



Contents

A rebalancing act	3
Global economy to keep its head above water	5
US economy: rays of hope?	8
Can China get its mojo back?	11
The eurozone feels the heat	14
UK buckles up for storms ahead	17
Time to get selective in equities	20
The road to normalisation for bond investors?	25
Anchors aweigh	29
Is asset allocation at a tipping point?	33
The case for investing in clean energy in 2023	38
Being comfortable with the uncomfortable	42
Multi-asset portfolio allocation	46
Key dates	47

Contributors:

Henk Potts, London UK, Market Strategist EMEA
Julien Lafargue, CFA, London UK, Chief Market Strategist
Dorothée Deck, London UK, Cross Asset Strategist
Michel Vernier, CFA, London UK, Head of Fixed Income Strategy
Nikola Vasiljevic, Zurich Switzerland, Head of Quantitative Strategy
Lukas Gehrig, Zurich Switzerland, Quantitative Strategist
Alexander Joshi, London UK, Head of Behavioural Finance
Damian Payiatakis, London UK, Head of Sustainable & Impact Investing
Luke Mayberry, London UK, Investment Analyst
lain Martin, London UK, Investment Writer

Foreword

Welcome to our annual Outlook publication, in which our Investment Strategy team looks at prospects for financial markets next year and beyond.

This year's Outlook is entitled 'A rebalancing act' in recognition of the multi-faceted global transition currently underway, and the subsequent need for investors to strike an increasingly difficult balance between risk and reward.

As bond yields zoom up, central banks get more serious on rate hikes, and recession risks become real, the mood in financial markets is undeniably glum. The better news, however, is that the longer-term picture looks more encouraging. This year's report attempts to put these short-term challenges into full context.

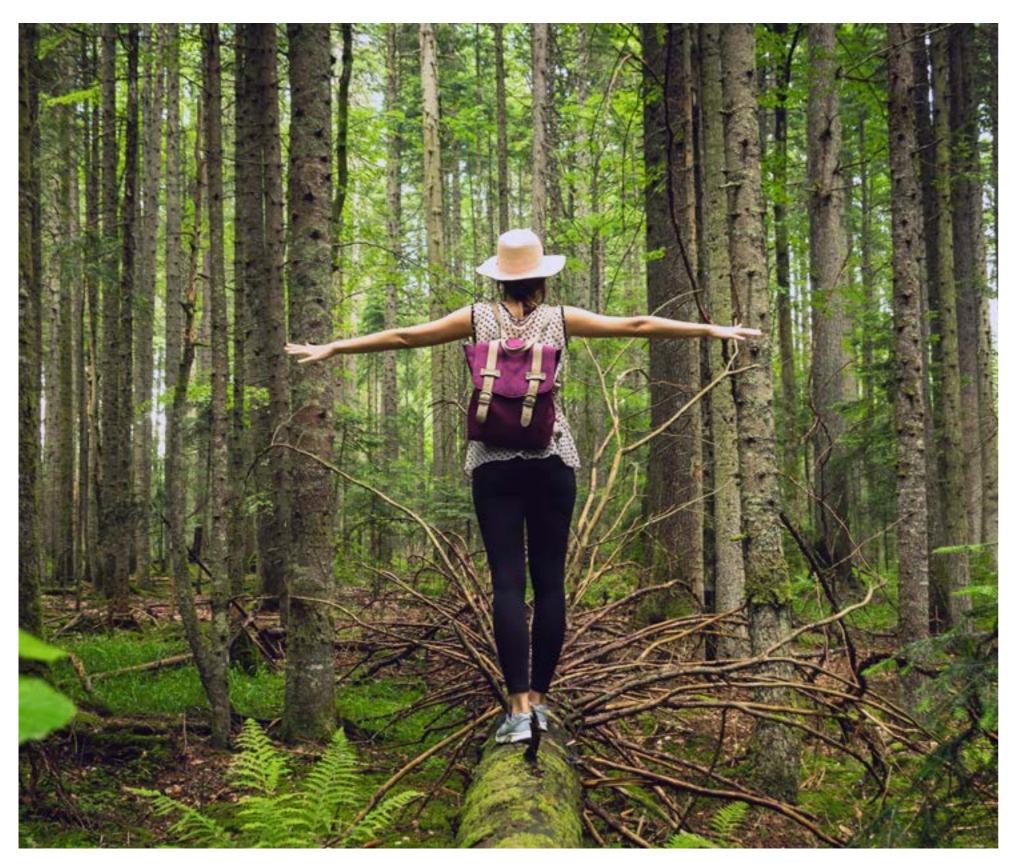
In addition to our usual asset class and financial market analysis, you'll find another fascinating sustainability chapter. Written at a time when sky-high fossil fuel prices continue to put the case for clean energy under the spotlight, it offers timely insights on a topic front-and-centre of many investor discussions today.

As always, we hope you enjoy the Outlook's articles and we thank you for entrusting us with your investments.

Jean-Damien Marie and Andre Portelli, Co-Heads of Investment, Private Bank

A rebalancing act

2023 looks like being another difficult one for investors. At a time of slowing growth, sky-high inflation, and punchy interest rates, investors and the authorities will need to tread carefully. That said, new investment opportunities have emerged, keeping us constructive over the medium term.



INVESTMENT STRATEGY

The last twelve months have been tough for investors. Only commodities posted positive real returns at the asset class level, and portfolios made solely of stocks and bonds have had one of their worst calendar years in a century, according to Bloomberg.

UNCOMFORTABLY CONSTRUCTIVE

Looking ahead and into 2023, we remain "uncomfortably constructive". Indeed, we expect the next 12 months to be equally challenging for investors. The prospect of slowing economic growth, if not recession, coupled with stubbornly elevated inflation, will require central bankers to find the right balance between too much and not enough monetary policy tightening. At the same time, governments won't be able to pick up the stimulus baton as easily, with funding becoming increasingly expensive.

Both Europe and the UK are more likely than not to enter a recession. In the US, the outlook is slightly more encouraging, but the largest economy in the world may barely grow next year. One big question is whether China will finally move away from its zero-COVID policy to resuscitate the economy.

But with lower growth and supportive base effects, inflation should finally come down. The pace of this normalisation process is uncertain (see <u>Anchors aweigh</u>). However, it should be somewhat proportional to the deceleration in economic momentum, assuming that geopolitics don't get in the way. We anticipate that both growth and inflation will moderate, rather than collapse, next year.

This backdrop is likely to lead to significant volatility and, at one point or another, investors are bound to get caught wrong-footed if they take too strong of a directional bet. With little sign that this period of heightened volatility is over, appropriate diversification (see <u>Is asset allocation at a tipping point?</u>) and a focus on your long-term objectives (see <u>Being comfortable</u> with <u>being uncomfortable</u>) remain essential.

"Next year will be a difficult but necessary rebalancing act for central banks, governments, markets, and investors alike"

3

A NEW ERA FOR BONDS

In our last Outlook, we made the case that investors should be looking beyond traditional stocks and bonds portfolios. Our main message now is that it may be time to revisit (and possibly rebalance) their bond exposure. We continue to see attractive prospects for real assets and private markets, but, given the repricing in fixed income markets, we believe investors should look again at this part of their portfolio in particular. The risk-free rate – which had become the rate-free risk in the last decade – is finally back, and investors can now generate attractive income in the public debt markets.

This repricing in rates hasn't happened in a vacuum, and equity valuations too have sold off. Here, we expect markets to remain choppy until more clarity emerges on the earnings front in particular. While equities have been the only game in town for several years, this is no longer the case and bonds are now a credible alternative (or at least complement) in portfolios. As we pointed out previously, over the medium to long term, we continue to see more upside in stocks than in bonds, but 2023 could be a more mixed year.

ENERGY TRANSITION

Finally, the last year has highlighted why countries need to secure access to reliable sources of energy. In this context, we are convinced that the energy transition to a low-carbon world will accelerate in 2023 and beyond, presenting investors with many opportunities.

"Looking ahead and into 2023, we remain 'uncomfortably constructive'. Indeed, we expect the next 12 months to equally challenging for investors"

BEWARE BEING TOO PESSIMISTIC

Next year will be a difficult but necessary rebalancing act for central banks, governments, markets, and investors alike. But, amid all the pessimism and concerns, we see more opportunities today than at any point in the last few years.

Our messages for 2023:

- A recession in Europe, the UK, and possibly the US is more likely than not
- Fixed income is interesting again
- Volatility isn't going away
- Selectivity and composure will be key to navigate an uncertain environment.

Author: Julien Lafargue, London UK, Chief Market Strategist

Global economy to keep its head above water

Another difficult year looks to be on the cards as the global economy and policymakers try to charter tame multi-decade inflation highs and adjust to a post-pandemic world. Growth may be tepid next year, but any recession should be short and shallow.



Global economic forecasts, year on year (%)						
	Real GDP		СРІ			
	2021	2022F	2023F	2021	2022F	2023F
Global	6.3	3.2	1.7	3.2	7.1	4.6
Advanced	5.3	2.5	-0.2	3.3	7.7	4.6
Emerging	7.1	3.7	3.1	2.9	6.3	4.6
US	5.9	1.8	-0.1	4.7	8.1	3.9
Eurozone	5.3	3.2	-0.8	2.6	8.6	5.7
UK	7.5	4.2	-1.0	2.6	8.8	8.7
China	8.1	3.3	3.8	0.9	2.2	2.0
Japan	1.7	1.4	1.0	-0.2	2.5	1.6
Brazil	4.6	2.7	1.0	8.3	9.3	4.5
India	8.3	7.0	5.1	5.1	6.7	4.9
Russia	4.7	-3.6	-3.2	6.7	13.9	9.3

Sources: Barclays Investment Bank, Barclays Private Bank, October 2022

It has been a far bumpier year for the global economy and financial markets than was contemplated twelve months ago. A war in Ukraine, surging price pressures, and a pronounced slowdown in China have created a broad-based, synchronised slowdown. Heightened geopolitical tensions, coupled with the aggressive tightening of financial conditions, have infringed on activity as business and consumer confidence take more of a knock.

GROWTH SLOWS

At times of economic stress, monetary policy would normally ride to the rescue. On this occasion, however, it has not been feasible, as central bankers have felt compelled to pivot away from promoting growth in favour of ensuring price stability. While fiscal support has cut some of the impact of the cost-of-living squeeze, headroom has been limited following the pandemic. Furthermore, policymakers are wary of not undermining the battle against inflation.

Bonds

We forecast that the global economy will grow at just 3.2% in 2022 (see table), a significant downgrade to the 4.4% estimate which we made at the start of the year. The revised growth forecast is also below the 3.3% medium-term trend growth ordinarily expected from the global economy.

Unsurprisingly, inflation gauges have surged as the year has progressed. We now expect global consumer prices to have jumped 7.1% this year, compared to the 3.2% increase registered in 2021.

RECESSION RISK CLIMBS

The risk of a recession has inevitably increased as we turn to prospects for 2023. There are a range of factors that could cause output to shrink over the coming quarters. One of the primary risks to growth is a further de-anchoring of inflation expectations, which would force policymakers into hiking rates further into restrictive territory.

Conversely, the potential for policy mistakes from overly vigorous central bankers could also hit growth prospects. Further downside risks could emanate from an intensification of the war in Ukraine, an escalation of energy crises, and a harsher-than-expected slowdown in China. Meanwhile, higher rates and the stronger US dollar have started to create headwinds for emerging market finances.

"Our forecast [for 2023] is that advanced economies will experience a relatively mild recession, with output contracting by just 0.2%. We forecast that global growth will remain positive in 2023, albeit at a weak 1.7%"

INFLATION PROSPECTS APPEAR BETTER

We were acutely aware that inflationary pressures could materialise, given the scale of the pandemic stimulus packages and the unleashing of pent-up demand as economies reopened. The ramifications of the war in Ukraine on commodity markets and the impact of Chinese COVID-19 restrictions on supply chains have powered these pressures to multi-decade highs.

Nevertheless, there is reason for hope. We expect price pressures to ease over the next 12-18 months. This forecasted moderation should be partly driven by statistical (base effects) and technical (fiscal subsidies) factors. More fundamentally, tighter monetary policy usually moderates demand.

Additionally, retail inventory levels are stocked high, which should create goods disinflation as shops are forced to aggressively discount prices. One of the key drivers of inflation has been energy; crude prices have shown some signs of stabilising over the past few months, with the price of oil slumping 25% between July and September ¹.

Supply chains have slowly picked up as restrictions were removed and capacity increased. The supply and demand dynamic for semiconductors, for example, is in much better balance today than it was at the start of the year. Meanwhile, shipping costs have plunged, with the Baltic Exchange Dry Index down 64% over the past year.

While we expect inflation to peak in the coming months, we still anticipate global consumer prices (CPI) will remain above the target level in many of the major regions. We forecast that global CPI will average 4.6% in 2023, but with prints becoming more digestible as the year progresses.

"We forecast that global growth will remain positive in 2023, albeit at a weak 1.7%, as a recovery in China (3.8%) and robust growth in India (5.1%) offsets weakness in western economies"

UKRAINIAN WAR TO BE A DRAG ON GROWTH PROSPECTS

The war in Ukraine has taken a devastating toll on its people, created a European energy crisis, had a profound impact on inflation projections, and, in turn, monetary policy.

Ukraine's military resistance and support from the international community have been more resilient than originally feared. Nevertheless, Russia has shown few signs of retreating and in recent weeks has displayed a determination to escalate the conflict, including the decision to call up around 300,000 reservists.

With hopes of a peace treaty still looking fanciful, we expect geopolitical tensions to continue to weigh on sentiment and activity in 2023.

POST-PANDEMIC BLUES

The path of the COVID-19 pandemic could also hinder prospects for the global economy in 2023. At the start of October, the World Health Organisation reported that several European countries had seen more COVID-19 cases, hospitalisations, and deaths, as restrictions were removed and colder weather encouraged people to spend more time inside together.

The prospect of additional waves of the virus through the winter should have relatively manageable implications for countries. However, the risk to domestic activity and global supply chains remains, not least as China maintains its zero-COVID strategy.

REASONS FOR SOME HOPE

While the outlook for global growth seems to be worsening, there are many supportive factors which should help to limit the extent of any loss in output. Labour markets remain robust, household and corporate balance sheets look healthy, excess consumer saving is helping to cushion demand, and the service sector still has room to recover.

If, as expected, price pressures ease, some of the intensity may be taken out of the hiking narrative that has been dominating markets. This should then allow policymakers to pivot to a more balanced approach when assessing inflationary and growth risks, leading to a softer economic landing.

BUT, ANOTHER TRICKY YEAR AHEAD

2023 looks set to be another problematic year for the global economy as the rebound from the pandemic fades and the cost-of-living crisis takes its toll on activity. Our forecast is that advanced economies will experience a relatively mild recession, with output contracting by just 0.2%. We forecast that global growth will remain positive in 2023, albeit at a weak 1.7%, as a recovery in China (3.8%) and robust expansion in India (5.1%) offsets weakness in western economies.

While our growth forecast may appear to be discouraging, we should acknowledge that the majority of factors within our 2022 risk framework have already occurred. Therefore, with much of the bad news already incorporated into our low baseline growth forecast for 2023, the potential for further downside from tail risks has actually reduced.

Author: Henk Potts, London UK, Market Strategist EMEA

US economy: rays of hope?

Aggressive rate hikes, plus commodity and food price shocks, have rocked American consumers and businesses. However, as the central bank finally takes its foot off the interest rate accelerator and inflationary pressures ease, the country appears set to grow faster than most developed-world peers next year.



US economic forecasts, year on year (%)					
	2021	2022F	2023F		
Real GDP growth	5.9	1.8	-0.1		
CPI inflation	4.7	8.1	3.9		
Unemployment rate	5.4	3.7	4.5		
Gross public debt (% of GDP)	127	122.3	123.6		
Private consumption	7.9	3.5	0.4		

Source: Barclays Investment Bank, Barclays Private Bank, October 2022

Whether the economic slowdown seen in the US this year was a recession or not is open to debate. The National Bureau of Economic Research (NBER) defines one as being a significant decline in economic activity spread across the economy, lasting more than few months, normally visible in production, employment, real income, and other indicators.

While the dip in US output may not have met this broad definition and growth rebounds in the third quarter, the two consecutive quarters of negative growth registered in the first half of 2022 are, at least, testament to an uneven downturn.

ECONOMY TAKES FOOT OFF ACCELERATOR

The weakness in the US economy has been driven by decreases in inventory and housing investment, lower levels of government spending, and a reduction in net exports. Additionally, construction, wholesale trade, and manufacturing activity have shrunk in recent months.

September's Institute for Supply Management (ISM) survey showed that manufacturing (12% of the economy) activity grew at its slowest pace in more than two years¹. While, the services purchasing managers index (PMI) continues to point to an expansion, growth rates have been slowing due to a decrease in business activity and new order orders.

The strength of the labour market, resilience of the consumer, inflation trajectory, and the path of monetary policy will be the key factors in determining how much the economy slows in 2023.

TIGHT US LABOUR MARKET TO SLACKEN

The American unemployment rate fell to 3.5%² in September, the lowest level since the 1970s, although the headline rate is also a reflection of a lower participation rate. As the economy weakens over the coming year, we would expect job creation levels to reduce and the unemployment rate to begin to rise. A fall in non-farm payroll creation and job openings was seen in August, hitting the lowest since June 2021.

We forecast that the US unemployment rate will rise to around 4.9% at the end of next year, and average 4.5% in 2023 (see table). While obviously higher than today, it is not at a level that will scare policymakers.

"Our forecast is for real GDP to decline by just 0.1% in 2023, compared to growth of 1.8% in 2022"

US CONSUMERS TO KEEP SPENDING

Consumer spending has proved to be resilient, despite pressure on real incomes. Personal consumption expenditure (the value of the good and services purchased by, or on behalf of, US residents) rose 0.4% in August. Spending has remained positive as consumers rotated from buying goods into services, a trend that is likely to persist next year.

Helpfully, demand should continue to be cushioned by rising wages, a lower saving rate, and excess consumer savings built up during the pandemic.

CONFIDENCE IS FRAGILE

Consumers are ending the year not as glum as they were in the summer, supported by lower petrol prices and a buoyant labour market. However, confidence about the future continues to be fragile. The University of Michigan's survey showed that the consumer expectations component has declined due to renewed pressures from uncertainty over the future trajectory of prices, rates, economies, and financial markets.

Given the clear stress on purchasing power and confidence levels, together with the forecasted moderate increase in unemployment, we expect private consumption growth to materially weaken through the course of next year. For 2023, we expect household demand growth of 0.4%, much less than the 3.5% increase this year.

IS A HOUSE PRICE SLUMP ON THE CARDS?

The US housing market looks set to come under much pressure next year. After a post-pandemic boom, prices are now registering monthly declines, as the market adjusts to elevated prices and soaring mortgage rates.

The average 30-year fixed loan has surged above 6.9% in recent weeks, its highest level since 2002. Applications to purchase or refinance a home fell to their lowest level since 1997 in October, according to data from the Mortgage Bankers Association³. We expect price appreciation to continue to ease next year, and possibly turn negative as sales slow and affordability measures become stretched.

IMPACT OF A SPLIT CONGRESS ON POLICY

The midterm elections failed to produce the "Red Wave" that Republicans had hoped for on 8 November, as the Democrats outperformed the opinion polls leaving control of Congress hanging in the balance, at the time of writing. While Republicans appear to have taken back control of the House of Representatives, the lack of a governing majority suggests that the US administration will now move into a period of legislative gridlock.

The diffusion of power across the political spectrum will likely constrain rule makers to deciding upon the appropriate levels of government funding and assessing expiring provisions. Divided government means that President Biden will have to decide to either move to the centre and try to find compromise with the GOP leadership or try to impose policy changes through executive actions and regulatory changes.

INFLATION SHOULD MODERATE

October's inflation report offered some encouraging evidence that prices pressures are finally starting to ease. The annual consumer price index (CPI) fell from 8.2% in September to 7.7% in October, the slowest rate of increase in 2022. Core inflation, which excludes volatile components like food and energy, also decelerated to 6.3%, compared to the 40-year high of 6.6% in September.

We anticipate that the rate of price increases will further decline in 2023, supported by a broad-based slowing of demand, high inventory accumulation, and easing supply constraints. Nonetheless, the upside risks from shelter, tight labour markets, and elevated wage inflation, together with the uncertainties on food and energy prices, make it difficult to quantify the pace of disinflation.

We believe that the peak in inflation is now behind us and that it will slowly grind lower over the next twelve months. We expect headline CPI of 6.8% year-on-year in December, before gliding to 2.5% at the end of 2023. Similarly, core CPI is forecast to be 6% at the end of the year, before slipping to 2.9% in December 2023.

² The employment situation – September 2022, Bureau of Labor Statistics, 7 October 2022 https://www.bls.gov/news.release/pdf/empsit.pdf

³ Mortgage applications decrease in latest MBA weekly survey, the Mortgage Bankers Association, 5 October 2022 https://www.mba.org/news-and-research/newsroom/news/2022/10/05/mortgage-applications-decrease-in-latest-mba-weekly-survey

⁴ Core UK inflation rises to 40-year high, securing big Fed hike, Bloomberg, 13 October 2022 https://www.bloomberg.com/news/articles/2022-10-13/core-us-inflation-rises-to-40-year-high-securing-big-fed-hike?leadSource=uverify%20wall

HIKING CYCLE TO GO OUT WITH A BANG

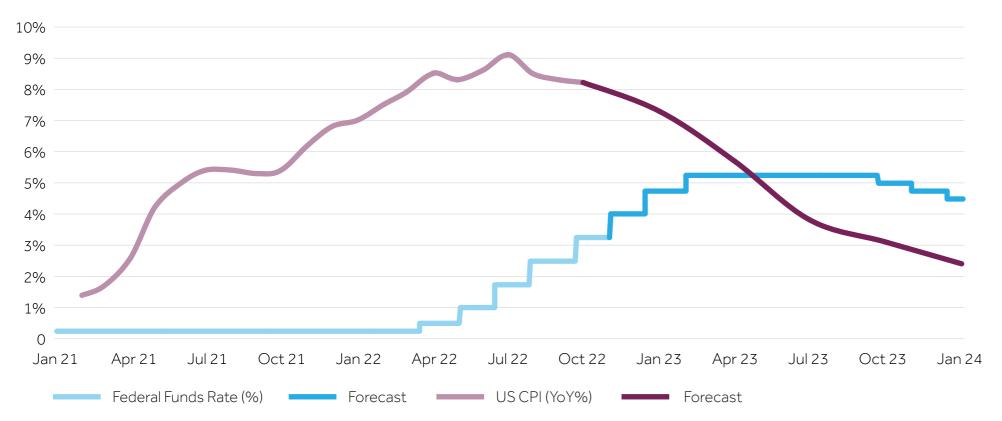
The lowest unemployment rate in five decades, coupled with the highest inflation readings in 40-years, have forced the US Federal Reserve (Fed) to push ahead with its steepest tightening cycle since the 1980s, despite evidence of a significant economic slowdown.

The resilience of labour markets and the persistence of inflation suggests that the central bank will need to deliver an extended finish to its policy normalisation programme. We expect the Fed to raise rates by a further 50 basis points (bp) at the December and February meetings.

We would then anticipate that the Federal Open Markets Committee (FOMC) will step down to a final 25bp increase in March, as risks between inflation and growth begin to level out. (see chart). This suggests that the terminal point for the fed funds rate for this cycle will be 5–5.25%.

US INFLATION AND INTEREST RATES SET TO DROP

The actual and forecast US consumer price index and fed funds rate since January 2021



Sources: Bloomberg, Barclays Investment Bank, Barclays Private Bank, October 2022

"We forecast that the US unemployment rate will rise to around 4.9% at the end of next year, and average 4.5% in 2023"

BUT, RATE CUTS ON THE WAY

The easing of inflation expectations, concerns about the impact of tightening financial conditions, and slowing growth could finally see the Fed pivot back to an easing stance towards the end of 2023. We have pencilled in 25bp cuts at the final three meetings of 2023, suggesting that the target range for fed funds would finish next year at 4.25–4.5%.

A YEAR OF SLOW GROWTH, BUT NOT RECESSION

Looking forward, it is likely to be a subdued year for the US economy, although the outlook looks brighter compared to its European counterparts. We expect activity to contract somewhat in the first three quarters, before recovering in the final three months of the year. Our forecast is for real GDP to decline by just 0.1% in 2023, compared to growth of 1.8% in 2022.

Author: Henk Potts, London UK, Market Strategist EMEA

Can China's economy get its mojo back?

China's focus on containing COVID-19 through containment measures, together with a property crisis and slowing demand for its exports, are at the heart of the subdued growth prospects facing the world's second-largest economy.



China economic forecasts, year on year (%)					
	2021	2022F	2023F		
Real GDP growth	8.1	3.3	3.8		
CPI inflation	0.9	2.2	2.0		
Unemployment rate	5.1	5.4	5.1		
Consumption	5.3	1.4	2.9		

Source: Barclays Investment Bank, Barclays Private Bank, October 2022

Rigorous enforcement of COVID-19 restrictions, a collapsing property market, and weaker external demand have conspired to drag down growth. The world's second largest economy grew by just 0.4% between April and June (Q2), the worst expansion in output (excluding the pandemic hit in Q1 of 2020) in data available since 1992. The economy recovered in Q3, with gross domestic product (GDP) growth of 3.9%, which was still short of its official 5.5% target.

China's growth rate has now fallen behind that of rival Asian economies which have abandoned lockdowns, boosted fiscal support, and benefited from higher commodity prices. For 2023, while we expect some reacceleration from the current depressed levels, but the mixture of structural and cyclical headwinds suggest that growth will once again fall short of its potential.

FASCINATION WITH A ZERO-COVID APPROACH

China is an outlier in the battle against coronavirus, with its focus on suppressing the disease through a mixture of aggressive testing, enforced periods of quarantine, and city-wide lockdowns.

The proffered rationale behind the policy is the country's large elderly population, its uneven regional development, and insufficient medical resources. The combination of a lower efficacy rate from its domestically-produced vaccine and relatively low vaccination rates among vulnerable populations has generated fears that its national health service would be overrun, and deaths would surge.

China's recorded deaths from coronavirus have been far fewer than other major regions. In fact, World Health Organisation data shows that China has reported less than 30,000 COVID-19 fatalities, compared to the US which, despite having a much lower population, has surpassed the one million mark ¹.

SPLUTTERING RECOVERY

While the strategy has subdued the spread of the disease, its impact on the domestic economy and global supply chains has been severe. China's labour market, retail sales, and service sector growth have come under renewed pressure as restrictions have intensified. Unemployment rose to 5.5% in September compared to 4.9% a year earlier. Activity data shows that domestic aeroplane flights have been running at around 40% of pre-COVID levels, tourist spending and visits have seen large declines in recent months, and the recovery in auto-sales has stalled.

Retail sales growth in September slowed to 2.5%, compared to August's 5.4% increase. We expect consumer activity will remain lacklustre in 2023 due to ongoing COVID-19 restrictions, rising unemployment and limited policy support.

INDUSTRIAL PRODUCTION A BRIGHT SPOT

Industrial production has been one bright spot, with growth of 6.3% registered in September ². This coincides with the introduction of the "closed loop management" approach, a system by which factories arrange for staff to live and work within its facilities. This arrangement allows for production to continue while adhering to the strict COVID-19 rules, but does come at a social cost.

Industrial production has also benefited from the improvement in supply chains at China's ports, the recovery in car manufacturing and a pickup in electrical machinery and equipment investment.

As domestic demand falters and the slowing global economy leads to a weaker demand for exports, the prospect of a further significant rebound in industrial production in 2023 looks unlikely. Exports, as measured through container throughput, registered a double-digit contraction in early September. Order backlogs in key manufacturing and exporting hubs have declined and figures show that falling demand in areas such as computers and semiconductors. We expect exports to decline by 2-5% in 2023. .

The latest Caixin manufacturing PMI figures revealed a noticeable fall in its new orders component, adding to concerns about future growth prospects.

COLLAPSING PROPERTY MARKET

The Chinese property sector accounts for around 25% of GDP when construction, land sales, and other related activity are taken into consideration. Previous measures to cool the housing market, the fallout from the property developer debt scandal, and a growing movement to boycott mortgage payments in protest over stalled construction have smashed activity levels. Home prices fell for a thirteenth consecutive month in September. Meanwhile, new starts fell 46% and land purchases slumped 57% in July (see chart).

Authorities have been trying to alleviate the distress in the housing market by easing mortgage rates, reducing down-payment ratios for first-time buyers in the major cities from 30% to 20% and relaxing buying restrictions outside of the four tier-one cities.

Given the broad range of pressures, we remain cautious about the potential for a recovery in the property sector. Homebuyer sentiment remains poor, household leverage is elevated, and the outlook for the labour market has been more uncertain. For 2023, we expect a longer and deeper contraction in housing investment, with an estimated contraction of 8-10% year-on-year. The current dislocation in the housing market is also expected to create long-term scarring which could weigh on growth prospects for many years.

CHINESE PROPERTY MARKET CRASHES

Trends in newly started houses (by floor space) and land areas purchased for real estate in China since February 2020



Sources: Bloomberg, Barclays Private Bank, October 2022

² China's industrial output up 6.3% in September, China.org, 24 October 2022 https://covid19.who.int

Quantitative strategy

Bonds

INFRASTRUCTURE REBUILD

Infrastructure investment has helped to mitigate some of the sharp slowdown experienced elsewhere in the economy. China believes that injecting vast sums into large-scale projects will help to modernise its economy and deliver an industrial transformation.

Traditional infrastructure projects are being fast-tracked in areas including transportation, energy, and water resources. China is implementing a massive renewable energy strategy, creating the world's longest water tunnel and developing a high-speed rail network. Authorities are also determined to deliver an enormous digital transformation, which revolves around building massive data centres and deploying ultra-fast digital networks.

The significant increase in credit growth and a faster approvals process have encouraged us to increase our growth forecast for infrastructure investment to 8-10% for 2022. During times of economic weakness, China has traditionally turned to infrastructure investment (such as in 2008-09 and 2012-13) although current levels are still significantly lower than during previous cycles. We expect the projected level of infrastructure investment will boost growth annually by around 0.5% in 2023, which although supportive, is not enough to materially turnaround China's growth profile.

INFLATION

China's price pressures are subdued when measured against the multi-decade highs in inflation seen in many western economies.

The country's consumer price index (CPI) rose to 2.8% year-on-year in September. Headline CPI was pushed higher by an increase in food prices, but lower levels of consumption have helped to reduce core inflation. Housing inflation (rentals) has eased for ten consecutive months, while recreation inflation fell to an 18-month low of 1.2% in September. We expect Chinese CPI to moderate through 2023 averaging just 2% compared to 2.2% registered in 2022 (see table).

POLICY OUTLOOK CLOUDED BY COVID-19 RESPONSE

Given the scale of the economic woes and the mild inflation profile, economists' have been calling for a more pronounced policy response. Assistance for the housing market has come in the form of bailout funds and special loans. Meanwhile, the People's Bank of China has reduced the banks' reserve requirement ratio, relaxed its credit policy, and cut rates.

Although these measures are helpful at the margins, they are unlikely to provide a meaningful boost to activity. While we can expect some further support over the next year, we anticipate that policymakers will maintain the "no big stimulus view", given their concerns about leverage levels, fears over stoking inflation, and a further weakening of the currency.

Despite the persistent rhetoric around the need to adhere to zero-COVID principles, we expect the authorities to ease some of China's travel restrictions in the coming months. Officials are reportedly debating measures that would cut quarantine periods for international travellers and allow the resumption of some overseas fights. However, given the surge in Omicron cases following the partial reopening back in March, any easing of rules is likely to be gradual and subject to revision depending upon the path of the pandemic.

On the political side, President Xi has said that China will continue to strive for a peaceful reunification with Taiwan, but fell short of renouncing the use of force. We anticipate that ongoing concerns over China's intentions towards Taiwan and a ratcheting up of tensions with the US will further add to geopolitical risk in 2023.

SLUGGISH SHORT-TERM GROWTH OUTLOOK

Without a material pivot from the zero-COVID containment policy, China's recovery is expected to remain inhibited through next year. We would expect some improvement from the sluggish 3.3% 2022 growth rate to around 3.8% in 2023, still a long way behind the 8.1% achieved in 2021.

In the medium term, China's growth profile should be underpinned by becoming a high-tech, sustainable, and domestically-focused economy. At the 20th Communist Party Congress, officials reiterated the commitment to transition from high-speed growth to high-quality development. Within that self-reliance framework, there is determination to develop the foundations which will deliver domestically-driven scientific and technological breakthroughs.

Improvements in domestic demand are expected to be achieved through its "Dual Circulation" strategy and the continued focus on the concept of Common Prosperity. The Common Prosperity doctrine aims to narrow the income gap and expand the middle class. The authorities believe that this can be achieved by rewarding productivity and standardising income distribution and wealth accumulation mechanisms.

China has all the attributes needed to become the world's largest economy eventually, but as recent turbulence attests, the path to the top of the rankings will not be unencumbered.

Author: Henk Potts, London UK, Market Strategist EMEA

The eurozone feels the heat

After a tough year for the eurozone economy, the prospect of energy shortages, a series of strikes leading to soaring wages, and battered consumer confidence means a recession is on the cards next year, with the bloc underperforming its developed world peers.



Eurozone economic forecasts, year on year (%)					
	2021	2022F	2023F		
Real GDP growth	5.3	3.2	-0.8		
CPI inflation	2.6	8.6	5.7		
Unemployment rate	7.7	6.7	7.2		
Gross public debt (% of GDP)	97.5	94.7	95.2		
Private consumption	3.7	3.9	-0.1		

Source: Barclays Investment Bank, Barclays Private Bank, October 2022

The devastating combination of the energy shock, record price pressures, and supply-chain disruptions to the crucial manufacturing sector, is suffocating activity in the eurozone. Regardless of the weakening economic backdrop, the European Central Bank (ECB) has been forced to hike interest rates in an effort to combat double-digit inflation.

With the composite purchasing managers' index (PMI) leading indicator now in contraction territory, the prospect of a recession in 2023 looms large. Energy security risks, tighter financial conditions, plunging domestic demand, pressures on industrial output, and reduced levels of investment point to a darker outlook.

EUROPEAN ENERGY CRISIS

The rationing of power and a proposed European Union (EU) embargo on Russian fuel supplies has sent a shockwave through energy markets, with European gas prices rocketing by fourfold. While Europe will remain vulnerable to further supply-side troubles, the immediate impact may be less than originally feared.

European gas storage facilities are 90% full¹ and the increase in liquefied natural gas (LNG) imports is helping to offset some of the supply shortfall. Nevertheless, as winter temperatures drop and demand lifts, the possibility of enforced cuts in consumption remains ever-present.

In order to further mitigate the effects of rising energy prices (see chart, p15), EU officials have been trying to develop a package to curb electricity and gas prices, and shield the most vulnerable.

Europe's gas stores are almost full. But there's a catch, Bloomberg, 20 October 2022 https://www.bloomberg.com/news/articles/2022-10-20/europe-only-has-a-loose-grip-on-the-gas-hoarded-to-save-winter

PERSISTENTLY HIGHER POWER PRICES

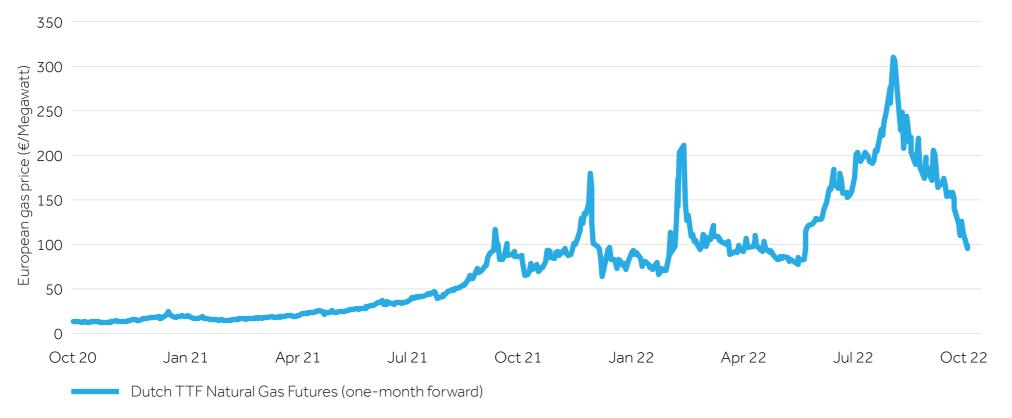
The European Commission (EC) is aiming to lower prices through the development of a collective purchasing platform. In their opinion, mandatory joint purchases (which would force nominated energy companies to participate in the programme) would allow the bloc to take advantage of its greater bargaining power.

A transition away from Europe's reliance on Russian fossil fuels to green energy is at the heart of the REPowerEU plan². Member states will be allowed to request additional funding through the Recovery and Resilience Facility³ in order to accelerate the investment required to achieve this objective by 2027.

Despite policymaker's best efforts, we expect that supply-side shortages and persistently higher energy prices will continue to impinge upon industrial production, household consumption and inflation projections through 2023.

EUROPEAN GAS PRICES SOAR, THEN CORRECT

Trend in European gas price, as measured by Dutch TTF Natural Gas Futures (one-month forward), since October 2020



Sources: Barclays Investment Bank, Barclays Private Bank, October 2022

LIMP CONSUMER DEMAND

Europe's recovery in domestic demand has been far less pronounced than in other western economies. Recent data has confirmed the slump in consumer confidence and slide in retail sales.

Figures from the EC showed that consumer confidence in the EU plummeted in September to its lowest level on record⁴. This steep decline was driven by a significant fall across all its major components, including their outlook on their financial future, intention to make a major purchase, and expectations about the general economic situation. Eurostat figures show that retail sales in the 19 countries which share the euro fell 2% year-on-year in August⁵.

Household consumption will likely remain constrained by the impact of elevated inflation on real income, a weaker labour market, and less willingness from consumers to draw upon savings accumulated during the pandemic. We forecast that private consumption will shrink by 0.1% in 2023 after growing by 3.9% in this year.

"We continue to forecast that price pressures will remain elevated next year, averaging 5.7%"

EUROZONE WORKERS FEEL THE SQUEEZE

Eurozone labour markets have been relatively stable, nonetheless, we do expect unemployment to rise from 6.6% in September 2022 to 7.2% by the end of next year. The risk around aggressive pay increases is more of a concern. Unions in Europe remain very powerful and demands for higher wages could have hit both activity and inflation projections for 2023.

In order to push through hefty wage settlements, unions have sparked a programme of industrial action. These negotiations take place at a fragile time for employees, as a cost-of-living squeeze continues to play out. If employers fail to settle with workers, the risk of more social disorder is likely to rise over the next year. On the other hand, if companies do significantly up wages, concerns over stoking price pressures would surface.

INDUSTRIAL PRODUCTION FACING HEADWINDS

While euro area industrial production has grown faster than expected over the summer, sectors particularly vulnerable to the energy crisis, such as metal producers and chemicals, have come under pressure. Conversely, other sectors, such as electronics and motor vehicles, have worked through backlogs and rebuilt stocks as supply-chain disruptions ease.

²REPowerEU: Joint European action for more affordable, secure and sustainable energy, European Commission, 8 March 2022 https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511

³ Recovery and Resilience Facility, European Commission, October 2022 <a href="https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-europa.eu/info/business-economy-economy-europa.eu/info/business-economy-ec

⁴ Flash consumer confidence indicator for EU and euro area, European Commission, 22 September 2022 https://economy-finance.ec.europa.eu/system/files/2022-09/Flash_consumer_2022_09_en.pdf

⁵ Volume of retail trade down by 0.3% in the euro area and by 0.2% in the EU, Eurostat, 6 October 2022 https://ec.europa.eu/eurostat/documents/2995521/15131934/4-06102022-AP-EN.pdf/30dbcae1-1162-7035-4b3e-ae69a64df586#:~:text=In%20August%202022%2C%20the%20seasonally.office%20of%20the%20European%20Union

Next year, we expect Europe's manufacturers to face the triple headwinds of elevated energy prices, softer domestic/ external demand, and reduced investment. Gross investment is expected to come under pressure due to higher input and financing costs, climbing wages, and heightened uncertainty.

HAS INFLATION PEAKED?

Euro area inflation accelerated in October, hitting a euro-era high of 10.7% year-on-year⁶. While energy and food were the main drivers, there has also been a noticeable pick up in services prices.

We expect the harmonised index of consumer prices (HICP) to remain in double-digit territory into the start of next year, after which we forecast that price pressures will slowly moderate as a result of government intervention in energy markets, and weaker wholesale gas and electricity prices. Nevertheless, we continue to forecast that price pressures will remain elevated next year, averaging 5.7% (see table).

ECB UPS RECESSION RISKS

The European Central Bank's (ECB) Governing Council has sent a clear message to markets that they are determined to tame inflation, and normalise policy, despite potentially sending the eurozone into recession. Policymakers delivered an unprecedented 75 basis point (bp) rate hike at both the September and October policy meetings.

Given the high, persistent, and broad-based nature of inflation, the aggressive hiking cycle may persist over the next few months. We forecast that rates will be lifted by 50bp at the December meeting, followed by 25bp increases at both the February and March ones. This would put the terminal rate at a higher-than-previously-forecast 2.5%.

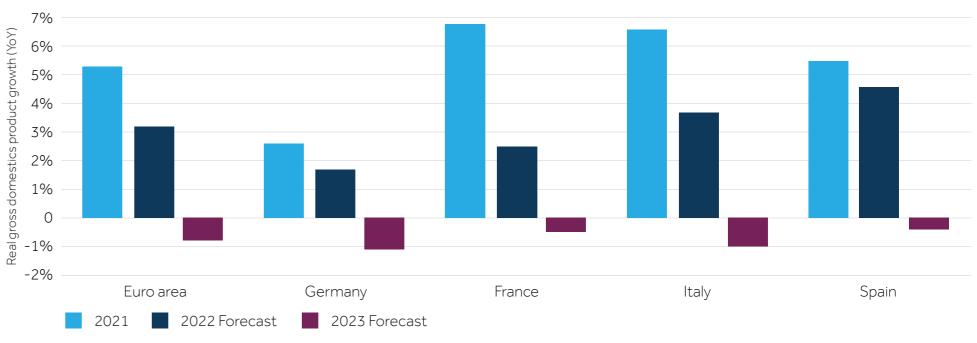
After concluding the rate hiking cycle, we expect the central bank to consider scaling down the reinvestment of maturing securities in its asset-purchase programme (APP). That said, the timing will depend on the depth of the recession and impact on financial stability.

BLOC SET TO UNDERPERFORM

As outlined, Europe faces a plethora of economic challenges next year, yet price stability is the primary objective for policymakers. Inevitability, the cost of taming inflation will lead to a longer and deeper recession. We forecast that the eurozone will shrink by 0.8% in 2023, underperforming most advanced economies, led by Germany and Italy (see chart).

EUROPEAN ECONOMIES FACING A RECESSION NEXT YEAR

Real annual gross domestic product growth forecasts (year-on-year) for various euro area economies between 2021 and 2023



Sources: Barclays Investment Bank, Barclays Private Bank, October 2022

Author: Henk Potts, London UK, Market Strategist EMEA

UK buckles up for storms ahead

After an unforgettable year for UK politicians and investors, as the economy dives into recession and the third prime minister of 2022 gets his feet under the desk, the next 12 months could be just as blustery.



UK economic forecasts, year on year (%)					
	2021	2022F	2023F		
Real GDP growth	7.5	4.2	-1.0		
CPI inflation	2.6	8.8	8.7		
Unemployment rate	4.5	3.7	4.8		
Gross public debt (% of GDP)	96.7	97.8	98.9		
Private consumption	6.2	5.1	-0.4		

Source: Barclays Investment Bank, Barclays Private Bank, October 2022

Wilting economic data, political turmoil, and policy confusion encourage us to take a much more pessimistic view on the UK's growth prospects. The post-pandemic recovery is rapidly fading and the cost-of-living squeeze is becoming more pronounced. September's disastrous mini-budget has led to a tightening of credit conditions and the Bank of England has been forced to ratchet up interest rates to fight the fastest rate of inflation in 40 years.

After being one of the fastest growing top-ten economies in 2022, the country now looks set to contract next year (see table).

SERVICES AND MANUFACTURING BEING SQUEEZED

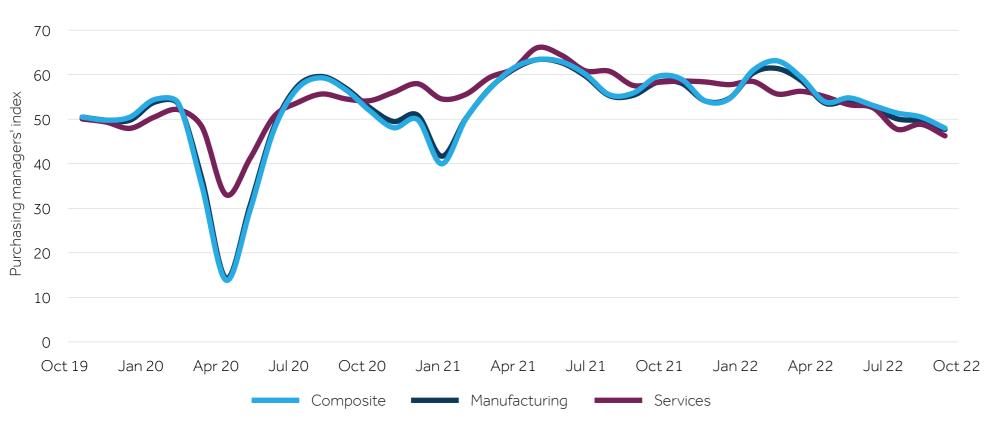
The UK economy shrank in August and a raft of indicators has added to the evidence that it is in a recession. October's S&P Global Purchasing Managers Index (PMI) survey revealed that both services and manufacturing are contacting (see chart, p18). The combined composite measure fell to a 21-month low of 47.2 from 49.1 in September, being below the 50 neutral line for three consecutive months¹.

The service economy lost ground (47.5) for the first time in 20 months and at the fastest pace since January 2021. While the measure for construction output (52.3) expands, helped by strength in house builders, civil engineering has weakened and orders on builder's books have fallen to a 2.5-year low.

Business confidence in the future has diminished at a rapid rate. The slump in the new orders, backlog of work, and export demand has helped to reduce business expectations to its lowest level since the global financial crisis (excluding the COVID-19 lockdown period in 2020).

UK PURCHASING MANAGERS' INDEX POINTS TO A RECESSION

The trend in the S&P Global/SIPS PMI indices (manufacuturing, services, and composite) since October 2019



Sources: Bloomberg. S&P Global. Barclays Private Bank. October 2022

WEAKER HOUSEHOLD DEMAND

Rising prices of goods and the squeeze on discretionary incomes have hit household demand. Cautious consumers are starting to save more, reducing the rate of consumption. Retail sales dipped 1.4% in September, following a fall of 1.7% in August. Retail sales remain 1.3% below February 2020's pre-pandemic level.

The combination of rising energy, food, and borrowing costs has been a drag on consumer confidence. Over the past couple of months, the GfK consumer confidence survey has been languishing down at its lowest levels in nearly half a century².

Consumers have become particularly cautious about buying big ticket items, including properties or cars. We expect that shoppers will remain very cautious over the next year with private consumption contracting by 0.4% in 2023 rather than the impressive 5.1% growth registered this year.

SERVICE SECTOR REBOUND IS OVER

High demand for travel, leisure, and tourism following the end of COVID-19 lockdowns has helped to propel the services sector over the past year and half. That bounce back has now ground to a halt as households slash their spending. Data from the Office for National Statistics show that output in consumer-facing services fell by 1.8% in August, including a large drop in arts, entertainment, and recreation³.

"Given the multitude of pressures on the UK economy, we think that a mild recession is inevitable... We expect the UK economy to contract by 1.0% in 2023, compared to growth of 4.2% this year"

LABOUR MARKETS A RARE BRIGHT SPOT

Despite the weakening economic backdrop, UK labour markets have remained robust. Unemployment fell to 3.5% in the three months to August, the lowest rate since February 1974⁴. The rise in job vacancies to record levels is a further signal of the tight labour markets. That said, both the unemployment rate and vacancy levels are flattered by the higher levels of inactivity plus the reduction in the supply of labour following Brexit.

Rising wages have helped to cushion some of the demand for goods and services. Growth in average total pay increased by 6% year-on-year (y/y) in the three months to August⁵. However, in real terms (adjusted for inflation) pay fell 2.4%, one of the largest such declines on records that began in 2001.

The weakening economic backdrop and more cautious employers should exert some downward pressure on labour markets over the next year. We forecast that unemployment will gradually rise through 2023, with UK unemployment finishing next year at 5.2%.

UK HOUSING MARKET

Elevated prices and rising mortgage rates have begun to take their toll on the housing market. Lenders have been withdrawing products, particularly on high loan-to-value mortgages. The average rate for a two-year fixed mortgage has risen above 6%, the highest since November 2008.

² UK consumer confidence tumbles to hit new low of -29 in September, GfK, 23 September 2022 https://www.gfk.com/en-gb/press/UK-consumer-confidence-tumbles-to-new-low-of-49-in-September

³ GDP monthly estimate, UK: August 2022, Office for National Statistics, 12 October 2022 https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/gdpmonthlyestimateuk/august2022

⁴ Labour market overview, UK: October 2022, 15 November 2022 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/october2022

⁵ Average weekly earnings in Great Britain: October 2022, 15 November 2022 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/october 2022

Bonds

UK house price fell month-on-month for the first time since the pandemic in October. The 0.9% decline was the first since July 2021 and the biggest decrease since June 2020, although the annual pace of growth still remained a relatively robust 7.2%, according to data from the Nationwide⁶. A cooling of conditions is also evidenced by the decline in mortgage approvals and reduction in new buyer enquires.

Whilst we would expect house price growth to ease over the next year, we do not anticipate an aggressive correction in home values. The impact of rising mortgage rates will take time to filter through to higher payments.

Since 2018, 90% of property purchases have been through fixed rate mortgages. From 2014, a more stringent affordability regime has been in place to ensure borrowers are tested against a higher interest rate environment. The UK housing market should continue to be underpinned by the structural supply and demand imbalance. Meanwhile, the weaker pound should encourage international investors.

SUSTAINABLE FINANCES

The government's mini-budget in September, that was structured around a series of un-funded tax cuts, sent a shockwave through UK assets, as investors questioned the sustainability of the nation's finances.

In his first week in office, Chancellor Jeremy Hunt reversed all the permanent tax cuts except for those that were midlegislation (the reversal of the 1.25 pence in the pound National Insurance Contribution rate increase and changes to Stamp Duty Land Tax). He also cancelled the 1p reduction in the basic rate of income tax. These measures have clawed back around £32 billion of the £45 billion giveaway.

Alongside the hole in the public finances made by the mini-budget, additional pressure on the UK's fiscal position have been created by the deteriorating growth profile, rapid rise in interest rates, and higher cost of servicing inflation-linked debt. In order for the government to restore fiscal sustainability and bring the deficit back down to 1–2% of gross domestic product, we estimate that additional tax increases or public spending cuts worth around £30 billion will be needed.

"The government's mini-budget in September... sent a shockwave through UK assets, as investors questioned the sustainability of the nation's finances"

INFLATION

September's UK inflation report showed consumer prices rose to 10.1% y/y. The acceleration back into double digits, matched the 40-year high in July and was slightly ahead of consensus, as was the core reading at 6.5%. The contributing factors were broad-based and were led by food (14.8%) and hospitality (specifically accommodation). Services inflation continues to strengthen with few signs that weaker activity over the summer is deterring companies from raising prices. Short-term inflation will continue to be driven by food and to a lesser extent housing and miscellaneous goods and services.

The key to understanding the medium-term inflation profile will be the trajectory of energy prices and the development of the Energy Price Guarantee Policy. Chancellor Hunt pledged that the policy will be reviewed in April 2023 and become more targeted. If energy prices do revert to the historical Ofgem formula, we would expect inflation to be back above 10% in April and stay above 7% through 2023.

Under this scenario, inflation would be, on average, 3.6 percentage points higher next year than if the price guarantee was maintained at current levels through 2023. Any extension of support to mitigate energy bills would help to ease price pressures, but could simultaneously result in an increase in demand expectations.

PATH OF POLICY

The Bank of England has had a particularly difficult task in assessing the appropriate level for rates. Beyond the obvious challenge of double-digit inflation, the Monetary Policy Committee (MPC) has also had to digest the turmoil in UK financial markets and wild gyrations in government policy.

With a struggling economy, tighter fiscal stance, and taking into consideration that base rates are already in restrictive territory, we believe that policymakers will conclude the hiking cycle at December's meeting. After delivering a bumper 75 basis point (bp) increase in November, we expect a final 50bp increase at the end of the year, leaving the terminal rate at 3.5%. However, given the vast amount of economic and fiscal uncertainty, we should acknowledge that risks to rates still remain skewed to the upside.

PROLONGED RECESSION BECKONS

Given the multitude of pressures on the UK economy, we think that a deeper and more prolonged recession is inevitable. We expect that the economy will register five consecutive quarters of negative growth, starting in the third quarter of 2022. We forecast that the recession will generate a peak to trough decline of -1.6%. For calendar year 2023, we predict that real GDP will contract by 1%, followed by only a sluggish recovery (0.7%) in 2024.

Author: Henk Potts, London UK, Market Strategist EMEA

Time to get selective in equities

After a sharp sell-off in equity markets, the long-term prospects for the asset class look much better. However, with a recession potentially in the cards, soaring inflation, and geopolitical tensions, increased selectivity in portfolios may be needed.



It's been a tough year for equity investors as economic growth expectations are slashed across regions, while inflation forecasts and policy rates have been revised higher. Will 2023 be any better for financial markets?

With the US Federal Reserve (Fed) and other major central banks tightening monetary policy amid a slowing economy, unsurprisingly, the risk of a global recession has increased. A consensus of economists puts the probability of a recession in the next 12 months at 60% in the US and 80% in Europe. Barclays' economists now expect advanced economies to contract next year (to -0.2% in 2023 from +2.5% in 2022), but global growth to remain positive, albeit very weak (see <u>Global economy to keep its head above water</u>).

US bond markets have flagged for a while that a recession is likely towards the second half of next year. Yield curve inversions have been reliable indicators of them in the past, with recessions typically starting 14 months on average after inversions. The 2s10s US yield curve turned negative in July, reaching a 40-year low of -63 basis points (bp) in early November.

KEY ASSUMPTIONS AROUND THE NEXT RECESSION

The key question for investors is around the timing, depth, and duration of the next recession. Equity market performance in such periods, and the time it takes for investors to recoup their losses, depend on the severity of the downturn.

Unfortunately, recessions are difficult to predict, and they vary enormously in duration and magnitude. The current environment is particularly hard to assess with inflation running at multi-decade highs in leading economies and the geopolitical situation adding further uncertainty, there are few historical precedents.

The most severe recessions tend to be the ones triggered by a financial crisis. Encouragingly, we do not see any major imbalances in the economy for now. US consumer and corporate balance sheets remain healthy, large excess savings provide some cushion, and the labour market remains strong. Therefore, if a global recession materialises, we believe it is more likely to be mild and short-lived.

WHAT IS PRICED IN, AND WHAT ARE THE DOWNSIDE RISKS?

At current levels, the market seems to be discounting a mild recession, in line with our base case scenario. This view is based on the level of economic activity and earnings growth we believe is reflected in equity prices at present.

If we were to see an average recession, we believe that global equities could decline by a further 10% or so. This would be approximately 33% below the January peak levels on the MSCI All Country World Index.

i. Activity level discounted by equities

At current levels, global equities seem to be discounting an ISM Manufacturing Index of around 42, in contraction territory, compared with 50.2 in October (see chart).

This compares with an average trough in the ISM manufacturing index reading of 39 in previous bear markets, which would be consistent with a further 10% dive in global equity prices.

In a more severe contraction, the ISM manufacturing index could drop below 35, similar to the troughs in the index seen in recessions in 1973 and 2008, which would imply a plunge of at least 20% from current levels.

ii. Earnings growth discounted by equities

On our numbers, the equity market is currently discounting around a 14% year-on-year tumble in global earnings by May, broadly in line with the 13% decline projected by our top-down earnings model.

In previous recessions, global earnings have fallen on average by 20% year-on-year, though crashed by as much as 35% in 2009. We estimate that a 20% decline in earnings would justify a 10% further downside to global equity prices from current levels.

iii. Market drawdowns seen in previous recessions

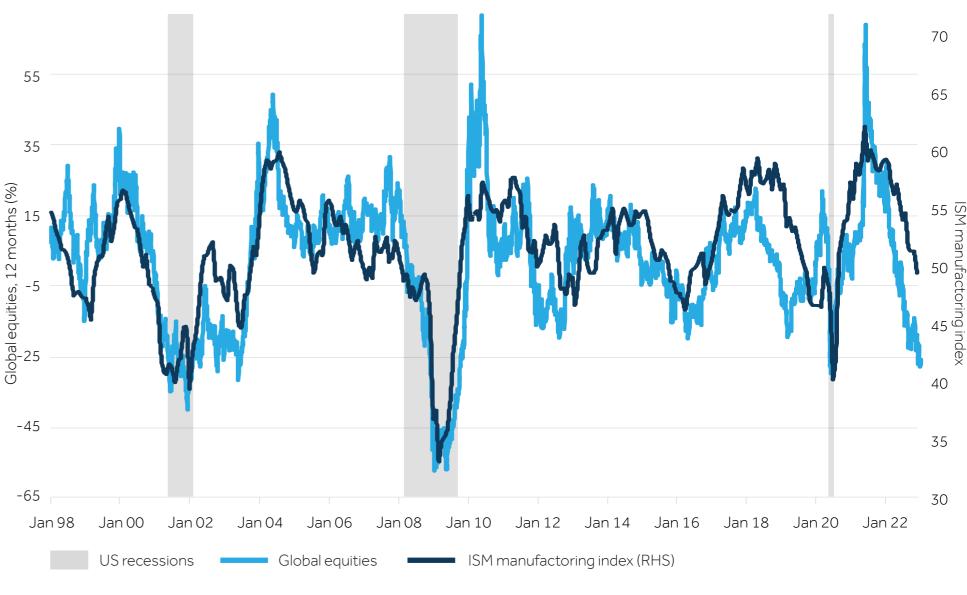
Our estimate of a -10% downside risk to global equity prices in an average recession scenario would be consistent with the average drawdowns seen in previous recessions.

At the time of writing, the MSCI All World Country Index is down 23% from its January peak. In the past 50 years, global equities have declined by 36% on average around recessions (from peak to trough). These drawdowns ranged from -15% in 1980, to -60% in 2009, and they lasted 12 months on average.

"Equity performance has been primarily driven by stocks' sensitivities to rising real yields this year"

GLOBAL EQUITIES ARE DISCOUNTING A MILD RECESSIONS

The 12-month change in global equity returns implies a sharp decline in the ISM manufacturing index into contractionary territory



Sources: Refinitiv, Barclays Private Bank, October 2022

NECESSARY CONDITIONS FOR A TROUGH

For equity markets to bottom, certain conditions generally need to be in place:

- Cheap valuations
- Depressed sentiment
- Cautious positioning
- A sense that the worst is over in terms of economic activity, inflation, and interest rates.

Two of those conditions appear to be in place, but they may not be sufficient, on their own, to trigger a sustainable rebound:

- Equity valuations have already plunged on the back of this year's surge in real yields.
- Sentiment is very depressed amongst individual investors.
- However, risk appetite measures across major asset classes are more neutral, suggesting that we have not seen a capitulation yet.
- With regards to positioning, it appears to be cautious, but not yet extreme.

For markets to look beyond heightened levels of volatility, we will need to see signs that economic activity has troughed and that central banks' hiking cycle are coming to an end.

Historically, rate cuts have been a key catalyst for equities to rebound. But we do not expect a dovish pivot soon, unless something breaks — in which case, obviously, markets may struggle. Until clarity emerges, we do not exclude more rallies, similar to the ones we saw in March and from mid-June to mid-August, which were violent but short-lived.

"If we were to see an average recession, we believe that global equities could decline by a further 10% or so"

IMPLICATIONS FOR MARKETS

In the next six to 12 months, equity markets are likely to remain highly volatile, and risks appear tilted to the downside. Price action will likely be driven by surprises around economic growth, inflation, and labour markets, as well as central bank commentaries.

We expect markets to be very myopic and oscillate between risk-on and risk-off periods, in a wide range. Geopolitics will also be a major driver of short term price action. However, as mentioned earlier, given depressed sentiment and cautious positioning, sharp rallies and violent rotations are possible.

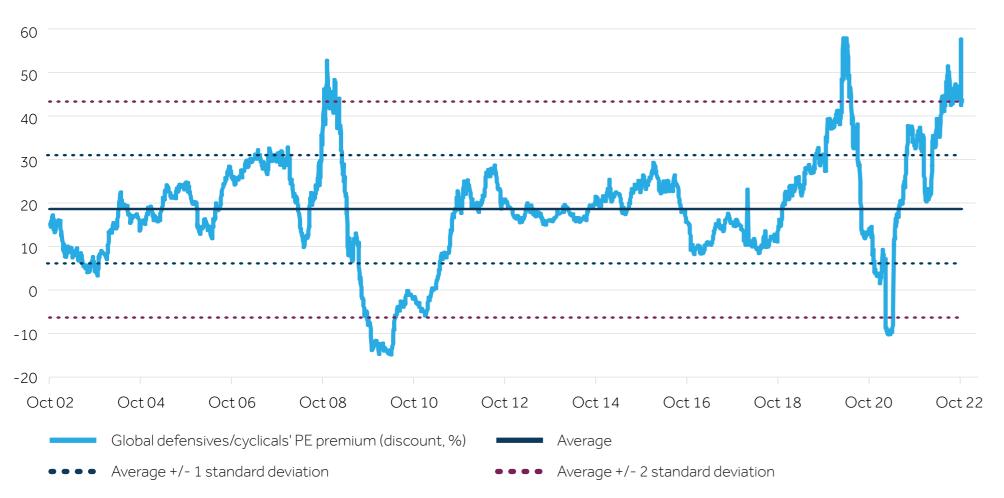
On a more positive note, equity markets' long-term prospects have perked up in recent months, following their sharp derating. As highlighted in <u>Cyclically-adjusted PEs as a guide to equities' long-term return potential</u>, cyclically-adjusted price-to-earnings (PE) multiples are now consistent with global equity returns of 9% annualised over the next decade, including dividends, in line with the returns generated in the past 20 years. While implied returns vary by region, the message is generally positive for long-term investors who can withstand bursts of volatility.

INVESTMENT IMPLICATIONS

Given the near-term uncertainty, we maintain a balanced positioning. We see merits in having some hedges in place and in using option strategies to reduce downside risk. We also encourage increased selectivity at both the sector and the stock level.

DEFENSIVE SECTORS GLOBALLY TRADE AT AN EXTREME PE PREMIUM RELATIVE TO CYCLICALS

Relative price-to-earnings multiple of global defensives versus cyclicals in the past 20 years



Sources: Refinitiv, Barclays Private Bank, October 2022

i. Defensive sectors are too expensive

Following the substantial rerating of defensive sectors in the past year, as recession fears gained traction, the sectors appear expensive, especially in the context of a risk-free rate of 4%. Indeed, defensives are now trading at a 46% PE premium to cyclicals, globally, much higher than the average premium of +18% in the past 20 years. This is two standard deviations above the long-term average (see chart).

Attractive investments can still be found, but on a very selective basis, at the stock level, or in some regions as opposed to globally. Given this year's surge in yields, we generally see better opportunities for defensive positioning in the fixed income universe at present.

ii. Value versus growth

Equity performance has been primarily driven by stocks' sensitivities to rising real yields this year. Value plays have been more resilient in the market sell-off than the more expensive growth stocks, with long duration cash flows. The MSCI World Value index has outperformed growth by 38% (and the market in general by 17%) since November 2021, as US real yields surged by close to 300bp.

While most of the rise in yields seems to be behind us, value stocks could still perform well into next year. Indeed, we believe that their relative performance does not fully reflect the higher yields, and they continue to trade at a large valuation discount relative to growth stocks, and the market in general.

iii. Banks

In keeping with the value tilt at the sector level, we see interesting opportunities in banks and energy.

Banks should be one of the main beneficiaries of rising yields. Since the start of the year, the relative performance of banks has disconnected from US 10-year yields (see chart, p24). This disconnect reflects market concerns over recession risks, and the negative impact one would have on banks' profitability, given their sensitivity to the business cycle.

We continue to expect the disconnect between the relative performance of banks and yields to narrow. Net interest margins may surprise positively, and loan-loss reserves have already been built up in anticipation of worsening asset quality. Banks are also better capitalised today than they were during the global financial crisis. As we get more clarity on the shape and magnitude of the slowdown, we think the sector could re-rate further and catch up with the recent rise in yields, despite rising recession risks.

And finally, valuations and earnings revisions are supportive. Within the MSCI World index, banks are trading at a -42% discount to the market, based on forward PEs, versus a -26% discount on average in the past 20 years. They also offer a superior dividend yield (4.7% forward 12-month dividend yield for MSCI World Banks versus 2.3% for the broader market).

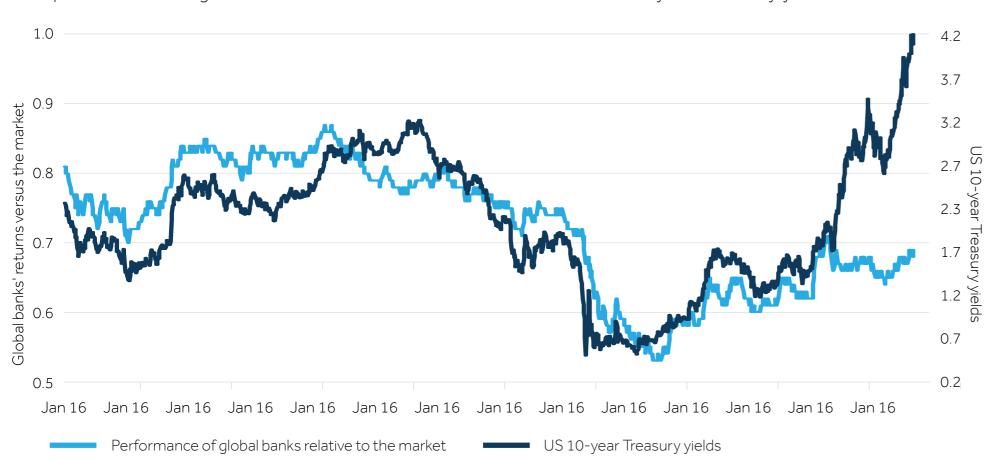
iv. Energy

The energy sector should continue to profit from high fuel prices and offer some protection against escalating geopolitical tensions. While global demand for oil and gas would be at risk in a recession, energy prices should be supported by tight supply in the coming months. The EU's embargo on Russian oil supplies will take effect in the next few months, and the OPEC+ group of oil producers recently announced production cuts starting in November.

Despite surging so far this year (the MSCI World Energy index is up 52% while the broader market is down 21%), the sector continues to trade at a significant discount versus the market, based on forward PE multiples (1.4 standard deviations below 20-year average). Energy shares also offer a superior dividend yield (3.6% for the next 12 months compared with 2.3% for the market).

BANKS' RELATIVE PERFORMANCE LAGS THE SURGE IN BOND YIELDS

The performance of global banks versus the broader market and US 10-year Treasury yields



Sources: Refinitiv, Barclays Private Bank, October 2022

v. UK equities

While we are neutral on European stocks against their US peers, we see opportunities in UK equities.

European shares trade at a steep discount relative to the US. However, we do not see a catalyst in the near term for the discount to narrow, as Europe enters a recession and the conflict in Ukraine rages on.

On the other hand, UK stocks appear better positioned, due to the over-representation of value and commodity sectors in the UK market (financials, energy, and basic materials). We particularly like large-capitalisation (large-cap) names, which tend to derive much of their revenues from overseas, and should benefit from the weak sterling.

At the same time, valuations are supportive, with UK large-cap stocks trading at a -40% forward PE discount to the broader market, versus a -13% average discount over the past 20 years.

Finally, sentiment on UK assets appears very depressed, following September's mini-budget announcement and political crisis, and UK equities have seen the worst outflows on record year-to-date. We believe the appointment of market-friendly Rishi Sunak as the new prime minister should help calm markets and lift sentiment.

vi. At the stock level

Beyond sectors or geographies, we believe that the bulk of the opportunities will materialise at the stock level. Here, we would focus our attention on companies exhibiting the following characteristics:

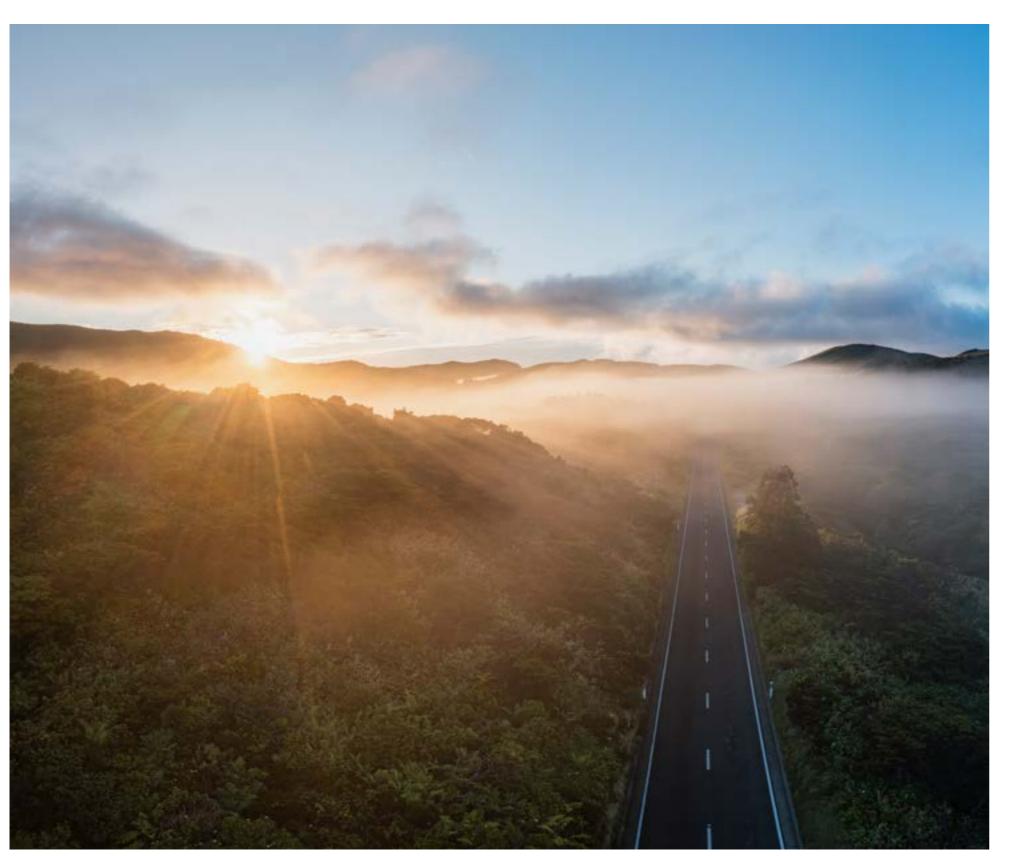
- "quality" attributes at a reasonable price (strong profitability, stable earnings, robust balance sheets with low financial leverage)
- defensive stocks (predictable earnings and resilience through downturns) at a reasonable price and with an income component
- stocks with an asymmetric risk profile (that is, those that have materially underperformed and are discounting a more severe recession than the one we expect)
- long-term structural plays, notably in the areas of renewable energy, energy efficiency, security (food, energy, cyber), defence, capital expenditure beneficiaries, and fiscal infrastructure beneficiaries.

A diversified portfolio of stocks exhibiting the above characteristics should help investors to reduce downside risk, generate income, exploit market dislocations, and tap into long-term structural trends.

Author: Dorothée Deck, London UK, Cross Asset Strategist

Road to normalisation for bond investors?

After another challenging year for bond investors, the pace and path of interest rates and inflation will be vital for prospects in 2023. Yield opportunities have already emerged and investment grade corporate bonds may offer the tastiest pickings.



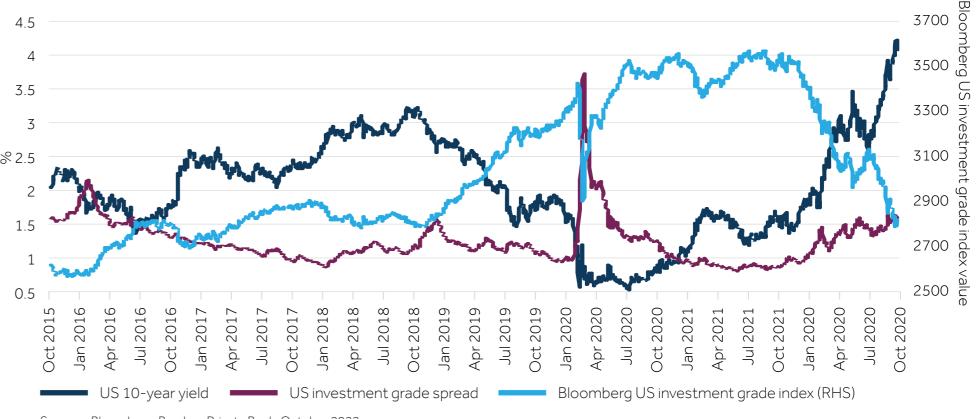
FIXED INCOME

Bonds have had their worst year this century as central banks finally realised that the surge in inflation was not "transitory". Their U-turn to a more aggressive, determined approach to fighting inflation saw cumulative rate hikes of 850 basis points (bp) by the US Federal Reserve (Fed), the European Central Bank (ECB), and Bank of England (BoE). With the prospect of more "jumbo" moves to come, the short end of the rate curve has reached levels not seen since 2007.

The vacuum created by the short end has pushed long-end yields higher, albeit to a lesser degree given that the long end of the curve tries to anticipate lower yields once peak policy rates have been reached (rightly or wrongly). Regardless of the shape of the curve, higher rates sparked a substantial repricing of the bond market and significant losses for bond holders (see chart).

BOND MARKET REPRICES SHARPLY IN 2022

The trend in US 10-year yields and for US investment grade spreads and prices since 2015



Sources: Bloomberg, Barclays Private Bank, October 2022

HIGHER YIELDS, AND BOND RETURNS

However, mark-to-market losses on fixed income holdings in 2022 will only be realised if these are sold, or if we assume that many bonds default, of course. If held to maturity, the capital and the yield stated at purchase (even if negative, as seen in Europe) would still be realised.

With hindsight, the yield offered for 2-year US Treasuries during 2020 and 2021, at around 0.25%, was insufficient given the subsequent inflationary pressures. The question for bond investors is not necessarily whether fixed income markets are prone to further mark-to-mark losses, but if current yields appropriately price for future inflationary pressures and general risks. By focusing on this outcome, rather than trying to catch peak yield levels at the point of maximum losses, a more sustainable result can be achieved.

The first factor to watch is the path for inflation and the likely response from the central bank. This is what will drive short-end yields, ultimately (and with them the rest of the bond curve).

CALLING PEAK INTEREST RATES

Admittedly, over the year, we and most of the Street have revised peak base rates up gradually. This reflected a reassessment of inflationary pressures and central banks' response, especially the Fed, as well as the economic consequences of the war in Ukraine.

Since the release of the Fed's updated "dot-plot" projection in September, it seems that the rate market and the US central bank are in broad agreement on a terminal peak rate of around 5.25% being reached by the middle of 2023.

Fed chair Jerome Powell keeps reiterating that, at least for now, economic repercussions are the cost of the tightening policy: "We have got to get inflation behind us. I wish there were a painless way to do that. There isn't." As such, the Fed is unlikely to hesitate in lifting rates further in the absence of a sustainable moderation in inflation.

The US central bank expects its favoured inflation measure, the personal consumption expenditures (PCE) rate, currently at 4.9%, to reach its target by 2024. This seems optimistic, given the pressure building in core service inflation, a trend which is usually sticky. This, in turn, suggests that the risk of a higher terminal rate is skewed to the upside.

UNCOVERING THE PATH TO LOWER INFLATION?

Still, as outlined in our macro section, a moderation of inflation is likely to be around the corner. Disinflationary trends in car prices, healthcare costs, and shelter (living) expenses along with the prospect of much lower growth, potentially a recession, suggest the worst (on the inflation front) is almost over.

"The question for bond investors is not necessarily whether fixed income markets are prone to further mark-to-mark losses, but if current yields appropriately price for future inflationary pressures and general risks"

The crucial question for next year remains how fast will inflation moderate? Here, current market pricing may not fully reflect the potential for surprises. At the same time, we don't believe the risk of an even higher peak in inflation and policy rates should be disregarded. Recent Fed commentary seems to suggest that this is one of the biggest risks to be managed.

The central bank has often pointed to the risk of easing rates too early. In 1974, the Fed started to lower peak policy rates of 12% only for inflation to flare up again.

With this in mind, it has used every opportunity to warn that higher rates are here to stay. By providing such advice, the policymakers hope to be able to reach a lower, but prolonged, level of peak inflation.

IS THE MARKET BEING TOO OPTIMISTIC?

The bond market, meanwhile, seems to expect a different scenario, which appears optimistic on two levels. First, it does not price in the possibility of a higher peak in inflation. Second, the rate market anticipates rate cuts less than six months after the peak, something that we believe is not on the Fed's agenda.

Of course, risk of a severe downturn remains, together with the possibility of a partial unwinding of the rate hikes. But to get there, we believe fed fund rates potentially need to peak even higher than is being priced in at the moment.

WHAT DOES THIS MEAN FOR PORTFOLIO POSITIONING?

From a positioning point of view, this makes the short- to medium-term part of the curve the most attractive. Meanwhile, there seems a higher probability that the longer-end of the curve may reprice to the upside, acknowledging that rates can stay higher for longer. While the path from current inflation levels to 4% may be steep, it could take much longer to hit the 2% target subsequently.

With a possible peak in the terminal rate next year, and the Fed possibly refocusing more on financial conditions, we believe that opportunities at the longer end of the curve may emerge later next year. During past hiking cycles, including in the 1970s, the US 10-year rate usually peaked either at the moment short rates hit their top or slightly before, with the respective peak usually close to, or even below that seen in the policy rate.

CENTRAL BANK TO REMAIN ON THE FRONT FOOT

In the UK, the yield curve will likely be affected by the path of the policy rate and bond supply dynamics. We expect the BoE to keep aggressively front-loading hikes next year. Governor Andrew Bailey said that "inflation hits the least-well-off the hardest, but if we don't act to prevent inflation becoming persistent, the consequences later will be worse".

But the market still seems to be focusing too much on the risk of higher rates. The former government's unfunded fiscal plans unveiled in September led to a substantial repricing of the base rate to a peak of around 6%. Even after the reversal of the government measures in October, the curve still prices in a peak of around 4.65%.

The retail price inflation index may shrink to 4.5% by October next year, having hit 12.6% in September 2022. This, together with the bleak growth outlook for the UK, may stop the BoE hiking to the level implied by the market.

WILL UK RATES PEAK BELOW EXPECTATIONS?

Contrary to the US, we see the possibility of a lower-than-implied peak. This represents an attractive opportunity to lock-in yields at the short- and medium-part of the curve.

On the other hand, rate volatility at the long end will likely remain. A more substantial gilt supply – albeit lower than initially feared – will collide with the BoE's quantitative tightening and active sale of sovereign bonds it carries on its balance sheet. This, together with the UK gilt market being comparatively small, creates fertile ground for more rate volatility going into 2023.

"Apart from Europe, global high yield spread levels do not fully reflect the risk of higher rates, excessive inflation, and certainly not a recession"

OPPORTUNITIES IN EUROPEAN INVESTMENT GRADE DEBT

In Europe, policy rates of over 2.5% seem realistic, in our view, with the caveat that many supply-driven inflationary pressures cannot be addressed with higher rates. But, in addition to inflation dynamics, local investors may also focus on Italy, the largest bond market in the bloc. The country's unsustainable and worsening debt to gross domestic product ratio (already over 150%) as well as the risk of increased tensions between the newly elected government and the EU, will likely result in continued pressure on Italian debt.

The ECB's back-stop programme may well get tested should Italy's bond market show more signs of distress. At higher spreads, and given the continued support for the country from the EU and ECB, renewed yield opportunities may emerge. In addition, peak investment grade bond yields usually coincide with that for rates, not necessarily the spreads (see September's <u>Catching peak bond yields</u>).

Admittedly this was different during the pandemic crisis and the great financial crisis, but a credit crunch in the investment grade bond market looks less likely than it did back then. Leverage may have only moderately declined from the peak pandemic levels, but investment grade issuers, in particular, largely termed out their funding during the pandemic crisis. This should provide a buffer against rising interest rates.

ARE MARKETS OVEREGGING RECESSIONARY RISKS?

Meanwhile, many bonds, especially European investment grade and UK corporate bonds, trade at spreads that are close to recessionary levels. While the risk is elevated, equally, the troubles sparked in the energy market in 2022 could be more manageable in the next six-to-12 months.

In the US, the average investment grade bond spread is around 50-100bp away from what might be described as recessionary levels. While investors could experience some short-term mark-to-market losses if yields were to jump above 7%, the segment's average yield of 6% – which was last seen in 2009 – represents an attractive risk-reward for an investment of five or six years. After all, this is not too far off the long-term average return that the equity market promises.

CLOUDY OUTLOOK FOR HIGH YIELD

The outlook for high yield seems cloudier, given that spreads contribute much to performance. And, apart from Europe, global high yield spread levels do not fully reflect the risk of higher rates, excessive inflation, and certainly not a recession.

Global default rates within the speculative grade market have so far been contained at around 2%. However, given the current macro backdrop, the risk is that this number rises. While higher-quality, BB-rated, debt may be more insulated (and offer very selective opportunities), the risk of spill over from the most leveraged and vulnerable issuers is uncomfortably high. A lower growth path, margin pressures, and higher funding costs suggested by the short-term funding profile, do not bode well for high yield issuers.

EMERGING MARKET CHALLENGES

A common theme facing emerging market bond investors is the challenging backdrop created by a strong US dollar and higher USD rates. This has already led to significant outflows from this part of the bond market, as carry trades became increasingly less attractive.

Next year should bring similar challenges, as some emerging markets are faced with a worryingly weak currency already. Lower dollar reserves, with less headroom to counteract any further dollar-imported inflation, and limited fiscal leeway are also likely to pose a risk.

But, 2023 could be a turning point. If US policy rates peak, and if the market starts to price lower rates for 2024 or 2025, emerging market debt could stage a comeback. The timing may coincide with higher spreads, which would open carry opportunities. During the last 20 years, average yields of over 6-7% led to solid subsequent performance.

"If US policy rates peak, and if the market starts to price lower rates for 2024 or 2025, emerging market debt could stage a comeback"

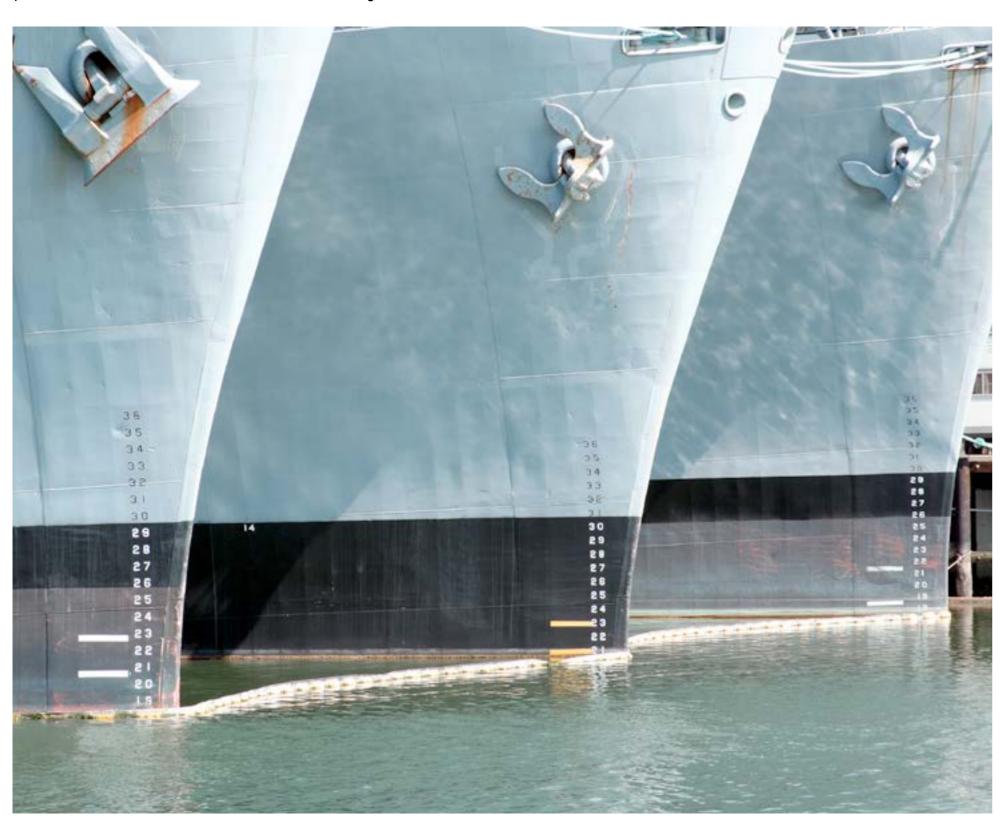
BOND MARKET REVIVAL

As outlined, the discussion around "peak-rate" will likely dominate the first half of 2023 and investors may have to face further mark-to-market losses in the short term. The biggest risk, in our view, is a longer-than-expected road to moderation and a period of prolonged higher yields. However, when one steps back and assesses the risks in light of current yields, opportunities become apparent. Fixed income, as an asset class, should not be ignored anymore.

Author: Michel Vernier, CFA, London UK, Head of Fixed Income Strategy

Anchors aweigh

Amid a storm of data on inflation, economic activity, and labour markets, it can be difficult to pinpoint one's position or even ascertain the direction of travel. We discuss the importance of inflation anchoring and show how much it has loosened this year, as well as the potential implications for portfolios and the economy.



Analysis of inflation has been dominated by one topic over the last two decades: the ability of central banks to influence inflation using standard monetary policy tools, also referred to as the flatness of the so-called Phillips Curve.

After having been declared dead countless times, the Phillips Curve relationship, between the central bank policy rate and the inflation rate, was finally resurrected when the idea of time-varying degrees of inflation-expectation anchoring was added to the standard equation¹. This approach explains why monetary policy intervention at times had very little effect on inflation: the expectations were simply too well anchored.

This anchoring-induced slumber, of inflation, may have encouraged central banks to take actions that were not necessarily linked to their primary goal of price stability, such as saving equity markets (and banks), bailing out governments "whatever it takes", and stimulating corporates through a worldwide pandemic.

In fact, in February 2021, US Federal Reserve (Fed) chair Jerome Powell acknowledged that monetary policy was often run for the average labour market participant, and that weaker segments of the labour market were often hurt by monetary policy which was too strongly tied to its 2% target². As a result, the Fed intended to let inflation run above 2% for some time to let these weaker segments catch up.

ANOTHER KIND OF "WHATEVER IT TAKES"

These secondary goals of trying to correct for unfortunate side effects of policy have now been put on ice, with central banks gripped by the fear of persistent runaway inflation. The question on everyone's mind is: can central banks reaffirm these calming anchors now, bring inflation back towards target, and at what cost?

The Japanese experience of the last two decades, of having a target at 2%, while core inflation was negative almost 60% of the time since 2000, raises doubts over the ability of central banks to lift inflation expectations against entrenched structural drivers and beliefs.

Whether central banks can lower expectations is an ongoing experiment. If history is any guide, then former Fed chair Paul Volcker emphasised the need to fully commit to combating inflation, however difficult and painful it may be, in 1981, when he stated³: "In sum, we are in the midst of dealing with the accumulated problems of decades. It is inevitably a painful process – precisely because it has been put off so long."

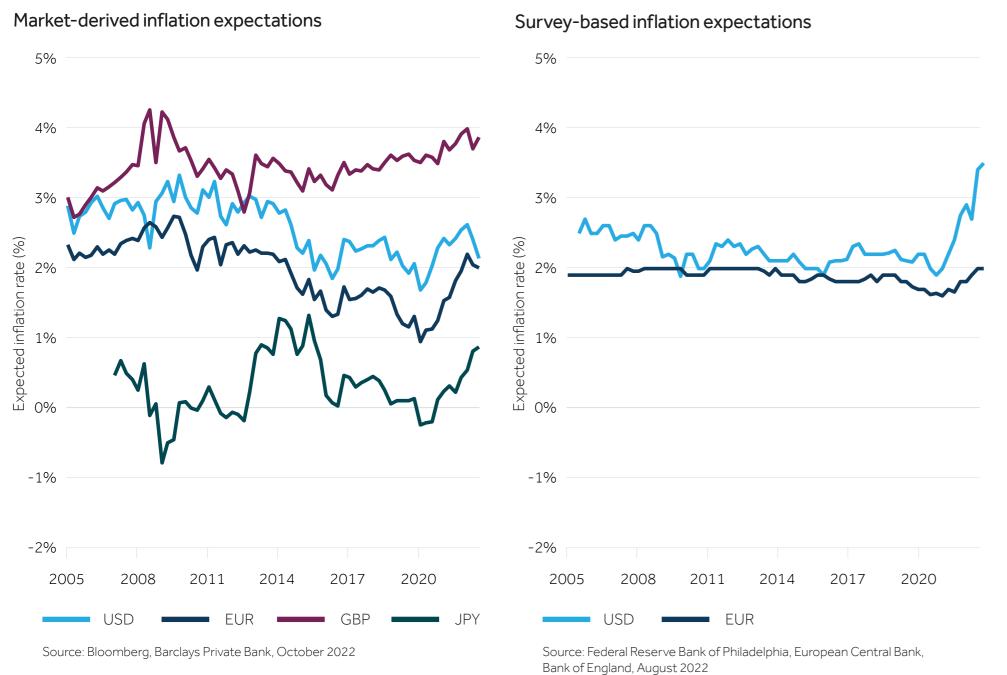
¹ Jørgensen, Peter L. & Lansing, Kevin J. (2021): Anchored Inflation Expectations and the Slope of the Phillips Curve. Federal Reserve Bank of San Francisco Working Paper 2019-27. Accessible at: https://www.frbsf.org/economic-research/publications/working-papers/2019/27/

² Getting back to a strong labor market, The Federal Reserve System, 10 February 2022 https://speech/powell20210210a.htm
³ No time for backsliding: remarks before the National Press Club, Washington DC, Federal Reserve Bank of St Louis, 25 September 1981 https://fraser.stlouisfed.org/title/statements-speeches-paul-a-volcker-451/time-backsliding-8243

Recent market-derived measures for long-term inflation suggest that this year's aggressive central bank rate hikes have, for the time being, convinced market participants that inflation will return towards existing inflation targets eventually (see chart, left panel). However, the less forward-looking or less sentiment-driven measures derived from surveys and models suggest that the anchors could have risen for coming years.

LONG-TERM INFLATION EXPECTATIONS

5y5y inflation swaps reflect market-pricing implied average inflation for the five years in five years from now (left panel) and median responses of surveys among professional forecasters for inflation in five years (right panel).



LOOKING AT AN ANCHORING HISTORY

The indicator that is correct can only be assessed in hindsight, and even then, it will remain uncertain since the "true" inflation expectations and their anchoring cannot be directly measured.

The econometric approach (see box out) has one distinct advantage – its sparsity in data consumption. Since it only requires a price index series, we can run it back even beyond 1970 while most other measures only date back to 2005.

INFLATION EXPECTATION ANCHORS

Survey-based: Long-term expectations of inflation rates provide a direct gauge of survey respondents' inflation anchors. The biggest drawback is the frequency, which can be as low as four times a year.

Market-based: The 5y5y inflation swap offers a "real time", transaction-based measure for the average market expectation of inflation rates for the five-year period beginning five years from now.

Econometric approach: Following seminal work by Stock & Watson (2007)⁴, we combine the power of Monte Carlo simulations with the concept of Markov Chains in a so-called Unobserved Components - Stochastic Variance model to explain the observed inflation history by a level component and a noise one.

By allowing separate and time-varying volatilities for both components, we can infer whether an increase in the volatilities is actually moving the level (in which case it would affect the anchoring of inflation and therefore affect expectations) or whether it is simply amplifying the noise (in which case the longer-term anchoring would remain unaffected).

The main strength is the sparsity in data usage: one only needs an inflation time series. The main drawback is the strong assumption one has to make on the data generating process – for instance, should the volatilities be correlated, how are they distributed, and the like. The blindness to all other economic data can be both a strength and a weakness.

Stock, James H. & Watson, Mark W. (2007): Why has U.S. Inflation Become Harder to Forecast? Journal of Money, Credit and Banking, Supplement to Vol 39, No.

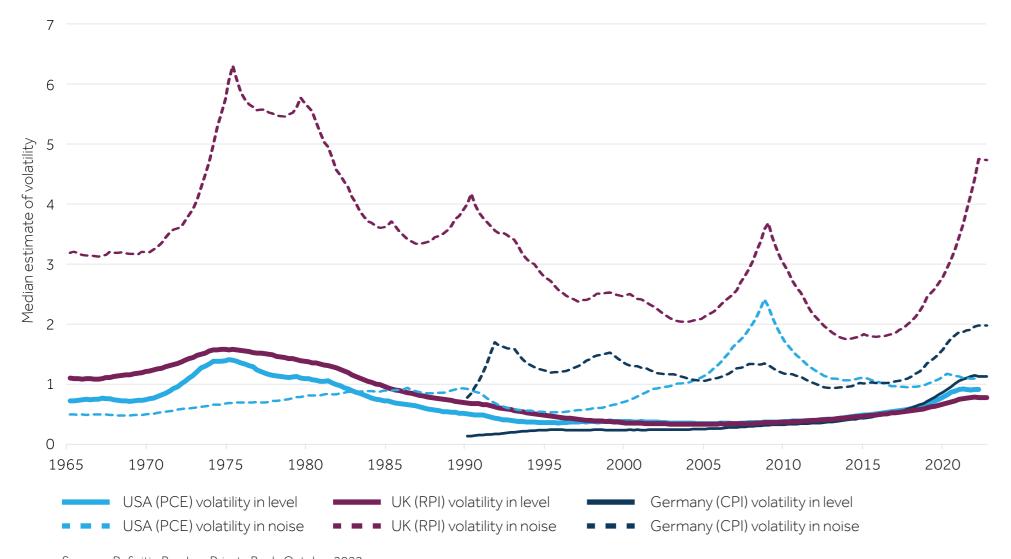
^{1 (}February 2007), The Ohio State University https://scholar.harvard.edu/files/stock/files/whyhasinflationbecomeharderforecast.pd

This allows us to put the current situation in a historic context and highlight the main difference to the inflationary surge that was observed in 2008, when US personal consumption expenditure (PCE) almost touched 4%: in 2008 the anchors did not budge, but in the 1970s, and now again, the volatility in the underlying inflation "level" increased significantly, prompting a monetary policy emergency.

The combined surge in level and noise volatility that is estimated for the UK highlights the country's particularly precarious situation. That said, the much higher readings for noise volatility in the UK are also due to the use of retail prices as an inflation measure, instead of the more stable personal consumption expenditure that is used in the US (see chart).

MOVEMENT IN INFLATION ANCHORS

Median estimates of volatilities in the level component and noise component of annualised quarterly inflation derived from the Unobserved Component – Stochastic Volatility Model. Increases in volatility of the level component suggest weakened anchors



Sources: Refinitiv, Barclays Private Bank, October 2022

REGIONAL DIFFERENCES

In last year's <u>Outlook 2022</u>, we termed the joint efforts of fiscal and monetary policy as "fiscal fast-forwarding". Furthermore, we noted how the US performed better than the eurozone and many other developed economies due to the sheer size of stimulus and its more direct nature. Whereas European governments relied more on automatic stabilisers (such as short-time work) to keep consumption afloat.

The different speeds of fiscal fast-forwarding are now reflected in the inflation rates and the wage dynamics. Wage shares – the share of employee compensation in gross domestic product – are still increasing in the US economy, much like they did after the oil shocks of the 1970s. In the eurozone, however, the share is shrinking, which suggests a smaller risk of an inflationary price-wage spiral.

"A more nuanced investment strategy is in order when investing in especially volatile times"

WHAT IS IT TO MARKETS?

Strong inflation anchors have a calming effect, not only on companies and households, who can plan ahead easier, but also on markets. With uplifted anchors, market participants' longer-term opinions may be affected by single inflation-data prints, making them more short-sighted. Central banks, on the other hand, understand that mistaking expectations as well-anchored, when they are not, is much more costly than overtightening the policy⁵.

Uprooted expectations imply elevated inflation rates beyond 2023, and increased inflation volatility. That said, the peak should be reached next year.

The best indicator for spotting the peaks of inflation seen in the 1970s was when unemployment rates started to increase significantly.

Undoubtedly, today's tight labour markets are a reason why some investors are on the side lines, often a poor strategy as turbulent markets can also be good entry points for those investing for the long term. To be comfortable investing in tough times, we suggest looking beyond inflation and considering macro factors more broadly.

NAVIGATING STORMY SEAS

When deriving implications for portfolio construction from macro projections, it can be useful to focus on the sensitivity of an investment to macro factors one at a time. A simple way to do so is to build factors for growth, inflation, and monetary policy stimulus⁶, and to then study partial correlations of historical performance for each of these factors.

The use of partial correlations (see chart) prevents costly errors, such as mistaking equities for inflation protection just because inflation usually goes along with growth. When properly separated, it is obvious that the so-called risk-on bucket, consisting of equities, hedge funds, real estate, and large parts of the commodities universe, is heavily reliant on growth (or its short-term supplement monetary policy stimulus) in order to thrive.

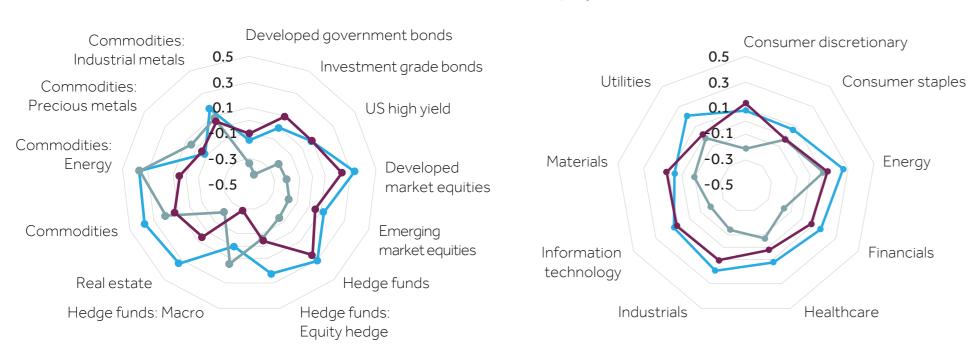
Inflation by itself, however, is detrimental to most investments considered here, and only macro hedge funds, energy, and commodities are likely to profit from it.

THE MACRO-SENSITIVITIES OF INVESTMENTS

Partial correlations of six-month returns for each asset to the three identified macro drivers between January 2000 and September 2022 (US equity sectors starting from 1990). Partial correlations extract correlation to one factor while removing the influence of the remaining factors.

Broad indices US equity sectors

Monetary policy (stimulus)



"Recent market-derived measures for long-term inflation suggest that this year's aggressive central bank rate hikes have... convinced market participants that inflation will return towards existing inflation targets eventually"

TRIMMING THE SAILS WITH A SECTORAL TWIST

A more nuanced investment strategy is in order when investing in especially volatile times, rather than one of simply avoiding equities. Looking at the macro-sensitivities of equity sector performance in the US, consumer staples, and materials can best cope in an environment of low growth and elevated inflation. Should inflation surprise to the downside, however, consumer discretionary could thrive in an otherwise low-growth environment.

Heightened inflation volatility as a result of less-well anchored expectations also suggests that a diversified approach with regards to inflation sensitivity makes sense beyond the peak inflation rates.

Authors: Lukas Gehrig, Zurich Switzerland, Quantitative Strategist; Nikola Vasiljevic, Zurich, Switzerland, Head of Quantitative Strategy.

Inflation

Sources: Bloomberg, Barclays Private Bank, September 2022

⁶ The macro factors are built from normalised and aggregated changes in macroeconomic time series on US industrial production (growth); US consumer price index and the Citi inflation surprise index (inflation); Fed funds rate and US monetary policy aggregate M2 (monetary policy).

Is asset allocation at a tipping point?

Since the turn of the century, negative equity-bond correlations have survived several macro and bear-market regimes. However, the relationship has flipped, turning diversification strategies on their head, with bonds and equities crashing in 2022 amid soaring inflation and surging interest rates. What are the main drivers, will the current trend last, and how does this impact asset allocation?



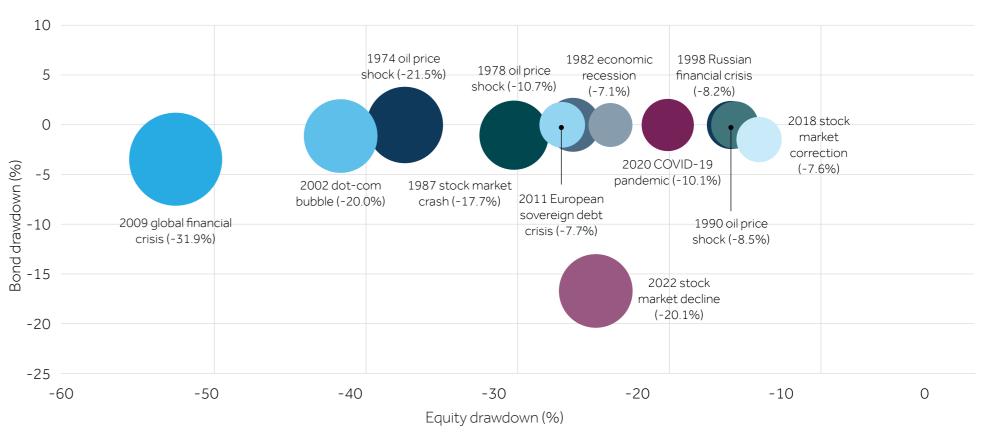
ASSET ALLOCATION

The relationship between equity and bond returns holds the key to asset allocation. A negative equity-bond correlation implies that the two asset classes will move in opposite directions, on average. In such a scenario, bonds can bring balance to a portfolio by mitigating the effects of equity drawdowns.

When the correlation becomes positive – as happened in 2022 after two decades of negative correlations – diversification benefits erode as bonds provide less protection during periods of equity-market turmoil (see chart). Arguably, 2022 has been a prime example of the potential dangers at such times in terms of the US 60/40 portfolio performance¹.

THIS YEAR WAS A SHOCKER FOR A US 60/40 PORTFOLIO

The drawdowns of US equities and government bonds in the worst equity bear-market sell-offs since January 1973. Bubble sizes indicate the magnitude of 60/40 portfolio drawdowns



Sources: Bloomberg, Barclays Private Bank, October 2022

¹ See After the storm comes great expectations. https://privatebank.barclays.com/insights/2022/october/market-perspectives-october-2022/after-the-storm-comes-great-expectations

FINDING THE IDEAL ASSET MIX

Despite the tough macro landscape, bonds' shine has not evaporated. Theoretically, as long as the two asset classes are not perfectly correlated, diversification benefits exist (albeit they're relatively muted). This can be shown by calculating the portfolio volatility across equity-bond mixes (see chart) for different levels of equity-bond correlation.

A perfect positive correlation signifies no diversification, and in that case the investor should choose the asset with the higher return. Conversely, when two assets are perfectly negatively correlated, diversification is maximised, and an asset mix with no volatility can be found. The optimal asset weights for that riskless portfolio are inversely proportional to their respective volatilities.

In practice, we do not see such extreme values. For most asset classes, correlations are typically between -0.5 and +0.75, although equities can have higher intra-asset-class correlations, especially during sell-offs.

In our chart, the maximum volatility reduction with zero correlation is about 2.3% (relative to where there are no diversification benefits). If correlation drops to -0.25, the maximum risk reduction reaches 3%. However, when correlation flips to +0.25, the diversification benefit reduces to about 1.7%. This effect can be described as a "diversification pull" – decreasing correlation improves diversification and reduces portfolio volatility (or pulls down the volatility curve).

THE 60/40 PORTFOLIO IS DEAD, LONG LIVE A 50/50 PORTFOLIO?

Assuming that an investor's risk tolerance remains the same, when the equity-bond correlation flips from negative to positive, the optimal asset allocation also has to shift in order to remain within the pre-defined risk budget.

In the earlier example, this means that the equity allocation should be cut by about 1.5-2% per correlation increase of 0.1. Therefore, a correlation jump to +0.25 from -0.25 – which is a realistic scenario for US equities and government bonds – would probably result in a new 50/50 bond-equity portfolio mix, replacing the 60/40 portfolio.

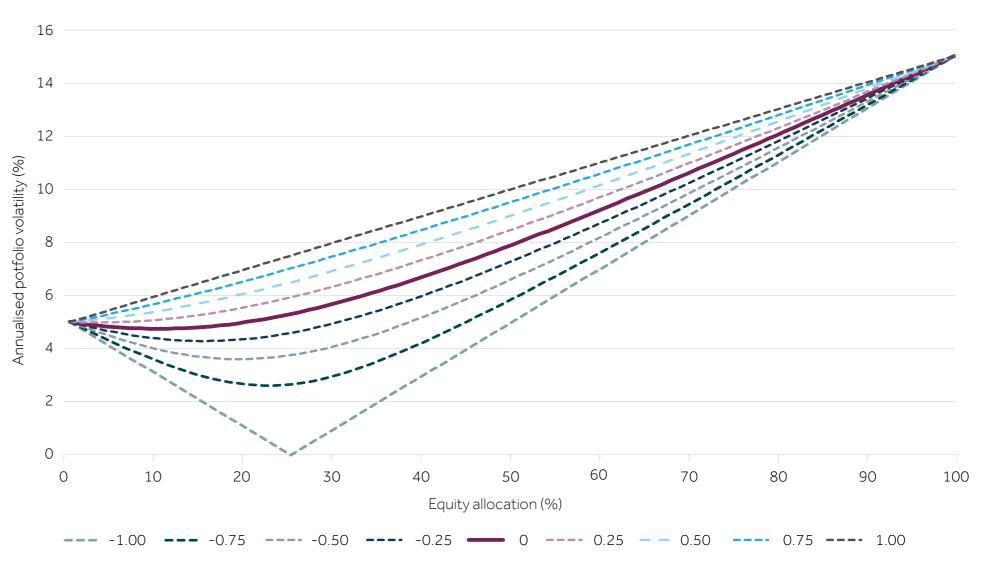
BRINGING MACRO REGIMES TO THE FORE

Historically, changes in macro regimes and uncertainty matter for the long-term performance and co-movement of equities and bonds. To explore the implications, we consider two macro regime frameworks – one based on inflation only, and one that combines inflation and growth.

In what follows, we measure the performance of equities and bonds relative to their respective average returns over the period reviewed. Therefore, all reported numbers and discussions regarding performance are based on long-term detrended data calculated on a quarterly frequency and annualised.

EQUITY-BOND CORRELATION SPECTRUM AND THE "DIVERSIFICATION PULL"

The illustrative example below shows the impact of equity-bond correlations on portfolio volatility for various levels of equity allocation. Decreasing correlation improves diversification and reduces portfolio volatility (pulls down the volatility curve). The assumed volatilities for equities and bonds are 15% and 5% respectively



Sources: Barclays Private Bank, October 2022

Note: The values at the bottom of the chart represent various equity-bond correlations.

This approach allows us to better demonstrate which macro environment is favoured by equities or bonds. We also show equity-bond correlations, which are calculated using regime-dependent quarterly returns, without any adjustments.

We define four different inflation regimes as follows:

- Deflation: Low and falling inflation
- Disinflation: High and falling inflation
- Reflation: Low and rising inflation
- Inflation: High and rising inflation

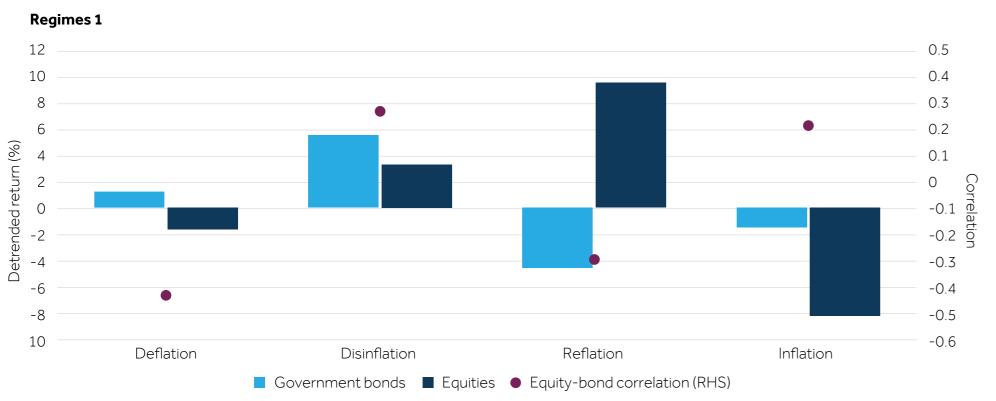
Our findings show that bonds tend to outperform relative to their long-term average in deflationary and disinflationary environments, whereas equities favour reflation and disinflation (see chart, regimes 1).

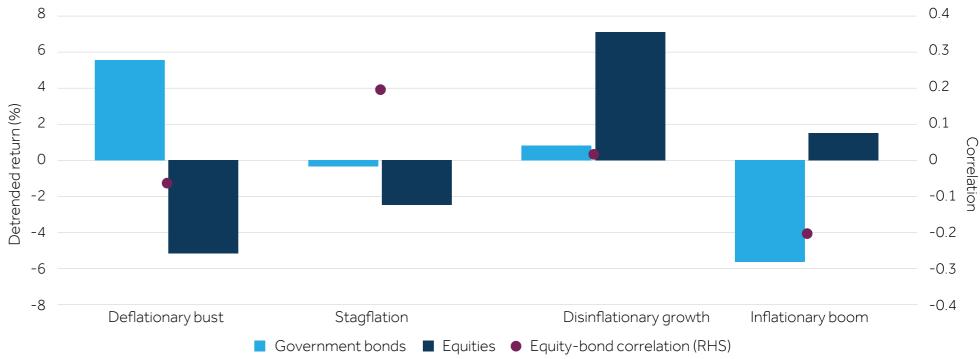
These results are intuitive. Bonds usually react positively (negatively) to falling (rising) inflation, which ultimately results in lower (higher) interest rates. Equities are typically boosted by monetary and fiscal stimuli during reflationary episodes. They also outperform in disinflationary regimes, since inflation stabilisation should aid future profits while reducing discount rates. Equities tend to underperform in deflationary periods, which often coincide with recessions and spikes in uncertainty. Both asset classes typically suffer losses in inflationary regimes, as seen in 2022.

MACROECONOMIC REGIMES DRIVE EQUITIES AND BONDS

Annualised average quarterly performance of MSCI USA Net Total Return index and Bloomberg US Treasury Total Return index correlation in different inflation-only (regimes one) and inflation-growth (regimes two) regimes from March 1973 to September 2022. The regime-dependent performance is calculated relative to the respective average return over the full sample

Regimes 2





Sources: Bloomberg, Barclays Private Bank, October 2022

In the regimes 2 panel of the chart (see p36), we consider four inflation-growth regimes:

- Deflationary bust: Falling inflation and real GDP growth
- Stagflation: Rising inflation and falling real GDP growth
- Disinflationary growth: Falling inflation and rising real GDP growth
- Inflationary boom: Rising inflation and real GDP growth

This setting allows us to gain further insights by linking equity performance to the economic growth. Our findings indicate that bonds and equities favour disinflationary growth phases. Bonds also tend to outperform in deflationary busts, whereas equities do well in inflationary booms.

SHIFTING TIDES OF EQUITY-BOND CORRELATION

Overall, the two proposed macro regime frameworks distil coherent conclusions. The latter unveils that equity-bond and inflation-growth correlations tend to move in opposite directions. As such, equity-bond correlations tend to increase when inflation is not in sync with the growth cycle.

This can help us to understand the recent moves in the equity-bond correlation and form a view on expected diversification benefits of bonds over the next twelve months.

The current macro backdrop can be classified as "inflation" in the inflation-only regimes 1 setting, and "stagflation" in terms of that seen in inflation-growth regimes 2. Such an environment is harmful for diversification as both equities and bonds tend to underperform in sync. If inflation keeps crawling up and the growth weakens further, we are likely to see continued equity and bond drawdowns.

The negative performance of the US 60/40 portfolio since its peak in December 2021 until September 2022, is already on a par with that seen during the dot-com bubble burst of the early 2000s and the oil price shock in 1974.

In a scenario where persistent inflation, coupled with further rate hikes over the next six to 12 months exacerbates growth weaknesses, the fall in 60/40 portfolio returns could be extended by another 10%, overtaking 2009 as the worst historical drawdown over the past half century.

However, if inflation finally cools off and rates stabilise, assuming a mild recession, the macro regime would likely switch from "stagflation" to a "deflationary bust". Historically, that regime was supportive of bonds but not equities. In that case, the equity-bond correlations are expected to come down. When growth picks up the speed at a later point, a strong rebound in the 60/40 portfolio performance (and especially in equities) could be expected based on historical performance. The equity-bond correlation would increase again during that phase.

² In our framework, the term premium is defined as the difference between the US Treasury 10-year yield and the short-term interest rate. The equity risk premium is defined as the difference between the earnings yield and the US Treasury 10-year yield.

BREAKING DOWN CORRELATIONS USING RISK PREMIA

In a final step, we now seek to explain the drivers of the equity-bond correlation from a risk premia angle.

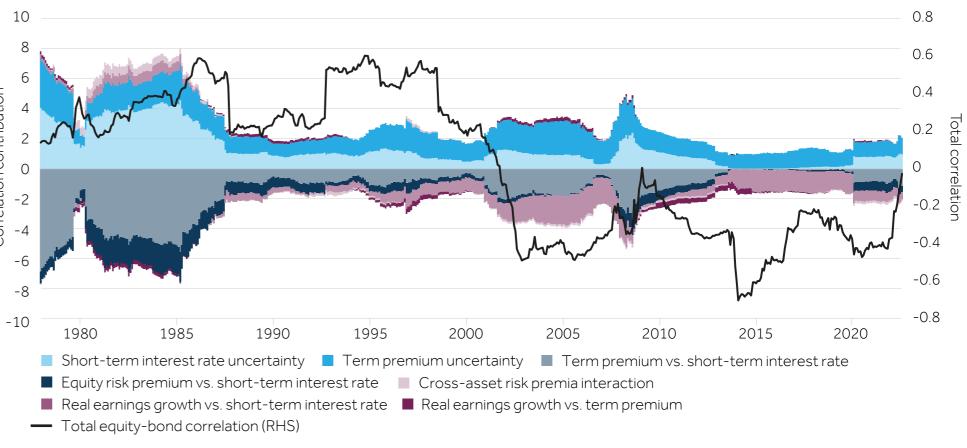
We first decompose returns into nominal short-term interest rate and risk premia (such as term premium or equity risk premium) and other factors (such as real earnings growth and inflation)².

Second, we apply the mathematical covariance decomposition into covariance of all interaction terms. This procedure results in an equity-bond covariance factorisation via variances of individual terms which impact both equities and bonds (such as short-term interest rate and term premium uncertainty) and covariances (cross-asset risk premia interaction).

Finally, by scaling the covariance by the product of equity and bond volatilities, we can offer insights on the dynamics behind the equity-bond correlation (see chart).

DECOMPOSITION OF THE US EQUITY-BOND CORRELATION

A decomposition of the realised five-year rolling US equity-bond correlation into the main risk premia and contributions and other factors from March 1973 to September 2022, given on monthly frequency. Equities are represented by the S&P 500 and bonds by the 10-year constant-maturity government bond



Sources: Bloomberg, Barclays Private Bank, October 2022

The first order effect comes from the short-term interest rate and term premium uncertainty (measured as their respective variances). Both factors contribute positively to interest rate uncertainty lifting the equity-bond correlation. These forces are balanced by the interactions between the short-term interest rate and the risk premia changes (in particular, the term-premium changes), which contribute negatively on average.

Another decisive factor is the cross-asset premia interaction, or the covariance between the term- and equity-risk premium, which behaves broadly in line with the inflation-growth regimes discussed earlier.

Finally, the covariances between the real earnings growth and the short-term interest rate and term-premium uncertainty changes, represent a second-order effect.

An additional important insight offered by this framework – which is not directly observable in the chart – is that the average equity valuation over the observation period represents a scaling factor in our calculations. An elevated price-earnings ratio can amplify the effects of the short-term interest rate and term-premium uncertainty, and contribute to equity-bond correlation distortions. Therefore, equity market valuations and macro conditions can reinforce each other and result in significant correlation swings, especially in the short-to-medium term.

UNDERSTANDING THE RECENT CORRELATION SHIFT

To better understand our quantitative framework and put it into the current macro context, let's look into the past twelve months and focus on changes in the correlation determinants. This analysis reveals the key drivers of the rising equity-bond correlation (see chart).

The main positive contributions come from the elevated short-term interest rate and term premium uncertainty, and the increased co-movement between the term and equity risk premia changes (that is, both premia have decreased recently).

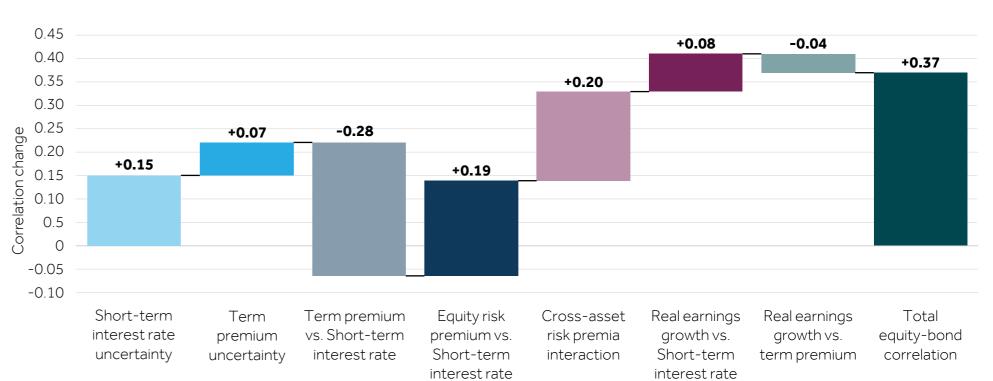
The joint contribution of the covariance between the two risk premia changes and the short-term interest rate uncertainty change boils down to the impact of the rising short-term interest rates on the realised equity returns (in excess of cash), which has been negative³.

AN OUTLOOK FOR THE EQUITY-BOND CORRELATION

A relatively strong relationship between the short-term interest rate uncertainty and most other factors allows us to focus on the former when analysing future scenarios. To estimate possible dynamics of the equity-bond correlation next year, we consider three scenarios for the evolution of the future US policy rate.

US EQUITY-BOND CORRELATION CHANGE ATTRIBUTION

A decomposition of the change in realised five-year rolling US equity-bond correlation from September 2021 to September 2022. Equities are represented by the S&P 500 and bonds by the 10-year constant-maturity government bond



Sources: Bloomberg, Barclays Private Bank, October 2022

Using the Bloomberg Consensus data, we focus on the median and high forecasts (terminal policy rate at 4.4% and 5.25%, respectively), and we add one stressed scenario where the policy rate reaches 7% at the end of 2023.

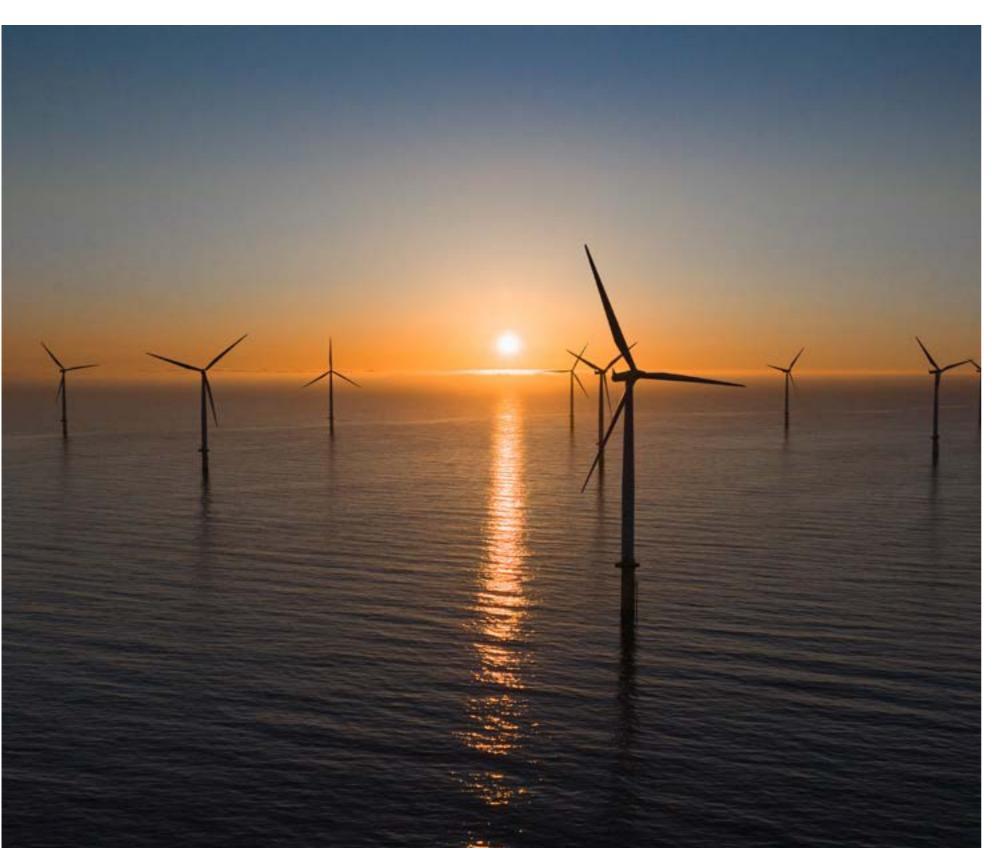
This simplified scenario analysis indicates that the equity-bond correlation will at best remain around the current level, but it could also increase further by about 0.1-0.2 in case the stressed scenario should materialise. As discussed above in this article, the outcome ultimately depends on the macro regime which will dominate next year – stagflation or deflationary bust.

Authors: Nikola Vasiljevic, Head of Quantitative Strategy, Zurich, Switzerland; Lukas Gehrig, Quantitative Strategist, Zurich, Switzerland

³ See After the storm comes great expectations for the discussion about changes in cross-asset premia over the last twelve months. https://privatebank.barclays.com/insights/2022/october/market-perspectives-october-2022/after-the-storm-comes-great-expectations.

The case for investing in clean energy in 2023

The inevitable transition to low-carbon energy will not only impact our daily lives, it should inform how we think about investing for the long term, helping us to look beyond the opportunities in uncomfortable market conditions.



In the current markets, investors might do well to heed the advice of sailors: if you feel unsteady, look at the horizon.

With many, often conflicting, dynamics expected next year, we expect it to be an uncomfortably, constructive 12 months. To steady your nerves and portfolios, it could pay to look at long-term opportunities on the horizon.

Confronting pressing social and environmental issues will take decades and trillions of dollars of investment to resolve. At the same time, therein lie some of the largest and fastest growing sectors of the economy.

LOSING THE FOSSIL-FUEL LEGACY

Our fossil-fuel-based energy system is at the forefront of many pressing issues. Over the last few years, many have championed a transition to a low-carbon economy on environmental grounds. Now, high fossil-fuel prices and energy security demands are further fuelling the need for this change.

In this article, we present the rationale for private investors to develop an investment strategy for clean energy in 2023 – a case that is increasingly supported by government actions, economics, and demand drivers.

SELF-INTEREST IS SUPPORTING A SHIFT TO CLEANER ENERGY PRODUCTION

A cleaner energy system can help governments to address their environmental commitments, energy security, affordability, and transition challenges all at once.

Until recently, net-zero commitments were the primary driver of government activity around cleaner energy. Around 140 countries, covering 88% of global emissions, have net-zero commitments¹. Energy usage (in buildings, transport, and industry) accounts for nearly three-quarters of greenhouse gas emissions². Therefore, to meet these commitments a cleaner energy system is needed.

Now, governments face a more localised and visceral pressure – avoiding over-reliance on expensive and insecure sources of fossil fuels.

"Governments are shouldering the increasing costs of fossil-fuel dependence"

38 Page

¹ CAT net zero target evaluation; Climate Action Tracker, October 2022 https://climateactiontracker.org/global/cat-net-zero-target-evaluations/
² Historical GHG emissions, Climatewatch, 20 May 2022 https://www.climatewatchdata.org/

PICKING UP THE TAB

Governments are shouldering the increasing costs of fossil-fuel dependence. For example, as of mid-September, European policymakers had committed roughly half a trillion dollars to shield households and businesses from the energy crisis³. With future budgets more constrained, and a potential recession, they cannot maintain this fiscal spending indefinitely.

Compare this cash cost with a study that calculated existing renewables allowed the EU to avoid nearly €100 billion in fossil fuel imports during the six months to September 2022⁴. Moreover, a recent model of a 2050 decarbonised energy system suggested it would save the world at least \$12 trillion in net present value – and this was without factoring in the additional trillions of adapting to climate change and its physical impacts.

At the same time, governments are waking up to the risk of their dependence on petro-states for fuel imports. Europe's reliance on Russia for 40% of its gas requirements provides the obvious example⁵. But 80% of the world's population lives in countries which, as net importers of fossil fuels, face similar risks⁶.

CLEANING UP

Additionally, in a potential recession, governments will be looking to stimulate economic growth. Accelerating home-grown clean-energy industries will provide new jobs to local workers. In fact, clean energy now accounts for the majority of all energy jobs. In a 2050 net-zero scenario, 14 million new clean-energy jobs would be created by 2030, while another 16 million workers switch to new roles related to clean energy.

Plans, such as the EU's "Fit for 55" and RePowerEU, the US' Inflation Reduction Act, or China's 14th five-year plan, combine legislation and fiscal stimulus to accelerate this transition. For investors, governments are providing clear signals of ongoing commitment to the energy transition.

GREEN ECONOMICS

Even without government support, renewables are rapidly becoming the cheapest source of energy around the world.. Both for new capacity and, with heightened fossil fuel costs, existing production.

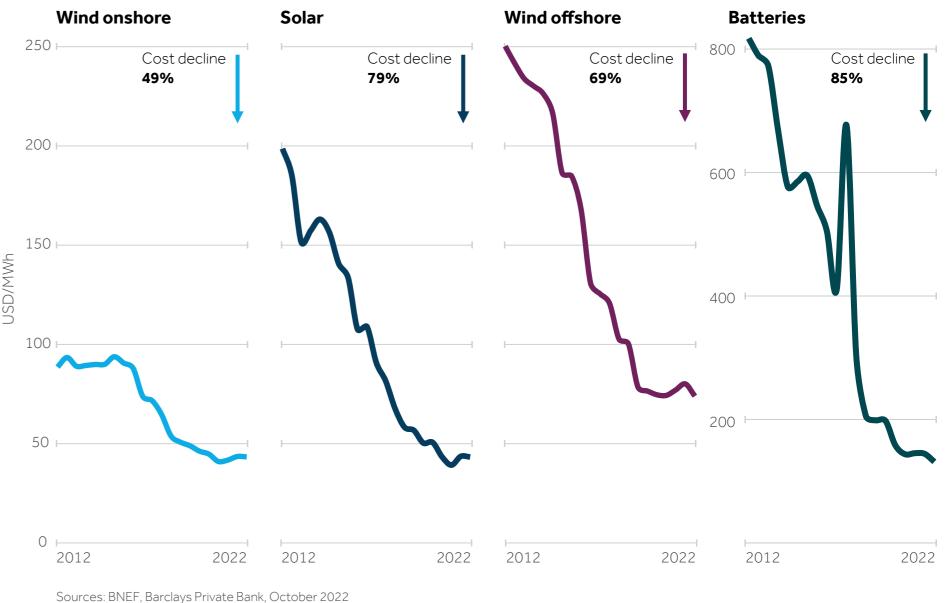
Unlike fossil fuels, the renewables sector is profiting from "learning curves". For example, every time over past decades that global supply of solar has doubled, additional capacity costs declined by almost 30%.

³ National policies to shield consumers from rising energy prices, Brueghel, 21 September 2022 https://ember-climate.org/press-releases/eus-record-growth-in-wind-and-solar-avoids-e11bn-in-gas-costs-during-war/

Amazingly, the cost of key clean-energy technologies – onshore wind, offshore wind, solar, batteries – has fallen between 60% and 90% over the last ten years (see chart below). In the last twelve months while costs have notched up, due to global supply-chain challenges, these are seen as temporary issues⁹.

KEY RENEWABLES TECHNOLOGIES BECOME MORE COMPETITIVE

The costs needed by renewable energy technologies to generate power have fallen substantially over the last decade; making them as competitive, or more so, as fossil fuel costs



Sources. BINEF, Barciays Private Barik, October 2022

39 Page

⁴ EU's record growth in wind and solar avoids €11bn in gas costs during war, Ember, 18 October 2022 https://ember-climate.org/press-releases/eus-record-growth-in-wind-and-solar-avoids-e11bn-in-gas-costs-during-war/

⁵ REPowerEU: Joint European action for more affordable, secure and sustainable energy, European Commission, 8 March 2022 https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511

⁶ A New World: The Geopolitics of the Energy Transition, International Renewable Energy Agency, 2019 https://www.irena.org/-/media/files/irena/agency/publication/2019/jan/global_commission_geopolitic_new_world_2019.pdf,

⁷ World Energy Employment Report, International Energy Agency, September 2022 https://www.iea.org/news/global-energy-employment-rises-above-pre-covid-levels-driven-by-clean-energy-and-efforts-to-strengthen-supply-chains

⁸ Clean Energy Has a Tipping Point, and 87 Countries Have Reached It, Bloomberg, 18 October 2022 https://www.bloomberg.com/graphics/2022-clean-energy-electric-cars-tipping-points/?leadSource=uverify%20wall

⁹ Cost of New Renewables Temporarily Rises as Inflation Starts to Bite, Bloomberg New Energy Finance, 30 June 2022 https://about.bnef.com/blog/cost-of-new-renewables temporarily-rises-as-inflation-starts-to-bite/

And these costs will continue to fall. Renewables are likely to be deployed at larger scale, and less expensive incremental and newer technologies will emerge. Based on new models, this could mean the so-called "levelised costs" of energy decrease by 23% for wind and 47% for solar in the period to 2035¹⁰.

The shift to renewables based on their cost advantage means the investment case does not only need to be made on environmental benefit, but also on a solid economic interest too.

"2023 can be a timely moment for investors to seek entry points into this structural trend"

CLEANER ENERGY: REACHING THE TIPPING POINT

The surge in demand for clean energy is a warning for carbon-intensive investors. Indeed, in some geographies, demand for fossil fuels has already peaked¹¹.

Clean energy is following a traditional tipping point growth pattern. Initially, new technology adoption starts slowly, and then very rapidly once a tipping point is reached, as exemplified by wind and solar generation or electric vehicle sales (see chart). The tipping points for clean energy vary between 1% for solar and wind to 10% for electric vehicle (EV) manufacturers.

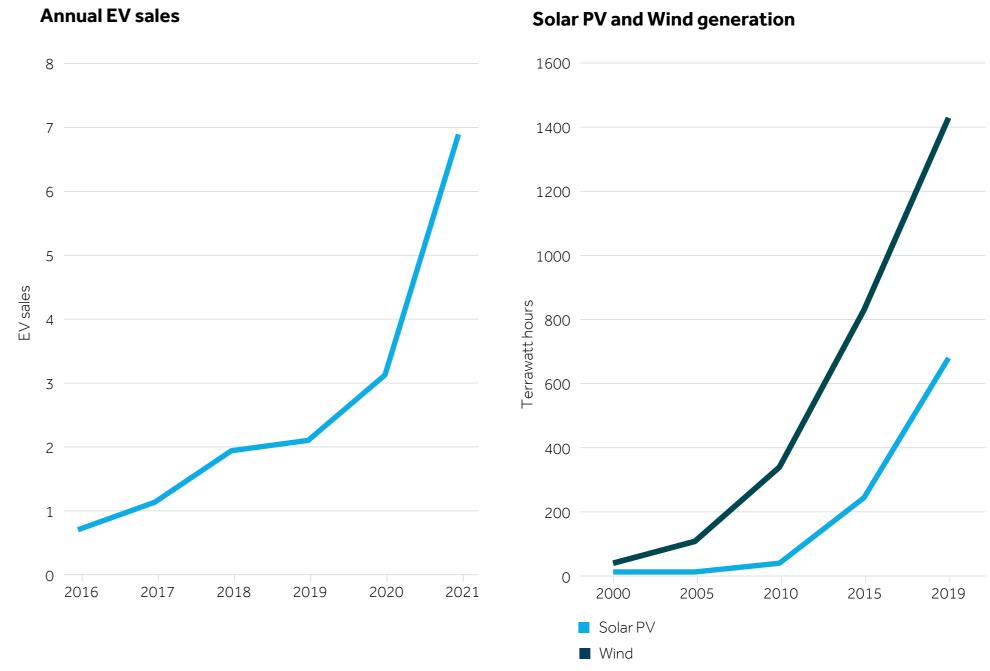
Today, 87 countries generate at least 5% of their electricity from wind and solar. Looking at the case of the US, renewables languished for a decade with only 5% of electricity produced in 2011, before then surging past 20% by 2021. If it follows the fastest growth rates, American wind and solar could account for half of its power generation capacity in next ten years¹².

Similarly, related technologies for EVs, heat pumps, or grid-scale batteries also adhere to tipping points. Consider the electric car market. In 2019, 2.2 million EVs were sold, or 2.5% of global car sales. Two years later and the number has tripled to 6.6 million, representing nearly 9% of all new car sales¹³.

As individuals and companies shift to these new technologies, demand will quickly flip from fossil fuels to clean energy. For investors, this accelerating demand points to high-growth opportunities for companies and projects aligned to the theme.

ADOPTION RATES SOAR FOR EVS, WIND, AND SOLAR

Adoption of new technologies start slowly but once reaching a tipping points growth rapidly accelerates



Sources: IEA, Barclays Private Bank, October 2022

¹⁰ Levelized cost-based learning analysis of utility-scale wind and solar in the United States, IScience Journal, 17 June 2022 https://www.sciencedirect.com/science/article/pii/S2589004222006496

¹¹ The Energy Transition Narrative, Rocky Mountain Institute, October 2022 https://rmi.org/wp-content/uploads/dlm_uploads/2022/10/energy_transition_narrative_1.1.pdf

¹² Clean Energy Has a Tipping Point, and 87 Countries Have Reached It, Bloomberg, 18 October 2022 https://www.bloomberg.com/graphics/2022-clean-energy-electric-cars-tipping-points/?leadSource=uverify%20wall

¹³ Electric cars fend off supply challenges to more than double global sales, IEA, 21 June 2022 <a href="https://www.faistgroup.com/news/electric-car-sales-2021/#:-:text=An%20interesting%20report%20published%20by%20IEA%20-%20The,understand%20the%20dimensions%20of%20the%20electric%20car%20phenomenor for the first of the first of

DIVERSE CLEAN-ENERGY INVESTMENTS CAN FIT INTO AN INVESTOR'S PORTFOLIO

For investors, there isn't a single way to access this clean energy theme. There are many of them.

Renewables are at the core of the clean-energy transition. But, it is not the sole option for investors. Even established technologies are being advanced and challenged. Wind generation started onshore, then moved to offshore; and next generation technologies are evolving for floating windfarms and rooftop wind. Additionally, there are emergent sources of renewables, such as geothermal, wave, or tidal, which have not yet reached tipping points.

Beyond this core, there are adjacent sectors – for example, heat pumps, batteries and energy storage, and grid infrastructure. Similarly, there are opportunities in the "picks and shovels" for the industry, such as, electrolysers for hydrogen production, fuel cells for batteries, photovoltaic modules for solar, and digital technologies to manage these systems. Additionally, renewables rely on rare earth commodities that provide further opportunities; as well as their own social and environmental challenges.

ASSET CLASSES TO SUIT PORTFOLIOS

Along with sectors, investors can deploy capital into various asset classes. In public markets there are options to finance the transformation of individual companies through green bonds. Or sovereign bonds for country transitions. Investors can also directly access specific companies in the utilities sector and "pure-play" clean-energy companies. For those wanting to play the theme without the selection challenges, specialists have established clean-energy funds.

Private markets also offer various options for investors. Investment vehicles span from seed to venture to growth, and even private equity. Also, infrastructure funds have emerged to benefit from existing, steady state clean-energy assets. Finally, for more sophisticated investors, direct access to early-stage companies can provide higher risk-reward opportunities.

ENERGY IS NOT A SHORT-TERM TRADE

Importantly, while constructive on the growth of clean energy and range of asset classes, this does not necessarily mean all investment opportunities are compelling. Here timing and market conditions may be helpful, though.

During 2019 and 2020, valuations for renewables were buoyant. In 2021 they faced pandemic-related issues, cost-push inflation, and supply-chain limitations that slowed deployment rates and damaged valuations. In 2022, as growth-oriented industries, they have been hit from sector rotation and interest rate rises. Collectively, these have depressed prices from recent peaks. Conditions during 2023 may exacerbate these headwinds.

However, the argument for clean energy is not fundamentally a short-term trade. It is a belief in the long-term trend and its investment opportunity. Here, advisers can counsel on picking the right options and considerations for your portfolio.

ALIGNING YOUR PORTFOLIO WITH LONG-TERM GOALS

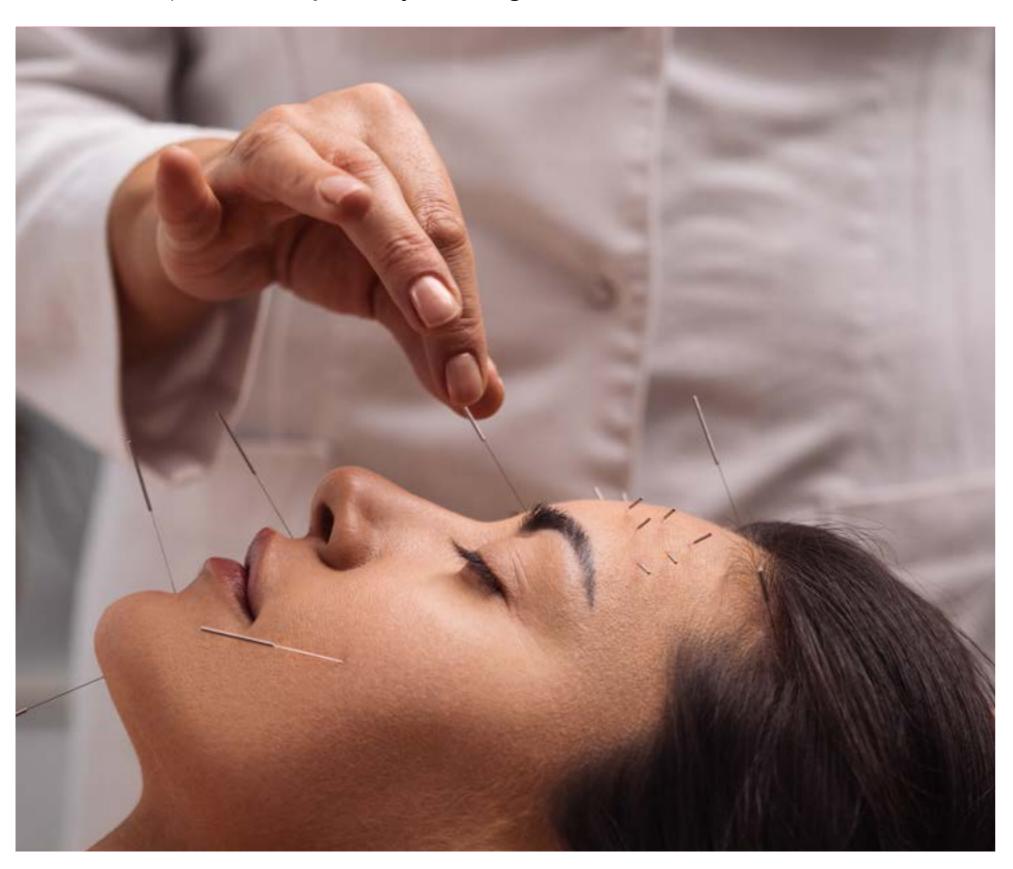
The shift to a clean-energy system is inevitable. It does not necessarily mean it will be simple or easy. However, 2023 can be a timely moment for investors to seek entry points into this structural trend.

Investors able to see beyond the current markets will find opportunities to build positions in clean energy. In doing so, they can commercially benefit from the long-term energy transition and make a positive contribution to our planet through their additional capital.

Author: Damian Payiatakis, London UK, Head of Sustainable & Impact Investing

Being comfortable with being uncomfortable

After a tough year in financial markets, full of nasty surprises, 2023 may be another uncomfortable time to be invested. However, this is par for the course and part of the journey for long-term investors. After all, for those that can stomach the risk, the rewards can be worth it.



The decade after the global financial crisis and ensuing recession in 2007-2008, was a comfortable one in which to be invested. As the scars healed, central bank quantitative easing led to low rates, and market participants were supported by the belief that central bankers would act at almost all costs to protect the financial system.

The ensuing US stock market bull run was the longest in history, with only the outbreak of the coronavirus pandemic in March 2020 ending 11 years of gains. Surprisingly, the downturn was short-lived, with the market surging through 2020 and 2021 to end both years up at 16.3% and 26.9%.

THE WINDS OF CHANGE

However, the world is changing. Fears of inflation in the final three months of 2021 led to a sell-off in technology stocks, made worse by the outbreak of the war in Ukraine this year and the aggressive rate hikes from central banks to fight surging inflation.

Investors are now faced with meaningfully higher interest rates in the short term, at a minimum. Significantly, central bankers' primary focus is getting to grips with surging inflation, and that clearly has implications for investors. The changing expectations of a 'Fed pivot' are driving significant short-term volatility.

While we remain constructive on the longer-term outlook for investors, as outlined in this publication, this environment will require investors to become comfortable with being uncomfortable, given current levels of market uncertainty.

"Elevated geopolitical tensions, a slowing growth outlook, and central banks in rate-hiking mood suggest that the year ahead is likely to be another particularly volatile one"

WHY INVESTING CAN BE UNCOMFORTABLE

Given the tumultuous year that investors have had, discomfort going into what looks set to be another challenging year is understandable.

The macro macro environment (see <u>Global economy to keep its head above water</u>) has changed substantially and remains very uncertain, with considerable risks on the horizon for 2023. On the other hand, positive developments after such dramatic drawdowns can lead to sharp bear market rallies. Therefore, irrespective of the overall directionality of markets, volatility is likely to remain elevated.

However, that shouldn't cause investors in addition to panic, provided they have the appropriate investment solutions, that have been matched to their goals and tolerance to, and capacity to, bear risk.

Having the right asset allocation, however, does not necessarily mean that an investor will be immune to an uncomfortable investment journey to reach their goals. Volatility is part of the journey, and history shows that it won't necessarily stop you from reaching your goals, if you can see it through.

For this reason, investors need to keep their composure. Not doing so can mean exacerbating behavioural biases, which can impair decision-making and lead to actions which are not in your long-term interest. Many investors unnecessarily change portfolio allocations during periods of market turbulence because they don't want to regret not doing something.

"Volatility is part of the journey, and history shows that it won't necessarily stop you from reaching your goals, if you can see it through"

THE COSTS OF ACTING ON DISCOMFORT

As humans, we don't like uncertainty, and many investors are wondering when the storms will pass to produce the 'right moment' to invest.

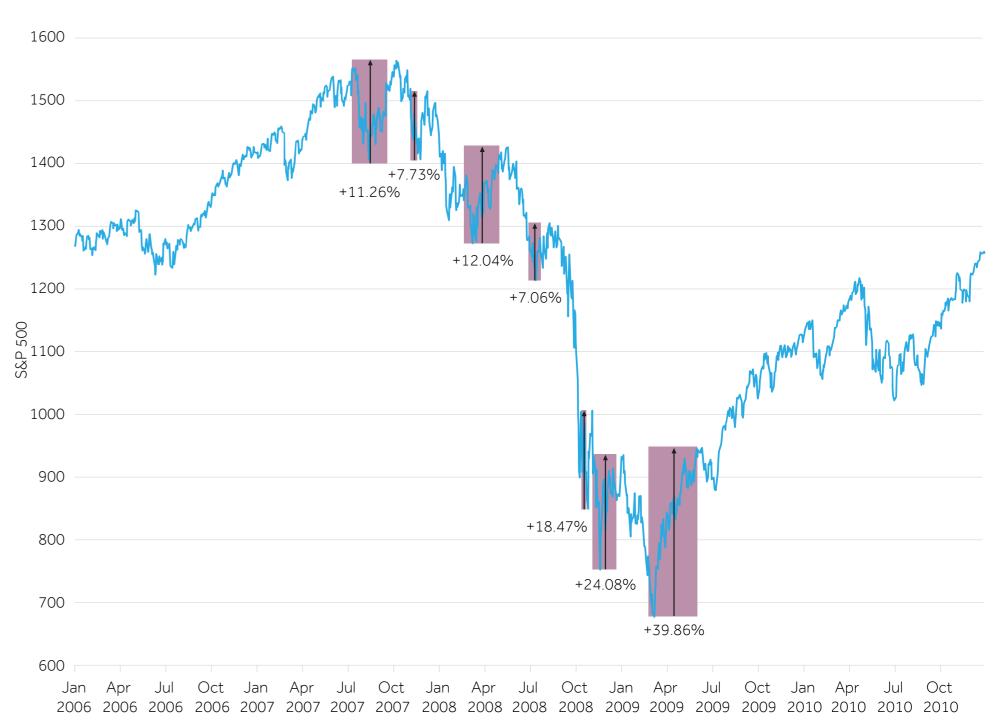
Timing markets is notoriously difficult. Attempting to do so against the backdrop of considerable market volatility, makes it even more difficult. Calling the absolute bottom of the market is near impossible.

We believe that value comes from focusing on building and following a robust investment philosophy. One that identifies strong companies capable of providing outsized gains through the various stages of the business cycle over the long term, including economic slowdowns or recessions. Attempting to time the market introduces additional biases and risk into the decision-making process, and can be a costly, futile endeavour.

There have been many bear market rallies during recent downturns (see chart). This highlights the potential dangers of trying to time the market – in the short-term there can be rallies even as we get closer to the ultimate trough in a downturn.

RECENT CRISES HAVE BEEN MARKED BY REPEATED RALLIES

The performance of the S&P 500 saw several bear market rallies during the global financial crisis



Sources: Bloomberg, Barclays Private Bank, October 2022

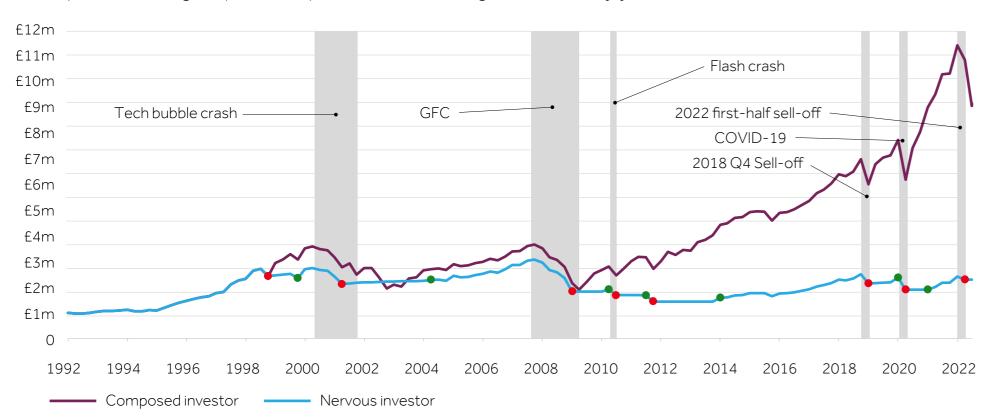
COSTLY ACTS

Selling investments during a particularly uncomfortable period in the markets can be costly. Staying the course may require patience, discipline, and composure. But, investors who do so have historically been rewarded over the long term, compared with those trying to time the market.

A hypothetical example (see chart) of a composed versus nervous investor illustrates this point. Both invested £1 million in the S&P 500 30 years ago. The composed investor held the portfolio regardless of market conditions, whereas the nervous investor sold out the whole portfolio into T-bills following any 10% fall in the index, and only bought back into equities after three consecutive quarters of positive returns. The net result is the nervous investor's portfolio is worth under a quarter of the value of the composed investor's portfolio.

COMPOSED VERSUS A NERVOUS INVESTOR

The impact of timing on portfolio performance during the last thirty years



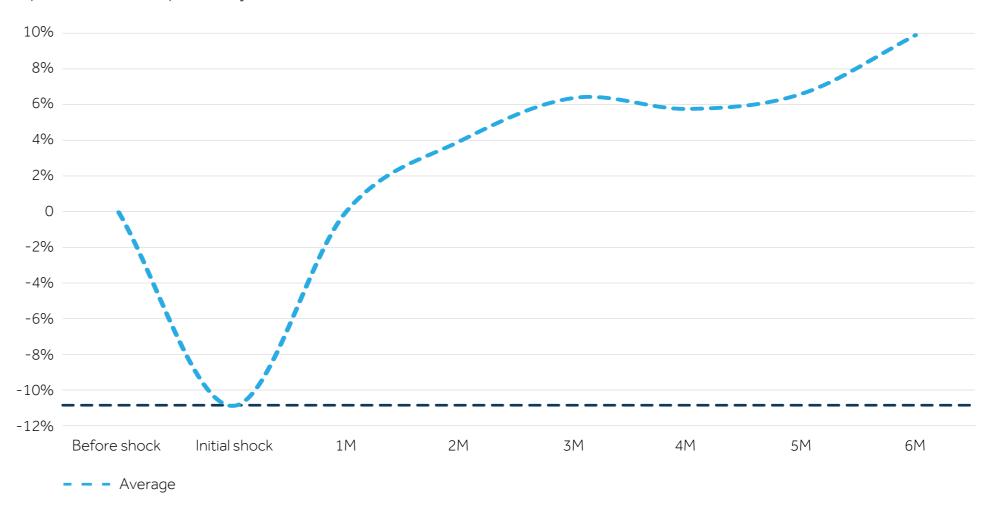
Sources: Bloomberg, Barclays Private Bank, October 2022

Note: Based on an initial investment of £1,000,000. The composed investor buys and holds while the nervous investor buys, but if stocks drop by 10% in a quarter sells out into T-bills and only move back after 3 quarters of positive returns.

In large part, this cost from reacting in the short-term stems from the speed of recoveries after significant drawdowns. Investors can be caught out and end up re-entering the market at a higher market level (see chart).

AVERAGE PERFORMANCE OF US EQUITIES AFTER SELECTED MARKET SHOCKS

Average performance for six-month holding periods following the ten worst monthly drawdowns for US equities over the past 30 years



Sources: Bloomberg, Barclays Private Bank, October 2022

RECOGNISE THE OPPORTUNITIES

We begin by reminding investors that a recession doesn't necessarily mean a crisis.

While it may not be comfortable, it is important for investors to recognise that when the situation looks at its worst and sentiment is at its lowest, in many cases the dawn is not far off. Opportunities do arise, the situation can change. So, it is important to remain calm.

For others, being uncomfortable is not necessarily bad – of late the market has been looking oversold, and there are signs that we may be close to the capitulation stage in markets. Indeed, in the macro world, global growth expectations are already near all-time lows. An improving economic picture could spark a rebound, for example, if China relaxes its zero-COVID containment strategy.

However, the macro situation doesn't need to fully rectify itself for investment opportunities to pop up.

As a result of the changing landscape, asset classes that may have been a ballast for portfolios in the past are already providing opportunities, such as in in fixed income (see <u>The road to normalisation for bond investors?</u>). While holding cash over the long term can be a risky strategy, especially in a world of runaway inflation, short-term cash rates have also risen. For investors considering phasing into markets, this can be supportive.

A BEHAVIOURAL TOOLKIT FOR 2023

We believe that three factors are worth bearing in mind for next year and beyond in order to keep calm and composed on your investment journey.

1. Goals

Are you clear on your investment goals? Our experts have examined the macro outlook and asset classes in detail, but before acting on it, investors should first be clear on what it is they are trying to achieve.

With this in mind, investors should have a lens through which to consume investment views, and to consider how to capitalise on opportunities, or mitigate risks that may jeopardise their goals.

Additionally, those who are clear about their goals may be better able to manage volatile periods by having a longer-term perspective than those chasing performance for performance sake, who may be more susceptible to behavioural biases due to a more myopic approach.

2. A solid foundation

A diversified portfolio remains the best way to protect and grow your wealth across different market conditions, due to imperfect correlations between assets, which can reduce risk and smooth returns (see <u>Is asset allocation at a tipping point?</u>)

By offering a layer of protection to your portfolio against volatility, diversification can help to shield investors from the emotions that volatility can induce. While others may act poorly during a market crisis, holding a diversified portfolio can help you to be able to think clearly, capitalising on opportunities, while navigating risks.

3. Utilise an adviser

Communicating with a trusted adviser throughout the investment journey can be extremely beneficial from a behavioural perspective, particularly during stressed market conditions, to ensure robust decision-making. An adviser that can challenge us on investment decision-making to ensure we don't fall foul of biases such as the confirmation bias – when we seek and pay more attention to data that confirms pre-existing views and beliefs. Their most important contribution is to help you to keep perspective and the longer-term picture at the forefront of your mind.

"While we remain constructive on the longer-term outlook for investors...this will require investors to become comfortable with being uncomfortable"

STICKING TO THE COURSE

Elevated geopolitical tensions, a slowing growth outlook, and central banks in a rate-hiking mood suggest that the year ahead is likely to be another particularly volatile one. However, the secret is to be comfortable with that happening, rather than letting it affect your investment decisions. For those who can stay the course, history has shown they have been compensated for it.

Author: Alexander Joshi, London UK, Head of Behavioural Finance

Multi-asset portfolio allocation

Barclays Private Bank discusses asset allocation views within the context of a multi-asset class portfolio. Our views elsewhere in the publication are absolute and within the context of each asset class.



	-	=	+
Cash and short duration bonds			
Fixed income			
Developed market government bonds			
Investment grade bonds			
High yield bonds			
Emerging market bonds			
Equities			
Developed market equities			
Emerging market equities			
Other assets			
Alternative trading strategies			
Commodities			

⁻ denotes a cautious view = denotes a neutral view + denotes a positive view

CASH AND SHORT DURATION BONDS

• Given the ongoing uncertainty, and to manage portfolio risks, we still prefer higher-quality and liquid opportunities.

FIXED INCOME

- We see increasing opportunities in fixed income
- We maintain a preference for developed market government bonds as a hedge against any macroeconomic volatility
- In credit, we prefer the higher-quality segment and remain selective elsewhere
- In high yield, where selection is key, our exposure remains relatively low as spreads have room to widen further in an adverse scenario

• We prefer high yield and emerging market (EM) hard currency debt over EM local currency debt, considering the risk that faces their economies and currencies.

EQUITIES

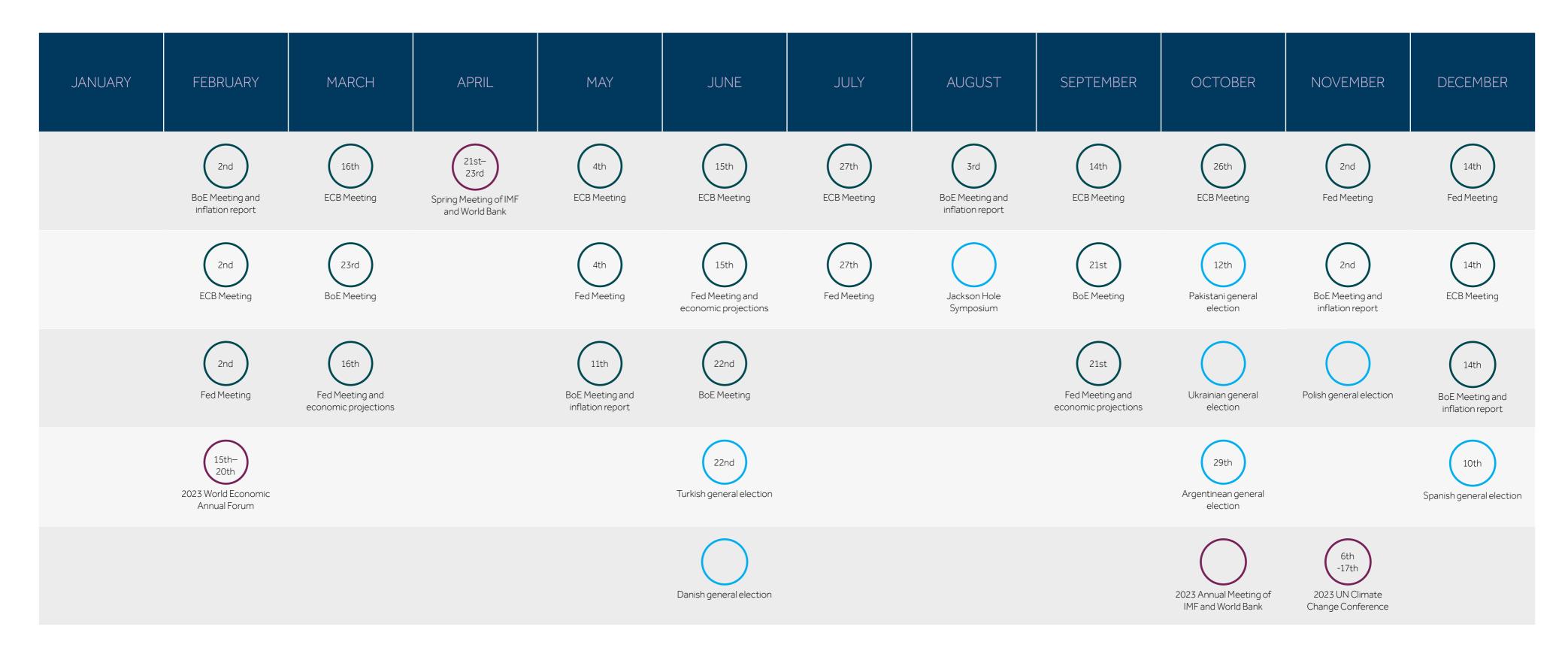
- We believe that equities remain relatively more appealing than bonds for long-term investors
- Yet, we are highly selective in our allocation
- In line with our long-term investment philosophy, portfolios remain geared towards high-quality, cash-generative, and conservatively-capitalised businesses
- As a function of our bottom-up selection, we currently see more opportunities in developed market equities compared to their emerging peers.

ALTERNATIVE TRADING STRATEGIES (ATS)

- There are a limited number of opportunities in the ATS space, as the cost/ benefit trade-off can be challenging
- Our focus is on strategies offering diversification benefits due to their lowcorrelation to equity markets.
 COMMODITIES
- As a risk-mitigating asset, gold remains the only direct commodity exposure held in portfolios
- From a portfolio management perspective, we believe that our risk budget is better spent outside of the asset class.

Author name: Julien Lafargue, London UK, Chief Market Strategist

Key dates







Geopolitical events



International bodies

privatebank.barclays.com

$Investments\ can \ fall\ as\ well\ as\ rise\ in\ value.\ Your\ capital\ or\ the\ income\ generated\ from\ your\ investment\ may\ be\ at\ risk.$

This document is for information purposes only. It is general in nature and does not take into account specific investment objectives, financial situation, knowledge, experience or particular person. It should not be relied upon in considering the merits of any particular transaction. It does not constitute a prospectus, offer to buy or sell, invitation or solicitation to buy or sell or invest in or refrain from investing in securities or other investment products or services that we may potentially provide, and you should consider whether any of those may apply to your own circumstances and needs.

It is not intended to provide the sole basis for any evaluation of securities or any other instrument, which may be discussed in it. The information in this document is not investment, tax, legal, accounting, regulatory or other advice, and you should consider seeking advice tailored for your own circumstances, including any impact an investment may have on your personal tax position from your own tax adviser. You have sole responsibility for the management of your tax, accounting, legal and regulatory adviser. You have not and will not provide you with, and you should obtain your own, independent, tax, accounting, legal and regulatory advice.

Any offer or entry into any transaction with Barclays as a party, requires Barclays' subsequent formal agreement which will be subject inter alia to internal approvals and execution of binding transaction documents. Terms and conditions if any herein are indicative and subject to change and/or negotiation between us. Full details of final terms and conditions will be contained in a prospectus or offering or other document.

Investment products may be subject to investment risks, including, but not limited to, market and currency exchange risks, fluctuations in value and possible loss of principal investments are concerned, past performance does not predict or guarantee future performance. Investments can fall as well as rise in value. Your capital or the income generated from your investment may be at risk. The value of any investment may also fluctuate as a result of market changes.

Although any content in this document from other sources is believed to have been obtained from sources, we believe those sources to be reliable but we do not guarantee the information's accuracy. Information set out herein may be incomplete or condensed. Barclays is not responsible for information stated to be obtained or derived from third party sources or statistical services. Any past or simulated past performance including back-testing, modelling or scenario analysis contained herein is no indication as to future performance. No representation is made as to the accuracy of the assumptions made within, or completeness of, any modelling, scenario analysis or back-testing. You should carry out your own due diligence and verification of such information accordingly. This document may become outdated and/or its contents subject to changes at any time and without prior notice to you, and in that regard, we are under no obligation to update or correct this document or inform you in relation to any such changes to the contents herein. Any estimates and opinions from Barclays as may be included in this document constitute our judgement as of the date of the document and may be subject to change without notice, and we have no obligation to provide revised estimates or opinions.

Unless expressly stated, products are not guaranteed by Barclays Bank PLC or its affiliates or any government entity.

This document is not a product of the Barclays Research department. Any views expressed may differ from those of Barclays Research.

This document is strictly confidential and may be being made available to selected recipients only. It may not be reproduced or disclosed (in whole or in part) to any person without our prior written permission. Barclays or its affiliates may act upon or use material in this publication prior to publication. The manner of distribution of this document and the availability of the products and services may be restricted by law or regulation in certain countries and persons who come into possession of this publication are required to inform themselves of and observe such restrictions.

Barclays Bank PLC ("Barclays"), its affiliates, and their respective directors, employees, and agents ("Barclays Group") make no representation or warranty as to the accuracy, completeness, timeliness or reliability of the contents of this document. To the maximum extent permitted by law, no member of the Barclays Group accepts any liability whatsoever for any direct, indirect or consequential losses (in contract, tort or otherwise) (including, without limitation, any liability arising from the use of or reliance on this document or its contents or otherwise arising in connection with it.

The contents of this document have not been reviewed or approved by any regulatory authority.

Barclays offers wealth and investment products and services to its clients through Barclays Bank PLC registered in England and operates in India through its subsidiaries, including Barclays Securities (India) Private Limited (BSIPL), Barclays Wealth Trustees (India) Private Limited (BWTIPL) and Barclays Investments & Loans (India) Private Limited (BILIPL). BSIPL is a company incorporated under the Companies Act, 1956 having CIN U67120MH2006PTC161063. BSIPL is registered and regulated by the Securities and Exchange Board of India (SEBI) as a Portfolio Manager INP000002585, Stock Broker INZ000269539 (member of NSE and BSE), Research Analyst:INH000001519; Depository Participant with the National Securities & Depositories Limited (NSDL): DP ID: IN-DPNSDL- 299-2008, Investment Advisor: INA000000391. BSIPL is also registered as a Mutual Fund Advisor having AMFI ARN No. 53308. The registered office of BSIPL is at 208, Ceejay House, Shivsagar Estate, Dr. A. Besant Road, Worli, Mumbai – 400 018, India. Telephone No: +91 22 61796339. Email England Company Investor Grievance E-mail: bsipl.concerns@barcap.com. Website: www.barclays.in/bsipl. BWTIPL is a company incorporated under the Companies Act, 1913 having CIN U93000MH2008PTC188438. BWTIPL is a Corporate Agent (Composite) of (i) HDFC Standard Life Insurance Company Limited and (iii) ICICI Lombard General Insurance Company Limited and (iii) ICICI Lombard General Insurance Company Limited (BILIPL). BSIPL is a Company incorporate agency (insurance) matters: xealethindiainsura@barclays.com, Email Address for corporate agency (insurance) matters: xeawealthindiainsura@barclays.com, Email Address for corporate dunder the Companies Act, 1913 having CIN U93090MH1937FTC291521. BILIPL is registered and regulated by the Reserve Bank of India (RBI) as a Non Banking Finance Company (NBFC): Registration no.8-13.02176. The registered office of BILIPL is at. Nirlon Knowledge Park, Level 10, Block B-6, Off Western Express Highway, Goregaon (East), Mumbai - 400063, India. Telephone No: +

