Forecast
Market Outlooks

Q4 2022

Forecasts Quarter 4, 2022

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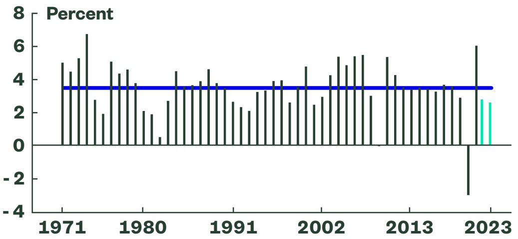
Global Economic Outlook

Figure 1
Global Slowdown Accelerates

World Real GDP Growth (WEO)
World, Real World GDP, State Street Global Advisors Forecast
Long Term Average Growth (3.5%)



Source: IMF, WEO, State Street Global Advisors, as at 30 September 2022. The above forecast is an estimate based on certain assumptions and analysis made by the State Street Global Advisors Economics Team. There is no guarantee that the estimates will be achieved.

- Global economic growth likely falls further below trend in 2023 as the aggressive monetary tightening weighs on activity and consumption.
- Europe's energy crisis and the strong dollar are but two of many challenges, while supply chain normalization and slowing demand suggest a disinflationary episode ahead.

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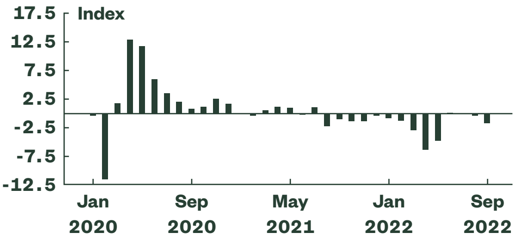
Emerging Markets Outlook

Figure 2
China Weakness a Drag on EM Performance in 2022

Composite PMI Output Index: China minus Emerging Markets



Sources: Macrobond, State Street Global Advisors, IHS Markit, as at 30 September 2022.

- Sluggish Chinese growth weighs on EM growth performance in 2022, but improvement seems likely in 2023.
- Uneven terms of trade shocks, strong dollar, and slowing global growth remain headwinds for emerging markets as a whole.

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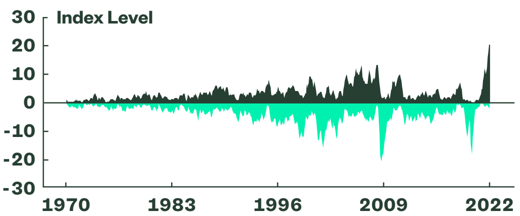
Global Capital Markets

Figure 3
Global Policy Rate Rises & Cuts (1970–2022)

Rises
Cuts



Source: Bank for International Settlements, World Bank.
Note: Three-month average of the number of policy rate rises and cuts over the month for 38 countries including euro area. The last observation is July 2022.

- With the collapse of equity values in 2022, we are observing meaningful improvement from bottom-up drivers for equity markets. However, we remain cautious given still-elevated risk regimes.
- The outlook for commodities is more balanced amid weakening economic growth and higher financing costs, but we remain constructive on tight supplies, firm momentum and ongoing geopolitical risks.

Global Economic Outlook

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The global economy is rapidly slowing as a momentous monetary tightening cycle is unfolding at top speed, particularly in developed markets. An all-out war to slay inflation will inevitably cause some collateral damage in terms of growth and employment. But, given the reasonably robust starting point, the feeling — for now at least — is that this is an acceptable tradeoff. Some short-term pain for long-term gain, some short-term volatility for longer-term stability.

Mounting Risks of Overtightening

This may be true, up to a point. What concerns us is the speed and aggressiveness of these hiking moves in a world where equilibrium is very hard — perhaps even impossible — to ascertain right now. After all, we are still dealing with the protracted war in Ukraine (and its particularly troublesome implications for European energy supply) and with the lingering effects of the pandemic (on everything from supply chains to migration). And so, there are plenty of wild gyrations in the macro data but no clear indication of where these indicators might ultimately settle. We are reluctant to extrapolate too much from this moment in time.

Against this backdrop, the risks of overtightening seem considerable in our estimation. While inflation remains unacceptably high at the moment, a whole range of leading inflation indicators — not least oil prices themselves — suggest that a powerful disinflationary episode lies ahead. Evidence that inflation expectations are de-anchoring seems scant. And while the debate about a new, higher global inflation regime is pervasive, the timeline and magnitude of such a potential shift is highly uncertain.

Unsurprisingly, we've lowered global growth forecasts, particularly for next year. We now see global growth at just 2.6% in 2023, half a percentage point less than three months ago and meaningfully below trend. The scale of the downgrades varies by country, with a "growth recession" seen in the US and Europe. The US economy is set to grow by just 0.4% next year from an earlier estimate of 1.5%, while in Europe the twin drags of rising interest rates and energy shortage fears have sapped business confidence and looks set to dampen the robust consumer spending seen through much of 2022. German GDP likely shrinks in 2023 by 0.1% as manufacturing-related headwinds take a toll, with the eurozone itself expanding by just 0.3%. Among other developed market economies, Canada and Australia are notable outliers with robust (though still reduced) GDP growth of 2.3% and 2.4%, respectively, seen next year. The near 20% appreciation of the US dollar year-to-date intensifies the pain and could unveil some unanticipated vulnerabilities. This is a risk that warrants close watching.

United States: Leading Indicators Tell Story of Moderation

The biggest macro story in the United States over the past three months has not been the data flow per se, but the reaction of the Federal Reserve (Fed) to it. The hawkishness reached fever pitch with the third consecutive 75 basis points (bps) hike in September and a new 'dot plot' of member expectations that incorporates another 125 bps of hikes through the year-end. Another 25 bps hike is expected to follow in 2023. Most astonishingly, after peaking at 4.6% next year, the federal funds rate is seen remaining close to 4.0% even in 2024, and still above the neutral rate in 2025. And yet, inflation forecasts have been revised higher as if totally insensitive to higher rates. We are especially perplexed because, even as inflation forecasts have edged higher, FOMC members' perceptions around the risks to those forecasts remains heavily skewed to the upside. There is a wide range of views within the FOMC with respect to the trajectory of Fed Funds, even in the near term, to the point where dissenting votes may soon appear. The range in the dots is a full 100 bps in 2023 and 200 bps in 2024, implying many possible scenarios.

To us, leading indicators of inflation tell a consistent story of a moderation, whether we look at commodity prices (oil prices ended September near January lows), ISM price metrics, regional Fed surveys, import prices, producer prices, pricing plans by small businesses, etc. Even rental inflation, as measured by the Zillow observed rents index, is now precipitously slowing. Wage inflation appears to have peaked, at least as measured by average hourly earnings. Global supply chain pressures are also easing. These are the same indicators that warned in mid-2021 of an inflation spike and were arguing for higher interest rates. The indicators are now sending a very different message, but the Fed seems once again disinclined to listen. Because of that, the slowdown we were already anticipating likely gets a little worse.

Economic Activity Slows

Housing is already facing intense cyclical pain and manufacturing is not far behind. Residential fixed investment declined 5.0% y/y during the first half; the second half is shaping up to be worse. Although we see structural undersupply conditions in the US residential housing sector, the unprecedented surge in mortgage rates is just too much of a short-term demand destroyer to avoid a retrenchment in building activity. Other areas of business investment may do better, but momentum will inevitably slow.

Most importantly, consumer spending growth slows sharply. Real household consumption grew just 3.2% y/y during the first half, down from 7.9% in 2021 as a whole. Further moderation will likely see this slow to a full-year expansion rate of 2.5% and then virtually stagnate in 2023. We see household goods consumption declining outright this year and next while services consumption also moderates under the weight of declining real disposable income.

Trade and inventories have been major swing factors behind quarterly GDP performance over the last few quarters. As the dash to rebuild inventories cools — only the automotive sector still has a ways to go on the inventory rebuilding journey — stock-building becomes less relevant. The mirror image of this is that import growth moderates sharply, turning trade into a positive contributor to growth in 2023. The strength of the dollar and uncertainties around the health of external demand remain important risk factors to this outlook, however.

Growth Recession, At Least

All this translates to a below-potential 1.5% GDP growth this year, and a sharp slowdown to 0.4% in 2023. A growth recession at the very least, likely to become an official recession. The labor market remains extremely tight, with the unemployment rate dropping back to 3.5% in September. However, both job openings and quits data suggest that the moment of "peak exuberance" in the labor market has passed. We expect employment growth to slow materially and push the unemployment rate to 4.4% by end-2023. This is not too dramatic.

A parallel moderation in labor market churn will hopefully help lower wage inflation more than the unemployment figure alone might suggest. This is the dynamic that could keep the prospect of a soft landing alive. Inflation is high but has peaked. There won't be substantial improvement in the very near term, but the moderation becomes far more visible by late Q1 2023 and the trend intensifies thereafter. We lean optimistic in our inflation forecast, anticipating headline CPI to average 3.0% next year, down from 7.9% in 2022. The Bloomberg consensus anticipates a gentler moderation (3.8%) amid an extraordinarily wide range of outcomes (2.2% to 7.5%).

Given this inflation forecast (and worries about the speed of hikes), we think there remains a slight chance that the Fed may stop just shy of the 4.6% Fed Funds peak signaled in its Summary of Economic Projections (SEP). Even if it does, we see a window of opportunity arising for it to unwind at least a couple rate hikes by late 2023.

Eurozone: Starting the Descent

We previously highlighted the main reasons behind the resilience of the eurozone's economic performance this year. The reopening dynamics and consumers' substantial savings were particularly influential in facilitating the 4.8% y/y increase in real GDP during the first half of 2022. Real household consumption, which hadn't even recouped half of its 2020 losses last year, accelerated meaningfully during the second quarter as COVID restrictions were lifted and tourism activity soared. Fixed investment dipped in the first quarter but made up those losses in the second and, relative to a year earlier, increased 3.5% during the first half.

Neither of these dynamics are likely to persist, however. Consumer spending, still buoyed by summer travel and tourism, is unlikely to have retrenched much in the third quarter, but we expect it to start buckling in the fourth and into early 2023. However, this need not be a collapse, especially given the double-digit household savings rate. And, straddling as it does the two calendar years, this pattern still allows for a robust 3.0% expansion in 2022, a touch better than what we forecast back in June. We expect 2023 to start poorly but improve thereafter as the energy crisis abates over time. Fiscal measures to shield consumers from high energy prices have materially scaled up in recent weeks and this will help put a floor under household consumption. Risks around energy supply interruptions and forced shutdowns of industrial activity remain substantial, but the region's success in boosting natural gas storage despite massive reductions in Russian supply offer some reassurance that the worst case scenario has become a little less dire than it might have been a couple of months ago.

Growth in the Balance

Still, economic expansion likely slows to 0.3% in 2023, which is as weak as it gets this side of contraction. Risks may be skewed to the downside but it is important to recognize that there are some upside risks as well — it would not take an unmitigated disaster to give us a negative full-year outcome, but nor would it take an ideal scenario to deliver something considerably better. One thing seems certain: we anticipate considerable volatility in quarterly performance as trade and inventories could — and likely will — become major swing factors over the next year.

The inflation problem remains acute and, compared to the start of 2022, there is also more evidence of wage acceleration, raising concerns over a potential price/wage spiral. The prevalence of wage indexation in Europe vis-à-vis the US raises risks as it makes wage inflation stickier. On one hand, it may take longer for wages to respond to higher inflation (we saw this last year), but they can also take longer to moderate once the inflation shock abates, and in the process delay or even prevent the full normalization in both. This bears close watching. On the other hand, there appears to be a general recognition on both sides of the table that today's inflation environment is not the norm that longer-dated wage negotiations should be benchmarked against. After all, a disproportionate share of eurozone's inflation spike reflects a supply shock that ameliorates over time. Admittedly, the magnitude is so intense and the healing process delayed enough that the 2023 annual average inflation rate is still in the neighborhood of 5.0%. However, by 2024 a full-on deflationary episode should be unfolding.

United Kingdom: Changing Risks to Growth

As economic activity continued to soften, we have again trimmed our 2022 growth projection, reducing it to 3.3% from 3.8% in June. Growth then comes to an effective standstill next year. As the third quarter neared an end, there was a negative market reaction to the new government's fiscal announcement that included deficit-financed tax cuts alongside an estimated £60 billion energy price support package. The government's subsequent U-turn on the planned income tax cut for high earners and the Bank of England's (BoE) intervention to ensure liquidity through long-dated bond purchases eased pressure on sterling and Gilt yields. Whether the risk of a sharper slowdown has increased remains to be seen.

Real GDP contracted 0.1% in the second quarter, and while the outcome was a bit less severe than expected, the details were disappointing with weak final demand. Government consumption declined for a second consecutive quarter in Q2 and was the largest detractor from quarterly growth. Household consumption declined 0.2%, the first retreat since early 2021. Exports recovered a little while imports retreated from the first-quarter surge. Business investment rose 3.8% q/q, but inventories spiked again. Given the government intervention with the new energy cap, near-term inflation risks have been reduced relative to the prior expectation, but compared to our June forecasts, we've made substantial upward revisions to both 2022 and 2023 inflation. Headline CPI inflation is now expected to average 9.3% this year and 8.6% the next.

There are signs the labor market may be starting to weaken at the margin. The unemployment rate retreated 0.2 percentage points (pp) to 3.6% in July (the lowest level since 1974), but the economic inactivity rate rose by 0.4 pp to 21.7%. Importantly, labor demand continued to cool with job vacancies in the three months to August down by 34,000, the largest quarterly fall since June–August 2020. Wage growth continued to exceed expectations, although it still lags inflation.

The BoE delivered a second consecutive 50 bps hike in September, bringing the Bank rate to 2.25%. There was an unusually large number of dissents, with three members preferring a larger 75 bps hike and one favoring a smaller 25 bps increase. With inflation likely to accelerate further over the coming months, we expect that the bank will bring the policy rate to 3.75% by year-end.

Japan: Devolving Vulnerabilities

Our outlook on Japan remains bleak despite support from investment and possible government subsidies to underpin spending. This view stems from two factors: deteriorating terms of trade and weakening external demand.

Consumption has historically slowed during inflationary episodes in Japan, but it has been resilient through this period thus far as the economy emerges from the effects of the pandemic. The weak yen and high inflation will challenge this resilience. We expect consumption to rise 4% annual levels by Q3 and factor in a mean-reversion by H1 2023 on account of rising inflation. We also anticipate a 0.2% rise in spending from the recently announced reopening of borders from October, which will increase inbound tourists' spending. However, we do not expect the number of travelers to rebound to the pre-pandemic levels of about 87,500 tourists per day — the government currently caps the daily number at 50,000. Furthermore, the supplementary budget expected in October and the reintroduction of nationwide travel subsidies, the details of which are awaited, will likely cushion consumption.

The trade deficit has widened on the back of a weakening yen and already high energy and food prices. It worsened to a record in August amid a weakening yen and high energy and food imports — imports soared 49.9% y/y against a 22.1% rise in exports. Exports to the US have been steady on account of auto shipments, but this may not be sufficient to bring about an overall improvement. Furthermore, we are already noticing slowing European exports because of weak regional demand. Making matters worse, evolving growth dynamics in China is another headwind, though one that may improve in 2023. Overall, we look for trade to be a significant headwind to growth.

Some better recent news on capex allows us to keep our 2022 growth forecast at 1.2%, as projected back in June, but we have sharply trimmed the 2023 growth expectation to 0.9% from 1.8% previously. Consumer prices will remain elevated on the back of higher electricity prices and costlier imports. While the weak yen is inflationary, LNG imports could make it severe as prices may remain high as they usually lag global crude oil prices, especially amid high global demand. Further, low telecom prices will begin to tail off, and food costs may contribute more to inflation as restaurants have been increasing prices.

The government has already capped imported wheat prices and is planning a supplementary budget in October to battle inflation. Some ruling party members have called for packages as big as 30 trillion yen. Because of these, we revise our 2022 CPI forecast four-tenths lower to 2.4% and leave 2023 unchanged at 1.5% as prices will cool due to base effects and moderation in import prices.

Conundrum for Bank of Japan

Weak growth and high inflation is not a great combination for the Bank of Japan (BoJ). At its September meeting, the central bank reaffirmed that its ultra-loose monetary policy would not change any time soon, including its Yield Curve Control Policy (YCC). We expected BoJ Governor Haruhiko Kuroda to at least amend guidance in the context of the global tightening wave, but instead he opined that guidance did not need to be changed for two to three years.

After the press conference, the finance ministry intervened in the FX market for the first time since 1998 as the yen weakened to around 145.90 on the rising policy divergence with global central banks; the yen rallied 3.6% as a result. In fact, Japan is now the only country in the world with a negative policy rate. But in reality, intervention may not have much effect due to its limited scope and the possibility of being named as a currency manipulator.

This makes us wonder how long can the BoJ sit on the sidelines. We think there is still a chance of a BoJ pivot should the global rate-hiking frenzy continue on stubborn inflation. That said, our base case, for now, is for global rate hikes to moderate as recessionary risks rise, and the BoJ could have missed an opportunity to normalize its policy.

Emerging Markets: Challenging Headwinds Remain

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The global macroeconomic and geopolitical environment remains challenging for the emerging market (EM) universe. The monetary policy tightening cycle, the slowdown in global demand, tensions between the US and China, in addition to the Russia-Ukraine War and unrelenting USD appreciation, make for a difficult near-term backdrop.

But nothing is stagnant for long and conditions will likely begin to improve over the next six to 12 months. A key signal in that direction would be incoming data evidence that the inflation surge of the past year is beginning to subside. We are, in fact, optimistic that inflation — in the US and globally — will trend visibly and materially lower by mid-2023. This would, in turn, facilitate a reset of expectations with respect to how long policy interest rates need to remain deeply in restrictive territory. As markets adjust to this future dovish shift, the dollar would likely take a bit of a breather, aiding the stabilization of inflation and supporting financial stability in emerging economies.

Demand — particularly for goods — is unlikely to rebound in any meaningful fashion over the course of next year, not when goods demand broadly (but especially in the US) needs to normalize lower to correct the COVID-induced overshoot. However, commodity demand is likely to remain robust, supporting prices and export revenues for a wide swathe of EM countries.

Despite the underwhelming demand outlook, we anticipate some moderate improvement in EM growth performance in 2023, driven primarily by an acceleration in China. This, in turn, reflects easier base comparisons following a sub-par 2022 performance, a modest recovery in housing investment, and — most importantly — an easing of domestic COVID-related mobility restrictions. Finally, 2023 should bring about some improvement in the geopolitical landscape. With key political events (Party Congress, mid-term elections) out of the way, there are compelling reasons for both countries to seek to scale back the rhetoric. Likewise, whereas there is no clear off-ramp in the Russia-Ukraine War at the moment, such an opportunity will likely present itself over the course of next year. The extended duration of the conflict and associated human and economic costs should create incentives for some degree of deescalation, which would help restore confidence.

Global Capital Markets Outlook

Jerry Holly
Senior Portfolio Manager
Investment Solutions Group

With the collapse of equity values in 2022, we are observing meaningful improvement from bottom-up drivers for equity markets. However, we remain cautious given still-elevated risk regimes.

General Versus Local

Price signals may well have their faults, but one can't argue with their efficient impact on behavior. If prices for used cars go up, the calculus for repairing that old clunker becomes more attractive. Higher costs for your favorite cut of steak at the grocery store might prompt a substitution effect toward poultry, or perhaps even a more dramatic (and environmentally friendly) shift to vegetarian fare. You learn from your oral surgeon that the cost of general anesthesia for a given procedure is not covered by your insurance. Well, now we have got a decision to make. Such was the situation confronting your author in the not-so-distant past. For someone with a weak stomach, the thought of staying awake during an invasive dental procedure was not ideal, to say the least. But the price signal won the day, a localized shot of Novocain would have to do the trick.

When the economy, or financial markets, run into trouble policymakers are usually there to see what they can do to help. The worse the scenario, the more urgent the need to act. And for the better part of the last two decades, policymakers have stepped up with force. Central banks have kept interest rates low, purchased huge sums of financial assets and guaranteed access to foreign exchange. Fiscal authorities have ramped up spending, purchased "troubled" assets and bailed out weak sectors and countries. The reflexive nature of this process is one reason why navigating global capital markets can be so challenging. Even if you are dead right about the direction of macroeconomic fundamentals, the Federal Reserve, European Union or International Monetary Fund (IMF) might intervene. Many, but certainly not all, of these interventions have been analogous to easing pain by way of general anesthesia — blunt tools which are also highly effective. But the price of using blunt tools today has risen. Inflation risks have central bankers on the defensive. Fiscal support, for its part, has been identified as one of the driving forces behind the current inflation.[1] It appears that, for the time being, the global economy will have to live with more targeted, or local, policy assistance.

This regime of more localized policy is well underway and is critical to consider for cross asset investing. Windfall taxes on energy companies to help fund energy relief for consumers will influence equity market returns and consumption patterns. Actions to prop up currency values in Japan, India and China could spread wider still. And the targeted quantitative easing recently implemented by the Bank of England seems to illustrate that central banks are not yet helpless when it comes to suppressing market volatility.

Will it be enough to turn the tides of global equity markets? Our opinion is that we are not yet there. But, as you will see, there are upside risks to our base case which we are monitoring.

Regime Reversals Less Likelv

If there is any argument to be more bullish on markets at this point, the contrarian interpretation of sentiment data likely plays a role. The influence of short squeeze behavior during the markets' double-digit advance this July offers up a useful case in point. And the pervasive bearishness on offer from a multitude of survey-based and positioning indicators certainly gives us pause. If we look at buy-side positioning in US equity futures, we can observe one example of the pessimistic sentiment toward the market (see Figure 4). Though the extent of short positions has eased up since the relative extremes witnessed in August, the buy-side overall remains distinctly short, which could very well lead to short-term bursts to the upside.

Figure 4
Short Equity Positions (2016–2022)

E-mini S&P 500 Stock Index, CME Non-commercial, Net Long/ Short Contracts

Source: FactSet, CFTC as of 7 October 2022. Past performance is not a reliable indicator of future performance.

Other sentiment indicators, particularly those incorporating some degree of implied volatility, offer up mixed signals in this regard. Our internal sentiment gauge, the Market Regime Indicator (MRI) is structurally designed to back off defensive, or short, positions when sentiment becomes overly bearish. And for most of this year, we have been bouncing between regimes which either promote outright defensive positioning (high-risk regime) or imply that sentiment might be too extreme (crisis regime). But the persistence of these higher volatility regimes has been alarming — a setup that echoes the movements of our MRI during the Global Financial Crisis in 2007 and 2008. Couple the ominous historical parallels with the constrained policy environment and it would seem that there are fewer levers in operation today to help markets revert out of the more dangerous regimes. With this as the backdrop, we have respected the shifts into crisis regimes but have moderated our allocations to maintain a more defensive posture than might otherwise be the case.

Global Equities: Value and Valuations

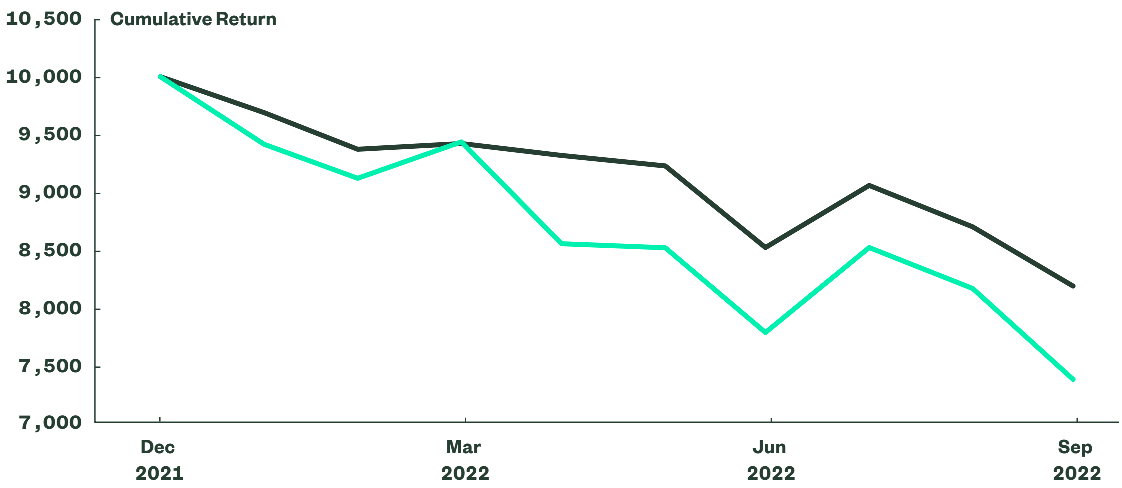
While our regime-aware allocations have us positioned somewhat cautiously, our underlying equity modeling has started to incrementally improve. That our value-oriented factors are helping to prop up the outlook for equities comes as no surprise. If this was not the case after losing a quarter of their value, we need to double-check the math. But valuations are not the only area where there are signs of a turning point in the health of equity markets. Greater dispersion of stocks, particularly in the weightier sectors, is an encouraging trend in our view. Wider spreads in credit markets also suggest a propensity for a nearer-term mean reversion in equity markets. However, these reflect modest improvements compared with our assessment earlier in the year — not forceful messages to take on greater equity risk.

The impact of losing the general anesthesia of low interest rates is quite evident in the structuring of our equity book. Within equity markets, a preference for value over growth exposures characterizes our sector and regional posture. Energy, financials and utilities dominate our rankings from a cross-sector standpoint — lifted by relatively favorable sentiment surrounding earnings and sales growth for all three. Localized policy goals may also serve as tailwinds for these exposures. Certainly, the imposition of windfall taxes on energy companies eats into investor profits. However, even with an additional haircut, prospective income from the sector looks better than can be found elsewhere. Ongoing geopolitical risks, supply constraints from the Organization of the Petroleum Exporting Countries (OPEC) as well as the Biden administration's plans to restock the Strategic Petroleum Reserve could well insert a floor into oil price dynamics. Despite inversion at the longer-term maturities on the yield curve, a still steep short-end coupled with low deposit betas may well support financials in the near term. Utilities likely face a more mixed market and policy environment, with some even requiring state intervention to stay afloat. But for the sector overall, the low beta equity exposure helps to balance out our risk from a total portfolio standpoint. The strength of those same sectors in our quantitative research also informs our regional positioning, where we have relatively less exposure to the United States and hold more favorable views of European and Pacific equities. Though these regions, and Europe in particular, face daunting risks ahead, the local equity markets have held up quite well (see Figure 5). And if currency markets have absorbed most of the known macroeconomic and geopolitical risks to date, we might well see a rebound in the returns for unhedged-USD investors.

Figure 5
Equity Market Performance: US vs. Europe

MSCI Europe Index — USD Hedged Price Return — Cumulative Return

MSCI USA — Price Return — Cumulative Return



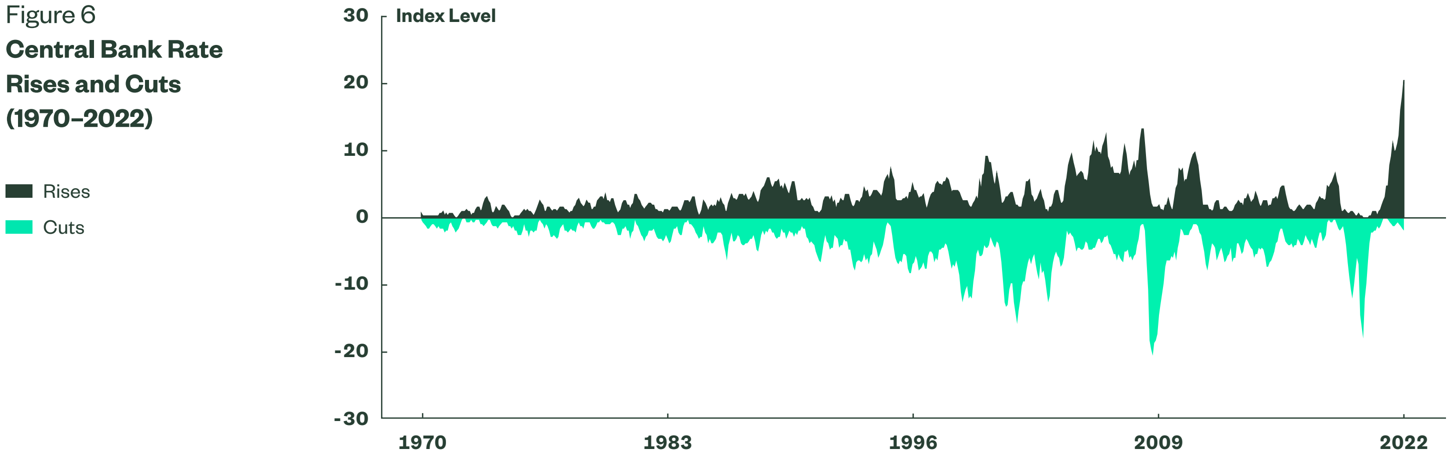
Source: FactSet as of 30 September 2022. Past performance is not a reliable indicator of future performance. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable. Past performance is not a reliable indicator of future performance.

Big Moves in Bond Markets

Much as we see with respect to risk regimes, there are several ominous parallels that can be drawn from developments in bond markets. These analogs span different aspects of the market, including the direction of monetary policy, the pricing of volatility as well as the shape of the yield curve. Never before have central banks exhibited such synchronicity in tightening monetary policy. The MOVE Index of implied interest rate volatility has rarely eclipsed equity market volatility to this degree. And the inversion we are currently witnessing in the spread between long-term interest rates and short-term interest rates has not been this negative since the early 1980s. However, inferring what may lie in store for bond markets over the next quarter or year requires more reflection on our operating assumptions.

It comes as no surprise that economies and markets around the world are now contending with a wave of monetary tightening. But Figure 6 illustrates just how pervasive that wave has become. Never before have we witnessed such tightening from central banks in unison; the only time we ever came close was in mid-2008 in the run-up to the Global Financial Crisis when oil prices were pushing $150 per barrel. But what inference can be drawn from this data, and this historical comparison? On the one hand, the fact that central banks are tightening — and seem (mostly) like they will continue to do so — might lend some further upside to short-term interest rates with some follow-through across the curve. But if we look back more closely, it only took two months in 2008 for those same central bank trends to reverse course and start to lower policy interest rates, from a net perspective. The inflationary backdrop today makes that touch harder to envision, but not impossible.

Figure 6
Central Bank Rate Rises and Cuts (1970–2022)

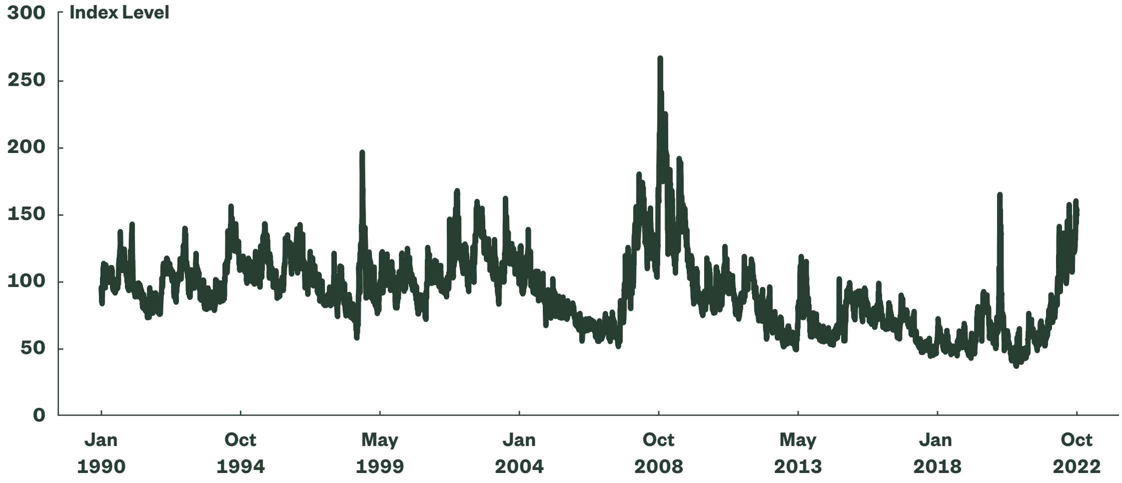


Sources: Bank for International Settlements, World Bank. Note: Three-month average of the number of policy rate rises and cuts over the month for 38 countries including euro area. The last observation is July 2022.

If we shift gears to evaluate the market pricing of the implied volatility of interest rates, we can see that there is a great deal of uncertainty. The MOVE Index, which measures implied volatility on 1-month Treasury options, has surged to around 150 — right around the peak levels reached during COVID, even if it remains well below the highs reached in 2008 (Figure 7). At these levels, it suggests that over the next month option markets are pricing intermediate Treasury yields to change by roughly 9–10 basis points per day. Contrast that to the sub-50 levels that prevailed in late 2020, which imply 2–3 basis point moves on any given day, and you get a good sense of how the environment has changed. But does the higher implied volatility represent better remuneration amid elevated uncertainty and juicier yields, or does thin liquidity and quantitative tightening mean we are likely in a higher volatility environment for the near future? In our portfolios, we do see some value, especially at longer maturities, but remain underweight duration overall and have very limited exposure to credit assets. With the high-yield new issue market essentially at a standstill and questionable collateral practices in some corners of credit markets, we continue to view bond markets with caution.

Figure 7
Surge in Implied Volatility on 1-Month Treasury Options

MOVE Index



Source: Bloomberg Finance L.P., as of 10 October 2022. Past performance is not a reliable indicator of future performance.

Commodity Outlook More Balanced

One area that had not benefited as much from the generalized support of low interest rates is commodity markets. Whether underlying growth patterns were up, down or sideways, broad commodity indexes lost more than half of their value between the commodity price highs seen prior to the Global Financial Crisis and the end of 2020. Globalization, low inflation and hefty capital expenditures all contributed to the weakness in commodities. Meanwhile, equity markets valuations multiplied by anywhere from two to five times over the same period of easy money. But since then, real assets have roared back and commodities might well be primed to continue shining. Longer term, price momentum remains firm and roll yields are better than average. Other factors such as constrained supply and ongoing geopolitical risks may continue to offer some support, but previously positive factors like the pace of global economic growth as well as financing costs have moved in a more negative direction for the complex. For our part, we continue to see commodity markets as an attractive proposition, but have moderated our stance given incremental weakness in some of the pillars noted above.

It may look like a relatively bleak outlook with cautious positioning across stocks and bonds and a less bullish outlook for commodities. With major policy forces largely working against both equity and bond markets, it is not too surprising that they are struggling to stand on their own. But, as mentioned, value is building and localized policy supports should not be underestimated. Coming back to my own earlier example, in retrospect I was glad to have chosen the local anesthesia — it worked just fine and cost a lot less money.

Sources: Bloomberg, FactSet, J.P. Morgan, Barclays, MSCI, Morgan Stanley and The Economist, as of September 30, 2022.

Endnote

1 Bianchi, Francesco and Leonardo Melosi. *Inflation as a Fiscal Limit*. August 19, 2022.

State Street Global Advisors Forecasts as of 30 September 2022

	2022 (%)	2023 (%)
Real GDP Growth		
Global	2.8	2.6
US	1.5	0.4
Australia	4.0	2.4
Canada	3.7	2.3
Eurozone	3.0	0.3
France	2.7	1.0
Germany	1.6	-0.1
Italy	3.3	0.3
UK	3.3	0.1
Japan	1.2	0.9
Brazil	2.7	1.7
China	3.9	5.2
India	7.3	6.0
Mexico	2.2	1.3
South Africa	2.0	2.0
South Korea	2.7	1.3
Taiwan	2.9	1.8
Inflation		
Developed Economies	7.9	4.3
US	7.9	3.0
Australia	6.6	3.5
Canada	7.0	3.5
Eurozone	8.3	4.8
France	5.9	4.2
Germany	8.3	4.8
Italy	7.5	4.5
UK	9.1	8.6
Japan	2.4	1.5
China	2.2	2.3

	30 September 2022 (%)	30 September 2023 (%)
Central Bank Rates		
US (upper bound)	3.25	4.25
Australia	2.35	3.60
Canada	3.25	4.25
Euro	1.25	2.75
UK	2.25	4.50
Japan	-0.10	-0.10
Brazil	13.75	12.50
China	4.35	4.35
India	5.90	5.90
Mexico	9.25	9.50
South Africa	6.25	6.75
South Korea	3.00	3.25
10-Year Bond Yields		
US	3.80	4.42
Australia	3.89	4.50
Canada	3.17	3.62
Germany	2.13	2.95
UK	4.14	5.23
Japan	0.24	0.29
Exchange Rates		
Australian Dollar (A$/$)	0.64	0.71
British Pound (£/$)	1.12	1.25
Canadian Dollar ($/C$)	1.37	1.24
Euro (€/$)	0.98	1.10
Japanese Yen ($/¥)	144.75	120.00
Swiss Franc ($/SFr)	0.98	1.03
Chinese Yuan ($/¥)	7.09	6.90

One-Year Return Forecasts	USD (%)	EUR (%)	GBP (%)	JPY (%)	AUD (%)	CAD (%)
S&P 500	6.6	-5.0	-4.8	-11.6	-3.4	-3.8
Russell 2000	7.5	-4.2	-4.0	-10.9	-2.6	-3.0
MSCI EAFE	7.6	-4.1	-3.9	-10.8	-2.5	-2.9
MSCI EM	9.6	-2.4	-2.1	-9.1	-0.8	-1.1
Barclays Capital Aggregate Bond Index	3.5	-7.8	-7.6	-14.2	-6.3	-6.6
Citigroup World Government Bond Index	1.7	-9.4	-9.2	-15.7	-7.9	-8.2
Goldman Sachs Commodities Index	5.7	-5.8	-5.6	-12.3	-4.2	-4.6
Dow Jones US Select REIT Index	5.4	-6.1	-5.9	-12.6	-4.5	-4.9

State Street Global Advisors Forecasts, as of 30 September 2022.
The above estimates based on certain assumptions and analysis made by State Street Global Advisors. There is no guarantee that the estimates will be achieved.

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- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager* with US $3.26 trillion† under our care.

* Pensions & Investments Research Center, as of December 31, 2021.
† This figure is presented as of September 30, 2022 and includes approximately $55.12 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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