Forecast
Market Outlooks

Q2 2022

Forecasts Quarter 2, 2022

Global Economic Outlook

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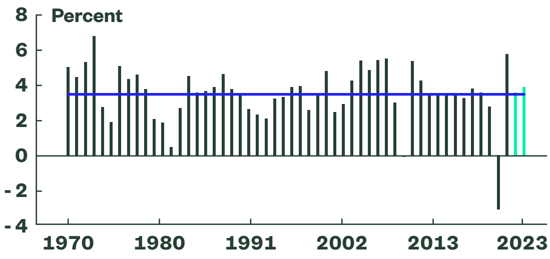
Figure 1
Global Growth Retreats Amid New Shock

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



Source: State Street Global Advisors Economics, Oxford Economics, International Monetary Fund. 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.

- The invasion of Ukraine represents a shock for the global economy, with inflation forecasts revised sharply higher and central banks poised to quicken the pace of monetary policy tightening.
- Policy normalization makes sense in this environment, but the aggressive tightening priced in the markets carries risks and threatens prospects for a soft landing.

Emerging Markets Outlook

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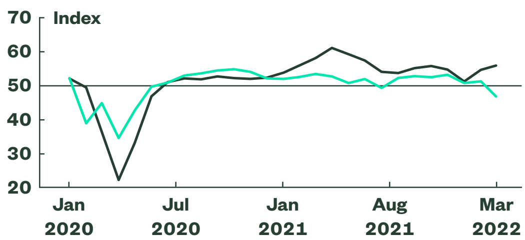
Figure 2
EM Purchasing Managers' Indices Stumble

World, Devloped, Composite PMI Output Index
World, Emerging, Composite (M+S) PMI Output Index



Source: State Street Global Advisors Economics, IHS Markit as of 31 March 2022.

- Fortunes within the emerging markets universe continue to diverge amid reducing commonality in growth drivers. Severe recessions are in store for Russia and Ukraine, while oil producers are benefiting from a trade windfall.
- Although EM central banks are further advanced in terms of policy tightening, rising commodity prices and their impact on food costs could pose social stability risks.

Global Capital Markets

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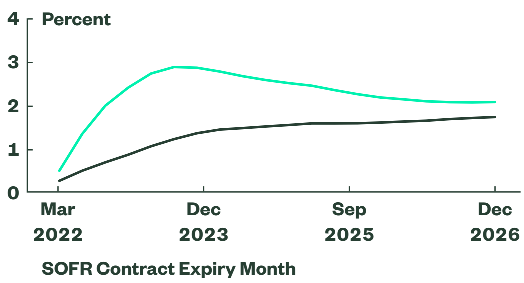
Figure 3
Rate Expectations Rise (Secured Overnight Financing Rate Futures Curve)

03/01/2022
31/03/2022



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 31 March 2022.

- Equity markets continue to look attractive despite recent weakness, but with elevated risk regimes and moderating macroeconomic influences, a more cautious stance is warranted.
- Fixed income sectors sent increasingly mixed signals as Q1 progressed with high nominal GDP levels suggesting the rise in rate levels may not have exhausted itself yet while slowing PMI levels and elevated inflation point towards lower rates.

STATE STREET GLOBAL ADVISORS

Global Economic Outlook

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The Russia-Ukraine War represents a powerful stagflationary shock for the global economy, one that worsens the monetary policy trade-off for almost every central bank in the world.

New Shocks: From COVID to War and Policy Tightening

With inflation forecasts revised sharply higher from already multi-decade highs, central banks have little choice but to quicken the removal of policy accommodation despite deteriorating growth prospects. This is particularly true for developed market central banks that had greatly lagged their emerging market counterparts in the policy normalization process. And so, tightening is finally gathering steam at the Bank of England, the Bank of Canada, and at the US Federal Reserve (Fed), not only via rates but also quantitative tightening. Spiking inflation has triggered a hawkish shift in the European Central Bank (ECB) rhetoric, though not real action just yet. The Bank of Japan (BoJ) might be the lone exception to the hawkish rule.

Advancing on the path to normalization makes perfect sense, but the aggressive tightening currently priced in the markets carries risks. Engineering a soft landing is difficult at the best of times; it may prove outright impossible in the context of the compressed post-COVID recovery cycle and in the dark shadows of the war. We favor a more cautious approach that preserves the soft landing narrative by pursuing more modest tightening and worry that excessive hikes could trigger a boom-bust sort of scenario. Our view is also steeped in the belief that monetary policy is ill-suited to resolve today's primarily supply-driven inflation. Raising the cost of capital too much may impair supply capacity just when we need it to expand. In any case, given the long lags with which monetary policy operates, the practical policy target is inflation a year from now. By then, the economic backdrop could — and likely will — be very different. We suspect we would be operating in a slower growth and a much softer inflation world by then. As such, what may appear as innocuous tightening right now (real rates still deeply negative) could quickly become rather burdensome down the line.

Risks to the growth outlook are skewed to the downside to a far greater extent than perhaps at any time since the initial COVID onset. A more defensive posture seems wise for global investors.

United States: Headwinds Versus Resilience

Following last year's 5.7% expansion, growth in the US economy will moderate this year but remain above trend. (That changes in 2023, but first things first.) Our mid-March forecasts called for 2022 growth close to 4.0%, though the even more hawkish Fed narrative transpiring since then introduces more downside risks to that projection. Still, the labor market remains strong (unemployment touched 3.6% in March), supporting incomes. Moreover, while the savings rate has now fully normalized and might dip below recent averages in the coming months, consumers in the aggregate still sit on considerable excess savings. This helps offset the erosion of purchasing power and cushions the deceleration in consumer spending that must inevitably occur following the extraordinary 2021 surge.

The inflation spike has proven to be more intense and more persistent almost anyone had anticipated. The war-induced surge in oil prices has triggered yet another increase, such that the Consumer Price Index (CPI) inflation hit 8.5% year-on-year (y/y) in March. Having averaged 4.7% last year, CPI inflation will likely exceed 6.0% in 2022. While normalization has been delayed and will begin from a much higher starting point, we still anticipate meaningful moderation during the second half that continues into 2023.

The Fed is in a rush to normalize policy and began with a 25 basis point hike in March. Balance sheet reductions will also begin shortly, with the committee intending to reach the agreed $95 billion monthly cap fairly quickly. At least one 50 basis point hike is on the cards as a necessary proof of commitment to the stable inflation narrative. However, a reassessment of the speed of adjustment may become necessary in the third quarter if the soft landing trajectory is to be preserved. With both growth and inflation inflecting lower, the Fed might choose to forgo the final one or two of the seven rate hikes it has penciled in for this year.

Eurozone: A High Risk Moment

Our positive view, relative to the consensus, on eurozone growth has come to pass as the region grew a solid 5.3% in 2021. And yet, there is no celebratory feel in the air as the Russia-Ukraine War has greatly damaged the near-term outlook. Given the geographical proximity, and heightened reliance on Russian energy supplies, a dark cloud of uncertainty hovers over the region's short-term growth prospects. Unsurprisingly, we have downgraded our 2022 growth forecast from 4.4% to 3.7% and acknowledge that risks to this new projection are squarely to the downside. But there are two main reasons why we have not opted for a more drastic initial reduction. First, just like their American counterparts, eurozone consumers sit on considerable excess savings that can help blunt the detrimental impact of the energy price shock. Second, targeted fiscal stimulus measures announced so far and others likely yet to come will further shield household consumption.

Germany remains a big question mark. It persistently underperformed expectations last year, partly due to severe supply chain problems that stunted its manufacturing sector. Consumer spending barely rose following a deep 6.1% contraction in 2020. We had counted on a big rebound in spending to drive performance in 2022 but in the context of the Russia-Ukraine War and the drain on household purchasing power amid escalating inflation, we have scaled back those expectations. There are more uncertainties around the timing and pace of the anticipated recovery in automotive production. A further forecast trimming might prove necessary in the coming months.

It took a while for the inflationary flare-up to materialize in the eurozone, which helped keep average annual inflation at a relatively tepid 2.6% last year. However, that dynamic has dramatically shifted in recent months such that the 2022 average seems poised to more than double.

The intensity of the inflation spike has caused a hawkish reassessment from the ECB as well, although no real action so far. At the April meeting, the ECB reiterated its intention to end asset purchases in the third quarter, opening the door to rate hikes soon thereafter. However, they would dwarf in comparison to what the Fed, the Bank of England and the Bank of Canada will likely deliver.

United Kingdom: Bumpy Ride Continues

Following a very robust 7.5% expansion in 2021, UK economic growth looks set to moderate to about 4.5% this year as surging inflation, rising interest rates and tax hikes erode households' purchasing power. Inventory rebuilding — which has been far more advanced than in the US — seems likely to slow while weaker growth in continental Europe will constrain exports.

On the bright side, the labor market remains tight and stable, with the unemployment rate down to a mere 3.8%. Job vacancies remain elevated and wage inflation robust, despite having come off recent peaks. This remains an important anchor for household incomes and spending.

Consumer price inflation has skyrocketed, with the headline measure up to 7.0% y/y in March and the core rate up to 5.7% y/y. April is shaping up to be even worse given recent hikes to household energy bills, and so risks to our upwardly-revised 2022 inflation forecast (of 6.1%) remain skewed to the upside.

Unsurprisingly, given the labor market and inflation dynamics, the Bank of England has begun the tightening process, with the policy rate brought to 0.75% following the hike in March. Additional moves are expected, although market pricing of the Bank Rate exceeding 2.0% by year-end strikes us as too aggressive.

Japan: Standing Apart

Alongside Germany, Japan was perhaps the biggest underperformer relative to expectations in 2021. We started the year anticipating growth in the neighborhood of 3.0% and steadily trimmed that through the year, especially after a weak performance in the third quarter. In the event, the economy matched our much reduced 1.7% growth projection from December. Soft consumer spending was a major reason behind this: having contracted almost 6.0% in 2020, consumer spending only rose 1.1% in 2021. And, unlike in other parts of the world, high inflation wasn't the culprit. On that front, Japan was the true exception to the rule insofar as consumer prices fell 0.3% last year. A slow start to the vaccination process played a big role in this dismal performance. If there is a silver lining, it is that Japan has since fully caught up and has become a global leader in terms of vaccination rates. This should be a source of resilience in 2022.

Inflation remains — surprisingly given the global environment — extremely mild. Consumer price inflation printed a tepid 0.9% y/y in February. It is poised to move higher with the average likely to exceed 2.0% in 2022. Meanwhile, price pressures are much more acute on the producer side, with Producer Price Index (PPI) inflation at 9.5% y/y in March. The combination suggests a severe lack of pricing power for firms and might partly explain why Japan's manufacturing purchasing managers' index (PMI) has remained relatively soft while indexes for other developed economies, including the US and Germany, have been hovering at red-hot levels for months. Wage inflation remains low and there is little reason to expect anything even close to the sort of inflationary spikes evident elsewhere. Indeed, it's probably best to think of Japan as the exception to the rule insofar as inflation trends are concerned.

Unsurprisingly, the macro policy response remains heavily tilted in favor of additional stimulus, primarily fiscal. This will help, but will not be a game-changer. And so, the BoJ will likely remain reluctant to follow its peers onto the hiking path any time soon.

Emerging Markets: A Tale Of Many Cities

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One point we have often reiterated over the years, and increasingly in the recent past, is that it has become very difficult to effectively discuss emerging markets as a group. Developments over the past two months have made it abundantly clear why that is the case.

The Russia-Ukraine War means severe double-digit recessions in both Ukraine and Russia this year. By contrast, we have incrementally raised China's growth forecast — admittedly, only by a tenth and only to 5.1% y/y — in response to renewed policy support and authorities' commitment to a robust growth target. The divergence could not be more stark. While oil producers are enjoying a terms of trade windfall, large energy importers such as India are undergoing an opposite shock. The truth is, beyond the emerging market nomenclature, there is increasingly little commonality in growth drivers across emerging market economies.

Because of outsize shocks to Russia and Ukraine, aggregate emerging market real GDP growth slowed more materially than in developed markets this year. A large part of that reflects China's own growth moderation. While that is sequentially correct relative to the 2021 performance, from a forecast revision standpoint China actually plays a stabilising role this year.

Inflation forecasts have been revised higher, reflecting trends in commodity prices. Because emerging market central banks are well advanced on the tightening path, the latest inflationary impulse does not change the monetary policy trajectory that much. We are more concerned about the social stability risks associated with the latest inflationary shock given the outsized move in agricultural commodity prices and the higher weight of food in EM consumer price baskets. And amid all this, COVID continues to lurk in the background; it seems safe to assume that it could move back into the limelight at some future point, even if only for a brief period. Challenging times persist.

Beyond the negative near-term shock, the most important consequence of the Russia-Ukraine War is that the global shift toward deglobalization likely quickens and broadens. The war will end at some point, but the memories will linger far longer. The renewed emphasis on reshaping, reshoring, and rethinking global supply chains will be another source of performance divergence among emerging markets.

Global Capital Markets Outlook

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Investment Solutions Group

Faced with the confusion and complexity of unusual events, human intuition may seem to offer an attractive alternative to painstaking fact gathering and data analysis. Many successful investors, including George Soros, attribute their success to intuition. However, Economics Nobel laureate Daniel Kahneman postulates that intuitive thinking has both advantages and disadvantages: it is faster than a rational approach but also more prone to error.[1]

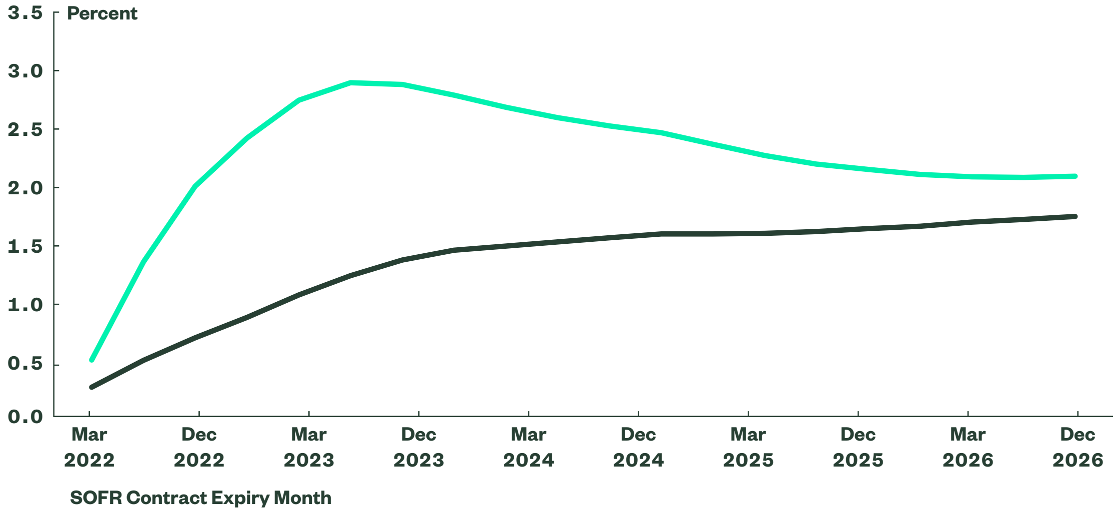
Intuition, or the immediate apprehension of an object by the mind without conscious reasoning, is based on the recognition of patterns stored in memory. However, when confronted with events so unusual that the patterns that led to their confluence are unlikely to be stored in memory, one will rely on reason and analysis rather than intuition, hoping that the use of models and technology will ease the burden of painstaking fact gathering and data analysis.

Inflation Stokes Reassessment of Policy Rate Expectations

Swift and sizable fiscal and monetary policy support helped economies and markets over the past two years. The task of how to dial these programmes back while maintaining financial and economic stability has now become a lot more arduous with the introduction of another major exogenous shock — the Russia-Ukraine War. The war pushed commodities to new highs, threatened the scenario of a transitory inflation episode, and will have an impact on capital market expectations. The first tangible impact of this reassessment of inflation expectations was a massive repricing of Fed policy expectations in March — from projections of about four hikes to eight hikes by the end of 2022. These were additional hikes being priced in and not just pulling forward hikes from future years.

At the beginning of the year, investors priced the Secured Overnight Funding Rate (SOFR) to rise towards 1% by the end of 2022 and to 1.5% in 2023 before eventually settling towards 1.75% over the longer term. At the end of March, that outlook had risen to almost 3% by the middle of 2023, followed by an easing of monetary policy circa 2024.

Figure 4
Investors Price in Higher Rates
Secure Overnight Funding Rate (SOFR) Futures Curve



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 31 March 2022.

Let's have a look at some examples from historical events for what might happen when the Fed embarks on a series of rate hikes from near-zero levels amidst high inflation, war, energy shock and a global pandemic:

- **1940s/50s:** when interest rates bottomed and started to gradually edge up after the Second World War
- **1960s:** when we faced a serious risk of nuclear deployment
- **1970s/80s:** high inflation and energy shocks
- **1990s:** overvalued technology stocks and volatile energy shares
- **2000s:** house price bubbles

But nowhere in modern history can we locate such a puzzling combination of strong growth, low unemployment, near-zero rates, geopolitical turmoil and public health menace.

With few historical examples to support our intuition, what risk factors should investors focus on? What models can help us sift through the data and determine if our base case scenario is a remake of the 1994 tightening cycle, which saw the US central bank lift rates by 300 basis points in 12 months with relatively benign impacts on risky assets? Or should investors brace themselves to relive the 1973–1982 stagflation period that saw the S&P 500 shed 60% of its value in slightly less than a decade?

Before letting our intuition guide us to contemplate the horrors of the 1970s' dubious fashion statements and lost decade for equity investors, let's consider at what the models are suggesting.

Market Regime Indicator/Risk Environment

To incorporate investor risk sentiment and appetite into our investment process in a disciplined manner without falling into the trap of following 'gut feelings', we built a proprietary tool called the Market Regime Indicator (MRI). The MRI is a multi-asset class barometer of risk aversion and allows us to classify the current risk sentiment into a regime. Specifically, it considers implied equity volatility, implied currency volatility, and spreads on risky debt.

Since the start of the year, all three components of our MRI had been trending higher. As markets dealt with geopolitical tensions and the possible impact of rising inflation and interest rates on equities, the spike in implied volatility, on both equity and currency, took the MRI into the High Risk regime toward the end of the quarter. This signaled that investors had become especially cautious. Our research shows that in this regime, investor sentiment can be a headwind to risk assets, and shifts from risk assets to more defensive assets like long-duration government bonds, gold and cash can be warranted.

In a context where any material improvement in the geopolitical climate is difficult to envision through the fog of the war in Ukraine and where central bank accommodation may be hindered by persistently high inflation prints, we see no reason to ignore the MRI's red flags on risky assets.

Equities: US Stocks Favored Despite Relative Valuations

Since the MRI hinted at a challenging environment for broad equities, let's consider the most relevant indications from our equity research.

At first glance, our equity modeling continues to point to positive, albeit modest, returns ahead. To be sure, expected returns for global developed equities are a scant few basis points above historical averages. Close scrutiny reveals that those same returns expectations have weakened meaningfully from where they stood at the start of the year. Certain aspects of our modeling, including a broad set of macroeconomic factors, sentiment as well as momentum indicators have been dampening our expected returns in equities for quite some time. But weakness across those indicators has intensified in 2022, offsetting improvements in the value factor that incidentally remain in neutral territory despite the MSCI All Country World Index sliding by 5.26% (in USD terms) in the first three months of the year.

So what is behind this drop in our global equity forecasts? The first noteworthy culprit is the deceleration in key measures of long and short-term price momentum, which began before the Russia-Ukraine War and largely offset improvements in valuation measures that accompanied the sell-off. Second, sentiment has deteriorated noticeably with the earnings diffusion score at its lowest level since May 2020, indicating that the balance of earnings revision has lost some of the upside skew it had enjoyed since the first wave of COVID. Looking at the revisions trend in the aggregate, estimates are still going up, though only modestly so. There are, however, plenty of cross-currents evident in the revisions trend at the granular level, with rising estimates in energy, material and real estate sectors and offsetting estimate cuts in consumer discretionary, staples and health care. From a regional perspective, our model continues to favor US equities over Europe and Pacific due to favorable momentum, sentiment and quality scores despite more attractive valuations outside of the US.

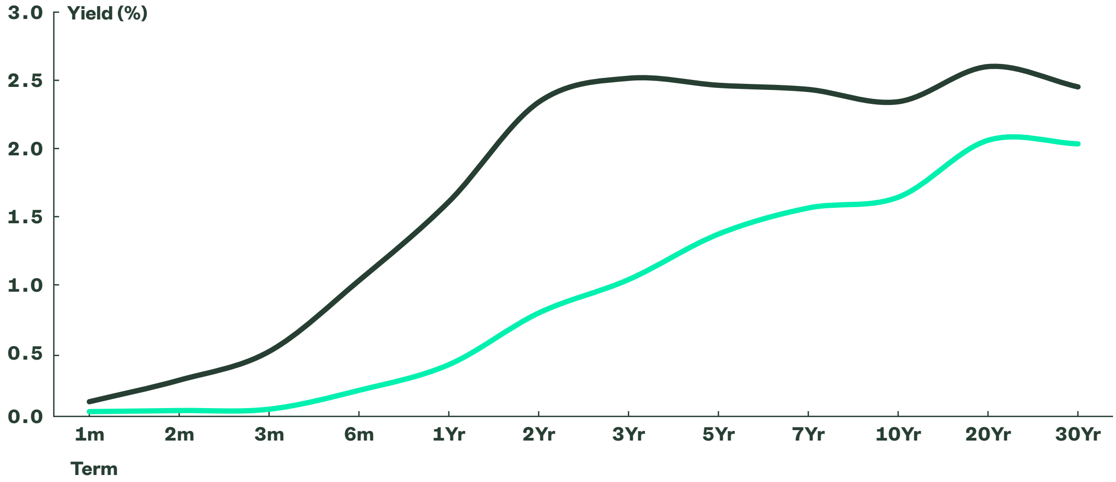
Fixed Income: A Lesson From History?

The unprecedented nature of this rate-hiking cycle can be captured by the notion that it began with the effective federal funds rate near 0% while US CPI increased by 8.5% on a year-on-year basis. We have not worked in this kind of environment before in our investment careers. There were seven rate-hike cycles since 1972 when the Fed began implementing consecutive hikes. In every one of those rate hike episodes, the Fed raised rates above inflation. The only historical precedent of a rate hike cycle to begin with the fed funds rate at similar levels was in 2015. However, when that cycle began, inflation was at a mere 0.1%. With no closely fitting pattern in our collective memory to guide our intuition, we will turn to our quantitative tools to assess the situation.

While our equity models hinted at moderation in otherwise positive return expectations, our quantitative assessment of fixed income sectors sent increasingly mixed signals as the quarter progressed. The main driver of this deterioration in model expectations has been a decline in the momentum factor. The momentum factor looks at the acceleration or deceleration of changes in interest rate levels and it appears to suggest that the current rise in rate levels that saw US 10-year Treasury yields rise by over 90 basis points in a month may not have exhausted itself yet.

Figure 5
Inexorable Rise in US Treasury Yields

US Treasury Curve 31/03/2022
US Treasury Curve 03/01/2022



Source: State Street Global Advisors, Bloomberg Finance L.P., as of 31 March 2022.

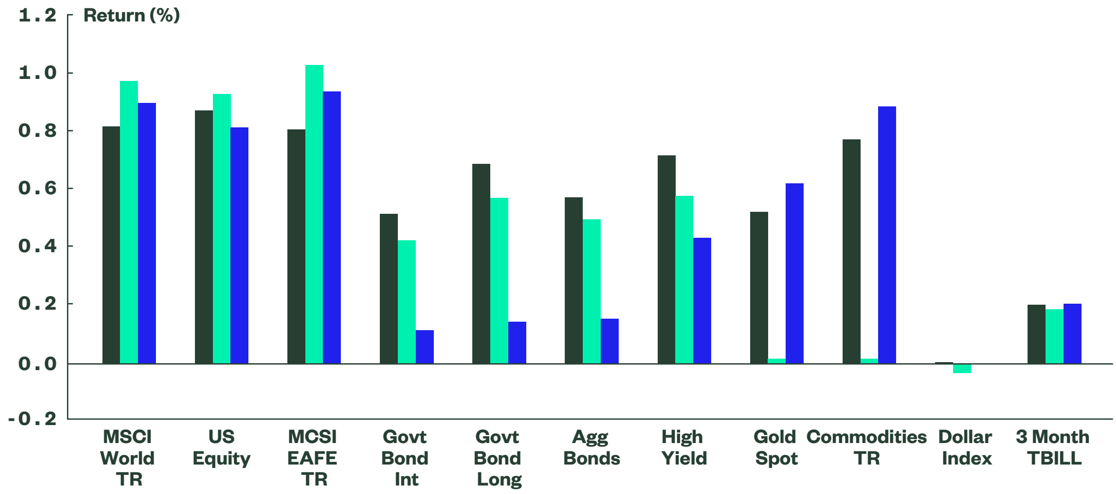
Within the macro factors, high nominal GDP also points toward higher rates, while slowing PMI and currently-elevated inflation levels point toward lower rates, offsetting some of the negativity in aggregate model scores.

Incidentally, despite the unusual nature of the current situation, the directional assessment of our models which points toward disappointing returns for fixed income is well aligned with the historical experience during previous hiking cycles, despite their dissimilarities with the current one.

We compared returns for various US fixed income sectors during the pre-hike period — defined as the nine months prior to the first hike of a cycle — with the hiking period (between the first and last hike against the full historical averages (from 1985)). We found that, unlike equities and commodities, bond returns were historically materially below the historical average in both the pre-hike and (especially) hiking periods.

Figure 6
Returns Through Pre-Hike and Hiking Periods (1985 to 2021)

Avg Historical Return
Avg Return Pre-Hike Period
Avg Return Hike Period



Source: Bloomberg, State Street Global Advisors, as of 31 December 2021. Past performance is not a guarantee of future results. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect capital gains and losses, income, and the reinvestment of dividends.

This represents another example where quantitative modelling helps us challenge our intuition by offering validation that things might not be that different this time around.

Commodities: Positive Outlook But Risks Exist

Our near-term fundamental assessment of the consensus market outlook for commodities continues to be supportive, and our model scores tend to largely corroborate this view. However, in a context where intuitive views and model-driven assessment seem to align reasonably well, we have to remain cognizant of the downside risk to this supportive outlook.

Global benchmark Brent crude oil rose 20% in the third week of March before settling to end the quarter at around $105 a barrel after a week of decline. As the effective buyers' strike on Russian crude that began a month earlier propelled oil prices to their highest levels in years, it has become increasingly difficult for speculators and traders alike to figure out the balance of supply and demand — the usual buyers of Russian oil are on the sidelines and struggling to find alternate sources. This outcome was largely unanticipated as initial US and European Union sanctions deliberately excluded Russian energy exports. However, with the odds of a protracted war in Ukraine increasing, the refusal of financial institutions to support Russian energy exports threatened to send oil prices higher once again. It also sent ripples throughout the commodity complex, driving metals and agricultural prices higher.

On the flip side, the International Energy Agency noted that "surging commodity prices and international sanctions levied against Russia following its invasion of Ukraine are expected to appreciably depress global economic growth".[2] Another downside risk to the bullish consensus on commodity prices is the potential of a COVID-related slowdown in China as the central government locked down much of Shanghai for testing. Some analysts observed that this large-scale action suggests that China is not yet ready to move away from its zero-COVID policy, implying broader weakness in Chinese growth and commodity demand if the country faces a resurgence of cases from a highly contagious variant. Whether or not that scenario materializes, it appears that 2022 still has an ample supply of confusion and complexity to test the limits of our intuition.

Contributors/ Contacts

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Endnotes

1 Kahneman, Daniel. Thinking, Fast and Slow. New-York, 2011.

2 International Energy Agency, Oil Market Report — March 2022.

State Street Global Advisors Forecasts as of 31 March 2022

	2022 (%)	2023 (%)
Real GDP Growth		
Global	3.6	3.9
US	4.0	2.2
Australia	3.6	2.4
Canada	4.2	2.8
Eurozone	3.7	2.7
France	3.5	2.5
Germany	3.7	3.1
Italy	3.4	2.7
UK	4.5	2.2
Japan	2.9	1.8
Brazil	0.0	2.0
China	5.1	5.2
India	6.5	6.0
Mexico	2.1	2.2
South Africa	2.0	3.0
South Korea	3.0	2.5
Taiwan	3.6	3.0
Inflation		
Developed Economies	5.6	2.0
US	6.0	2.1
Australia	4.3	2.4
Canada	4.9	2.6
Eurozone	5.0	1.9
France	4.0	1.5
Germany	4.9	1.6
Italy	5.2	1.7
UK	6.1	2.2
Japan	1.9	-0.4
China	2.4	2.1

	31 March 2022 (%)	31 March 2023 (%)
Central Bank Rates		
US (upper bound)	0.50	2.50
Australia	0.10	1.50
Canada	0.50	2.50
Euro	0.00	0.75
UK	0.75	2.25
Japan	-0.10	0.00
Brazil	11.75	13.00
China	4.35	4.35
India	4.00	4.75
Mexico	6.50	7.75
South Africa	4.25	5.25
South Korea	1.25	1.75
10-Year Bond Yields		
US	2.32	3.37
Australia	2.83	3.68
Canada	2.38	3.41
Germany	0.55	1.06
UK	1.63	2.44
Japan	0.22	0.32
Exchange Rates		
Australian Dollar (A$/$)	0.75	0.79
British Pound (£/$)	1.32	1.42
Canadian Dollar ($/C$)	1.25	1.20
Euro (€/$)	1.11	1.19
Japanese Yen ($/¥)	121.37	108.00
Swiss Franc ($/SFr)	0.92	1.02
Chinese Yuan ($/¥)	6.34	6.46

One-Year Return Forecasts	USD (%)	EUR (%)	GBP (%)	JPY (%)	AUD (%)	CAD (%)
S&P 500	6.7	-0.5	-1.1	-5.1	1.0	2.3
Russell 2000	6.8	-0.4	-1.0	-5.0	1.1	2.4
MSCI EAFE	5.8	-1.4	-1.9	-5.9	0.1	1.4
MSCI EM	8.4	1.0	0.5	-3.5	2.6	3.9
Barclays Capital Aggregate Bond Index	2.3	-4.6	-5.1	-9.0	-3.2	-1.9
Citigroup World Government Bond Index	0.1	-6.7	-7.2	-10.9	-5.3	-4.0
Goldman Sachs Commodities Index	9.9	2.4	1.9	-2.2	4.0	5.3
Dow Jones US Select REIT Index	4.6	-2.5	-3.0	-6.9	-1.0	0.3

State Street Global Advisors Forecasts as of 31 March 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.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- 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 30 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 $4.02 trillion† under our care.

* Pensions & Investments Research Center, as of 31 December 2020.
† This figure is presented as of 31 March 2022 and includes approximately $73.35 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.

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Information Classification: General

Marketing communication

Glossary

Basis Point One basis point is equal to one-hundredth of 1 percent, or 0.01%.

Capital Expenditure (Capex) refers to investment by a company to acquire or upgrade physical assets, such as a building, IT hardware or a new business.

Citigroup World Government Bond Index The WGBI is a widely used benchmark that currently comprises sovereign debt from over 20 countries, denominated in a variety of currencies.

Consumer Price Inflation (CPI) A widely used measure of inflation at the consumer level that helps to evaluate changes in cost of living.

Deflation A decrease in the general price level of goods and services over a given period.

Goldman Sachs Commodities Index GSCI is the first major investable commodity index and includes the most liquid commodity futures.

Gross Domestic Product (GDP) The monetary value of all the finished goods and services produced within a country's borders in a specific time period. Economic growth is typically expressed in terms of changes in GDP.

Group of Seven (G7) A group consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

MSCI EAFE Index An equities benchmark that captures large- and mid-cap representation across 22 developed market countries around the world, excluding the US and Canada.

MSCI Emerging Markets Index The MSCI Emerging Markets Index captures large and mid-cap representation across 23 emerging markets countries. With 834 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI World Index The MSCI World Index is a free-float weighted equity index. It includes about 1,600 stocks from developed world markets, and does not include emerging markets.

Organization of Petroleum Exporting Countries (OPEC) 13-member group of oil exporting nations founded to manage global supply and coordinate pricing.

Purchasing Managers' Index An indicator of the economic health of the manufacturing and services sectors compiled from a survey of purchasing executives.

Quantitative Easing (QE) An extraordinary monetary policy measure in which a central bank buys government fixed-income securities to lower interest rates, encourage borrowing and stimulate economic activity.

Russell 2000 Index A benchmark that measures the performance of the small-capitalization segment of the US equity universe.

S&P 500 Total Return Index The benchmark that reflects returns after reinvestment of dividends of the 500 large cap stocks in the S&P 500 Index.

The US Dollar Index Measures the performance of the US Dollar against a basket of major currencies.

Yield Curve A graph or line that plots the yields of bonds with similar credit quality, typically from shortest to longest duration.

State Street Global Advisors Worldwide Entities

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