

Investment Outlook 2023

A fundamental reset



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A time for prudence



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If 2022 confronted investors with stiff headwinds, 2023 is likely to be challenging as well. After all, financial conditions are all but certain to remain tight and the fundamental reset of macroeconomics and geopolitics is continuing. Investors would thus do well to adhere to a robust investment process and diversify investments broadly, particularly as the transition out of negative rates is behind us. Our House View provides a valuable compass in this regard.

The year 2022 presented investors with a particularly difficult environment. Inflation was a concern going into the year, and the onset of the war in Ukraine drove price levels up further. In response, central banks, first and foremost the US Federal Reserve, brought forward rate hikes and have all but demonstrated their determination to bring inflation down by tightening monetary policy aggressively. Indeed, they will not be able to slow the pace of rate hikes before realized inflation falls persistently.

All the while, growth has been slowing, with the Eurozone and UK even likely to have slipped into recession.

Looking ahead, we expect financial market volatility to remain elevated as risks persist and global financial conditions remain tight. This is likely to create continued headwinds to growth and, by extension, risk assets. Nevertheless, investors can find opportunities, particularly in fixed income, as we show in this year's Investment Outlook.

I believe that recent months have clearly reiterated the importance of adhering to robust investment principles, following a stringent investment process aligned with one's long-term financial objectives and seeking broad diversification, including alternative investments. Preserving wealth is our singular focus, and we remain fully committed to this goal as the fundamental reset continues.

Reset is the new reality



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The "Great Transition" that we foresaw for 2022 has played out to a much greater extent than we originally envisioned, resulting in a new reality.

Over the past year, geopolitics has made a comeback as a key driver of the global economy. The confrontation between the West and Russia over Ukraine has triggered an energy crisis as well as soaring food prices.

Far from normalizing, international commerce has reorganized according to political alliances, marking the dawn of a multipolar world.

This has resulted in a new economic reality with more elevated inflation and a monetary policy regime prioritizing inflation stability over growth. As a result, interest rates are at their highest in years and economic growth is slowing.

Financial markets could not evade these developments, with equities and bonds firmly in negative territory in 2022. Bonds were unable to act as an effective source of diversification within portfolios (their traditional role), as there was a stronger correlation between the two asset classes due to the turbulent macroeconomic environment and tighter monetary policy regime.

Which leads us to the outlook for 2023: we believe the global economy has undergone a fundamental and lasting reset due to the COVID-19 pandemic, shifting demographics, climate change, weakening business investment in the wake of geopolitical ruptures, among other trends. The fallout is evident in our longer-term forecasts for the global economy, which we expect will grow at a much slower pace than in the 2010–2019 period. Inflation will remain an issue in 2023, though we expect it to eventually peak and start to decline.

As for financial markets, as inflation peaks and monetary policy reaches restrictive territory, fixed income should become more attractive again. This means that the performance of bonds and equities should again diverge, as we expect equity markets could still be volatile in the first half of 2023 as slower economic growth hits company earnings.

We hope you find the insights in our Investment Outlook 2023 useful, as you navigate and adjust to this reset.

Tech giant plunges on Q4 results

A US technology giant suffered the biggest one-day decline in value for a US company amid disappointing Q4 results. The stock lost 26%, wiping USD 230 billion off its market value and pulling down other technology stocks. Tech stocks are coming under pressure amid expectations that elevated inflation will force central banks to start raising interest

rates, which would weigh on their future valuations as it will cost more to borrow money to finance their businesses. Additionally, the surge in demand that many tech companies enjoyed during the COVID-19 lockdowns appears to have peaked, leading to concerns about softer revenues going forward.

24 February 2022 Brent jumps above USD 100 on Ukraine war

Brent crude oil spiked above USD 100 for the first time since 2014 after Russia invaded Ukraine. Assets viewed as safe havens, including the USD, gold and the JPY also gained (the latter two only temporarily), while global equity markets declined. Simmering tensions between Russia and Ukraine escalated substantially this year, culminating in Russia's decision to launch attacks on several targets in Ukraine. The outbreak of war will have consequences, not only for Europe's energy supply and growth dynamics, but also for global commodity supply chains.

25 April 2022 COVID policies hurt China equities

China's main equity indices declined amid concerns about how the country's strict zero-COVID policy could impact global supply chains and the economy. The Shanghai Composite Index fell 5.1% on 25 April, while Hong Kong's Hang Seng Index slipped 3.7%. China continues to uphold its zero-COVID policy as other countries slowly begin to ease their restrictions. At the beginning of April, Shanghai implemented a strict lockdown that remains in place. Lockdowns over the course of the pandemic have disrupted global supply chains, leading to shortages for many goods and contributing to rising inflation across the world.

4 May 2022 Fed launches biggest rate hike since 2000

The US Federal Reserve (Fed) raised its benchmark rate by 50 basis points, as it seeks to tame soaring inflation. The rate hike was the biggest since 2000, and the Fed also announced plans to begin reducing its balance sheet next month. US equity markets responded positively after the Fed downplayed the likelihood of 75 basis point hikes at "the next couple of meetings." The S&P 500 Index climbed 3%, while the Nasdaq Composite Index finished the day up 3.2%.

21 July 2022 ECB surprises with hawkish rate hike

The European Central Bank (ECB) surprised the market with a larger-than-expected rate hike of 50 basis points. Considering the elevated inflation risks, the ECB's Governing Council believes "it is appropriate to take a larger first step on its policy rate normalization path than signaled at its previous meeting," the ECB said in a statement. Inflation in the Eurozone has skyrocketed far above the ECB's medium-term target of 2%, reaching a record 8.6% in June due to accelerating prices for food and energy.

22 September 2022 SNB ends era of negative rates

The Swiss National Bank (SNB) raised its policy rate to 0.50% at its September meeting, delivering the largest policy rate increase since March 2000. The SNB raised its policy rate by 0.75 percentage points, from -0.25% to 0.50%, following its September meeting. With the decision, the SNB puts an end to the negative interest rate policy it implemented in January 2015. Furthermore, it remains willing to intervene in the foreign exchange market.

23 September 2022 GBP falls on mini-budget

The GBP fell to its lowest level against the USD since 1985 after the new UK prime minister unveiled a mini-budget that would significantly increase its deficit. In response, the GBP fell 3.7% against the USD, while the yield on 10-year UK government bonds jumped by 33 basis points to 3.82%. The new mini-budget effectively raises the UK's deficit from 6.0% of gross domestic product (GDP) in 2021 to 7.5% of GDP in 2022, up from 3.9% in the March budget and the third-highest level since the 1940s. This will exert pressure on the Bank of England to hike policy rates by 75 basis points in November, given the rise in medium-term underlying inflationary pressures.

11 October 2022 Global growth to decline in 2022

Global economic growth is set to nearly halve in 2022, as high inflation, rising interest rates and the Ukraine war take a toll. Economic growth worldwide is expected to decline to 3.2% in 2022 and 2.7% in 2023, compared with 6.0% in 2021, according to the International Monetary Fund (IMF). Global inflation is forecast to increase to 8.8% in 2022 from 4.7% in 2021, though it should ease to 6.5% in 2023 and 4.1% in 2024, the IMF says.

20 October 2022 The down-turn of the JPY

The Japanese yen (JPY) experienced its worst ever decline against the USD, losing close to 50% of its value from a high in early 2012. In the year to date, the JPY has depreciated by 23% against the USD due to the Bank of Japan's ultra-loose monetary policy with yield curve control while the rest of the world – and the USA in particular – hikes interest rates substantially, leading to a meaningful rates differential.

24 October 2022 New UK prime minister

Rishi Sunak is set to become the new UK prime minister, succeeding Liz Truss, who stepped down after a short and volatile tenure. While his appointment should help in rebuilding the UK's credibility

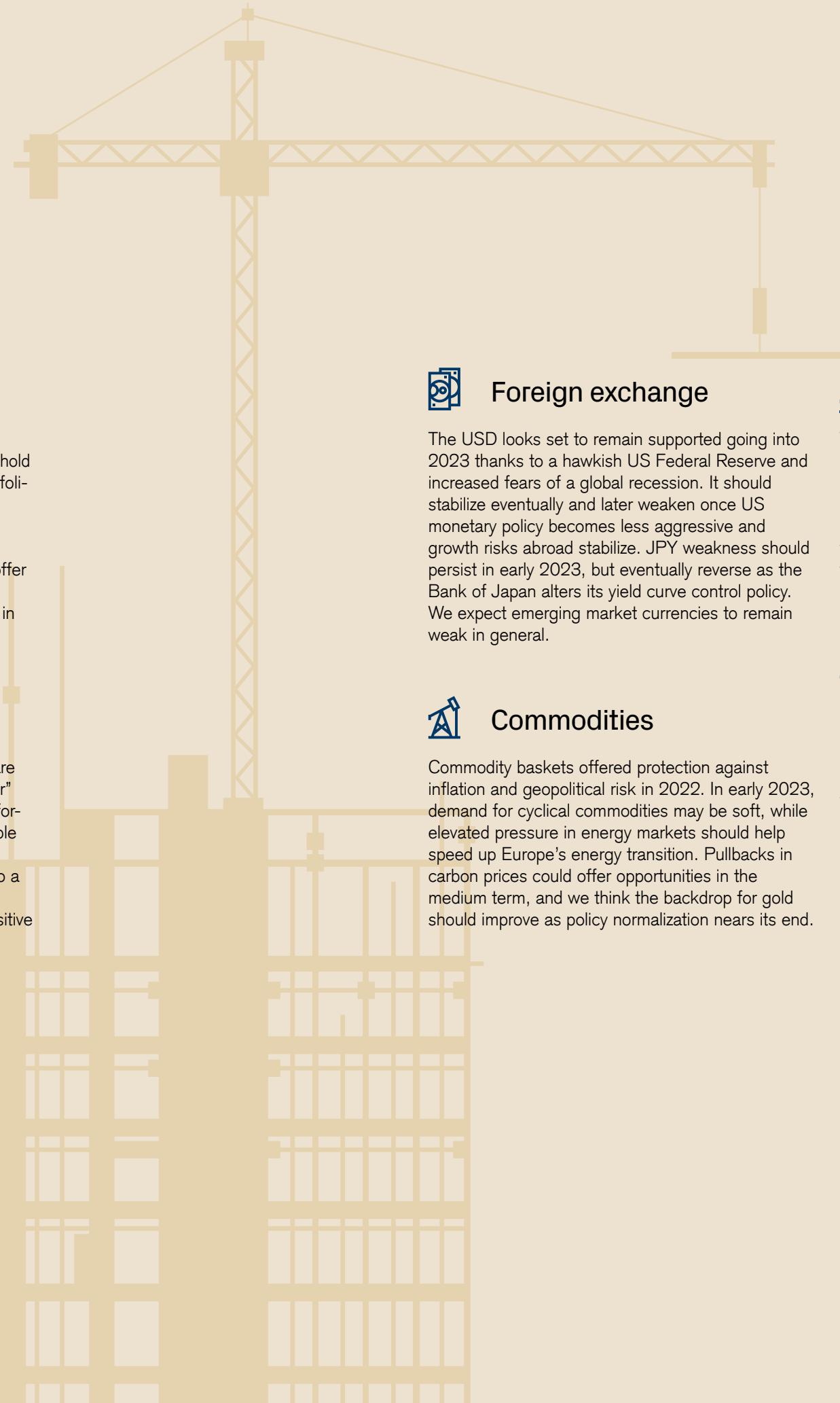
and continue to shrink the risk premium in UK assets, the government will still need to show a fiscally credible path in the budget to balance the books.

9 November 2022 US midterm elections

The US midterm elections are likely to lead to a divided government. Although this would make new fiscal

spending or tax initiatives highly unlikely, we doubt that it would lead to a government shutdown.

Credit Suisse House View in short



Economic growth

We expect the Eurozone and UK to have slipped into recession, while China is in a growth recession. These economies should bottom out by mid-2023 and begin a weak, tentative recovery – a scenario that rests on the crucial assumption that the USA manages to avoid a recession. Economic growth will generally remain low in 2023 against the backdrop of tight monetary conditions and the ongoing reset of geopolitics.

Inflation and central banks

Inflation is peaking in most countries as a result of decisive monetary policy action, and should eventually decline in 2023. Our key assumption is that it will remain above central bank targets in 2023 in most major developed economies, including the USA, the UK and the Eurozone. We do not forecast interest-rate cuts by any of the developed market central banks next year.

Fixed income

With inflation likely to normalize in 2023, fixed income assets should become more attractive to hold and offer renewed diversification benefits in portfolios. US curve "steepeners," long-duration US government bonds (over Eurozone government bonds), emerging market hard currency debt, investment grade credit and crossovers should offer interesting opportunities in 2023. Risks for this asset class include a renewed phase of volatility in rates due to higher-than-expected inflation.

Equities

We see 2023 as a tale of two halves. Markets are likely to first focus on the "higher rates for longer" theme, which should lead to a muted equity performance. We expect sectors and regions with stable earnings, low leverage and pricing power to fare better in this environment. Once we get closer to a pivot by central banks away from tight monetary policy, we would rotate toward interest-rate-sensitive sectors with a growth tilt.

Foreign exchange

The USD looks set to remain supported going into 2023 thanks to a hawkish US Federal Reserve and increased fears of a global recession. It should stabilize eventually and later weaken once US monetary policy becomes less aggressive and growth risks abroad stabilize. JPY weakness should persist in early 2023, but eventually reverse as the Bank of Japan alters its yield curve control policy. We expect emerging market currencies to remain weak in general.

Commodities

Commodity baskets offered protection against inflation and geopolitical risk in 2022. In early 2023, demand for cyclical commodities may be soft, while elevated pressure in energy markets should help speed up Europe's energy transition. Pullbacks in carbon prices could offer opportunities in the medium term, and we think the backdrop for gold should improve as policy normalization nears its end.

Real estate

We expect the environment for real estate to become more challenging in 2023, as the asset class faces headwinds from both higher interest rates and weaker economic growth. We favor listed over direct real estate due to more favorable valuation and continue to prefer property sectors with strong secular demand drivers such as logistics real estate.

Private markets & hedge funds

In a more volatile 2023, we see opportunities for active management to add greater value, particularly for secondary managers, private yield alternatives and low-beta hedge fund strategies. For seasoned, risk-tolerant investors, we also highlight co-investments, i.e., direct investments in an unlisted company together with a private equity fund.



Find out more

Global economy

A fundamental reset

For many years, geopolitics played a minor role in the global economic and financial outlook. These were the times of stable international relations and a relatively high degree of multilateral trust among countries. Though crises did occur, most of them were for financial reasons. Cracks in that world order started to appear in 2017, with the first economic tensions emerging between the USA and China on tariffs and trade under former US President Donald Trump. Under US President Joe Biden, rivalries evolved to confrontations involving more sectors and regions, which came to a head in 2022 with the war in Ukraine.

In hindsight, 2022 marks the year when geopolitics took center stage once again, not only significantly impacting the global economy and financial markets, but resetting international relations and commerce for many years to come. This has implications for short-, medium- and long-term growth, price prospects and monetary and fiscal policy, potentially leading to sizable shifts in the global monetary system with reverberations in financial markets.

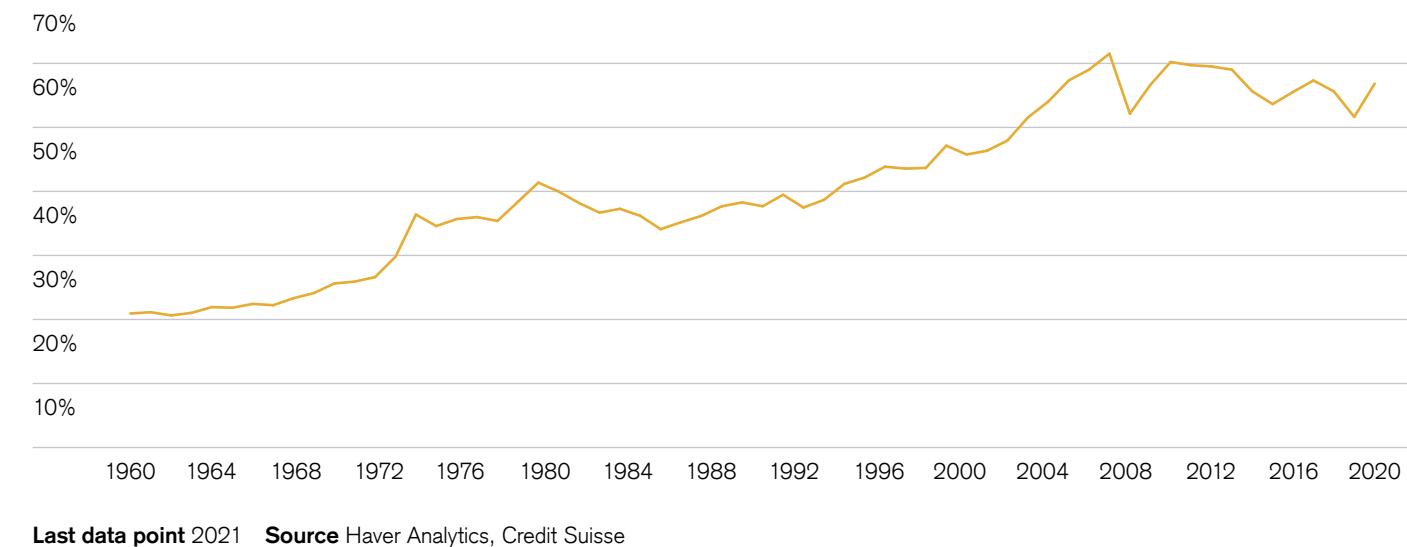
New world order

The world of multilateralism and strong mutual trust between countries and governments came to an end – or at the very least paused – in 2022. Deep and persistent fractures emerged in the geopolitical world order, giving rise to a multipolar world that we believe is likely to last for years. The global West (Western developed countries and allies) has drifted away from the global East (China, Russia and allies) in terms of core strategic interests, while the global South (Brazil, Russia, India and China and most developing countries) is reorganizing to pursue its own interests.

After decades of growth in global trade as a share of global gross domestic product (GDP), the volume of goods and services exchanged as a percentage of GDP peaked in 2008 and has fluctuated in a range between 50% and 60% ever since. The COVID-19 pandemic and, more recently, political sanctions, have forced companies to prioritize supply chain resilience over prices since 2020, which has changed trade flows substantially. International trade is now reorganizing in closer alignment with geopolitical alliances, and a shift toward repatriation and domestic development has started for strategic sectors. We believe this trend will continue for at least the next 2–5 years until potential political change in various parts of the world may bring a different political and economic agenda in focus again.

Past the peak

Global trade (goods and services) in % of GDP



Last data point 2021 Source Haver Analytics, Credit Suisse

Out with the old monetary regime

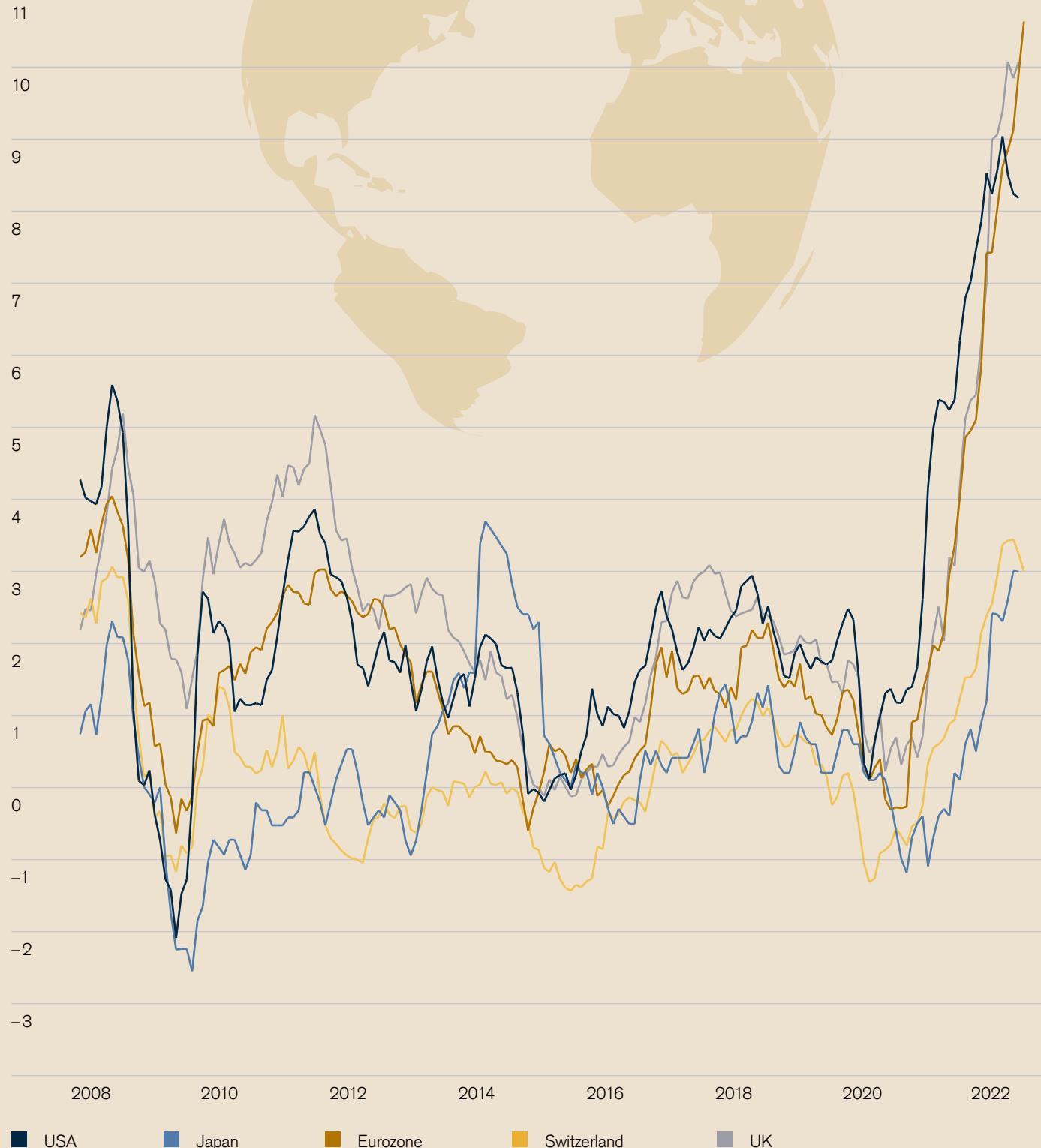
2022 also marked the end of “lowflation,” a side effect of globalization. Indeed, COVID-related disruptions of global supply chains, more decisive climate policy action and a full-fledged energy crisis and food price shock in the wake of the Ukraine war led to a new regime of elevated inflation. Not only did volatile energy and food prices drive up headline inflation, but wage increases also allowed less volatile price categories like travel, hospitality and medical services to rise, lifting core inflation to multi-decade highs.

Central banks saw themselves forced to tighten monetary policy in bigger increments and more swiftly than expected, thus ending the phase of low or even negative interest rates. Although we believe inflation is peaking in most countries as a result of decisive monetary policy action, central banks are signaling that they need to hike rates further to reduce demand and create slack in labor markets. One reason for this is that price increases have broadened from a limited group of supply shocks to widespread inflation. Crucially, tight labor markets and higher wage growth risk making broader inflation persistent.

This has prompted us to increase our forecasts for central bank policy rates in all major economies except China. We now expect the fastest pace of tightening on a 12-month basis and of the largest magnitude globally since 1979. Although we expect the pace of tightening to peak by end-2022, we do not forecast any developed market central bank to cut interest rates in 2023, as they are focused on actual rather than expected inflation.

From transitory to entrenched

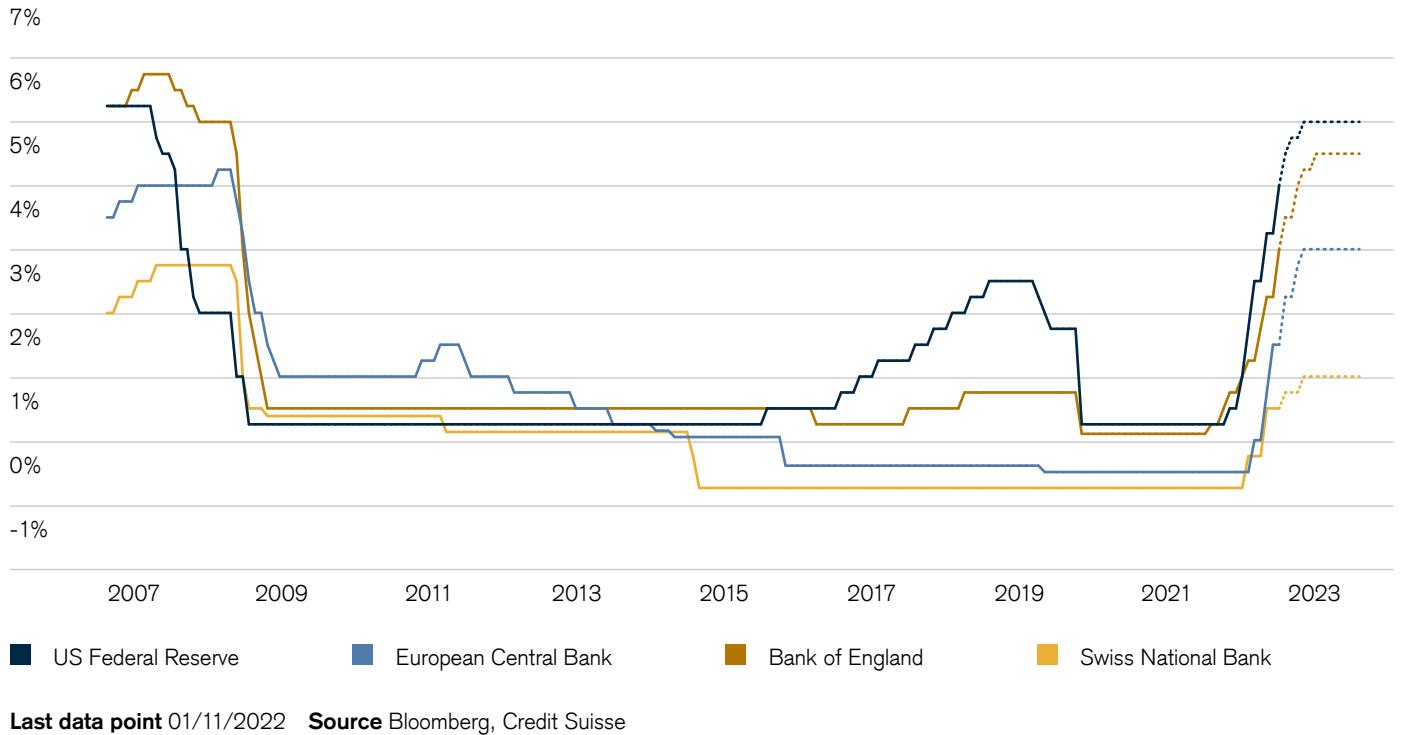
Headline inflation for USA, Japan, Eurozone, Switzerland and UK (% YoY)



Last data point 15/10/2022 Source Bloomberg, Credit Suisse

Lower-for-longer era ends

Selected central bank rates and forecasts



Last data point 01/11/2022 Source Bloomberg, Credit Suisse

Growth outlook dims

More monetary tightening, rising real yields, energy price shocks in Europe, China's ongoing property market downturn and COVID-19 lockdowns have led us to cut our forecasts for GDP growth across the board. We now forecast recessions in the Eurozone and the UK, and a growth recession in China. These economies should bottom out by mid-2023 and begin a weak, tentative recovery – a scenario that rests on the crucial assumption that the USA manages to avoid a recession. Our base case is for the US economy to grow 0.5% in Q4 2023 compared with the prior-year period, but we acknowledge that the risks are skewed to the downside.

Beyond the 2023 outlook, the transformed geopolitical environment suggests less international cooperation on technological innovation, less free movement of human talent and hence smaller productivity gains. As a result, we foresee lower potential growth over the next five years.

Moreover, the geopolitical events in 2022 have increased the risk that climate action will be uncoordinated across regions and even possibly postponed. In a disorderly climate transition, the negative supply shock will ultimately be larger, leading to higher inflation and lower growth in the medium term, accompanied by bouts of volatility as climate policy arbitrarily evolves across regions. This amplifies our expectations of a new macro regime with elevated inflation and lower potential growth.

Challenging environment in 2023 in developed markets

Governments are introducing support measures and increasing public spending to address current politically induced challenges. In many developed countries, budget deficits are already running at 4% or higher in 2022 and are unlikely to improve materially in 2023.

As became apparent in the UK after the new government announced an expansionary mini-budget (which was later scrapped), financial markets are quick to reject unsustainable fiscal policy, especially when it comes on top of unsustainable external balances, i.e., a high current account deficit. As a result, governments will over time either resort to tax increases to finance permanent increases in defense expenses and support programs, or risk large public debt increases. In highly indebted countries, sovereign bond yields will therefore again be at risk of rising sharply.

The USD in a divided world

As long as the rhetoric of the US Federal Reserve (Fed) remains hawkish, the USD should enjoy continued support, with USD strength tightening monetary policy globally. To prevent currency depreciation from exacerbating imported inflation, the European Central Bank will need to keep pace with the Fed even though the Eurozone faces recession. Weakness in the JPY looks increasingly likely to force the Bank of Japan to shift away from its current easing bias to allow Japanese yields to rise. Moreover, continued USD strength is likely to pull capital from emerging markets.

With the real trade-weighted USD already at its strongest level since 1985, it seems reasonable to expect the currency to peak and potentially lose some ground in the latter part of 2023. Yet this will likely require the Fed to signal an end to its tightening and some signs of economic recovery outside the USA.

In the longer term, however, the resetting of international relations may lead to new developments in the global monetary system. Today's USD-based monetary system, with most global trade denominated in USD and 90% of all currency transactions having one USD leg, is still a reflection of the post-World War II era. This system has gone through one big reform (from the gold standard to flexible exchange rates), involved change in the monetary policy setting (from targeting money supply to targeting inflation to quantitative easing) and seen reforms in the monetary reserve policies and tools (from reserves to the introduction of swap lines between key central banks). However, it has never been challenged.

The new multipolar world and the resetting of international trade may well, over time, lead to the emergence of two parallel monetary systems: the current USD-based system as well as a yet-to-be conceived alternative system bypassing the USD. The degree to which this may influence foreign demand for the USD as a reserve currency and for US government bonds as reserve assets will determine the future of the USD.

Long-term outlook: Lower growth

The energy shock to Europe from Russia's invasion of Ukraine and the growth recession in China have hurt the post-pandemic outlook. The Eurozone is likely in recession and the USA, though still growing slightly in our baseline forecast, is at high risk of recession.

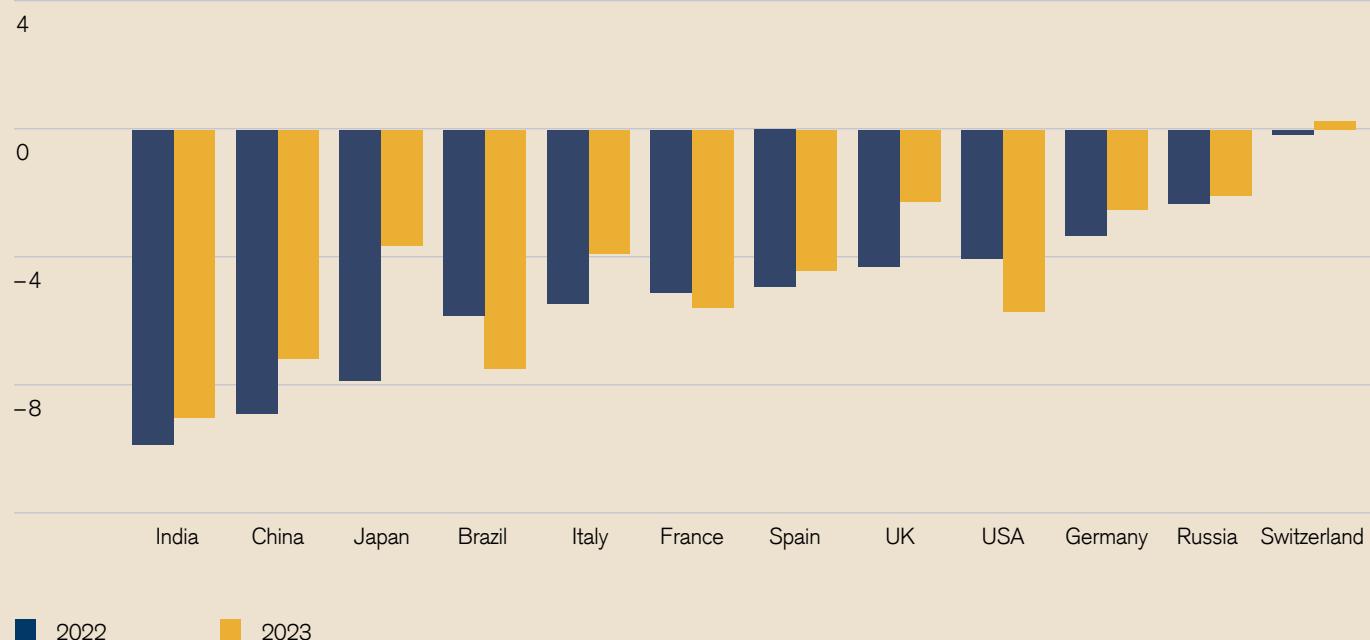
Although we expect this downturn to end and the recovery to resume in 2024, we also see lasting damage to economic structures. The pandemic has combined with demographic trends to weaken the outlook for labor supply. Geopolitical ruptures are weighing on trade and leading to persistently weaker business investment. In China, the policy shift back to a state-driven growth model will likely erode the outlook for productivity growth.

Taken together, we have cut our longer-term growth forecasts for all the major economies. For the USA, we forecast an average real GDP growth rate of 1.5% over a five-year horizon, significantly below the average growth of 2.2% for the 2010–2019 period. For the Eurozone, we forecast an average growth rate of 1.1% and for China growth of 4.4%.

On a positive note, the major central banks appear committed to returning inflation rates close to their 2% targets. Inflation may remain above target in 2023, but should return close to target from 2024. However, the cost of achieving this will be persistently higher interest rates and lower trend growth.

In the red: Budget deficits across countries

Overall government balances in % of GDP



Regions in focus

USA



A close call

US growth will average close to zero in 2022, according to our estimates, and remain in a slump at 0.5% in Q4 2023 versus the prior-year period. The probability of recession is high (above 40%), but recession is still not our base case. Tighter financial conditions are leading to a pullback in cyclical spending, namely goods consumption and housing, but healthy balance sheets and a resilient labor market should act as a buffer against an outright downturn, in part thanks to a continued recovery in spending on services. Inflation is beginning to moderate, but core personal consumption expenditures (PCE) inflation, the Fed's preferred inflation measure, is likely to remain stubbornly high at around 3% as of year-end 2023. We thus expect the Fed to continue to tighten aggressively. We expect another 100 bp of hikes by the end of Q1 2023, up to a terminal rate of 4.75%-5.0%, which we expect to remain steady for 2023.

Eurozone

Energy crisis dominates

We believe recession in the Eurozone started in Q4 2022 and will persist until late Q1 2023, with a peak-to-trough fall in GDP of about 1%. Fiscal policy support, resilient labor markets and high savings should mitigate the depth of the downturn, but the risks are to the downside amid persistent uncertainty over gas supply. Headline inflation may be peaking but is likely to decline only gradually as price pressures have broadened and wage growth has gained momentum. We expect persistently high inflation and currency weakness to push the European Central Bank to hike rates aggressively to a terminal rate of 3% by early 2023. In our view, rate cuts are unlikely in 2023.

Latin America

Tougher times ahead

We now project 2022 regional real GDP growth of 3.0%, up from our previous forecast of 2.0%, as we expect stronger growth in Brazil, Colombia and Mexico. For 2023, our regional growth forecast is 0.4%, down from 0.7%, driven by expectations of weaker growth in several countries, particularly Brazil and Mexico. Inflationary pressures have been stronger and more widespread than we initially expected, making the disinflation process challenging. By year-end 2023, annual consumer price inflation in inflation-targeting countries in the region will likely remain significantly above central banks' targets. We now see nearly all inflation-targeting central banks in the region taking their policy rates to double-digit territory before the end of 2022, with easing cycles unlikely to start until late 2023.

Gulf Cooperation Council (GCC)

Beneficiaries of geopolitical fractures

In 2022, the GCC economies broadly benefitted from the windfall of higher oil prices and a boost to their domestic economies following the pandemic and the transformed geopolitical environment. We expect the GCC's GDP growth to moderate to 3.4% in 2023 after 6.1% in 2022 as slowing global growth will eventually impact their economies. Nevertheless, the region looks set to grow more rapidly than the global average, supported by still elevated oil prices. As a result, 2023 should see the fiscal surplus easing modestly to 7.1% of GDP and the current account surplus to 15.0%. A better measure of economic activity is non-oil GDP growth, which we expect to ease from 4.8% to 4.3% over the same period. This underscores the importance of transformation plans across the GCC, which are revitalizing the private sector. The combination of targeted government subsidies and a firm peg to the USD is expected to keep inflation below 3% in 2023.

UK



Credibility in question

The UK entered a recession in Q3 2022. We expect the economy to continue to contract through most of H1 2023, with a peak-to-trough GDP decline of 1.0%. The UK's fiscal stimulus is likely to imply a shallower winter recession, but risks to growth are to the downside, given the reversal of some fiscal stimulus measures, spending cuts, tapering of energy support and tightening of financial conditions. Near-term inflation is likely to have peaked, but we expect inflation to fall only slowly and stay above target in 2023. Fiscal support is keeping upward pressure on underlying inflation in the medium term. The combination of the government's expensive fiscal package and a dovish response from the Bank of England (BoE) challenged market confidence in UK policy. To some degree, confidence has been repaired with the reversal on the extremes of the fiscal package and the announcement of a fiscally credible plan. Full restoration of credibility likely requires persistent monetary tightening by the BoE. We now expect the bank rate to rise to 4.5% by mid-2023. Failure to take it there risks inflation being higher for longer, further weakness in the GBP, higher risk premiums and eventually higher terminal rates, which could worsen the severity of the recession. Above-target inflation in 2023 implies we do not forecast any rate cuts in 2023 despite a recession.

China



Modest recovery in 2023

We forecast below consensus growth of 4.5% for China in 2023, a bounce from 3.3% this year. Lower growth potential, fiscal consolidation and a slow shift away from the government's zero-COVID policy should constrain the economy. A likely continued decline in land sales beyond 2022 will probably prolong the risk of policy hesitation at the local government level even after the eventual end of COVID-19 disruptions. The decisive factor will be how quickly China can move away from these disruptions, and our expectation is that it will do so gradually. Timing-wise, we expect China's mainland reopening to lag that of Hong Kong by six months. Hence, any meaningful reopening is expected to happen only toward the end of Q1 2023.

Switzerland



Consumption is holding up

Despite slower economic growth, we believe the Swiss economy will avoid recession, as private consumption should remain solid. The unemployment rate has declined to the lowest level in 20 years, and consumers are still in the mood for spending thanks to the high degree of personal job security. Furthermore, immigration has picked up again and should prove a substantial growth driver in 2023. The surge in energy prices is feeding through to household expenses only in a limited manner due to price regulation, a strong CHF and a relatively low weight of energy in private consumption expenditure. As a result, inflation in Switzerland is much lower than elsewhere, and we expect it to slow further in 2023. Against this backdrop, there is a relatively modest need for the Swiss National Bank (SNB) to tighten monetary policy further. We expect the SNB to raise its policy rate by another 0.5 percentage points by March 2023 and subsequently keep it at 1% for the rest of the year.

Japan

Creeping toward a policy shift

Japan's economy is likely to see low growth of 0.5% in 2023, supported by an easing of COVID-19 restrictions and some strength in the labor market. The jury is still out on how much JPY weakness will benefit Japanese exports given damage to supply networks and downward pressure on the global electronics cycle. The key change that we see for the Japanese economy is that inflation is likely to remain above 2% through H1 2023. We think this, as well as downward pressure on the JPY due to the hawkish Fed, should lead the Bank of Japan to adjust its policy of yield curve control in early 2023 to allow for slightly higher yields.

Trends to watch

Economics



An end to rate hikes as inflation peaks

As inflation peaks and eventually starts to decline, central banks will stop hiking rates in Q1/Q2 2023. However, we do not expect rate cuts in 2023 because inflation will remain above central bank targets.

Growth set to stay low

Global growth is decelerating, and with monetary policy reaching restrictive territory, we believe that it will generally stay weak in 2023.

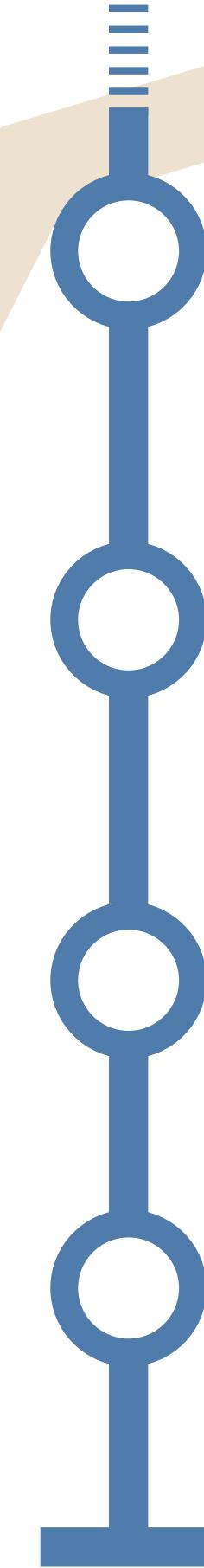
Fiscal challenges ahead

Public support measures to combat the cost-of-living crisis and increasing defense spending mean budget deficits will stay high. As borrowing costs remain elevated, governments are likely to increase taxes to finance spending.

Globalization dialed back

As the world becomes more multipolar with the emergence of various political spheres of influence, we expect global trade as a share of GDP to decline and strategic sectors to be repatriated.

Financial markets



The fixed income renaissance

As bond yields reset at higher levels, inflation peaks, and central banks stop rate hikes, fixed income returns look more attractive. Emerging market hard currency sovereign bonds, US government bonds, investment grade corporate bonds and selected yield curve steepening strategies look particularly interesting.

Equity markets remain volatile

Contraction of equity markets' valuation is well advanced, though challenged corporate profitability from the weak economic backdrop and margin pressure should still lead to headwinds and volatility going into 2023. We prefer defensive sectors, regions and strategies with stable earnings, low leverage and pricing power, such as Swiss equities, healthcare and quality stocks. Defensive Super-trends such as Silver economy, Infrastructure and Climate change should also prove less volatile.

USD seen staying strong

The USD should be supported by its interest rate advantage for most of 2023. As a result, we expect the USD to stay strong, particularly versus emerging market currencies such as the CNY. However, some developed market currencies such as the JPY are now undervalued and could stage a turnaround and appreciate at some point.

A good year for most alternative investments

Hedge funds should deliver above-average returns, and 2023 is also likely to be a good vintage year for private equity. Secondaries and private debt should do well. In real estate, we prefer listed over direct solutions.

Multi-asset diversification returns

As bond yields have reset at higher levels, fixed income as an asset class has gained relative attractiveness compared to equities. Diversification benefits should return as central banks stop hiking rates.



Find out more

Main asset classes

Yields make a comeback

The world – and financial markets – have experienced a long list of shocks in the past few years: global trade tensions; the COVID-19 crisis; massive liquidity injections and fiscal transfers to households leading to supersized demand for goods; disrupted manufacturing and supply chains; and the energy price shock. While the resulting spikes in inflation and interest rates caused havoc in capital markets in 2022, they may well have laid the foundation for a more normal investment environment going forward.

For the past several years, only a narrow set of asset classes have offered a meaningful positive return contribution to a portfolio, typically associated with greater investment risks. In particular, return expectations from core fixed income had been meager at best amid a lower-for-longer interest rate environment. Until recently, the broad consensus was that the world would have to go through a slow and gradual interest rate normalization, which would create a constant headwind for bond returns. Instead, the Band-Aid has been ripped off as interest rate tightening occurs at the fastest pace in decades, and bond yields in different currencies quickly normalize and start to offer a more attractive return outlook.

Bonds are back

We believe that core bonds will once again play a more relevant role within portfolios going forward. Yields have now reached levels that offer some protection against adverse market effects that will likely occur as we work through a period of substantial economic uncertainty. Furthermore, we assume that the diversification benefits of adding bonds to a portfolio, which are absent in 2022 as both equities and bonds have declined, should return, especially once growth risks start to dominate the headlines. That said, we acknowledge that we may not have reached the peak in bond yields yet, for example if a potentially more pronounced reduction of central banks' balance sheets should occur. This is why bond market volatility is likely to remain elevated in the near term.

Our preferred approach to adding bonds to a portfolio will evolve throughout 2023. At the beginning of the year, adding duration is unlikely to be outright attractive for most currencies, with the USD being an exception. Emerging market hard currency bonds already offer an attractive return outlook as yields have reached levels that are rare in a historical context and compensate handsomely for the investment risk. Corporate credit from investment grade-quality issuers will likely become attractive once central banks signal a slowing of the tightening cycle. For high yield corporate credit, we maintain a more cautious view as credit spreads do not properly reflect the challenging economic environment, in our view.

Headwinds for equities

The environment remains challenging for equity markets, as we expect the nominal economic growth rate to slow substantially, thereby reducing revenue growth potential. Furthermore, close to record-high corporate profit margins will likely come under pressure and start to reflect various cost pressures, including the energy price shock, higher wages and more expensive financing costs.

Such an environment is conducive to more defensive equity strategies, and we favor companies that can defend profit margins by passing on higher costs and which operate in fields with high barriers to entry – characteristics that can be found in defensive quality segments. Once the interest rate environment starts to stabilize and uncertainty clears, however, we think it will be time to shift into quality growth companies that are currently facing substantial headwinds from increasing rates.

Investors can build more robust portfolios by complementing these more traditional asset classes with non-traditional ones that offer different features, in our view. For example, the current environment of slow growth, increasing interest rates and elevated volatility is advantageous to certain hedge fund strategies, which can thus help to navigate this difficult investment backdrop. Similarly, for investors who can accept limited liquidity in investments, private markets that encompass both private equity and debt investments should help to enhance return profiles as the ongoing market disruptions open up opportunities.

Bonds vs. equities in 2023

Higher inflation and rising interest rates should translate into lower prices for equities and bonds. This is because future cash flows are discounted at a higher rate. Thus, higher inflation uncertainty should trigger larger, synchronized swings in the discount rates of equities and bonds, which would result in an upward shift in the bonds-equities correlation and reduce the diversification potential of bonds. This is indeed what we have witnessed over the past two years.

In contrast, growth shocks should primarily affect equities, via a depressed earnings growth outlook and lower expected dividends. Bonds, on the contrary, may benefit from such a scenario as yields fall on the back of lower inflation expectations and ultimately looser monetary policy. With growth risks abounding at the moment, conventional wisdom suggests that we should see a retraction of the bonds-equities correlation. The problem is that inflation uncertainty remains a concern for the immediate future, particularly against the backdrop

of geopolitical tensions and the looming energy crisis. Additionally, while inflation may eventually come off the current highs, the risks are skewed toward a protracted tightening cycle, which would lead to rising real yields. Rising real yields would prevent bond prices from rallying at a time when equities come under further pressure, limiting their diversification benefits and keeping the bonds-equities correlation at elevated levels.

In our view, 2023 may present a bifurcated picture. Initially, the bonds-equities correlation should remain elevated, limiting bonds' diversification potential. However, as inflation uncertainty peaks and the focus shifts to growth risks, the bonds-equities correlation should start to drift lower, making bonds more attractive from both a returns and diversification perspective. The caveat is that this shift in focus may take time, and that extended hawkish central bank action may keep the bonds-equities correlation above the levels seen in the past two decades.

Worst may be over for fixed income

With monetary policy tightening likely to slow or end in 2023, we believe fixed income assets will become more attractive to hold. Particularly, emerging market hard currency bonds are likely to deliver high returns. Moreover, if inflation declines as we expect, we think that fixed income, especially government bonds of countries with fiscal policies that can be sustained, should offer valuable diversification benefits in portfolios. Risks to the asset class include a renewed phase of volatility in rates, for example due to higher-than-expected inflation.

Elevated inflation has prompted central banks around the globe to hike interest rates meaningfully, leading to a sharp tightening of global monetary conditions. Given the shock of high energy prices and rapidly rising inflation expectations, central banks were forced to hike interest rates faster and more forcefully than in previous tightening cycles. Bond yields rose significantly in both nominal and real terms, including sovereign bonds in developed markets. Both US and Bund 10-year yields are up more than 200 bp in the year to date, currently at 3.81% and 2.01%, respectively, as of 10 November.

Our expectation is that central banks will slow the pace of rate hikes or end hikes altogether as economic growth deteriorates and inflation cools. As central bank expectations stop driving yields higher, the return outlook for sovereign bonds should improve significantly. In contrast to 2022, we anticipate that the return outlook for global treasury indices will be positive in 2023. Opportunities to increase duration in bond portfolios are also likely to arise once bond yields approach their cycle peaks. Government bonds have seen their performance weaken alongside risk assets, as rising inflation drove policy rates and the whole yield structure

higher, weighing on the asset class from a total return perspective. If inflation indeed cools, as we expect, we believe that government bonds will offer valuable diversification benefits for multi-asset portfolios.

Higher return potential in US Treasuries

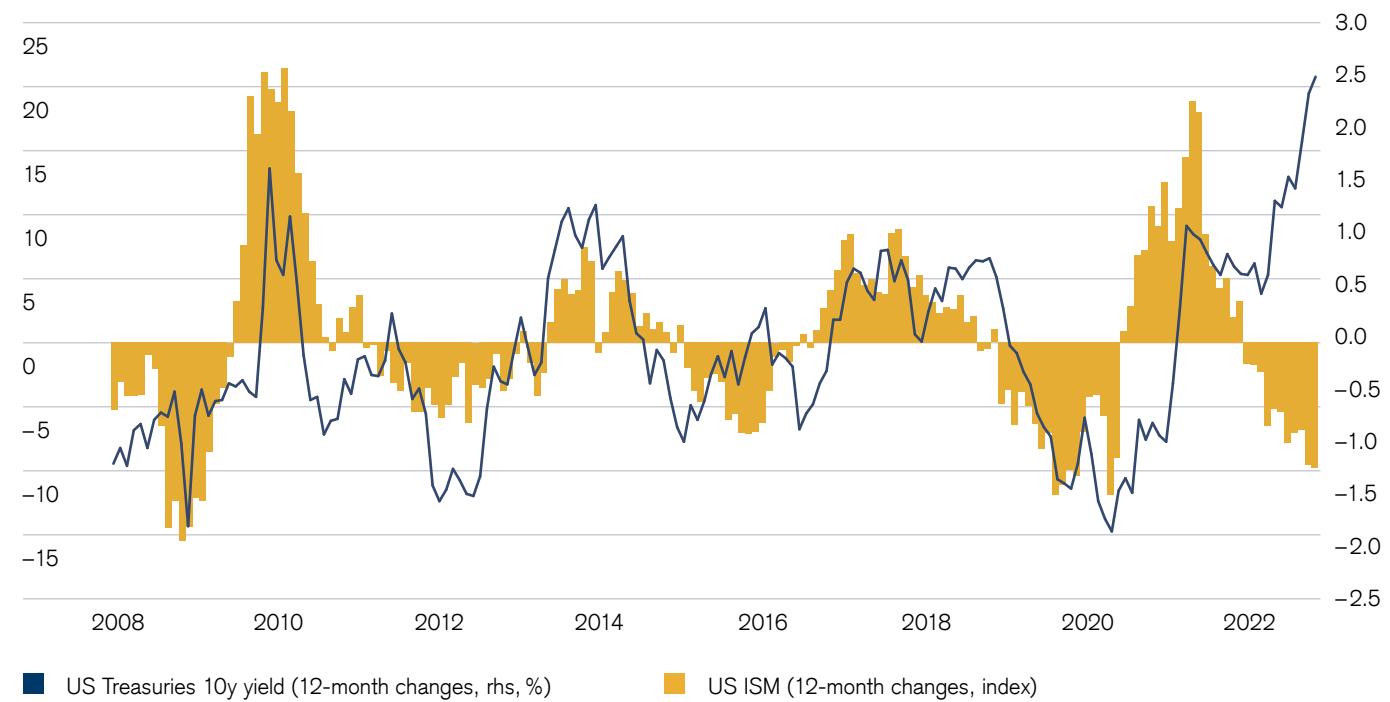
Across the major markets, we see the most duration potential in USD, and less in EUR. The US Federal Reserve (Fed) started to hike rates earlier and more meaningfully than the European Central Bank (ECB), which maintained negative interest rates until July 2022. Not only does the ECB have to catch up now, but the Eurozone is also facing higher inflation and greater uncertainty regarding energy prices this winter. High inflation together with currency weakness will likely force the ECB to raise rates aggressively even in a recession. Given the current rate differentials and the different outlook in terms of further rate hikes, we see greater return potential in US Treasuries than in Eurozone government bonds. Heightened concerns about European sovereign debt could make this relative move even more pronounced.

Watch the curves

As the Fed hiked interest rates aggressively, bond yields rose more for short maturities than for longer maturities. For example, the spread between the 10-year and 2-year US Treasury yields declined from +80 basis points at the start of 2022 to -50 basis points at the end of Q3 2022. Long-term yields are currently lower than short-term yields because the market expects economic growth to slow and monetary policy rates to fall again over time.

For 2023, we expect the yield curve to steepen, i.e., the spread between 10-year and 2-year yields to increase. The extent of this steepening will depend on the macro circumstances. A scenario in which the Fed reacts to rising recession risks by cutting interest rates would most likely lead to a significant yield curve steepening, as short-term yields would fall more than long-term yields. But even in our base case of a normalizing economic outlook (i.e., growth remains below trend), some gradual steepening of the US yield curve can be expected.

US rates should peak with activity slowing
10-year US Treasury yields vs. US ISM index



Last data point 31/10/2022 Source Bloomberg, Credit Suisse

Investment grade starts to look interesting

Despite still robust credit fundamentals, spreads for global corporate investment grade (IG) bonds are already close to the average levels of the last recession in 2020, which should provide some buffer against a further slowdown of growth and withdrawal of central bank liquidity. We expect credit spreads to stabilize in 2023, as easing inflation and persistent growth risks are likely to encourage central banks to slow and eventually stop hiking rates. This should provide a positive catalyst for IG, where credit metrics remain solid and we see few downgrade risks. Emerging market (EM) hard currency (HC) corporate debt should benefit once global financial conditions stabilize. Moreover, the asset class offers an attractive spread premium over comparable developed market IG corporate credit with similar duration. After a significant spread widening in 2022, EUR IG spreads are currently attractively valued. While we do not anticipate EUR IG to perform strongly in early 2023, the stabilization of global financial conditions might offer a catalyst to unlock the attractive value EUR IG provides. In a side scenario, a renewed crisis in Europe – financial or sovereign – would likely force the ECB to activate its Transmission Protection Instrument (TPI) and/or restart quantitative support, which would also support EUR IG spread compression. We therefore believe that we will see an attractive opportunity to enter the EUR IG market at some point in 2023.

HY corporate defaults set to rise modestly

US HY credit displays solid corporate fundamentals and a healthy market structure. Indeed, with 51% of US HY bonds rated BB, little debt maturity that needs to be renewed in 2023 and a large spread compensation, we expect the realized default rate to increase modestly to the historical average of 5%. This is below the currently implied default probability of over 6%. In EM, the realized default rate in the HY segment (equivalent to 43% of the JP Morgan Corporate Emerging Markets Bond Index) reached a high of over 10% in 2022 due to the war in Ukraine. However, excluding this extreme situation, the realized default rate remains low. Like the global HY benchmark, we expect realized defaults of EM HC corporate bonds to rise more modestly in 2023, given healthier credit fundamentals, a spread premium over developed markets and the possibility

to refinance in local markets. Against this backdrop, we favor high-quality segments such as BB rated credit, which offers investors a high implied vs. realized default premium.

Opportunities in emerging markets

As we enter 2023, the major central banks will likely continue to raise policy rates, though at a slower pace. This may keep sovereign EM HC spreads above historical averages for some time. But negative US Treasury returns and diminishing USD strength should result in improved returns for EM HC. While fundamentals in EM tend to be better than in developed markets, some EM regions are likely to prove more resilient than others. The risk of a slowdown or recession in China and developed markets will remain a concern for lower-rated USD issuers in open economies such as South Africa. Ongoing geopolitical tensions and recession risks in Western Europe are expected to continue to weigh on Eastern European issuers.

Despite the challenging environment, we expect EM HC bonds to deliver attractive returns. The significant coupon income they provide should offer a sound cushion against deteriorating risk sentiment, with yields near multi-year highs. Valuations remain attractive and fundamentals are holding up better than in developed markets. Moreover, they already appear to reflect an economic slowdown or recessionary pressures. On average, EM central banks are more advanced in their hiking cycle than their developed market peers, with inflation receding in several EM countries. Despite some stickiness, we expect inflation to continue to trend lower. As interest rates peak, an increasing number of EM central banks will eventually start cutting rates. Local currency sovereign bonds offer yields at multi-year highs and are expected to become more attractive later in 2023, when USD strength relative to EM currencies is expected to fade.

In Brazil, for example, the central bank is very close to the terminal rate already. We therefore favor Brazil within the asset class as interest rate cuts should be possible toward the end of 2023. Moreover, Brazil is more resilient in the face of global macro and geopolitical risks.

Rising rates make an impact

Yields of EM hard currency and local currency bonds (in %)



Last data point 10/11/2022 Source Bloomberg, Credit Suisse

Inflation dynamics still the main risk

Our base case for 2023 is for inflation to eventually decline, but stay above the major central banks' targets. Should inflation prove to be stickier and even higher than anticipated, for example due to surprisingly strong labor market and wage inflation data, we think central banks would have no choice but to further ratchet up their hawkish rhetoric. This would weigh on fixed income performance and temporarily hit longer duration indices. We therefore advocate active duration management in portfolios in order to remain flexible should such risks materialize. In such a scenario, inflation-linked bonds might outperform within fixed income. US real yields in particular have become more attractive from a long-term perspective.

Challenges for European senior loans

We are cautious on European senior loans. We think spreads have not fully priced in the potential defaults resulting from Russian gas supply cuts or a persistence of current geopolitical risks. Senior loans

are also a segment that would not benefit from an eventual intervention by the ECB via the TPI. In our opinion, investors should therefore consider reducing exposure to European senior loans and prefer EUR IG credit in 2023.

Rising default risk in frontier markets

The low interest rates of recent years incentivized countries to take on more debt. The COVID-19 crisis and efforts to provide a buffer against rising food and energy prices led some countries to further loosen fiscal policy. Despite lending from the International Monetary Fund, tighter financial conditions could result in an increasing default rate of distressed frontier markets. The most challenging phase is expected in the latter part of 2023, when central banks could be most restrictive and the economic slowdown or recession is already taking its toll, but spillover risk to core EM countries is limited.

A tale of two halves

The higher-rates-for-longer theme triggered a significant de-rating (i.e., lower valuation multiples) of equities in 2022. This theme will likely continue to dominate during the first half of 2023, leading to muted equity performance. Sectors and regions with stable earnings, low leverage and pricing power should fare better in this environment. In the second half of 2023, we expect that the discussion will turn to peak hawkishness, with earnings resilience in a slowing growth environment in focus. We see the technology sector as offering the most attractive returns once the US Fed pivots.

The past year has been tough for financial markets, including equities. The Ukraine war added to post-pandemic supply chain issues and fueled a rise in inflation to levels last seen in the 1980s. Central banks were initially slow to react but were then forced to hike aggressively. Equity valuations came under significant pressure as policy rates and real yields spiked across the globe. In our view, central banks and their policies aimed at reducing inflation continue to be a key driver of equity returns. This is because higher central bank rates increase funding costs for corporations and increase the discount rate of future earnings, which is a headwind to valuations.

Any signs that inflation is brought under control (i.e., close to central bank targets on a sustainable basis) would likely loosen central banks' restrictive stance and could therefore trigger a re-rating in equities (i.e., higher valuation multiples). However, we do not think this will be the case in the first part of 2023 as

our economists do not forecast rate cuts from major central banks, including the US Federal Reserve (Fed), in 2023.

Earnings resilience key to watch

Higher-for-longer policy rates will have a negative impact on the global economic outlook. Against this backdrop, our economists forecast a recession in the Eurozone, the UK and Canada, alongside very weak growth in the USA. This will inevitably add downside risks to corporate earnings, even more so given rising costs (e.g., wages and raw materials). Consensus earnings have already been revised materially lower, but the current estimate of 3.7% growth for 2023 may still be too optimistic, in our view. Ultimately, earnings resilience will depend heavily on the length and magnitude of the economic slowdown, but we see rising risks of an earnings recession (i.e., negative earnings growth in 2023).

2023: A tale of two halves

While we believe that the worst of the de-rating is behind us, a significant re-rating of equities would require a shift in central bank rhetoric. We expect a turning point in the market to materialize in the second half of 2023. Until then, we would expect volatile but rather muted equity returns and would focus primarily on defensive sectors/regions offering stable margins, resilient earnings and low leverage. Once we get closer to such a pivot, we would rotate toward interest rate sensitive sectors with a growth tilt, such as technology.

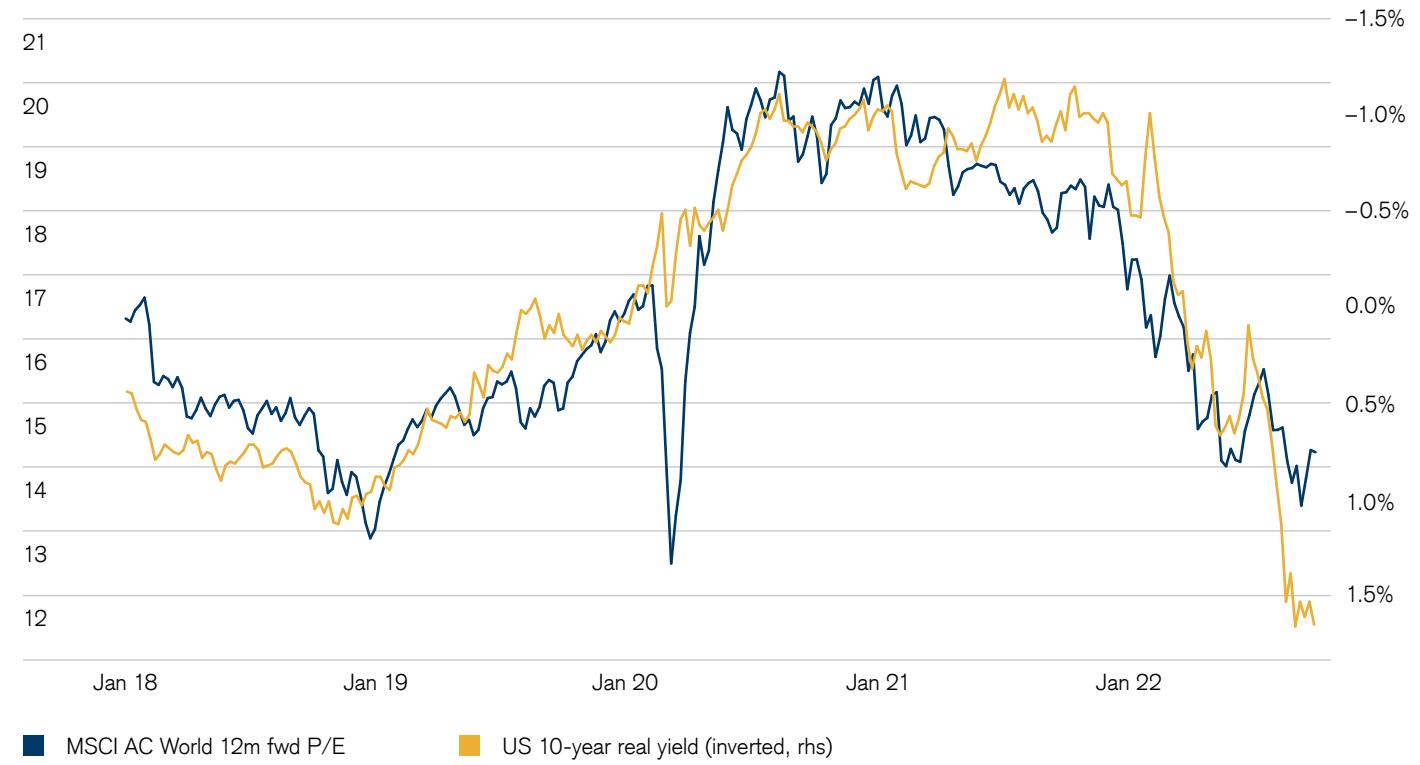
How to position for 2023

Going into 2023, investors should focus on equity sectors and regions that show resilient earnings growth and an ability to defend their margins,

otherwise known as pricing power. In terms of sectors, we like healthcare due to its defensive characteristics and margin stability. The relative valuation compared to other defensive sectors is also appealing. Furthermore, long-term growth drivers like better healthcare access in emerging markets (EM), aging populations and new technologies (e.g., mRNA vaccines) remain intact. Our preferred market in this challenging environment is Switzerland. Thanks to its defensive characteristics, it tends to outperform when growth slows. In addition, the earnings outlook is relatively bright, with double-digit earnings growth expectations for 2023. In EM, we expect Latin America to outperform Asia. In equity styles, we currently prefer quality (i.e., companies with high returns on equity, stable earnings growth and low financial leverage).

Headwinds from real yields

The impact of rising real yields on equity valuations



Last data point 07/11/2022 Source Refinitiv, Credit Suisse

As 2023 progresses and if markets show increasing confidence that central bank guidance regarding policy rates (or expectations thereof) reaches a peak, we would increase exposure in technology stocks. In 2022, technology has underperformed given its high sensitivity to interest rates. However, the sector generates by far the largest cash flow with little leverage and has a strong secular growth story.

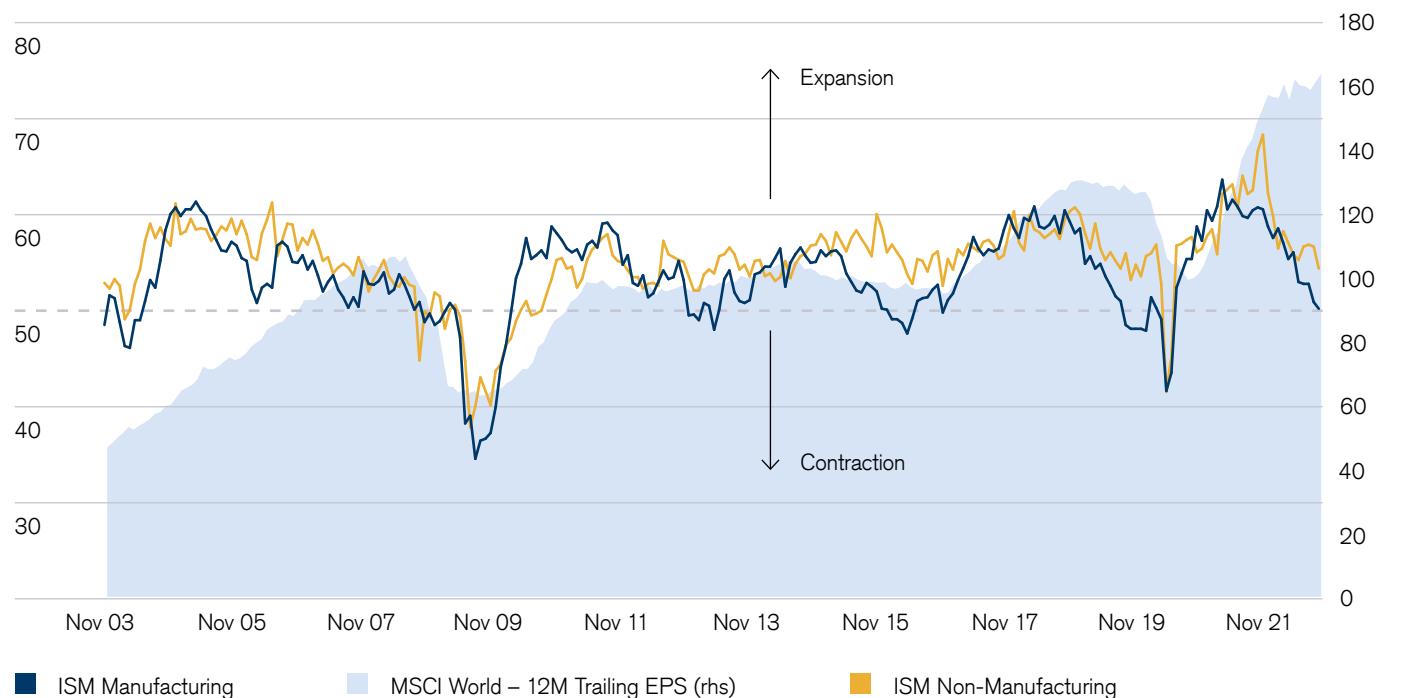
Increased volatility means more tactical investment opportunities

The multiple risks discussed are contributing to elevated equity volatility, which is likely to last well into 2023. In such an environment, we believe diversification remains key and see merits in

exploring actively managed solutions. Regarding downside risks, stubbornly high inflation with resilient demand is high on the list. In such a scenario, central banks would be forced into even more tightening, which could lead to a more severe recession further down the road. A broadening of the Ukraine war or a flare-up in hostilities between China and the USA over Taiwan would also weigh on equities, with defense likely one of the few sectors to benefit. Fresh COVID-19 mutations would support the healthcare sector. Regarding upside risks, a faster-than-anticipated decline in inflation, which would give the Fed more freedom to steer toward a soft landing, would benefit risky assets in general and the tech sector in particular.

Bucking the trend

Earnings historically moved in line with ISM readings



Last data point 31/10/2022 Source Refinitiv, Credit Suisse

Equity theme: Pricing power

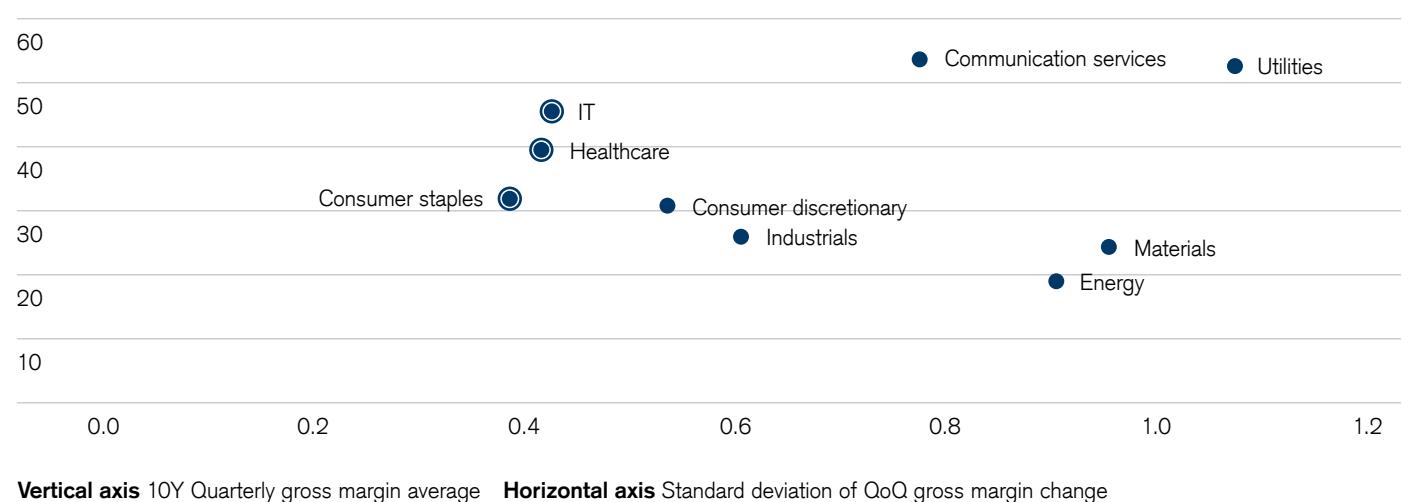
Pricing power and margin developments remain a key theme for investors as elevated inflation is likely to persist for longer at a global level into 2023. One way for investors to protect themselves from rising input costs is to select sectors or companies with pricing power. We define pricing power as the ability of a company or sector to pass costs on without a significant impact on margins and/or earnings. We recognize, however, that due to a wide variety of factors (e.g., market structure, location), not all sectors or companies are equally able to pass on costs and stay ahead of the curve.

As we assessed pricing power, we considered market concentration and margin stability. Market concentration measures the extent to which market shares are concentrated among a small number of firms. Sectors with a high concentration typically have more pricing power since fewer larger firms dominate a market. We note that on a relative basis, IT, communication services and consumer discretionary have shown the highest market concentration.

Gross and profit margins – notably, the ability to maintain and grow margins at sustainable rates – are key determinants of pricing power, in our view, as they can signal inelastic demand and the ability to increase profitability. When adjusting for growth trends, gross margin stability is historically highest for consumer staples, healthcare and IT. Profit margin stability is highest for consumer staples, healthcare and consumer discretionary. For consumer staples and healthcare, this indicates that these sectors are capable of increasing costs with a relatively limited impact to their bottom line.

We conclude that sectors with pricing power have high profit margin stability, which in our view is also reflected in consistent earnings estimates. One reason for this could be that when margins are stable, rising costs should be easier to pass on, which makes forecasting earnings more predictable and results in lower variability. Based on the factors we assessed, consumer staples and healthcare display the strongest pricing power leadership relative to other sectors. With global growth uncertainty and inflation likely to remain elevated in H1 2023, we expect these segments to prove more resilient relative to other sectors.

Pass it on The pricing power of various sectors



Sector outlook

Healthcare

Defensiveness at a reasonable price

Healthcare offers an appealing valuation compared to other defensive sectors, and earnings in line with the equity benchmark (MSCI World) for 2023. While the valuation premium compared to broader global equities expanded significantly after a strong performance in 2022, it is still our preferred sector in the defensive space. Healthcare equipment is expected to drive growth in 2023, while pharmaceuticals should provide a cushion for valuation. A peak in the USD could be a risk for the sector as it benefitted meaningfully from the USD's strength in 2022. We also like healthcare for its long-term growth drivers like better healthcare access in emerging markets, aging populations and developments of new technology (e.g., mRNA vaccines).

Communication services

Opportunities to emerge once rates peak

Communication services was the worst performing sector in 2022, as higher rates triggered a significant de-rating. The ongoing macro slowdown is likely to be a headwind for advertising revenues, but we believe the worst of the underperformance is behind us and opportunities will emerge once rates plateau. Valuations are no longer expensive and earnings are still expected to grow twice as fast as broader equities. Media & entertainment has the highest growth potential, in our view, while telecom stocks are cheap with an attractive dividend yield.

Consumer staples

Earnings resilience, but yields are a risk

The consumer staples sector offers high-quality companies with low earnings volatility and margin resilience and remains an interesting portfolio component in the long term, notably for risk-averse investors. Historically, the sector has been negatively correlated to yields and although yields rose in 2022, the performance of consumer staples was resilient. The uptick in yields was not reflected in the price, which is a key risk, alongside a potential growth rebound (in which the defensive consumer staples sector is expected to lag broader equity markets). However, as growth concerns are likely to remain elevated, we could see continued market consolidation where defensive sectors could hold up better.

Energy

More challenging 2023 ahead

Energy was the bright spot in 2022, but 2023 is likely to be more challenging. Strong cash flow generation and capital discipline still provide some buffer, but current energy prices appear unsustainable as non-OPEC supply is set to rise and demand to slow, in our view. Against this backdrop, earnings should decline more than for any other sector with the exception of materials in 2023. Exploration & production stocks will likely be the most vulnerable, followed by integrated oil & gas companies. Equipment and services should fare better as capital expenditures will likely remain resilient (extracting and refining activities will still likely be profitable throughout 2023).

Consumer discretionary

High-end consumer preferred

We expect segments exposed to premium consumers, such as luxury goods, to do well in 2023. The sector displays high margin resiliency and pricing power, which should be a supportive factor in an environment of global growth uncertainty, in our view. Valuations are attractive and consumption trends for this sector should remain supported given the target clientele and reopening of the Chinese economy. However, we expect the more cyclical elements of the sector to come under pressure in H1 2023 as global demand weakens.

Financials

Net interest income to drive earnings amid recession risks

We expect financials to benefit significantly from the higher interest rates boosting interest income and earnings, but slowing global growth and recession risks argue for a more balanced view on the sector going into 2023. Unlike in past recessions, the sector appears more resilient as banks are well capitalized and better positioned to weather the downturn as regulatory requirements and healthy balance sheets provide a cushion to absorb any potential losses. Fundamentals look appealing as valuations are cheap and the earnings picture has started to improve thanks to the positive impact from higher rates. Barring a significant downturn, we expect the sector to do well in 2023.

Industrials

Recession risks loom large

Industrials is one of the sectors that is most sensitive to economic activity, especially the manufacturing and industrial production segments. Our economists project that goods demand is already in a recession and expect industrial production (IP) momentum to slow significantly. We expect the capital goods and transportation segments to be affected by slowing global growth and recession risks, while aerospace and defense may continue to benefit from escalating conflict risks and geopolitical tensions. Overall, we expect the sector to perform in line with the equity benchmark (MSCI World), with downside risks mounting going into 2023.

Information technology

Earnings back in focus

The sector lagged in 2022 given its high sensitivity to rising yields. While some headwinds may persist until central banks are done tightening, we believe markets will refocus on the sector's attractive fundamentals once yields plateau. IT now appears fairly valued and offers superior earnings growth potential even in a slowing macro environment. The ability of the sector to maintain margins at elevated levels (net profit margins are close to 20%, almost double that of the MSCI World) is particularly attractive in the current environment. Within sub-sectors, software & services offers the most earnings stability given its high share of recurring revenues.

Materials

Earnings at risk

Materials stocks resisted well in early 2022, before succumbing to the broad-based equity sell-off. Since the sector is very cyclical, we expect pressure to intensify in 2023. Our economists see the goods sector as the most exposed to the ongoing economic slowdown, as over 90% of manufactured goods require chemicals. Metals & mining is also facing a period of soft demand, as housing and infrastructure spending plans are being cut back, while margins are being squeezed by higher average energy costs. Hence, the sector is expected to face the sharpest earnings contraction in 2023, forcing companies to cut back on capex plans and operations and to reduce dividends.

Utilities

Regulation and renewables in focus

Utilities was one of the most resilient sectors in 2022, benefitting from the adverse market conditions as defensives outperformed. We expect the macro environment to remain favorable for the sector in 2023 as the growth slowdown and recession risks intensify. Earnings are expected to be resilient, but valuation is expensive going into 2023. We expect the focus to turn increasingly to regulation risks and also the ongoing transition to renewables as energy disruption risks persist. We see the sector performing in line with the equity benchmark (MSCI World), but a more severe slowdown/recession than expected would argue for continued outperformance in 2023.

Equity styles

Quality in focus amid uncertainty

In equity styles, 2022 was a challenging year, with strong negative market directionality on the back of very hawkish central banks and geopolitical events. Defensive styles such as dividend and minimum volatility fared better in a relative sense alongside value, supported by higher benchmark yields. Looking into 2023, given the challenging macroeconomic backdrop and ongoing uncertainty, we believe focusing on the quality style would offer appropriate exposure given its focus on earnings stability coupled with low financial leverage and high return on equity (RoE), which should fare well given the headwinds we foresee. However, should broader conditions deteriorate faster and more severely than currently anticipated, it would be prudent to go for minimum volatility and to some extent dividend styles, while value is likely more negatively exposed to an outright recession.

Regional outlook



USA

Solid earnings picture, but relatively elevated valuation
US equities saw a sharp de-rating in 2022 as the Fed increased its policy rate significantly. In particular, the technology sector, which the USA has substantial exposure to, came under strong pressure in 2022. However, while the US equity market offers a relatively stable earnings picture, it still trades at a premium to the rest of the world. Growth is expected to slow, but the economic outlook is still better than for Europe as the USA is less dependent on energy imports. We believe that 2023 will be a year of two very different halves for US equities. As long as the Fed keeps its restrictive stance and yields remain elevated, US equities will show a rather muted performance. Once markets start pricing in a less hawkish Fed, we believe US equities have scope to recover.



UK

Favorable valuation, lackluster growth
The UK outperformed global equities in 2022 (in local currency terms), driven by stronger earnings growth thanks to the market's sector composition (higher energy and defensive exposure). UK equities also benefited significantly from the GBP's depreciation in 2022, given that UK equities earn most of their revenue from international markets. Looking forward, the UK is still trading at a meaningfully attractive valuation level and has one of the highest dividend yields within developed markets. However, a lot of these advantages are offset by negative earnings growth forecasts for the next two years. We currently see no catalyst for valuations given a pending trade deal with the European Union and geopolitical uncertainties.



Switzerland

Defensive characteristics attractive amid uncertainty
The Swiss equity market is geared toward so-called defensive sectors, as healthcare and consumer staples account for more than 60% of the benchmark index. Hence, Swiss equities tend to outperform when purchasing managers' indices decline and vice versa. Swiss equities thus are likely to outperform in a volatile environment with slowing growth, in our view. In addition, the earnings outlook for Swiss equities is relatively bright, with double-digit earnings growth expectations for 2023. While a stronger CHF is a risk for the export-oriented Swiss market, Swiss companies tend to be quick to adapt to a stronger CHF.



Japan

Currency is the key
Japan outperformed other equity markets in 2022 thanks in large part to currency effects. While most central banks tightened aggressively, the Bank of Japan stuck with its dovish positioning, which weighed on the JPY. We believe currency dynamics will remain a dominant factor for Japanese equities in 2023. Fundamentally, while Japanese equities remain cheap, Japan is a very cyclical market and may suffer from the ongoing economic slowdown.



Asia

Recovery remains elusive
Asian equities (excluding Japan) have been under pressure in 2022 as China's zero COVID-19 policy, slowing global growth and USD strength weighed on regional earnings. We believe 2023 is likely to be another challenging year for the region, as tightening monetary conditions are expected to slow Asian economies, leading to meager earnings growth. Though valuations are at reasonable levels and foreign positioning remains light, the region lacks a catalyst for a strong recovery. We expect the Chinese economy to remain weak, despite easing monetary and fiscal conditions, until there is flexibility on the zero COVID-19 policy. Conversely, South Asian markets should benefit from the post-COVID recovery. However, on a relative basis, they trade at a significant premium, suggesting a large part of the recovery is already priced in. As such, we expect regional equities to perform in line with global peers. Within Asia, we prefer stocks linked to China's sustainability drive, as the sector enjoys strong state support and is delivering robust earnings growth.



Eastern Europe, Middle East and Africa



Latin America

Geographical isolation as a positive
After a strong performance in 2022, we expect Latin American equities to deliver attractive returns in 2023. The region should benefit from supply chain reshoring, which could provide a boost to the economy. Financials (25% of the MSCI Emerging Markets Latin America Index) should remain well supported by high policy rates. Central banks began hiking rates earlier than their counterparts elsewhere, and we expect rate cuts could come as early as Q2 2023, which could be a positive factor for the market. Valuations are attractive and dividend yields remain appealing at around 7.8%. We note commodity price developments will likely have a major influence on returns. We expect some volatility as the political transition in Brazil will likely usher in new fiscal rules and regulations for certain sectors. However, global delivery bottlenecks coupled with elevated average commodity prices create an environment from which Latin American equities should benefit relative to other EM, in our view.

Clear bright spot within the region

We expect Eastern Europe, Middle East and Africa (EEMEA) markets to perform in line with the benchmark MSCI Emerging Markets Index in 2023, with a preference for Middle East/Gulf Cooperation Council (GCC) markets within the region. EEMEA as a region has undergone significant upheaval in 2022 given the geopolitical shocks and soaring energy prices, leading to varied performance across the regional markets. Eastern European markets, for example, suffered from the Ukraine war and related energy disruptions, which we expect will remain an overhang in 2023. South Africa is expected to deliver returns in line with the benchmark as the earnings outlook weakened on lower metal prices amid global growth concerns. Middle East/GCC markets have displayed impressive resilience and are on track to generate the strongest returns of any region globally for the second consecutive year. These returns have been driven by three key factors: elevated oil prices, which are expected to generate a cumulative current account surplus in excess of USD 1 tn over the next three years; robust delivery on economic transformation plans that have allowed the region's non-oil sector to flourish, especially in Saudi Arabia and the UAE; and a steady pipeline of initial public offerings and loosening of restrictions on foreign ownership limits that have helped increase the GCC's weight in the MSCI EM benchmark from 1.4% in 2018 to around 8% at the beginning of Q4 2022. We expect these factors to remain in place over 2023, albeit with less intensity compared to the preceding two years. Finally, institutional EM investors have low exposure to the region, and this should keep foreign inflows structurally "stickier" over the coming few years. Taking the above factors into account, we expect the GCC to remain the bright spot and deliver significantly more defensive returns over 2023 than the broader EM universe.

Further weakness ahead for Chinese equity markets

We believe that Chinese equity markets are set to perform poorly into the first half of 2023, resuming the aggressive downtrend that began in early 2021. Hong Kong is expected to lead the way, where the Hang Seng Index has established a multi-year top. The MSCI China and the Shenzhen CSI 300 indexes already reached new lows for 2022. This negative outlook is further reinforced by breadth and volume indicators, as well as the weakening of the CNY relative to the USD. Importantly, we also see a range of important negative sector stories.

The market that continues to give us the most concern is Hong Kong, where the Hang Seng Index has removed pivotal long-term support seen from the YTD low and 2016 lows at 18279/235. This has established a multi-year top to warn of a long-term change of trend lower with some significant fresh declines already seen in October. This recent weakness has left Chinese equities highly oversold and we see scope for a consolidation phase toward year end to unwind this overstretched condition. With major tops seen in place, though, this will be seen only as a temporary pause ahead of an eventual resumption of the core downtrend back to 14560 and eventually our objective at the 61.8% retracement of the rise from 1974 at 12885.

The recovery seen in the MSCI China Index post the March low earlier this year was capped ahead of its falling 200-day average, and downside pressures quickly resurfaced in October, with the index moving below its March low potential neckline to a multi-year top from October 2011 for a brief move below the 2016 low at 47.99. With the decline already leaving the market highly oversold, we similarly see scope for a fresh consolidation phase. Should 47.99 be removed, this would be seen confirming a multi-year top and an even more significant change of trend lower, with support then seen next and initially at the 44.48 low of 2011.

For the Shenzhen CSI 300 Index, the beginning of 2022 saw a large and important "head & shoulders" top established to mark, in the view of our technical analysts, a long-term change of trend lower, with the market falling sharply until the end of April. While we continue to see scope for further consolidation at our next objective/support at 3503 – the key low of 2020 – we see no technical reason not to look for a break in due course, with support then seen next at the 61.8% Fibonacci retracement of the entire uptrend from the 2008 lows at 3259, then the long-term uptrend from the 2008 lows, currently at 3155.

A further recent negative factor for Chinese equities has been the sharp weakening of CNY/CNH relative to the USD, as we typically see these periods as a headwind for the equity market. We view the current weakness as corrective, and we continue to look for USD/CNY to rise further over the next 3–6 months, with next resistance seen at 7.42/745, which is a long term 61.8% Fibonacci retracement level, then 7.780.

US inflation expectations to move lower during 2023

We believe that US 10-year Breakeven Inflation Expectations (BEIs) are set to move lower in 2023, which we believe should eventually cap the upside in nominal yields.

This outlook is based on the confirmation of a large and significant technical "head and shoulders" top pattern in 10-year BEIs. Realized inflation readings remain high at this point and falling inflation expectations may be hard to envisage. However, we believe that markets are forward looking, and that this major top is signaling that the market is pricing in a higher chance of a recession during 2023, which would in turn bring inflation sharply lower. With all this in mind, the market is holding initial support seen at the 38.2% retracement of the 2020/22 up move at 208 bp, however we look for a break below here in due course, with the next supports seen at 200 bp, then 182/177 bp, with the measured top objective below here at 150/146.5 bp. With realized inflation still high, we do not expect this level to be reached quickly. Key resistance is seen at 258 bp.

A major top in US inflation expectations is expected to eventually limit the upside potential for nominal bond yields going into 2023, although this is only seen likely to occur once BEIs start to fall in a more meaningful way and we also see technical evidence that 10-year US real yields may have peaked, in the view of our technical analysts.

Finally, we note that high and rising inflation has resulted in weak performance across most traditional asset classes in 2022, with bonds and equities remaining unusually well correlated as both suffered large drawdowns. We believe a fall in inflation expectations is likely to help restore a more normal negative bond/equity correlation in 2023, which should trigger a large top in the US equity/bond ratio, resulting in a large underperformance of equities over the next 3–6 months.



Monetary policy, growth likely to drive FX

We expect the USD to remain overvalued in 2023. A turning point in the USD's strength remains largely conditional on a shift in US monetary policy and improving global growth prospects. The significant undervaluation of the JPY should reverse but will ultimately require the Bank of Japan (BoJ) to abandon its yield curve control policy. Emerging market (EM) currencies should remain soft in general. Finally, active foreign exchange (FX) management will be of the essence in a world of heightened volatility and rapid shifts in the forces driving FX.

The USD Index (DXY) is on track for one of its best annual performances in decades in 2022. We think this unusual strength, which has created a substantial overvaluation of the DXY, is justified. The US economy has been strong, resulting in a tight labor market. With underlying inflation substantially more elevated than the US Federal Reserve's inflation target, the Fed initiated the fastest policy tightening in decades. This generated a major source of USD support through increased carry attractiveness. Furthermore, the USD's safe-haven characteristics proved attractive at a time of deteriorating risk sentiment globally. Both these factors will likely remain in place going into 2023, and we expect the USD to remain largely overvalued throughout 2023. A turning point in the USD might come later in 2023. A dovish Fed pivot together with an improving global economic outlook would be needed for the USD to give back its gains.

JPY depreciation likely to turn in time

Among G10 currencies, the JPY has been most impacted by the ever increasing rates differentials in 2022. The Bank of Japan (BoJ) is expected to hold on to its yield curve control (YCC) policy until at least March 2023. As such, pressure on the JPY will likely remain substantial despite recent FX interven-

tion to stem the depreciation of the currency. For the first time since 2014, Japan has witnessed mounting inflationary pressures, and the JPY's sharp depreciation in 2022 might add to imported price inflation. The eventual abandoning of the YCC policy by the BoJ in 2023 is a key risk. As the Fed will likely pivot to a less hawkish stance sometime in 2023, we think this combination would mark an end to the sharp JPY depreciation and a potential significant reversal of our estimated 40% undervaluation in JPY vis à vis the USD.

Active and flexible FX strategy

FX volatility surged in 2022, virtually doubling from the level at the beginning of the year. While we do not anticipate a similar gain in volatility in 2023, we expect it will remain historically elevated. The uncertain pace of the global growth slowdown (or recession in some countries), combined with the volatile inflation normalization and persistent geopolitical uncertainties, is setting the scene for another year of potentially large market swings. For this reason, we believe that active and flexible FX management is a crucial strategy for investors. For example, resurfacing peripheral risks in the Eurozone could force the European Central Bank to intervene, or result in a further push for renewed

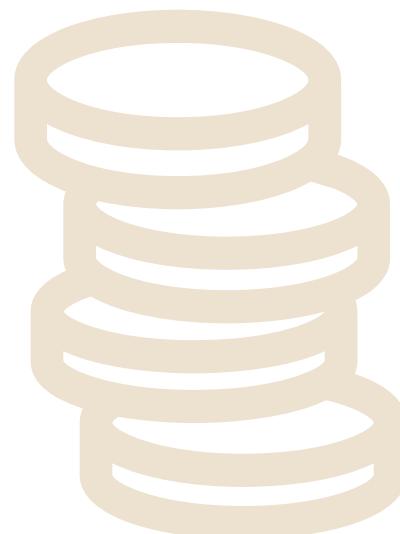
Eurozone-wide debt issuance discussions to stem a potential weakening of the EUR, thereby requiring a dynamic management of EUR positions.

EM hampered by lower carry, growth risks

In 2022, EM currencies held up well against most developed market (DM) currencies. However, the outlook for EM currencies versus the USD continues to be challenging despite already cheap valuations. In early 2023, the ongoing tightening of global financial conditions and a hawkish Fed should continue to support the USD. In the second part of 2023, the USD could lose some of its strength. That said, recessionary risks could still cloud the environment for EM currencies even though economic activity in EM is expected to hold up somewhat better than in the USA. Some EM central banks are expected to loosen monetary policy ahead of the Fed. This could further diminish the carry buffer and also the risk-adjusted carry in light of high volatility. A challenging environment for commodity prices would be favorable for the inflation picture in EM, but would lead to a further deterioration in the terms of trade, which were a key supportive factor for EM FX in the first half of 2022. Within the EM FX space, we are especially cautious on currencies with a larger exposure to DM recession risks, as well as geopolitical tensions and the slowdown in China. In this context, Eastern European currencies such as the PLN look particularly vulnerable given the country's strong trade ties with the Eurozone countries and geographical proximity to the Ukraine war.

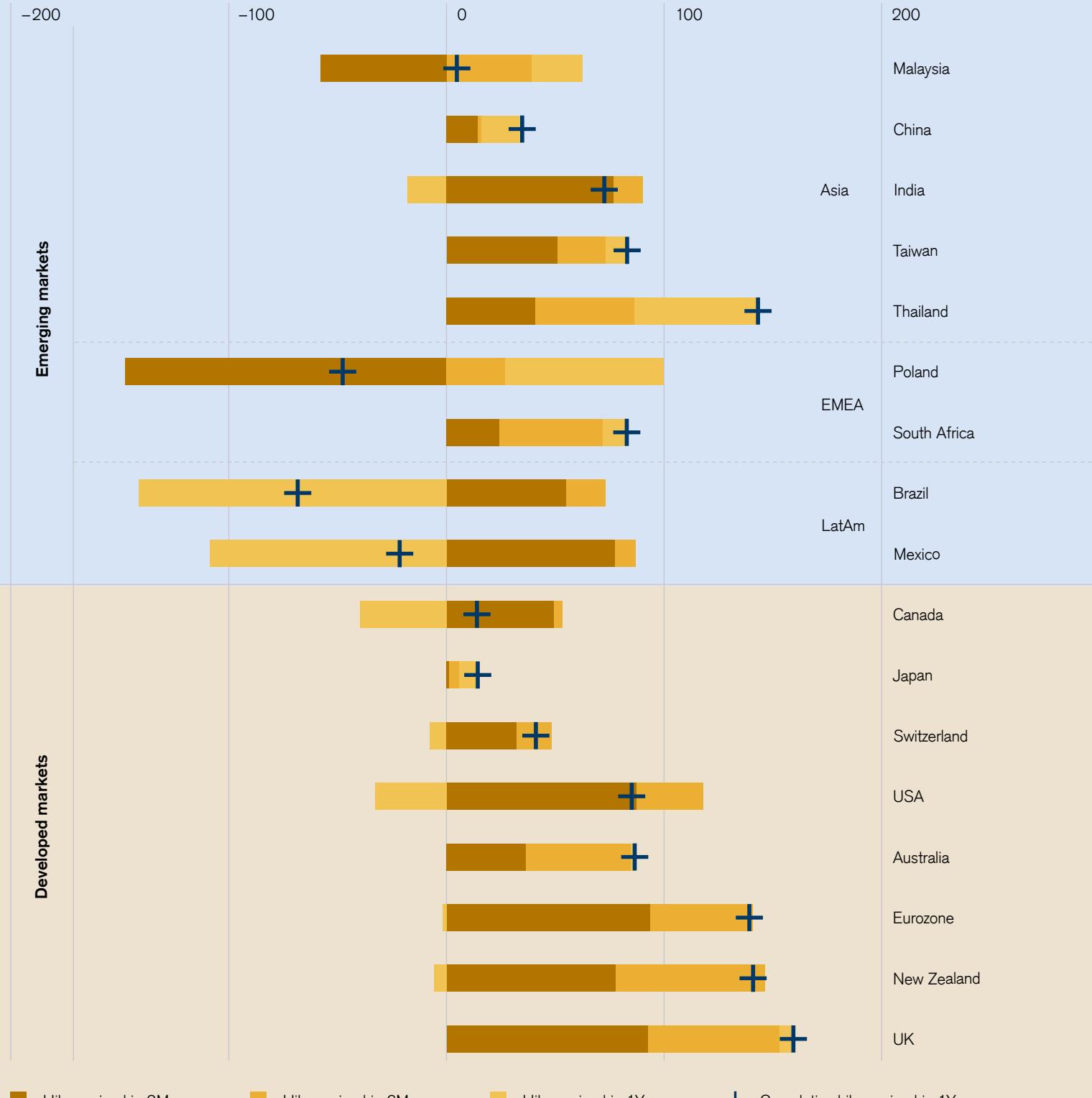
CNY weakness should persist

The Asia FX complex is likely to remain weak in the first part of 2023 given the resilient USD trend. Some divergence across the region can be expected, depending on the various economies' dependence on manufacturing exports, which are likely to be more impacted by the slowdown in global demand than commodities and services. This is one key reason why the CNY is likely to weaken. The other is that imports are likely to accelerate as expansionary fiscal and monetary policy starts to feed through into the real economy in the months to come. Further out, the relaxation of COVID-19 restrictions is likely to reignite tourism outflows and bring the current account surplus down from 2% of gross domestic product currently toward the 0.5% pre-COVID level. With the CNY still 3%-4% above pre-COVID highs in trade-weighted terms, we expect Chinese authorities to be more than comfortable with a meaningful CNY depreciation. Within the region, the IDR should prove more resilient in 2023, due to its trade surplus and attractive carry against the USD, which is among the highest in the region.



Implied policy rates in selected DM and EM economies

In basis points



Note Market-implied rate hikes over the next 12 months are displayed on the right and cuts on the left. The + sign depicts where markets expect rates to be in 12 months compared to today's levels, i.e. market-implied rate hikes and cuts within the next 12 months on a net (i.e. cumulative) basis.

Stay selective

We expect the environment for real estate to become more challenging in 2023 as the asset class faces headwinds due to higher interest rates and weaker economic growth. We favor listed over direct real estate and still prefer sectors with strong secular demand drivers.

Return prospects for global property markets are challenged by both higher interest rates and weaker economic growth, but remain partially supported by an embedded inflation link through contractual rents. Higher interest rates increase the cost of financing and negatively impact property valuations via higher discount rates, while weaker economic activity weighs on tenant demand for space, especially in more cyclical segments such as office and retail. On a positive note, rents can be indexed to inflation or increased by a fixed amount during the lease term, providing a partial hedge against elevated inflation. While listed real estate declined in the first nine months of 2022, direct real estate valuations proved resilient. Indeed, we believe they have yet to reflect the headwinds the sector faces.

Listed real estate: Prefer the USA and Switzerland over the Eurozone and UK

Valuations in listed real estate markets – at least partially – reflect the challenging outlook for property markets as multiples have fallen in 2022 and are now closer to their long-term average values. Regionally, we expect US real estate to benefit from lower but still positive economic growth in 2023, as well as a higher exposure to sectors underpinned by strong structural growth such as logistics, self-storage and data centers. In contrast, Eurozone listed real estate is trading at a significant discount to net asset values (NAVs) of over 50% but we expect headwinds to remain considerable, especially in the first half of 2023 as interest rates rise further while the economy weakens. The same applies to UK listed real estate, while more resilient economic

growth and lower inflationary pressures support Swiss listed real estate. We particularly like Swiss real estate funds, as they should benefit from a positive outlook for residential property markets at undemanding valuations as premia to net asset values (NAVs) have decreased to levels last seen during the Global Financial Crisis.

Direct real estate: Focus on rental growth

With valuations likely to come under pressure in 2023, we expect investors to be more cautious when it comes to new acquisitions. In fact, prime-property yields are expected to rise by an average of 100 bp, while property values should fall between 15% and 20% across all sectors by the end of 2023, according to Property Market Analysis. We therefore believe that valuations should start looking more attractive, potentially leading to investment opportunities in 2024. Having said that, we expect less pronounced declines in segments with positive rental growth, such as residential or logistics, due to favorable supply-demand dynamics. Logistics assets should continue to benefit from the growing penetration of e-commerce, larger inventory holdings as well as onshoring efforts, supporting demand even in an economic slowdown. Within the office segment, we believe that higher propensity to work from home will remain a challenge, and therefore expect higher quality assets that also score relatively better with respect to environmental, social and governance (ESG) criteria to perform best.

Improving return prospects

In 2023, hedge funds will likely deliver a better performance relative to traditional asset classes than in the past. Selectivity is key, and we highlight market neutral, relative value multi-strategy and private yield alternatives as potential alternative return solutions within traditional portfolios.

In 2022, hedge funds (HFs), and low-beta strategies in particular, delivered the largest outperformance compared to global equities and bonds since the inception of HF indices in the 1990s. In an environment of higher interest rates and volatility, slowing economic growth and still elevated inflation, we expect hedge fund excess returns vs. traditional equities and bonds to remain higher compared to the past decade, with improving return potential from active management and alternative return factors.

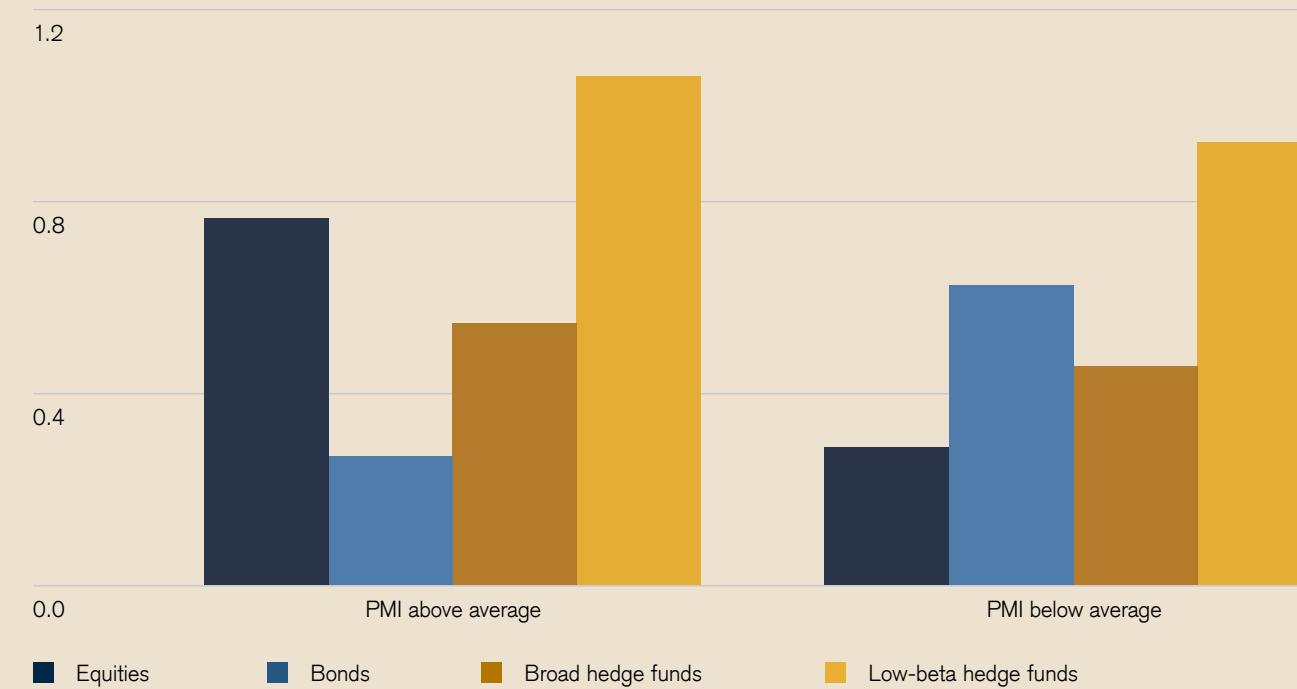
Strategies benefiting from rising rates and inflation

HF managers should be able to capitalize on the large performance dispersion between companies arising from their sensitivity to inflation, pricing power and financial leverage. Market neutral strategies are likely to provide an asymmetric return profile, with greater upside potential and limited downside in fundamentally stronger companies.

Additionally, higher interest rates and a lackluster growth environment should result in a higher return potential from alternative return factors, such as carry and mean-reversion, benefiting multi-strategy relative value strategies. A high-inflation environment is also supportive of yield alternative strategies such as private credit and infrastructure. Key areas in focus are assets such as clean energy and transportation, which benefit from higher fiscal spending on energy-transition efforts. However, large differences between the best and worst performers underscore the importance of selection and due diligence.

Hedge funds outperform in tough environments

Risk-adjusted performance of different asset classes during strong/weak purchasing managers indices (PMIs): Since 2000



Last data point 10/2022 Source Bloomberg, Credit Suisse

Shifting opportunities

As growth slows and interest rates rise, asset prices are likely to remain under pressure. Private markets should see more moderate declines than public markets, while lower asset prices will likely present opportunities for fresh investments. A highly selective approach is key.

Slowing economic growth and rising interest rates are putting asset valuations under pressure – a situation to which private equity (PE) is not immune. For already invested private capital, we expect further broad-based declines, though less substantial than in public markets. For fresh investments and funds in the investment phase, the de-rating of equities and volatility in capital markets will likely translate into better investment opportunities. Additionally, record levels of committed but uninvested capital (i.e., “dry powder”) provide capacity and flexibility to invest at improved valuations. It is worth noting that vintages (i.e., capital) deployed at lower points in the business cycle tend to perform better than those deployed at higher points.

Secondaries and private debt: Improved return prospects

In light of elevated volatility and more attractive asset pricing, we highlight active vehicles that specialize in acquiring companies at lower entry points – secondary managers. Such funds offer diversification with more than 200 positions, pricing visibility (given that their portfolios are well-funded) and lower loss ratios. Larger discounts to net asset values (NAVs) this year are also supportive. Private debt (PD) offers another solution, as rising benchmark rates and risk premiums improve its future return potential, particularly given its floating rate nature. However, higher returns are somewhat offset by higher default rates in a weak macro environment. We thus highlight direct lending – its more resilient component – due to its seniority in terms of the capital structure, lower defaults and typically better recovery rates.

Co-investments:

Tailored approach with lower fees

For more seasoned and risk tolerant investors, we highlight co-investments. Co-investors take minority stakes alongside the manager and actively undertake the deal selection and portfolio construction process. This offers a more tailored, highly selective and proactive approach with significantly lower fees and expenses. An investor can target a region, industry or manager, while also matching the pace of commitments with their cash flow needs. Due to lower fees and expenses, such investments – when successful – outperform private markets consistently. That said, the volatility and drawdowns associated with co-investments are higher than in private markets, but still lower than in public markets.

Stay selective and well diversified

Recent turbulent years have taught us that diversification, differentiation and specialized expertise are essential. Private market investing is grounded upon knowledge, skills and a hands-on entrepreneurial approach, with returns reliant on the specific manager's ability to skillfully navigate an investment to a successful outcome regardless of the prevailing capital market conditions. In our view, continuous allocation to well-selected, experienced managers across sectors, geographies and vintages forms the basis of a resilient portfolio.



Accelerating the transition

The backdrop for cyclical commodities is likely to stay challenging and volatile, an environment that favors active solutions over passive benchmarks. Intense pressures (e.g., supply and price) within energy markets will help accelerate the energy transition, while pullbacks in carbon prices could present longer-term opportunities. Gold upside optionality could be considered, too.

Commodities had a turbulent 2022. Physical markets started the year already tightly supplied, but the Ukraine war and its impact on supply chains added further pressure and caused prices to spike. While prices have forced some demand response in the meantime, supply buffers remain low and disruption risks elevated. That said, macro headwinds have been building, as high prices and aggressive central bank tightening have started to curb consumption, which may cause sub-trend growth in 2023. As a result, pressures on inventories are likely to ease – barring further unexpected geopolitical events. As inventories normalize, extreme backwardations in commodity forward curves – a sign of physical shortages – have scope to flatten. From an investor perspective, this favors active and/or systematic solutions over passive benchmarks since curve management is important in the current phase to generate excess returns.

Backdrop for gold set to improve

Commodities are cyclical assets to varying degrees across sub-sectors. Base metals and energy are most sensitive to the business cycle, while precious metals are considered more defensive. Demand for

agricultural goods also tends to be less elastic than for hard commodities. As we enter 2023, the backdrop might still be unfavorable for cyclical markets. However, central bank tightening efforts are likely to be advanced and peak hawkishness may be near, which would provide an improving backdrop for precious metals, especially gold. As central banks risk causing a deep growth slump, we see some upside risks to gold as we progress in time. It may be premature to build outright exposure, but we see merit in looking for medium-term upside optionality.

Energy transition set to accelerate

Energy markets have been in the eye of a storm on several fronts. Chronic underinvestment and several supply shocks (e.g., Russian gas export cuts, lack of contributions from renewables, unexpected nuclear outages) triggered a power crisis and a recession in the Eurozone. Households also face high energy bills. That said, price signals proved effective in forcing adjustments, i.e., curbing demand. Refilling gas storage ahead of winter 2023/2024 will be the next major challenge in case Russian flows fail to normalize, which we do not assume. In other words, prices need to stay historically high in order to keep

demand subdued, as liquefied natural gas (LNG) availability as well as other efficiency-enhancing measures are still not sufficient to fully replace pre-war volumes from Russia. However, the current acute pressure should help accelerate Europe's energy transition amid faster capital deployment and reduced bureaucracy. For the benefits of this transition to come to fruition, Europe must ensure unity and set incentives to ensure private participation.

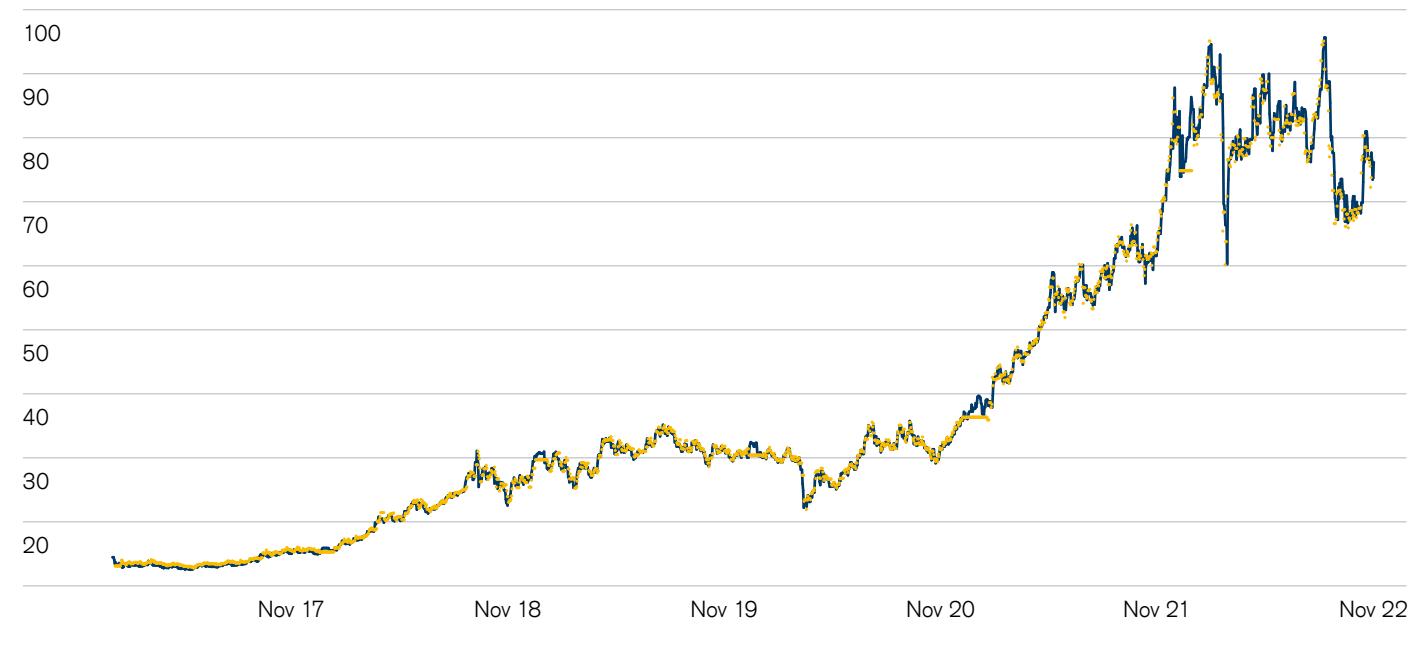
Carbon price dips present long-term opportunity

Carbon prices are a key tool in tackling climate change. Recent reforms to the European Union's Emissions Trading System scheme ensured the intended functioning of this market by addressing oversupply issues. However, increased carbon costs for industries added to the cost burden caused by Europe's energy woes. Policymakers came up with

compromises to hold additional supply auctions in the near term, which caused carbon prices to pull back in H2 2022. At the same time, the ongoing industrial recession in Europe is reducing demand for emission certificates, offsetting the increased carbon intensity of power generation as coal plants have been re-activated and gas use is maximized. It is important to note that no new supply has been created in this process but simply borrowed from the future. Hence, we would see pullbacks in European Union emission allowance prices as an opportunity to build long-term exposure since carbon prices must still rise substantially in order to provide incentives to retire coal plants, and for industrial processes to switch from gray to green hydrogen eventually.

Pullbacks are opportunities

European Union emission allowance prices, EUR/ton



Last data point 11/11/2022 Source Bloomberg, Credit Suisse

Supertrends – Diversify your risks

Geopolitical tensions, subdued economic growth and rising interest rates are all weighing on equity investors' sentiment for the time being. In the long term, however, we believe that a diversified thematic investment covering multi-year societal trends should outperform global equities. The Supertrends are here to stay.

In 2022, investors had to contend with volatile financial markets and a bear market, interspersed by small rallies, as was the case over the summer. Companies and consumers are currently grappling with the highest inflation in decades, which is persisting longer than many observers (ourselves included) anticipated. As such, investors have started to rotate away from growth stocks into value stocks. For example, the energy sector is benefitting from higher oil and natural gas prices as a result of the Ukraine war. Our strong diversification approach across the 23 subthemes of the Supertrends is helpful in navigating turbulent markets such as these, providing exposure to many different industries and trends.

On the defensive

We believe that our more defensive Supertrends, such as the Silver economy and selected subthemes within Infrastructure and Climate change, as well as the long-term demographic trends within Silver economy, should prove less volatile in the months ahead than the growth-oriented themes captured in the Millennials' values and Technology Supertrends. The Silver economy Supertrend focuses on healthcare companies that should benefit from rising demand and strong earnings growth as societies age. Therapeutic areas of particular importance include cardiovascular disease, oncology and neurology. Beyond the healthcare sector, Silver economy also has exposure to insurance companies,

which should benefit from the (higher) interest rate environment, along with selected consumer names. Within our Anxious societies Supertrend, geopolitical tensions put the Personal security subtheme back into focus, while the Affordability subtheme highlights a key issue due to the spike in energy and food prices. The Employment subtheme within Anxious societies is currently dominated by the lack of available labor and the difficulties that companies face in recruiting good employees, but an economic slowdown could alleviate that problem. Last but not least, we see the current energy crisis in Europe as another trigger point for climate change-related debates, though one needs to distinguish between key energy topics (i.e., electricity generation and the transition away from fossil fuels) and long-term growth themes in an early cycle stage (i.e., hydrogen, precision agriculture and cultivated meat processing), as the latter may see a delay in some investments in the short term.

[Find out more](#)

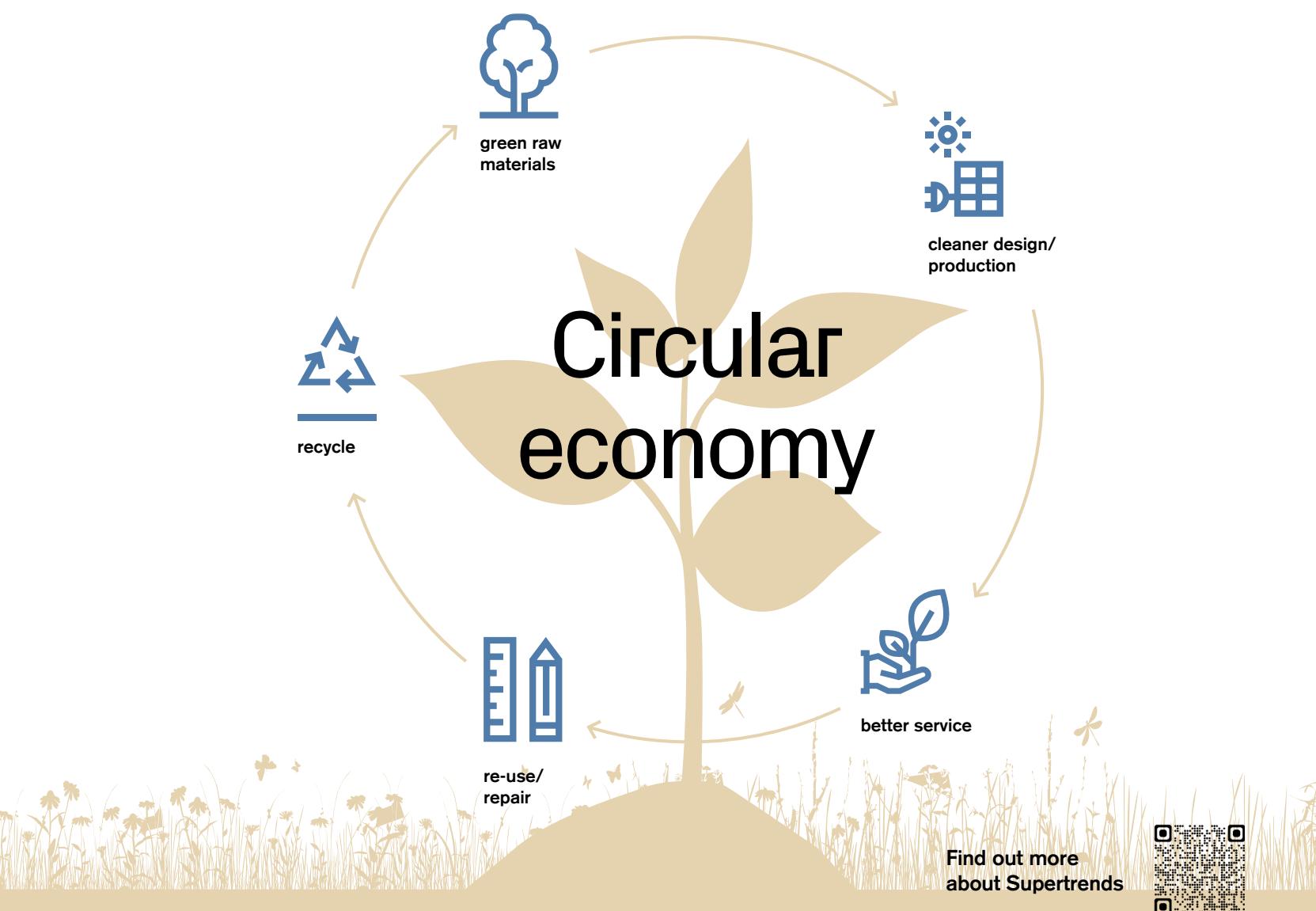


Trends with staying power

For investors with a multi-year horizon who want to add equities to optimize their strategic asset allocation, we believe that selectively adding Supertrends with a growth style makes sense due to current valuations. Our Technology Supertrend should get a boost from the metaverse, as companies increasingly invest in advanced IT infrastructure, higher processing power, collaboration tools and newer digital payment methods. Artificial intelligence adoption should continue to expand as digitalization accelerates and the number of Internet of Things devices surges, paving the way for automation, virtual and augmented reality as well as healthcare technology, which are all part of our Technology Supertrend.

Our Millennials' values Supertrend is set to benefit from long-term demographic patterns, as the young cohort in Asia in particular will dominate consumption and drive digital trends like social media, streaming, online shopping and fintech. Importantly, this generation has a long-term focus on the world of tomorrow, supporting biodiversity, the circular economy and health and nutrition.

We also believe that the Infrastructure Supertrend remains well positioned for the long term with a global commitment by political leaders to accelerate infrastructure investments. That said, higher interest rates might slow down large-scale investments in the short run due to the sector's capital-intensive commitments.



Developing a more secure and cleaner energy system

Amid geopolitical tensions, energy security will continue to dominate government agendas in 2023. Given the level and volatility of fossil fuel prices and the competitiveness of cheap renewable energy sources, it is unlikely that the European Union will ever depend on external supplies to the same extent that it did prior to the Ukraine war, when it imported 90% of its gas. The search for a more secure energy system – in Europe and elsewhere in the world – entails a combination of measures, though we expect that renewables will be the biggest beneficiary.

Geopolitics is not the only catalyst for this transition. The threat of climate change continues unabated. During the summer of 2022, the concentration of carbon dioxide (CO_2) in the atmosphere went above 420 parts per million (ppm) for the first time. At the current pace, the global average CO_2 concentration could reach 440 ppm before 2030, which would hinder the chances of limiting global warming to 1.5°C compared with pre-industrial times.

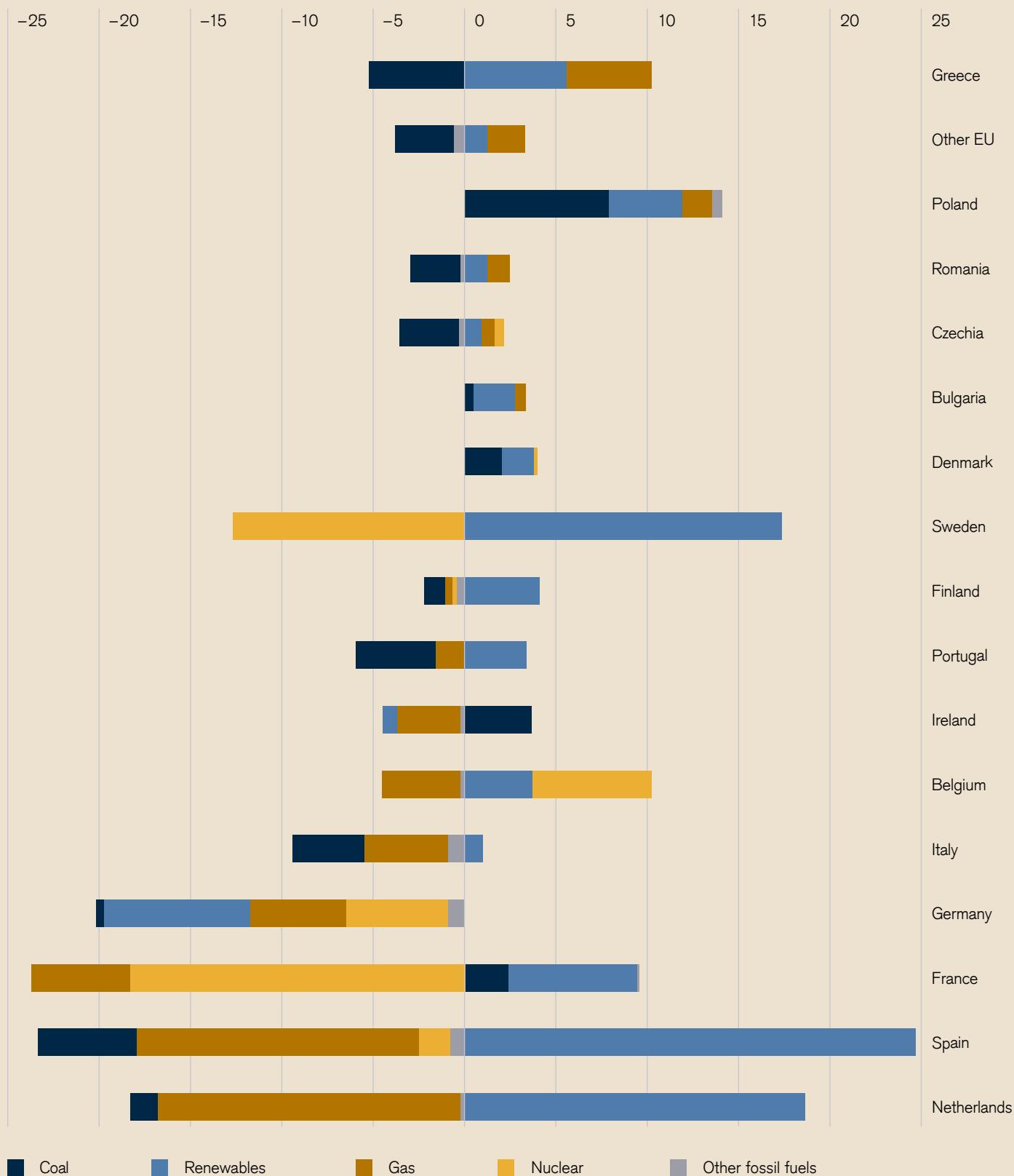
Does gas infrastructure hold the solution?
Dependence on fossil fuels has often been at the root of geopolitical instabilities, exacerbating conflicts and destabilizing economies through price shocks. Looking to 2023, persistently high energy prices would increase the risk of a global recession.

Through this lens, one solution – expanding liquefied natural gas (LNG) capacity – may struggle to solve all energy security concerns. For example, Germany plans to build LNG capacity above 60 billion cubic meters/year by 2026, but only a minor share

(e.g., up to 20–25 billion cubic meters) from floating units could become operational by the end of 2023. In addition, overextending gas capacity is not consistent with climate goals, as gas is associated with substantial emissions along the supply chain. The climate commitments of developed nations will make the share of gas-fired power increasingly marginal. The growing economic and security benefits of electrification will also contribute to displacing gas in other sectors, such as residential heating (e.g., via more efficient heat pumps). Thus, from a sustainability, security and economic perspective, investments in new gas infrastructure could eventually be subject to devaluation over the long term.

Out with the old, in with the new

Change in European Union electricity generation between 2019 and 2021 (in TWh)



Source Ember, European Electricity Review 2022

Renewables roll-out

In contrast, renewables deliver sustainable, readily available, domestic and economically competitive energy generation. Even before the surge in fuel prices, estimates of lifecycle costs were already signaling solar and wind energy as preferable to other sources of electricity. In addition, we can expect the yield of existing renewables to improve over their lifetime, as storage solutions such as grid-scale batteries become more common.

To meet the Paris Agreement, we estimate that cumulative wind and solar capacity needs to grow 3.5x vs. 2021 levels by 2030. For solar panels alone, BloombergNEF estimates that existing and planned manufacturing capacity will be sufficient to build 940 gigawatt of panels every year by 2025.¹ We also believe that nuclear power has a role to play. While several factors are slowing its rollout, nuclear energy has the potential to complement the production of low-carbon electricity where renewable resources are limited.

Offshore wind the one to watch...

The development of floating wind technologies makes it possible to explore new markets and geographies where bottom-fixed foundations are impractical. Offshore wind offers a remarkable capacity factor (ratio of actual energy output over a given period to the maximum possible output) of

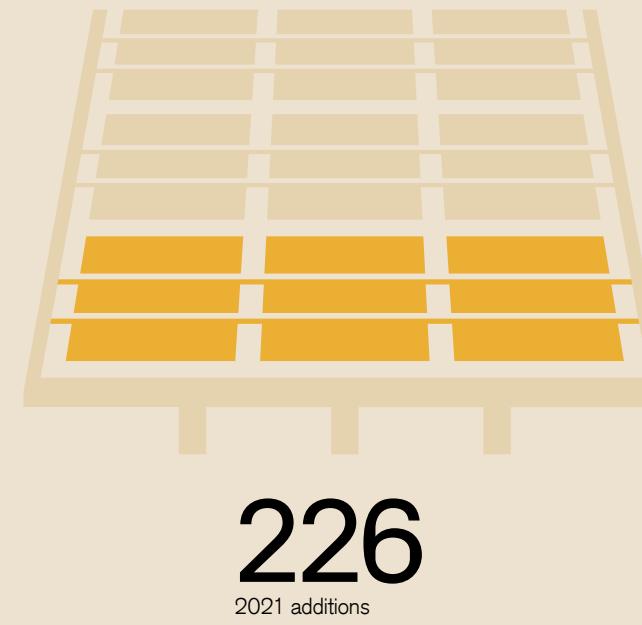
potentially more than 50%, which would be more than twice that of other sources such as solar. Finally, offshore wind is already economically competitive. For example, it offered the lowest power price at a recent large auction in the UK.² Thus, we expect this technology to experience exponential growth in the future.

...but solar (and storage) not far behind

Solar power represented only 3.6% of the global electricity mix³ in 2021. However, solar photovoltaic (PV) is forecast to lead global renewable capacity additions in 2022 and 2023.⁴ Solar projects will be increasingly paired with battery storage in the future, as the technology evolves and costs decline. In markets such as California, over 95% of solar assets in the grid connection queue are already paired with energy storage.⁵ This allows developers and grid operators to better manage the variability of renewables, and it provides a concrete alternative to costly and polluting natural gas-peaker plants.⁶

Banking on nature

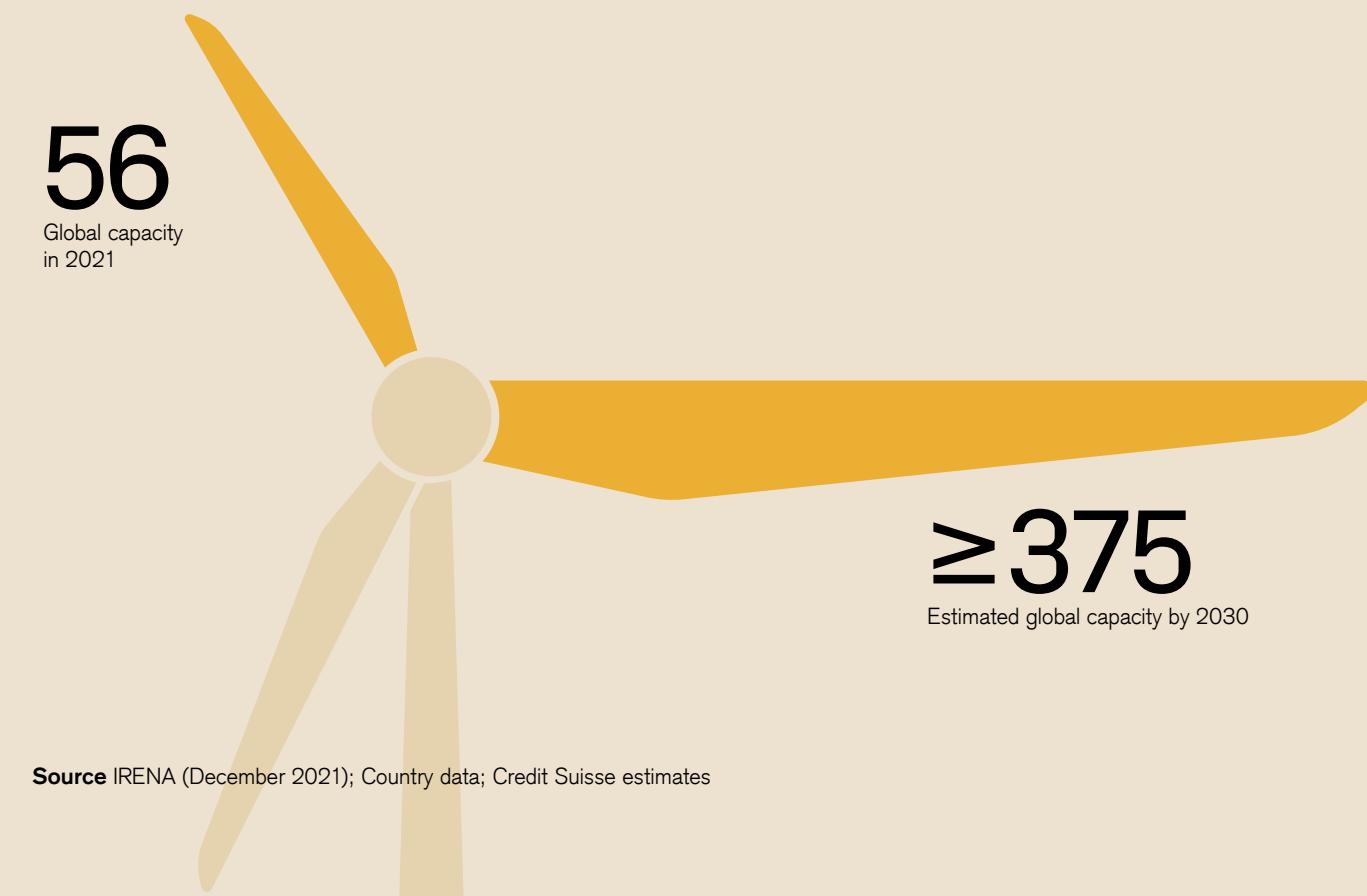
Estimated yearly solar and wind global additions to align to low-carbon scenarios (in GW)



Source IRENA (December 2021); Country data; Credit Suisse estimates

Wind picking up

Estimated potential offshore wind capacity by 2030 (in GW)



Source IRENA (December 2021); Country data; Credit Suisse estimates

Find out more





Forecasts

2023 in numbers

We foresee sub-potential growth (1.6%) globally, which will likely lead to higher unemployment rates. Inflation will remain more elevated than in the pre-pandemic years, but lower than in 2022.

Forecasts for growth and inflation

Real GDP (y/y %)	Inflation (annual avg. y/y %)		
	2021	2022E*	2023E*
Global	5.9	2.7	1.6
United States	5.7	1.6	0.8
Canada	4.4	3.4	1.0
Eurozone	5.3	3.2	-0.2
Germany	2.9	1.7	-0.8
Italy	6.6	3.7	-0.2
France	6.8	2.5	0.2
Spain	5.1	4.6	0.8
United Kingdom	7.4	4.2	-0.4
Switzerland	4.2	2.2	1.0
Japan	1.7	1.0	0.5
Australia	4.7	4.0	1.6
China	8.1	3.3	4.5
India (fiscal year)	8.3	7.1	5.8
Brazil	4.6	2.9	0.9
Russia	4.7	-4.0	-2.5
Global	3.5	7.6	5.0
United States	4.7	7.9	3.8
Canada	3.4	6.9	3.8
Eurozone	2.6	8.6	6.0
Germany	3.2	8.5	6.4
Italy	1.9	8.2	6.0
France	2.1	6.0	4.8
Spain	2.9	9.0	4.6
United Kingdom	2.6	9.0	6.6
Switzerland	0.6	2.9	1.5
Japan	-0.2	2.2	1.7
Australia	2.8	6.6	5.2
China	0.9	2.2	2.0
India (fiscal year)	5.1	6.8	5.1
Brazil	8.3	9.3	5.0
Russia	6.7	14.2	4.5

* E: estimate

Note: Historical and/or projected performance indications and financial market scenarios are not reliable indicators of current or future performance.

Last data point 10/11/2022 **Source** Thomson Reuters Datastream, Haver Analytics, Credit Suisse

Financial market performance/forecasts

Equities*	2022 YTD performance on 10 November 2022	2023 expected total returns	Credit	2022 YTD performance on 10 November 2022	2023 expected total returns
				10 November 2022	10 November 2022
US equities	-17.1%	2.0%	Global investment grade bonds**	-15.6%	4.6%
EMU equities	-10.8%	-2.0%	Global high yield bonds**	-13.4%	5.1%
Swiss equities	-13.0%	5.0%	Emerging market HC bonds***	-21.2%	7.6%
UK equities	5.7%	3.0%			
Japanese equities	-1.3%	1.5%			
Emerging market equities	-19.7%	1.0%			

Bond yields	Close on 10 November 2022	End-2023 forecast	Currencies & commodities	Close on 10 November 2022	End-2023 forecast
				10 November 2022	10 November 2022
10-year US Treasury yield	3.81%	4.10%	EUR/USD	1.02	1.02
10-year German Bund yield	2.01%	2.80%	USD/CHF	0.96	0.95
10-year Swiss Eidgenossen yield	1.07%	1.40%	EUR/CHF	0.98	0.97
			USD/JPY	141.00	135.00
			GBP/USD	1.17	1.14
			USD/CNY	7.19	7.30
			Gold (USD/oz)	1755.00	1750.00
			WTI (USD/bbl)	86.00	80.00

* Performance and expected returns are total return including dividends. Markets refer to MSCI country / regional indices in local currency. Performance of the periods. 10/11/2017–10/11/2022 for those indices in chronological order are: MSCI USA: 9.5%, 13.6%, 18.6%, 33.5%, -15.4%. MSCI EMU: -5.9%, 15.4%, -3.5%, 29.2%, -11.4%. MSCI Switzerland: 2.9%, 17.9%, 2.7%, 23.9%, -10.1%. MSCI UK: -0.3%, 7.8%, -13.1%, 21.3%, 7.0%. MSCI Japan: -4.6%, 5.8%, 2.9%, 22.3%, -1.5%. MSCI EM: -7.9%, 12.6%, 15.0%, 11.0%, -21.7%.

** Barclays Global Investment Grade Corporate and Global High Yield index

*** JP Morgan EMBIG Div. (sovereign index)

Note Historical and/or projected performance indications and financial market scenarios are not reliable indicators of current or future performance.

Last data point 10/11/2022 **Source** Bloomberg, Datastream, Credit Suisse

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References

¹ Solar Industry Supply Chain That Will Beat Climate Change Is Already Being Built – Bloomberg

² UK's Biggest-Ever Renewables Auction Is Also the Cheapest – Bloomberg

³ Solar power generation (ourworldindata.org)

⁴ Renewable electricity – Renewable Energy Market Update – May 2022 – Analysis – IEA

⁵ Solar Industry Supply Chain That Will Beat Climate Change Is Already Being Built – Bloomberg

⁶ Solar Is Now 33% Cheaper Than Gas Power in US, Guggenheim Says – Bloomberg

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