 countries are Canada, France, Italy, Japan, Germany, UK, and US. **Broad money** is the stock of physical cash, bank deposits, money market funds, and other monetary instruments held by the private sector. Precise definitions differ across countries.

For these reasons, and because we expect the US economy to outperform most other developed market economies, we think the Fed will remain tough on tackling inflation. In Europe, the European Central Bank (ECB) and the Bank of England (BoE) may pause their tightening earlier, but even there a resolute focus on inflation will likely keep the hawkish rhetoric flowing for longer than the economies can tolerate.

Sticky business: will inflation recede?

Several factors kept inflation stuck at a high level in 2022, including supply chain problems, the Russia-Ukraine conflict and, in the US, the pass-through of shelter costs in the Consumer Price Index. These should fade, with goods prices leading the decline and base effects making it hard to sustain high year-on-year inflation numbers. We expect inflation in the US to soften but remain above the Fed's target 2% rate. Europe's reliance on imported oil and gas aggravates the inflation outlook there, but progress in diversifying energy imports and reducing energy use mean further shocks would be linked to weather or geopolitics.

We take comfort in the fact that broad money growth (which has typically heralded the direction of inflation) has receded in developed markets since peaking in 2021 (Figure 2). This suggests inflation will retreat in 2023 and not persist as it did in the inflationary 1970s, when broad money growth never fell below 10%.

The key question is, can the Fed engineer a soft landing and avoid overtightening? The answer may lie in the labour market response. Previous tightening cycles relied on rising unemployment to contain wage growth and prevent high inflation from becoming embedded. Economic conditions today would seem to favour workers, making the Fed's job much harder (Figure 3).

What's baked in?

We think that the cumulative lagged effect of earlier tightening, and even certain global forces, will begin to impress on Fed thinking. Leading economic indicators globally are predicting one thing: *recession*. We must be careful when reading some forward-looking survey data as they can often describe a change in direction but not magnitude. Nevertheless, many new orders surveys are declining, and most consumer sentiment indices are bleak.

Figure 3: US economic conditions prevailing during soft landings

Tightening cycle	1965/6	1983/4	1994/5	Oct 2022
Unemployment rate (%)	3.9	8.7	6.0	3.7
Vacancy-to-unemployment ratio	1.7	0.6	0.8	1.8
Wage inflation (YoY %)	4.0	4.0	2.6	5.5
Interest rate > inflation rate?	Yes	Yes	Yes	No

Source: Bloomberg, Refinitiv Datastream, Janus Henderson Investors, Bureau of Labor Statistics (BLS). Unemployment rate: US unemployment rate average during tightening cycles and as at 31 October 2022. Vacancy-to-unemployment ratio: Conference Board Help Wanted to number unemployed average ratio during tightening cycles and BLS job openings rate divided by unemployment rate as at 30 September 2022. Wage inflation: BLS average hourly earnings of production and non-supervisory employees, total private, YoY change, seasonally adjusted, average during tightening cycles and as at 31 October 2022. Interest rate is fed funds rate and inflation is US CPI YoY % during tightening cycles and as at 31 October 2022.

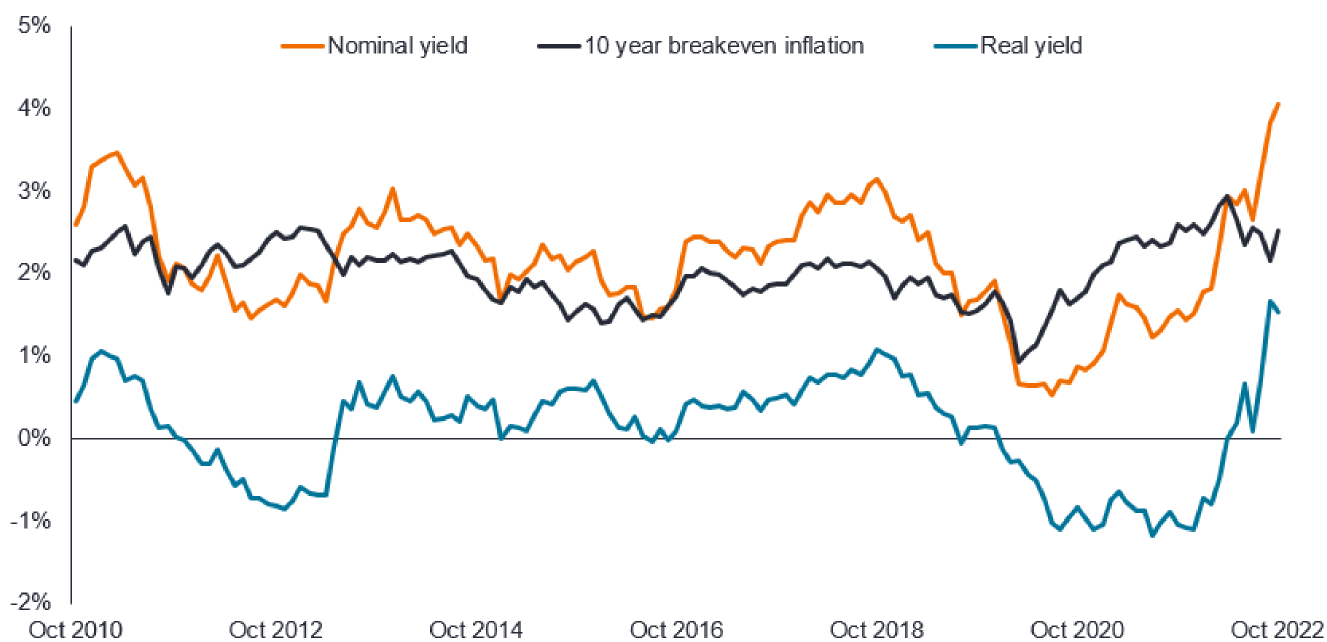
Tighter financial conditions are already being felt. Rate-sensitive areas of the economy are responding fast to higher financing costs. Take housing: in the US, the 30-year mortgage rate has climbed from 3.1% to 7.1% in a year; in the UK, the 5-year rate has risen from 2.7% to 5.6%.[2] Such big moves will eventually crack the housing market, and we have already seen central banks in Australia and Canada embrace smaller rate hikes as the lagged impact of monetary tightening bites. In our view, this is the start of a climbdown that other developed market central banks will follow in 2023.

Risky ingredients: rising rates vs credit risk

Interest rate risk was the principal risk to fixed income in 2022 as rising rates sent asset prices tumbling. That is set to change. In fact, interest rate risk could turn beneficial if, as we expect, rates peak in 2023 and an opening to a declining rate trajectory emerges. As Figure 4 shows, nominal yields at 4% on the 10-year US government bond are now high enough to appeal to income investors and offer some capital appreciation during risk-off environments. What is more, real yields (those adjusted for inflation) are positive.

Figure 4: Nominal and real yields have something to offer

10-year US government bond real and nominal yields both firmly positive.



Source: Bloomberg, 31 October 2010 to 31 October 2022. US government bond 10-year nominal yield, US 10-year breakeven inflation, US Treasury inflation indexed 10-year yield (real yield). **Yields may vary over time and are not guaranteed. Past performance is not a guide to future returns.**

In contrast, credit risk is rising as corporate fundamentals weaken, which raises questions around companies' ability to meet their debt repayments to investors. Company earnings have been surprisingly resilient, but a slowdown emerged in Q3 2022 reported figures. With inventory levels high and consumers retrenching, we think coming quarters will deteriorate further. Companies can also anticipate less fiscal support as governments seek to reduce their deficits post COVID. We expect credit rating agencies to downgrade more companies, with ratings downgrades outpacing upgrades in 2023.

Defaults are also set to rise. Typically, this happens when companies struggle to refinance. Many companies were able to term out their debt, extending the years to maturity and raising money at low rates in recent years. The COVID crisis also flushed out many of the weaker issuers, and the credit quality of borrowers is high relative to history. While this offers the prospect of a more subdued default path, we still expect the global high yield default rate to double to around 4-5% by late 2023.[3] But while default rates in the US and Europe should rise, we will watch for the rate in Asia to decline as the deleveraging policies in China, which led to heavy property sector defaults, may be mostly behind us.

"The prospect of more downgrades and defaults means assessment of credit fundamentals will be paramount, creating alpha opportunities from avoiding the losers and picking the winners". – Jim Cielinski

Liquidity concerns should not be overlooked in 2023. The problems in the UK around the mini-budget and the fallout in its gilt and pensions market are an example of how financial instability often rises around periods of tighter policy. Both the Fed and the BoE have embarked on quantitative tightening (QT), reducing their balance sheets by allowing bonds to mature or actively selling them. This removes a somewhat price-insensitive buyer, potentially increasing stress in the markets.

While the ECB has not yet formally announced QT, it has altered the conditions on its targeted longer-term refinancing operation (TLTRO). This move is encouraging commercial banks to repay TLTRO loans early, which could lead to a €1.2 trillion reduction of the ECB balance sheet by June 2023. Nor have peripheral eurozone sovereign bond concerns disappeared. The ECB's new Transmission Protection Instrument (TPI) allows the bank to buy sovereign bonds of countries suffering weakening financial conditions caused by its monetary policy, but this is the first time we have seen such a rapid repricing of Bund yields. So we are in uncharted territory in terms of whether eurozone sovereign bond yields can remain anchored – another reason to think the ECB will be more cautious around tightening than the Fed.

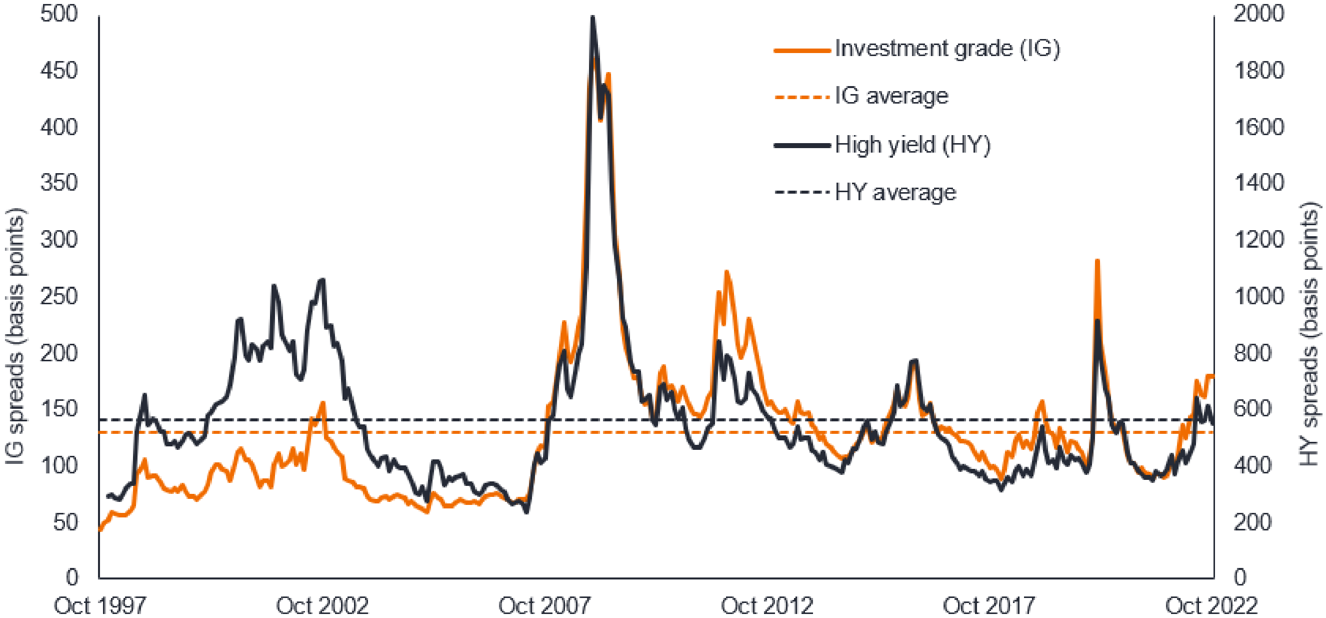
Japan could also be interesting. Haruhiko Kuroda's term as governor of the Bank of Japan (BoJ) ends in April 2023, and he has been a staunch advocate of the BoJ's negative interest rate policy and yield curve control. Soft global growth in 2023 makes it unlikely that the BoJ will move away from its ultra-loose policy stance, but any sign of change could have implications for capital flows.

The taste test: identifying investment opportunities

Looking across fixed income, we think developed market sovereign debt appears attractive, with yields having priced in most of the tightening and paving the way for a rally around the prospect of an end to the tightening cycle. The US and Europe look to offer better opportunities than the UK gilt market, which may face indigestion from high supply and the BoE engaging in QT. Signs of a peak in US rates may also be supportive for emerging market (EM) debt, as might a rebound in China's economy for EM exporters. It is worth remembering that some EM countries such as Brazil tightened early and have already had some success in moderating inflation. While nearly all central banks were on a rapid tightening footing in 2022, we expect more dispersion in monetary policy and economic outcomes in 2023.

Figure 5: Global investment grade and high yield corporate bond spreads

Investment grade spreads are above average levels.



Source: Bloomberg, 31 October 1997 to 31 October 2022. Govt OAS (option-adjusted spread), IG = **ICE BofA Global Corporate Index** which tracks the performance of investment grade corporate debt publicly issued in the major domestic and eurobond markets, HY = **ICE BofA Global High Yield Index** which tracks the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic or eurobond markets.

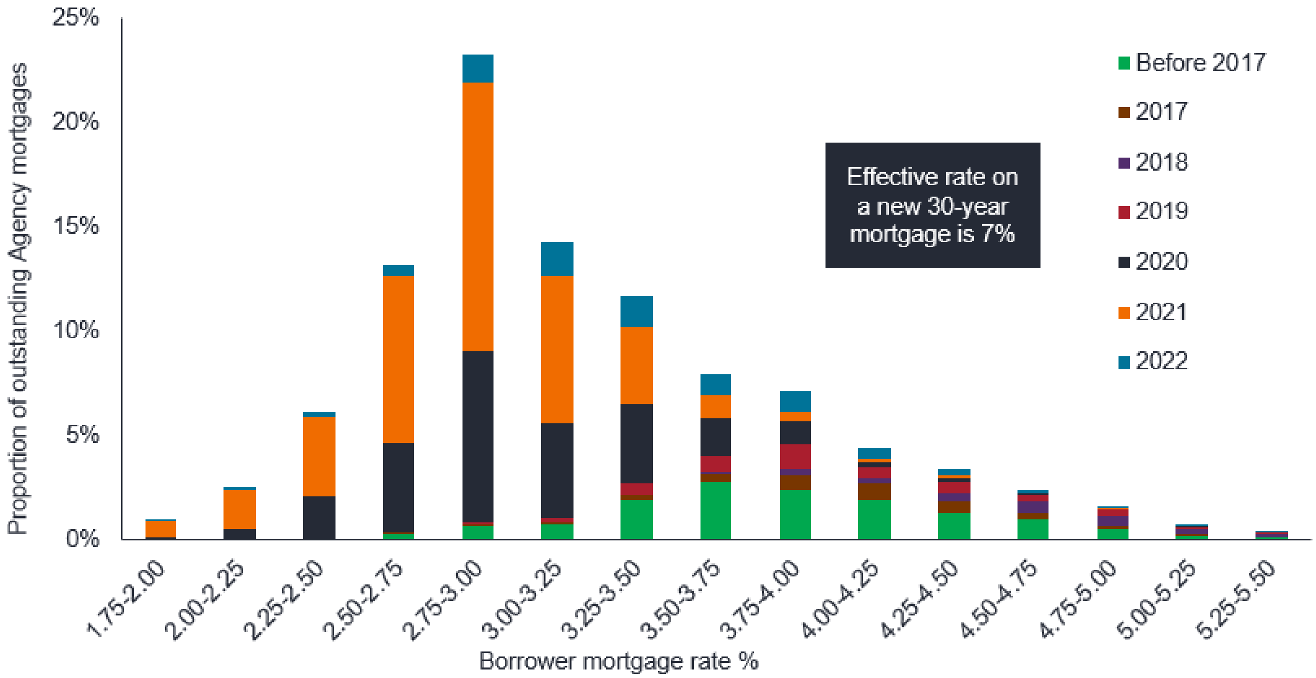
We lean towards favouring higher quality assets over more leveraged assets as a weak growth environment is likely to favour more stable issuers. We think value is emerging in investment grade (IG) corporate bonds. As Figure 5 shows, these are doing a better job reflecting credit risk than high yield debt, with spreads well above average levels.

That does not mean spreads are immune to further widening. Early 2023 could be trying as earnings uncertainty peaks, but we think this will pass. An underappreciated phenomenon is the disconnect between real and nominal economic growth numbers in this cycle. Economic growth figures are normally quoted in real (inflation-adjusted) terms, but corporate revenues are in nominal terms, which helps explain why earnings and cash flows have remained high. We think this may help bridge the gap between weak sentiment and resilient cash flows, and with investment grade debt being more sensitive to rates movements than high yield, put it in a stronger place to outperform.

Elsewhere, rates volatility has caused spreads on mortgage-backed securities (MBS) to widen to attractive levels at a time when regulation around risk-weighted assets has prompted commercial banks to step back from buying MBS while they build their capital ratios. This process may be nearing an end, however, and while the Fed's QT means it is allowing existing holdings of MBS on its balance sheet to passively decline as the principal is paid off, we think active selling by the Fed is unlikely. MBS spreads are high at a time when the risk of pre-payment is small since few households will want to refinance their mortgage now that mortgage rates are around 7% (see Figure 6).

The slowing economy is also likely to reassert the importance of environmental, social, and governance (ESG) factors. Controversies typically get exposed during challenging times when companies are under more scrutiny, so social and governance factors, with their focus on reputational and financial risk, have added resonance. In terms of environmental factors, the spotlight on energy efficiency means 2023 should be another year of strong green bond issuance within utilities and real estate and we would expect transition financing to grow as borrowers in high carbon-emitting sectors seek to link new issues with demonstrable progress on energy transitioning.

Figure 6: Yield profile of mortgage issuance by year



Source: Bloomberg, Janus Henderson Investors, US agency mortgages, as at 30 September 2022. Freddie Mac US 30-year mortgage rate as at 31 October 2022.

Proven recipes: the traditional appeal of fixed income

The higher yields on fixed income have restored the income qualities and likely the diversification benefits of the asset class. With pension solvency ratios much improved, we also think there may be less incentive to own riskier assets, creating demand for fixed income.

A slowdown is in the cards, but that is well-telegraphed. The key is whether inflation can slow quickly enough to preclude policymakers from over-tightening and creating severe stresses in the financial system. With the arrival of a well-anticipated global slowdown, however, investors are greeted by higher yields and higher potential returns. Thus, we believe the coming year should prove to be a more appetising one for fixed income investors.

Footnotes and definitions

[1] Source: Bloomberg US Aggregate Bond Index declined 13.2% in 2022 (up to 16 November 2022), the worst annual total return since the index formed in 1976, Bloomberg Global Aggregate Bond Index (hedged to USD) fell 10.6% in 2022, the worst annual total return since the index formed in 1990. Returns in US dollars.

[2] Source: Bloomberg, Freddie Mac US 30-year Mortgage rate, Bank of England 5-year mortgage rate, percentage rates at 31 October 2021 and 31 October 2022.

[3] Source: This compares with the Moody's trailing 12-month global speculative-grade corporate default rate of 2.3% at 30 September 2022.

10-year Treasury yield is the interest rate on US Treasury bonds that will mature 10 years from the date of purchase.

Basis point (bp) equals 1/100 of a percentage point. 1 bp = 0.01%, 100 bps = 1%.

Bloomberg Global Aggregate Bond Index is a broad-based measure of the global investment grade fixed-rate debt markets.

Bloomberg US Aggregate Bond Index is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.

Breakeven rate: The difference in yield between inflation-protected and nominal debt of the same maturity. The result is the implied inflation rate for the term of the stated maturity.

The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

Credit ratings: A score given by a credit rating agency such as S&P Global Ratings, Moody's and Fitch on the creditworthiness of a borrower. For example, S&P ranks high yields bonds from BB through B down to CCC in terms of declining quality and greater risk, i.e. CCC rated borrowers carry a greater risk of default.

Credit risk: The risk that a borrower will default on its contractual obligations, by failing to meet the required debt payments.

Credit spread is the difference in yield between securities with similar maturity but different credit quality. Widening spreads generally indicate deteriorating creditworthiness of corporate borrowers, and narrowing indicate improving.

Default: The failure of a debtor (such as a bond issuer) to pay interest or to return an original amount loaned when due. The default rate is typically expressed as a percentage rate reflecting the face value of bonds in an index defaulting over a 12-month period compared with the total face value of bonds in the index at the start of the period.

Federal Reserve or **Fed** is the central banking system of the United States.

Financial conditions: The ease with which finance can be accessed by companies and households. When financial conditions are tighter it is harder or more costly for people and businesses to access finance.

Fiscal policy: Government policy relating to setting tax rates and spending levels. **Fiscal support/expansion/stimulus** refers to an increase in government spending and/or a reduction in taxes.

Green bond: Bonds that provide a means of raising funds by companies and governments via the debt capital markets for projects that deliver environmental / sustainable benefits and solutions.

Hawkish is indication that policy makers are looking to tighten financial conditions, for example, by supporting higher interest rates to curb inflation.

High yield bond: A bond that has a lower credit rating than an investment grade bond. Sometimes known as a sub- or below investment grade bond. These bonds carry a higher risk of the issuer defaulting on their payments, so they are typically issued with a higher coupon (regular interest payment) to help compensate for the additional risk.

Inflation: The annual rate of change in prices, typically expressed as a percentage rate.

Interest rate risk: The risk to bond prices caused by changes in interest rates. Bond prices move in the opposite direction to their yields, so a rise in rates and yields causes bond prices to fall and vice versa.

Investment grade: A bond typically issued by governments or companies perceived to have a relatively low risk of defaulting on their payments. The higher quality of these bonds is reflected in their higher credit ratings.

Leverage: This is a measure of the level of debt in a company. Gross leverage is debt as a ratio of earnings before interest, tax, depreciation and amortisation.

Monetary policy: The policies of a central bank, aimed at influencing the level of inflation and growth in an economy. It includes controlling interest rates and the supply of money. **Monetary easing/stimulus** refers to a central bank lowering borrowing costs and increasing the supply of money. **Monetary tightening** refers to central bank activity aimed at curbing inflation and slowing down growth in the economy by raising interest rates and reducing the supply of money.

Option-adjusted spread (OAS) measures the spread between a fixed-income security rate and the risk-free rate of return, which is adjusted to take into account an embedded option.

Quantitative tightening (QT): contractionary monetary policy in which central banks decrease the supply of money in the economy by shrinking their balance sheets – this can be achieved by passively allowing bonds to mature and deleting them from its cash balances or actively selling bonds to drain money from the wider system.

Real yield: A real yield is calculated by subtracting the expected inflation rate from a bond's nominal yield.

Recession: A significant decline in economic activity lasting longer than a few months. A **soft landing** is a slowdown in economic growth that avoids a recession.

TLTRO: Targeted longer term refinancing operations were a form of cheap borrowing for commercial banks in the eurozone, designed to encourage lending.

US Treasury securities are direct debt obligations issued by the US Government. With government bonds, the investor is a creditor of the government. Treasury Bills and US Government Bonds are guaranteed by the full faith and credit of the United States government, are generally considered to be free of credit risk and typically carry lower yields than other securities.

Volatility: The rate and extent at which the price of a portfolio, security or index moves up and down. If the price swings up and down with large movements, it has high volatility. If the price moves more slowly and to a lesser extent, it has lower volatility. The higher the volatility means the higher the risk of the investment.

Yield: The level of income on a security, typically expressed as a percentage rate. For a bond, at its most simple, this is calculated as the coupon payment divided by the current bond price.

IMPORTANT INFORMATION

Diversification neither assures a profit nor eliminates the risk of experiencing investment losses.

Equity securities are subject to risks including market risk. Returns will fluctuate in response to issuer, political and economic developments.

Fixed income securities are subject to interest rate, inflation, credit and default risk. The bond market is volatile. As interest rates rise, bond prices usually fall, and vice versa. The return of principal is not guaranteed, and prices may decline if an issuer fails to make timely payments or its credit strength weakens.

High-yield or "junk" bonds involve a greater risk of default and price volatility and can experience sudden and sharp price swings.

Securitized products, such as mortgage- and asset-backed securities, are more sensitive to interest rate changes, have extension and prepayment risk, and are subject to more credit, valuation and liquidity risk than other fixed-income securities.

Janus Henderson
INVESTORS

MARKET GPS 2023

ALTERNATIVES INVESTMENT OUTLOOK

Alternatives:
The scale of change demands a different mindset

David Elms
Head of Diversified Alternatives

Steve Cain
Portfolio Manager

Following a year that tested the diversification and resilience of traditional strategies built around the ‘core’ asset classes of equities and bonds, David Elms and Steve Cain consider the opportunity for a multi-strategy approach to using alternatives.

Key takeaways

- Investors are facing a dramatically different landscape in 2023, with an uncertain inflationary climate and higher interest rates posing long-term questions around portfolio construction.
- In this environment, being able to apply a broad range of investment techniques could be crucial in helping investors to navigate this period of potentially persistent market volatility.
- Alternatives managers will need to focus on improving the range and adaptability of their processes if they aim to provide investors with a reliable platform capable of performing throughout the market cycle.

Looking back, 2022 has been a fascinating, albeit troubling, year for those of us who spend our time thinking about big macro themes and fundamentally game-changing shifts in politics and economics. A prominent theme from an economic perspective has been the sell-off in bonds and the consequent rise in interest rates around the globe. A major question for us to consider, in terms of determining where we are in the expansion of risk premia, is whether inflation has peaked, potentially ushering in disinflation again, or if we think inflation will end up being more persistent?

The market is currently pricing in recessions across a range of global economies, particularly in Europe, with the energy crisis coming through this winter, and even the US. If inflation does remain entrenched, we may have further to go in this bearish environment. Longer term, we see a range of macro factors with strong inflationary implications, which, when combined with monetary and fiscal policies designed to reduce high debt levels, suggests an environment where higher inflation becomes the dominant state – or at least one where it struggles to find equilibrium.

Within a global context, Japan is a particularly interesting story. The Bank of Japan has been an outlier in the developed world, placing a ceiling on 10-year government bonds that limits the yield investors can earn to 25 basis points (0.25%). The argument given is that increasing borrowing costs right now would only result in weaker demand, setting back an economy already struggling to recover from the pandemic.

The consequence, however, has been a rapidly devaluing currency, with huge amounts of capital being exported into foreign bond and equity markets as Japanese investors seek solace elsewhere. Should the Bank of Japan decide that it is time to lift that peg – even if it is a relatively minor change, such as shifting the limit on yields to 50 or 75 basis points – we think that could have a dramatic impact elsewhere.

The other place we have found particularly interesting is the UK. We saw extraordinary volatility in the UK fixed income market under short-lived Prime Minister Truss, whose plans to cut taxes and increase borrowing led to weeks of chaos in financial markets. As government borrowing costs rose, this fed through to higher costs for UK pension funds which typically hedge against future liabilities by buying long-dated swaps (interest rate swaps). This forced pension funds to sell their more liquid assets, primarily UK government bonds (gilts), which fast became a cascading liquidity spiral before the Bank of England stepped in to stabilize the market. When these catalysts emerge, how does one take a mean reversion view without exposing investors to abnormally large risks?

Risk reduction to remain key in 2023

If the environment has changed, then for investors like us, being able to apply a broad range of investment techniques is crucial. Our role is to look for places where there is a risk premium, and where we understand the underlying economic drivers of returns in a range of market environments and in different situations.

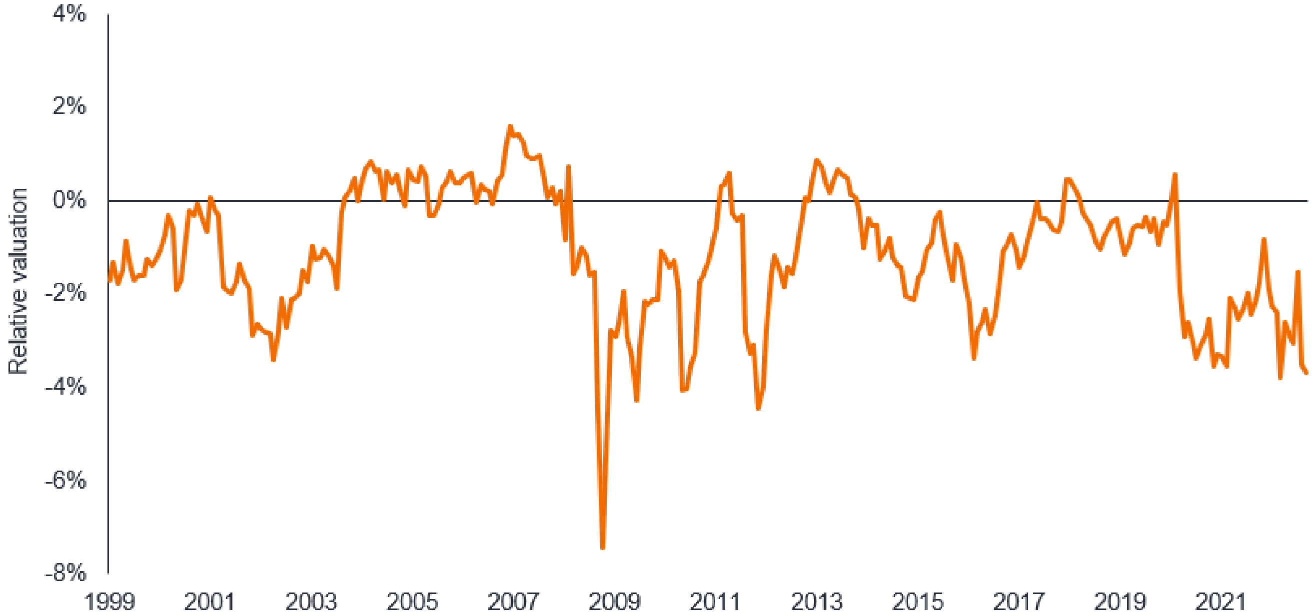
The outbreak of COVID-19, for example, understandably wreaked havoc on global stock markets. Investors took money out of funds and managers were forced to sell assets to cover outflows. We saw the diversification that investors would ordinarily rely on, via bonds and equities, no longer functioning as it had in the past. So what do you do when diversification doesn't work? Applying approaches designed to hedge risk or reduce the impact of market volatility have been areas of real interest in 2022 given how markets have behaved. We believe those difficult conditions will continue through 2023 and it will be important to seek to stabilise returns where possible. This means being able to adapt to very unusual situations over time, effectively acting as an insurance strategy for investors, should markets move against their broader positioning, while aiming to capture returns based on different forms of stress throughout the market cycle.

With inflation where it is, we believe it is a particularly relevant time for trend-following strategies. With the reemergence of inflation, demand has grown for inflation-sensitive assets like commodities, which have been a significant trend in 2022. We have also seen a downtrend in (and rising correlation between) traditional assets like equities and bonds, which has raised questions about whether a traditional ‘60/40’ asset allocation strategy (which allocates 60% to equites and 40% to bonds) can consistently fulfil the role it has played over the past few decades.

Time to take diversification seriously

Separately, we think the convertible bond space could present a more attractive prospect in 2023. We saw a wave of convertible issuance in 2020, significantly increasing the size of the global market as companies took advantage of accommodative financing conditions to strengthen their balance sheets in the wake of COVID-era restrictions. However, we saw the primary market effectively shut down in the first half of 2022, with smaller coupons and out-of-the-money options offering little appeal for investors seeking to offset inflation.

Figure 1: Are convertible bonds mispriced?



Source: BofA Merrill Lynch Global Research, Janus Henderson Investors Analysis, as at 30 September 2022.

Note: Fair value relative to market price of BofA Merrill Lynch European Convertible Excluding Mandatory Index. **Past performance does not predict future returns.**

As we look ahead to 2023, we expect the market for convertibles to pick up. This should be driven by either a stronger pipeline, via refinancing or new issuance, or an uglier, more cathartic sell-off from long-only funds. If the latter materializes, this could set up more attractive risk-reward opportunities, as well as potentially more favourable entry points for 'buy and hold' exposures.

More broadly, however, this is a fundamentally different environment to the one we saw in the pre-COVID world, and we believe investors will need to adjust accordingly. It is important to keep in mind that strategies that have worked before might not necessarily work in different environments. It is critical to understand how different strategies and investment tools work together in terms of risk, exposure, and diversification.

Catalysts and change in 2023

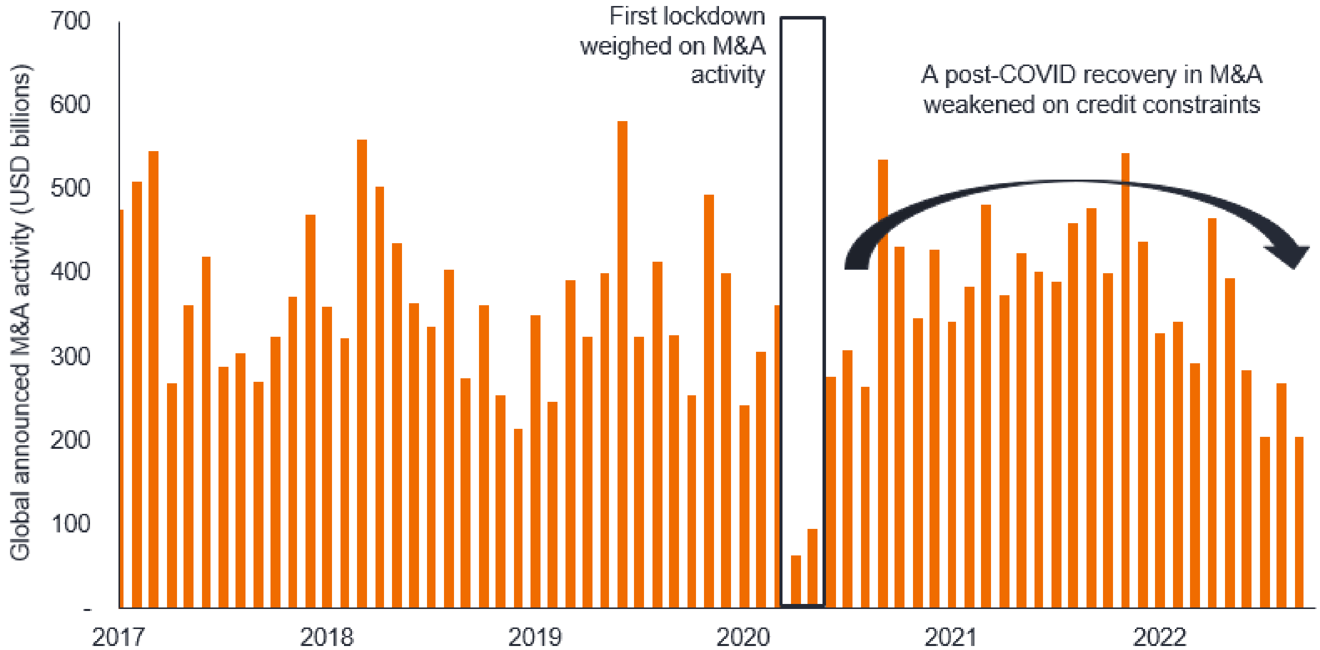
We believe that in the coming year a greater focus on catalysts that might drive shocks to the system will be needed. These could be events such as a Brexit vote, an election, policy error, or something significant that we believe could drive a break or a change in the direction of legislation and the monetary and fiscal environment.

However, while a top-down view of the world is critical, we believe bottom-up research should be a primary driver of returns. It will be vital to find structural opportunities in the micro and consider how those opportunities can drive demand for capital. A good example of this bottom-up view is risk transfer. Banks are taking a lot less risk now than they did before the Global Financial Crisis. Whereas banks might previously have had substantial risk appetites, their capacity in this regard is now limited, and this has created an imbalance in supply and demand in those circumstances where liquidity is tight. By providing much needed short-term liquidity to the market, it is possible to earn the return available for providing a capital provision service to the market.

It is also important to watch for those situations that suck liquidity out of the system. Illiquidity can break functioning markets when money is not flowing to the right segments, leading to price gaps and much higher volatility as a consequence. That is a key risk to keep in mind – and one to consider in hedging decisions. The risks illiquidity carries can drive wider risk premia and provide opportunities in the alternatives arena.

Another area that will be of particular interest for us in 2023 is anomalies in commodity markets, where we see a combination of sustainable factors presenting opportunities to seek differentiated risk-adjusted excess returns. Relative value opportunities in fixed income and currency volatility are also strategies that, after more than a decade of being out of favour, now appear target rich.

Figure 2: Where next for M&A activity?



Source: Bloomberg Global announced deals, Janus Henderson Investors Analysis, as at 30 September 2022. **Past performance does not predict future returns.**

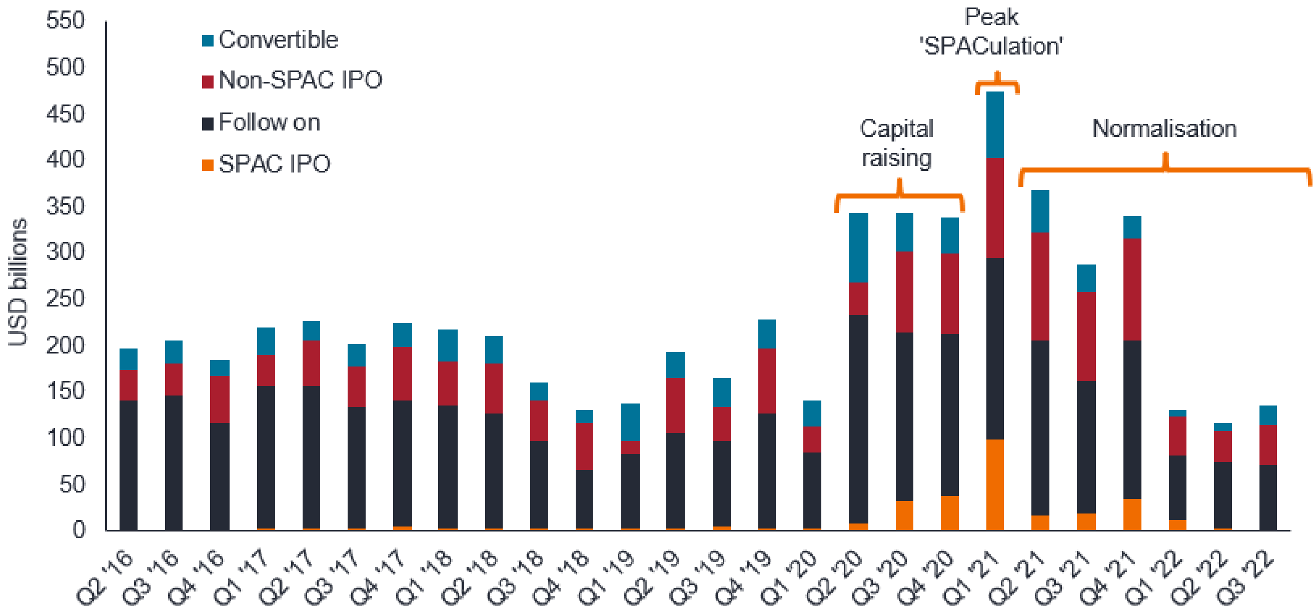
Heightened geopolitical risk and less certain financial conditions have been headwinds for more traditional opportunities in the merger and acquisition (M&A) space in 2022. We continue to see a healthy pipeline of deals in Europe and the US, which could provide some opportunity to harvest M&A risk premium with reduced idiosyncratic risk. However, a competition-focused regulator in the US and a more protectionist approach elsewhere could continue to weigh on activity (Figure 2).

Adapt to survive

We are often asked what role alternatives should play in a portfolio. The answer for 2023 will be the same as previous years – it depends on your need. Alternatives covers an incredibly broad range of strategies, often highly innovative, offering drivers of performance that are fundamentally different from more traditional assets like equities and bonds. These allow for adaptation for different client requirements. But when pushed, we would say there are two things alternatives should do: They should produce a positive return for investors, and they should produce those returns with low correlations to other assets. If the performance delivered makes it difficult to tell whether it were a bear or bull market, we would consider that a positive outcome.

2023 will no doubt present unexpected risks and opportunities. This will require the flexibility to rapidly adapt to a changing opportunity set by moving capital (and focus) between strategies. It will also mean that teams such as ours need to continually add to investment capabilities and potential return streams. One recent example of the evolving nature of the opportunity set was the rise of special purpose acquisition companies (SPACs) demonstrated in Figure 3.

Figure 3: Increased equity capital market activity presented both opportunities and risks.



Source: Goldman Sachs, Janus Henderson Investors Analysis, as at 30 September 2022. **Past performance does not predict future returns.**

The rise and fall of the SPAC markets created a varied set of opportunities. For managers with experience in equity deal flow, the 'bubble phase' in the first half of 2021, presented opportunities on the short side. Those positioned for the bursting of the bubble in late 2021 and into 2022, benefited as many SPACs were revealed as overpriced plays on flawed business models. Most recently, in late 2022, we saw a long opportunity hiding in the wreckage: pre-deal SPACs offered at what looked like compelling discounts, as SPAC promoters prepared to hand cash back to investors now unprepared to back their business plans.

This multi-phase approach to SPACs embodies the adaptive and flexible investment style that characterizes a multi-strategy approach to alternatives. To stay ahead in this shifting landscape, we believe alternatives managers will need to continue expanding their capability sets in 2023 and enhancing the adaptability of their processes, enabling them to perform across a broad range of potential market environments.

Definitions

Basis points: A standard measure for interest rates and other percentages in finance. One basis point (bp) equals 0.01%. 50 bps equals 0.5%.

Coupon: A regular interest payment that is paid on a bond. It is described as a percentage of the face value of an investment. For example, if a bond has a face value of £100 and a 5% annual coupon, the bond will pay £5 a year in interest.

Out-of-the-money options: An option where the underlying price of the stock is below the agreed strike price, meaning the option has no intrinsic value to the owner (only extrinsic value).

Portfolio protection: A term used here to describe a strategy explicitly designed to hedge risk or reduce the impact of market volatility – ideally stabilising returns in difficult environments.

Risk premia: The amount by which the return of a risky asset is expected to outperform the known return on a so-called ‘risk-free’ asset, such as a government bond.

SPACS: A special purpose acquisition company (SPAC) is a publicly traded company created for the purpose of acquiring or merging with an existing company.

IMPORTANT INFORMATION

Alternative investments include, but are not limited to, commodities, real estate, currencies, hedging strategies, futures, structured products, and other securities intended to be less correlated to the market. They are typically subject to increased risk and are not suitable for all investors.

Commodities (such as oil, metals and agricultural products) and commodity-linked securities are subject to greater volatility and risk and may not be appropriate for all investors. Commodities are speculative and may be affected by factors including market movements, economic and political developments, supply and demand disruptions, weather, disease and embargoes.

MARKET GPS 2023

ESG INVESTMENT OUTLOOK

ESG: Sailing through rough seas in 2023

Paul LaCoursiere
Global Head of ESG Investments

Bhaskar Sastry
ESG Content Manager

Amid a volatile macroeconomic backdrop, investment vehicles incorporating environmental, social, and governance (ESG) considerations typically underperformed non-ESG peers in 2022. This has galvanised sceptics and led to questions around the validity of ESG. Paul LaCoursiere and Bhaskar Sastry outline three reasons why ESG will remain a crucial consideration for investors.

Key takeaways

- The energy crisis could catalyse the transition to cheap, secure, and clean renewable energy, but fossil fuels are not disappearing anytime soon.
- Investors should expect different routes to greater ESG adoption, notably between the US and Europe. Open and honest debate from all sides will be crucial.
- We expect biodiversity loss to emerge as the second most important sustainability issue after climate change.

"Sailing is among my favourite leisure activities. On clear days it's a relaxing affair, but when winds pick up and the waters are choppy, it can be a bumpy ride. Championing sustainable investing can often feel like a similarly unpredictable journey, and 2023 is likely to be no exception".
– Paul LaCoursiere

Theme 1: Geopolitical uncertainty will catalyse the energy transition – but not immediately

The Russia-Ukraine-led energy crisis reveals both the interlinked nature of the global economy and its dependence on fossil fuels. Along with the COVID-19 pandemic, the conflict has resulted in an economic slowdown, decades-high inflation, and a growing food crisis in the developing world. Governments have reacted by implementing costly energy rescue packages and price caps, which have hit countries' already faltering fiscal budgets.

The crisis is bringing the *energy trilemma* into sharp focus – how can countries ensure energy security, energy affordability, and energy sustainability? Currently, energy security and affordability are being prioritised at the expense of sustainability. Many countries are naturally focused on building fossil fuel energy reserves, and it's clear that they cannot and should not abandon fossil fuels at this stage.

However, the continuation of a fossil fuel-based economy solves neither energy security nor the climate crisis. As Albert Einstein said, "We can't solve problems by using the same kind of thinking we used when we created them". Consequently, starting in 2023, we expect governments to begin to adopt a longer-term strategy focused on boosting investment in and deployment of renewable energy, thus making progress towards 'solving' the energy trilemma and achieving a Just Transition, in which benefits of the transition to a green economy are shared widely and those who stand to lose economically are supported.

Energy security

In 2022, we saw how susceptible oil and gas importers were to volatile prices influenced by global geopolitics and macroeconomics, and sometimes artificial price setting. Many European Union (EU) countries were left vulnerable by the Russia-Ukraine conflict through an over-reliance on Russian gas and oil and a history of underinvestment in alternative energy sources. Until recently, Europe imported 45% of its gas, 44% of its coal, and 25% of its oil from Russia[1]. In response to the invasion, the EU has outlined plans under the REPowerEU proposal to source 45% of its energy mix from renewables and save 13% of energy consumption through increased efficiency. This has democratic support, with 85% of Europeans believing that the EU should reduce its dependency on Russian gas and oil[2]. In the US, the Biden administration has passed the landmark Inflation Reduction Act, which allocates US$369 billion to clean energy and decarbonisation projects, as well as clean energy tax credits, with the aim of reducing US carbon emissions by around 40% by 2030.

As policymakers wake up to the prospect of prolonged high energy prices and potential blackouts, the arguments for on- and off-grid renewables – which offer clean, decentralised energy – will become ever more attractive.

Capital investments in renewables are expected to reach US$500 billion in 2022 and could overtake upstream oil and gas for the first time. Carbon Tracker, a think tank that researches the impact of climate change on financial markets, predicts that solar and wind could generate all of the world's electricity by the mid-2030s and displace fossil fuels to provide all energy worldwide by 2050.

However, the transition will take time; renewables, whether from solar, wind farms or hydroelectricity, take several years to build and involve significant capital outlay, although subsequent running costs are very low. Meeting baseload demand for longer periods also requires improvements in grid reliability and battery storage, but these are happening at pace.

Success stories like Greece, which ran entirely on solar, wind, and hydroelectric power for five hours in October 2022, show what's possible. Greece now hopes renewables will account for at least 70% of its energy mix by 2030. We expect to see more of these success stories starting in 2023.

Energy affordability

Thanks to technological developments, design improvements, and economies of scale, renewables are becoming cheaper every year (see Figure 1). In 2021, according to the International Renewable Energy Agency (IRENA), the global weighted average levelised cost of electricity (the average cost of the lifetime of the plant per megawatt hour of electricity generated) of new utility-scale solar photovoltaic and hydropower was 11% lower than the cheapest new fossil fuel-fired power generation option, whilst that of onshore wind was 39% lower.

Furthermore, Oxford University researchers have stated that, compared to the fossil fuel-based system, 'a rapid green energy transition will likely result in overall net savings of many trillions of dollars'. Research from the Royal Society of Chemistry shows that wind, water, and solar requires less energy, costs less, and could create more jobs than fossil fuels. These are encouraging developments, not least for the poor and vulnerable in developing countries who lack access to electricity.

Renewable energy assets such as wind farms and solar parks have the potential to generate long-term, stable, inflation-linked revenues on relatively low operating costs. This leaves them well-placed to perform strongly in a 'stagflationary' environment. Once capacity is installed, renewables prices can drop further. Investors are starting to appreciate that this cost advantage is shifting the dynamics in favour of renewables.

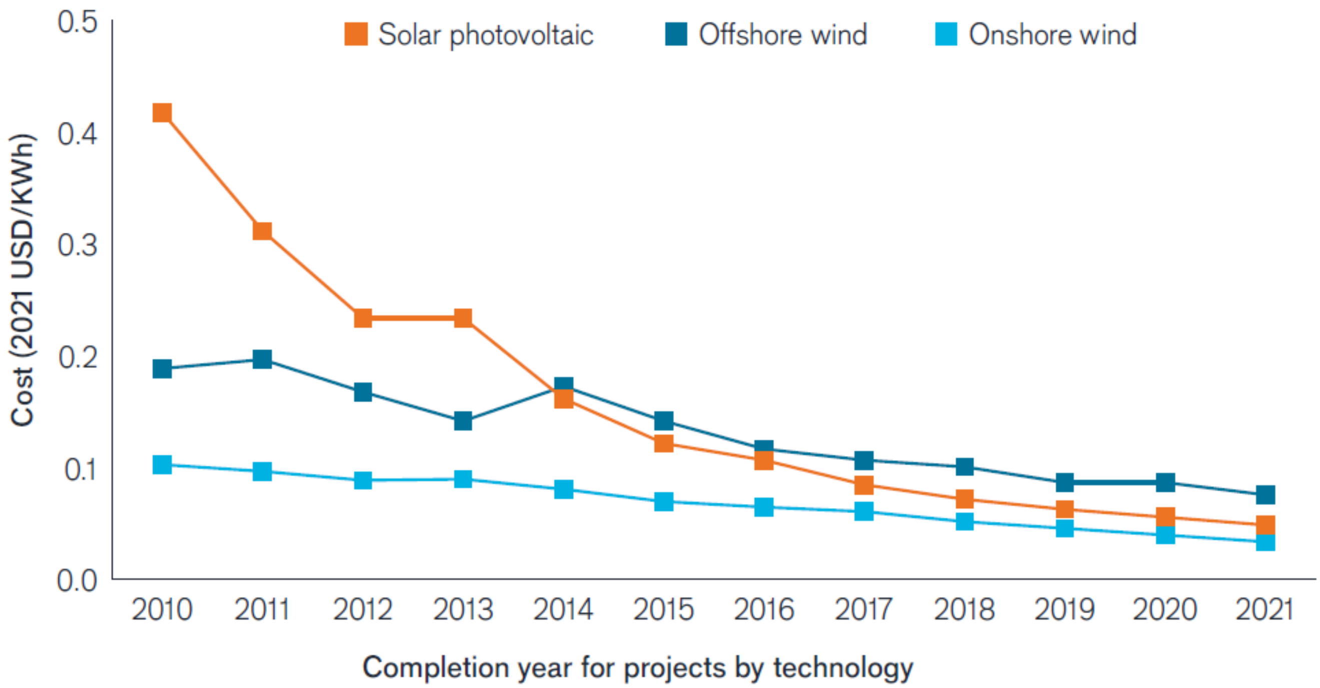
However, the energy transition will be challenging for governments. It means removing substantial subsidies which support the fossil fuel industry and accepting the upfront cost of building new renewable generators instead of continuing to use gas. The intermittency of renewables requires flexible plants that can switch to costly and polluting gas when renewable supply is insufficient. Building out renewables transmission infrastructure is also expensive and takes time. Finally, there are structural impediments in the electricity markets, such as marginal cost pricing in Europe and the UK, which some have called to be reformed.

Strong leadership will be required to overcome these challenges. We believe certain governments globally will start to acknowledge the challenges and implement necessary measures in 2023.

Energy sustainability

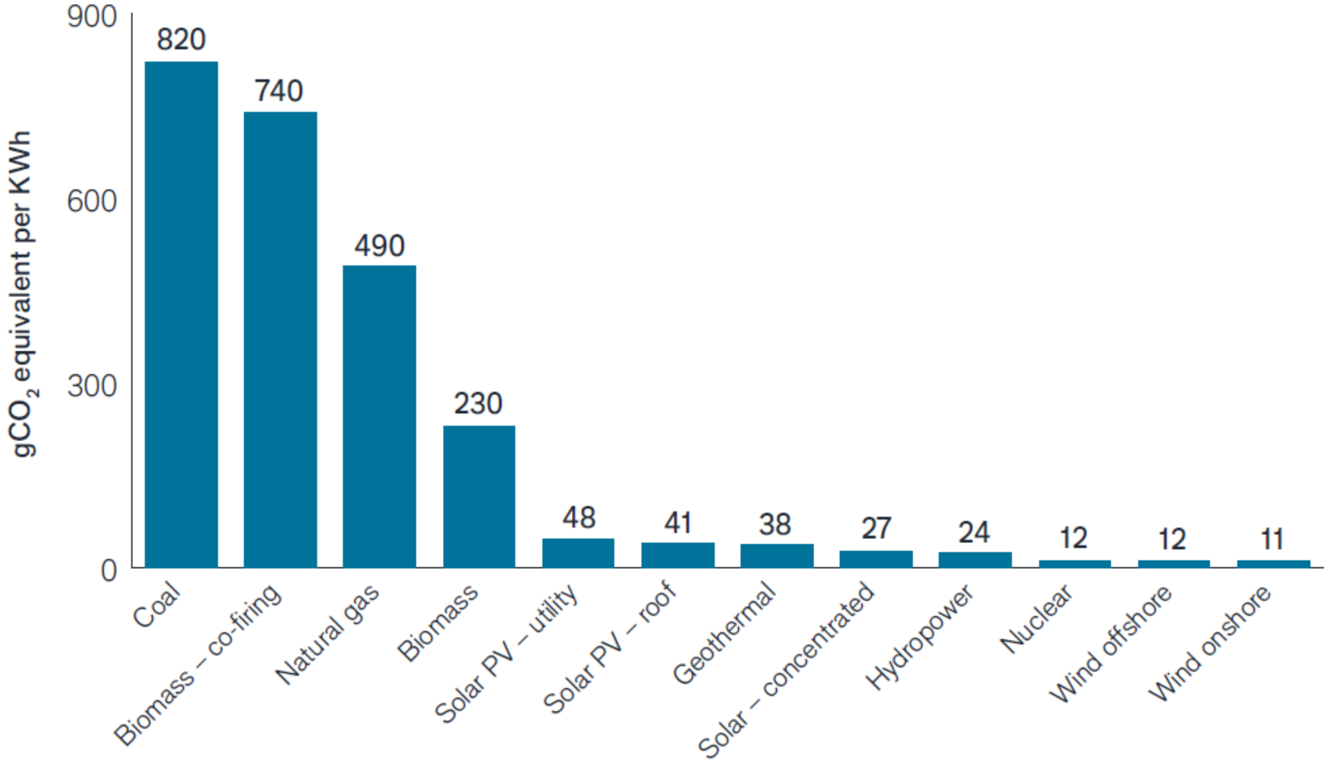
The International Institute for Sustainable Development has said that developing any new oil and gas fields is incompatible with limiting warming to 1.5°C, and that global oil and gas production and consumption must decrease by at least 65% by 2050. The implication is that renewables in all forms (wind, solar, hydro, biofuels, nuclear, green hydrogen, and geothermal) should make up a larger share of the energy mix.

Figure 1: Renewables are getting cheaper, supporting the transition to net zero



Source: International Renewable Energy Agency, 2022.

Figure 2: Average life-cycle CO_2 equivalent emissions



Source: United Nations Intergovernmental Panel on Climate Change, 2014.

In 2021, global energy transition investment aimed at decarbonising economies was over US$750 billion, representing 10% of energy investment, according to the International Energy Agency (IEA). This was already a 27% jump from 2020, driven by growth in renewables and electrified transport. Growth in renewable energy installations and electric vehicles is expected to limit the increase in global emissions from 2021 to 2022 to less than 1%. That is much smaller than the increase in the previous year and remarkable given the rise in fossil fuel use driven by the Russia-Ukraine crisis.

This is because, while the initial construction and installation of renewable infrastructure creates a carbon footprint (including through mining for metals), overall, renewables emit much lower average carbon emissions over their lifetime, as Figure 2 shows.

Bloomberg NEF estimates that, to get on track for net zero, annual energy transition investment (the term used for money spent on deploying clean technologies, including renewables, electric vehicles, and carbon capture) needs to average US$2.1 trillion from 2022 to 2025, doubling to US$4.2 trillion from 2026 to 2030.

The transition will require both governments and the private sector to propel the effort forward. Governments have the potential to commit to a clean energy future, redirect subsidies from fossil fuels to renewables, and limit use of gas as a bridging fuel. In turn, companies and investors may have opportunities to benefit from directing long-term capital into supporting the energy transition and the green industries of the future.

Theme 2: Polarisation of attitudes to ESG in the US will continue

In our outlook for 2022, we discussed divergent boardroom attitudes towards ESG and whether ESG would be considered synergistic with financial performance. Prior to 2022, there were nuanced disagreements around ESG; however, the fundamental proposition of ESG integration – that it is worthwhile to incorporate ESG and climate considerations in the investment process – was largely unquestioned.

This year, the mood has shifted. ESG funds and strategies that allocated to technology growth stocks and underweighted energy stocks have typically underperformed their non-ESG counterparts. Questions over the role of ESG in fiduciary duty are being retraced. Meanwhile, companies and investors have been expected to uphold ever stronger ESG standards, notably in the US. Disquiet has turned into fundamental disagreement.

Criticisms have largely come from the Republican Party and the US political right, which have denounced ESG variously for being a left-wing ideology, an instrument of global elites, a threat to the domestic fossil fuel industry, and, ultimately, a detractor from financial returns. As the energy crisis rages on, ESG has been termed a 'woke ideology' and 'perverse', among other things.

This year, the Texas Comptroller divested from almost 350 funds and 10 asset management companies that promote ESG. Florida's Governor approved a resolution that bars the state's pension fund from considering ESG factors in making investment decisions, and several other states have followed suit.

The backlash has spread to the private sector. One of the notable achievements of COP26 last November was the creation of the Glasgow Financial Alliance for Net Zero (GFANZ), a coalition of financial institutions with over US$150 trillion of assets under management committed to reaching net zero by 2050. Under pressure from clients of participant banks who argued that divesting from fossil fuel assets was a breach of fiduciary duty, the requirement to abide by the UN-backed 'Race to Net Zero' campaign was dropped.

Meanwhile, President Biden's administration pushed through the Inflation Reduction Act, an ambitious program which aims to kickstart investment and deployment of clean energy.

> "When I'm sailing, I often have the choice of following a direct route or taking a longer, more circuitous journey. On climate action, Europe appears to be taking the former route and the US the latter". – Paul LaCoursiere

How will it play out?

We don't expect the divisions between the sustainability champions and the ESG doubters to resolve anytime soon. Indeed, it's likely the polarisation will become starker in 2023.

In our previous outlook, we called for realism and honest debate about what ESG can and cannot achieve. This is more important than ever. We believe we need to remove the hyperbole and define what ESG really is.

First, ESG is not a single approach but an umbrella term for a variety of strategies, some of which are based on financially relevant metrics, and others which are based on the values of the investor. ESG approaches can be used in isolation or together (for example, exclusionary screening and ESG integration). It's important that investors understand the characteristics of the product they are buying. Second, research shows that ESG risks are financial risks, so incorporating ESG considerations should provide a more holistic assessment of the risks and opportunities of an investment. Finally, the rise of ESG investing in recent years partly reflects the need to tackle existential systematic sustainability challenges including climate change and environmental damage. These challenges are not going away.

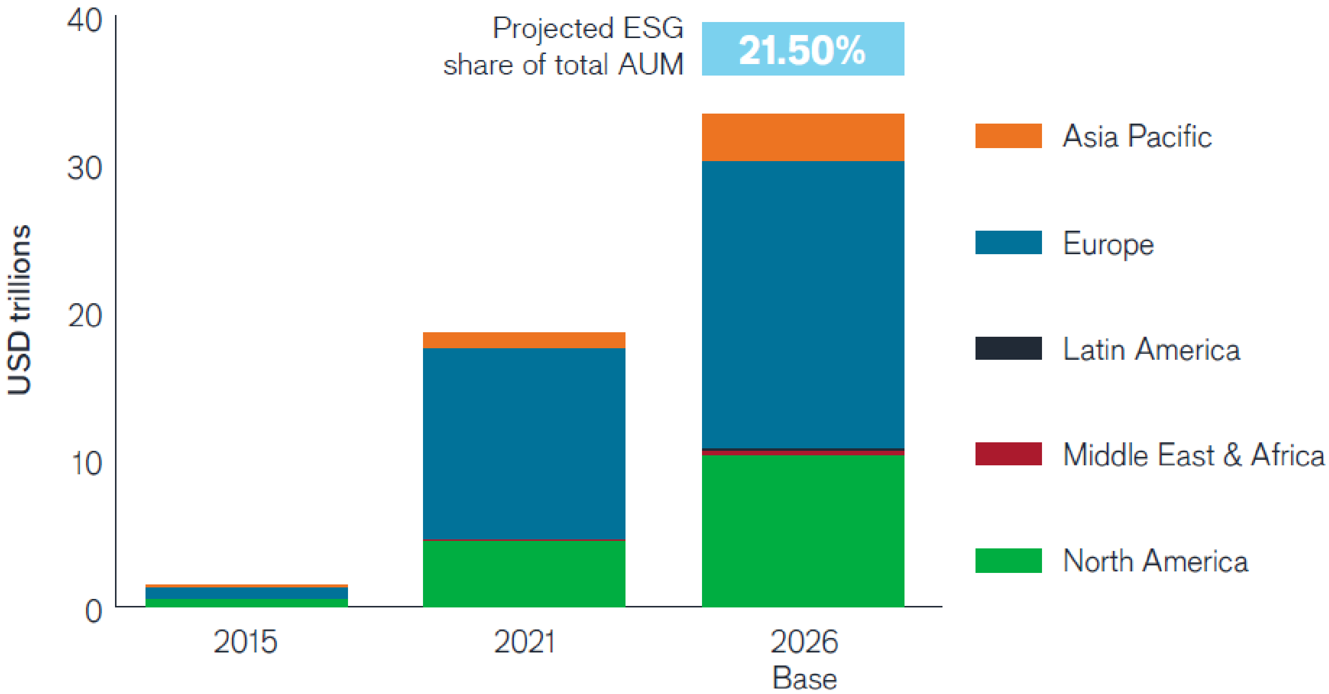
Nevertheless, the reprioritisation of ESG is understandable against a backdrop of high energy prices and potential blackouts. The underperformance of ESG funds and strategies raises larger questions of the role of the investment management industry in facilitating both energy security and a successful energy transition to tackle climate change. These are sensitive issues, and it's unsurprising that there is heated debate amid all the uncertainty. As we stated in our previous outlook, open and honest debate around the role of ESG – its strengths, limitations, and any trade-offs – is critical, especially in this time of division.

An obvious conclusion from recent events is that ESG adoption will slow amongst US investors; however, a recent survey by PwC of 250 institutional investors and asset managers worldwide with combined global assets of $60 trillion – or nearly half of global assets under management (AUM) – reveals intentions for more, not less, ESG investment. The study[3] shows that, in its base case growth projection scenario, North America ESG AUM would more than double from 2021 levels to over US$10.5 trillion in 2026 (see Figure 3), with 81% of institutional investors planning to increase allocations to ESG products over the next two years.

The report also estimates that Europe ESG AUM will increase 53% to US$19.6 trillion, while the fastest percentage growth is expected among Asia-Pacific (APAC) investors, with more than a tripling in ESG AUM to US$3.3 trillion in 2026.

The outcome of the US mid-term elections will be important in determining how events play out. At the time of writing, the Democrats have retained control of the Senate and the Republicans look favourites to win a slim majority in the House of Representatives. The results could well influence future ESG legislation and ESG adoption in the US.

Figure 3: Projected global ESG AUM growth



Source: 'Asset and wealth management revolution 2022: Exponential expectations for ESG', PwC, October 2022.

Theme 3: Biodiversity loss will become an investor priority

Biodiversity is the rich tapestry of life on Earth and the complex ways living things and non-living entities like rocks and soil interact to create the natural world. Nature is now in crisis as a direct consequence of the ever-expanding sphere of human activity. We expect biodiversity loss to emerge as the second most important sustainability issue after climate change.

We have written previously about the scale of human-induced biodiversity loss and ecosystem damage. Almost 70% of animal species have disappeared in the last 50 years (see Figure 4) and one million species are currently at risk of extinction in the coming decades. Given these stark warnings, scientists are talking of 'biological annihilation' and a 'sixth mass extinction'.

This is important for investors because nature provides a multitude of services to humanity, the monetary benefits of which are worth US$44 trillion – more than half of global GDP – each year (not to mention innumerable benefits to our wellbeing). The functioning of whole sectors of our economies, not least food and agriculture, depends on nature's services to function.

"I've been lucky enough to sail in the Caribbean. On first visiting over 30 years ago, I recall snorkelling around vivid, multi-coloured coral reefs. Sadly, some of these areas now look like graveyards. Corals occupy less than 0.1% of the ocean floor but house over 25% of all marine life. Thanks to pollution and climate change, these once vibrant coral reefs are turning into bleached wildernesses".
– Paul LaCoursiere

Thus far, there has been limited nature-related action by governments, corporate leaders, and investors. However, we expect that to change in 2023 for three key reasons:

- COP15 setting the agenda:

After four cancellations caused by the COVID-19 pandemic, the COP15 UN Biodiversity Conference will take place in Montreal in December 2022 to adopt the post-2020 global biodiversity framework. This framework provides the 'strategic vision and a global roadmap for the conservation, protection, restoration, and sustainable management of biodiversity and ecosystems for the next decade'. Given recent challenges – including the pandemic and the energy crisis – that have hit governments' finances hard, we don't expect any ground-breaking announcements. However, given the urgency, we anticipate countries will agree to more ambitious, transparent, and time-bound nature-related targets, and will work collectively to meet global goals.

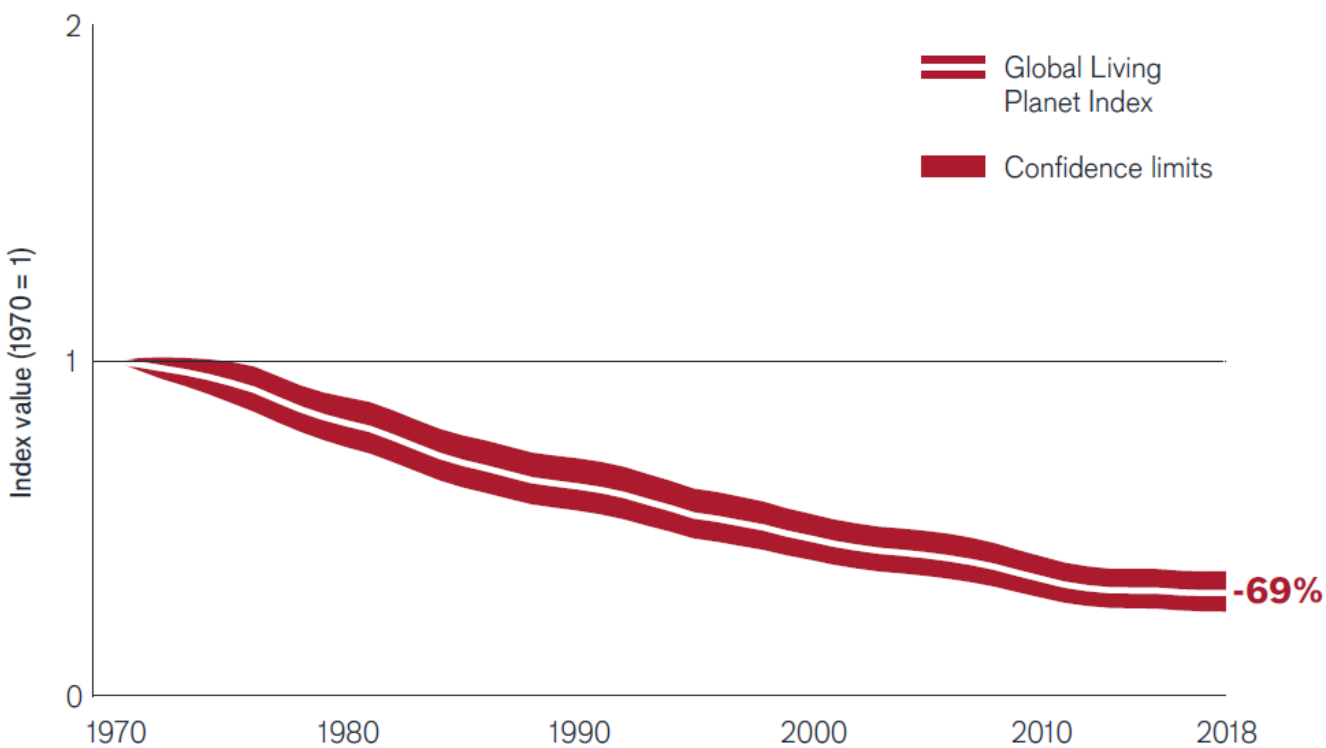
- Development of the TNFD framework:

The Taskforce for Nature-related Financial Disclosure (TNFD) is a global, market-led initiative consisting of corporations, financial institutions, and intermediaries, akin to the Task Force on Climate-related Financial Disclosures (TCFD) for climate disclosures. Its aim is to encourage the incorporation of nature-related risks and opportunities into corporate decision making and nature-related financial disclosures through relevant regional and sector-based metrics and targets. This is important because surveys suggest lack of available data and metrics is the main barrier to investor action on biodiversity. The TNFD's final framework will be published in September 2023 and could be made mandatory in certain jurisdictions.

- Acceptance that biodiversity risks are investment risks:

There is rising investor awareness that biodiversity loss represents a financially material risk, particularly for certain sectors such as food, agriculture, and healthcare. In the same way it interacts with and worsens climate change, biodiversity loss also poses a systemic threat. Reflecting this, organisers of the COP27 climate talks have allocated a day to discuss the topic. We expect client pressure on asset managers to act on biodiversity loss to increase. Indeed, a Robeco survey of 300 investors globally showed that 56% would make biodiversity a core strategy in the next two years. This could include the use of biodiversity metrics and targets in company analysis, engaging with companies on biodiversity risks, and voting on nature-related resolutions where relevant.

Figure 4: Around 70% of vertebrate species have gone extinct since 1970



Source: WWF/ZSL – 'WWF Living Planet Report 2022'. The global Living Planet Index shows that a subset of 31,821 populations of 5,230 vertebrate species has declined by an average 69% in abundance between 1970 and 2018. The white line shows the index values and the shaded areas represent the statistical certainty surrounding the trend (95% statistical certainty, range 63% to 75%).

Navigating a route ahead

Global challenges to ESG, including climate change and biodiversity loss, are not going away; indeed, they are worsening. The COVID-19 pandemic and Russia-Ukraine crisis have driven a rise in income inequality between developed and developing countries, as well as within countries. By taking a holistic investment approach that considers these challenges, ESG provides investors with a way to potentially improve the resilience of their portfolios while aiming to address such challenges.

Yet, the concept of ESG has faced something of a perfect storm in 2022. ESG has historically represented an accessible and comprehensive package of considerations that investors can use to better understand the characteristics of an investment. However, recent events have highlighted some of the drawbacks, including the assimilation of disparate issues such as carbon intensity and diversity metrics, and how (or whether at all) these metrics should be combined into a single score. In the worst instance, the complexity of these issues has engendered a sense that ESG lacks transparency.

These are complex issues, and it's clear that ESG must adapt and evolve in order to thrive. We look forward to open and honest debate from all sides on what ESG is, what it can meaningfully achieve, and why it is important – something that should lead to constructive outcomes in 2023 and beyond.

Footnotes and definitions

[1] London School of Economics and Political Science, April 2022.

[2] European Commission, May 2022.

[3] 'Asset and wealth management revolution 2022: Exponential expectations for ESG', PwC, October 2022.

ESG integration is the practice of incorporating material environmental, social and governance (ESG) information or insights in a non-binding manner alongside traditional measures into the investment decision process to improve long term financial outcomes of portfolios. This product does not pursue a sustainable investment strategy or have a sustainable investment objective or otherwise take ESG factors into account in a binding manner. ESG related research is one of many factors considered within the investment process and in this material we seek to show why it is financially relevant.

Just Transition: seeking to ensure that the substantial benefits of a green economy transition are shared widely, while also supporting those who stand to lose economically.

Levelised cost of electricity (LCOE): the average cost of the lifetime of the plant per megawatt hour of electricity generated. This reflects the cost of building, operating and decommissioning a generic plant for each technology.

Net zero refers to greenhouse gas production being balanced by removal from the atmosphere.

Stagflation is an economic cycle characterized by slow growth and a high unemployment rate accompanied by inflation.

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