

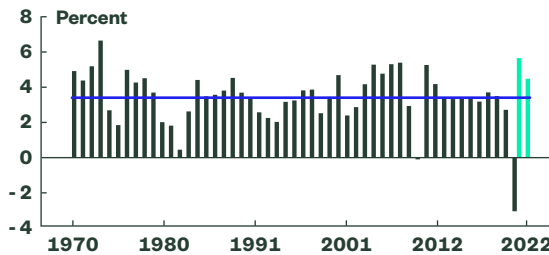
Q1 2022

**Simona Mocuta**  
Chief Economist  
Global Macro and Research  
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Figure 1  
**The Global Recovery Continues, but Slows**



**Global Economic Outlook**



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.

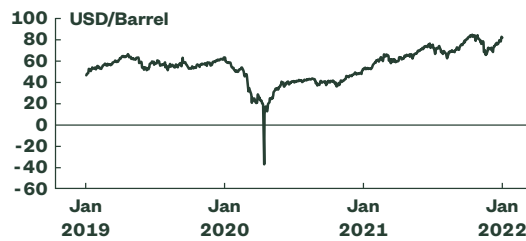
- Having benefitted from enormous fiscal and monetary policy stimulus in 2020 and 2021, the world economy will have to adjust to a new policy reality going forward.
- Engineering a smooth landing is never easy, and engineering a soft landing in the context of the current business cycle (extreme lows, followed by extreme highs) will be harder still.

**Simona Mocuta**  
Chief Economist  
Global Macro and Research  
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Figure 2  
**Higher Oil Prices Are a Boon to Some and a Challenge to Others**



**Emerging Markets Outlook**



Source: Macrobond, State Street Global Advisors Economics. Past performance is not a guarantee of future results.

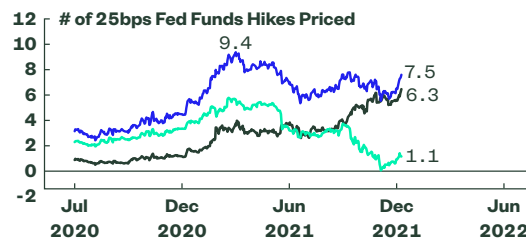
- Incoming macro data out of emerging markets (EM) remains mixed, mirroring Covid developments. However, we have kept our EM growth forecast unchanged and expect GDP to grow by 5.0% in 2022.
- Driven by inflation and debt concerns, EM central banks are well ahead of developed market counterparts in terms of monetary policy normalization and many could be done tightening by mid-year.

**Jeremiah Holly**  
Senior Portfolio Manager  
Investment Solutions Group  
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Figure 3  
**Market Difficulties in Setting Expectations on Short-Term Rates**



**Global Capital Markets**



Source: State Street Global Advisors, Bloomberg Finance L.P.

- The Fed is being called upon to maneuver deftly using tools ranging from interest rate policy and forward guidance to lending operations and the unwinding of asset purchase programs.
- It is unclear if an upcoming Fed rate-hiking cycle coupled with high inflation risks inevitably mean that bonds will fare poorly in 2022.

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# Global Economic Outlook

## **Simona Mocuta**

Chief Economist

Global Macro and Policy Research

Despite Omicron, the global battle against Covid-19 is turning in our favor. To be sure, the way this seems likely to play out is by entering an endemic phase, where we simply learn to live with the virus in a way that is less constraining to economic activity. We anticipate a lot more emphasis on treatments and vaccines going forward, with lockdowns becoming a thing of the past around the second quarter of 2022.

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### **A Different Kind of Risk: From Covid to Policy Tightening**

Unfortunately, just as Covid risks are poised to diminish over the course of the year, a new source of risk is already on the scene. Having benefitted from enormous fiscal and monetary policy stimulus in 2020 and 2021, the world economy will have to adjust to a new policy reality going forward. With many countries back to, or close to, pre-Covid levels of GDP, and with inflation surging to multi-decade highs, developed market central banks are now joining emerging market central banks in a major hawkish pivot. Multiple rate hikes are now expected from the Fed, the Bank of Canada, and the Bank of England this year, and even the ever-dovish ECB is sending out less-dovish signals.

Starting the policy normalization process at this stage makes perfect sense given how far the global economy has come. With unemployment rates as low as they are and inflation as high as it is, tighter policy is surely the right macro medicine. But while good for us, this medicine may yet prove to be a bitter pill and a source of macro and market volatility in coming months.

Engineering a smooth landing is never easy, and engineering a soft landing in the context of the current business cycle (extreme lows, followed by extreme highs) will be harder still. The post-GFC recovery was shallow and protracted, with the expansion lasting a whole decade. The post-Covid recovery was swift and intense, i.e., dramatically different. We have yet to discover how long the recovery will last, but we expect that this cycle to prove to be a lot shorter. And so, calibrating the appropriate policy tightening will be a tricky task.

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## United States: Poised for a Strong Year

After growing an estimated 5.6% in 2021, the US economy seems poised for another strong performance this year. We have penciled-in 4.4% growth in 2022, with some downside risks that stem less from Omicron and more from the less conducive policy backdrop that has emerged since our mid-December forecast.

The good news is that household excess savings remain high, helping offset the erosion of purchasing power due to higher inflation and the disappearance of fiscal transfers. There remains an acute need for inventory rebuilding that should be accretive to growth this year. And the huge drag from trade should ease a little in 2022 as foreign demand improves and the US relative growth outperformance moderates. Housing demand remains robust, and residential construction should improve in coming quarters as supply chain problems ease. We are also penciling-in an improvement in structures investment after two utterly dismal years for mining and oil exploration investment.

Admittedly, this year's growth will probably look better on paper than it will feel for the average consumer. Consumer spending growth is actually poised to halve, although given its extremely high current level, a further 4.3% gain is actually quite extraordinary. With the unemployment rate at 3.9% in December and job openings above 10 million, we expect the participation rate to improve over the course of the year as more people are enticed back into the labor market. Remaining excess savings and rising labor incomes should make that consumer resilience possible. Importantly, though, the consumer spending story over the next year will also increasingly be one of rotation away from goods and into services. Inflation, the cessation of fiscal transfers, and the need for consumers to resume servicing various loan obligations (e.g., mortgages, student loans) are accumulating risks to the resilient consumer narrative and bear close watching as we progress through the year.

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## Inflation and QT

The inflation spike has proven more intense and more persistent than anyone had been anticipating. CPI inflation touched 7.0% y/y in December and averaged 4.7% in 2021 as a whole. The 2022 average won't show much of a slowdown, but we do, in fact, anticipate a notable deceleration by the second half of the year and especially in Q4. More of this year's inflation will be driven by services, especially housing as rental costs respond (with a delay) to the surge in house prices. Even though inflation should dip back to the 2-3% range by the end of the year, the broader debate around whether we might be entering a more inflationary era will remain far from settled. Wages and inflation expectations remain key.

The Fed has provided ample policy accommodation throughout the Covid crisis and, acknowledging progress toward employment and inflation goals, began tapering its quantitative easing (QE) program in November and accelerated that taper in December. Forward guidance has turned decidedly more hawkish, with the summary of economic projections (the so-called "dot plot") incorporating three rate hikes each this year and next. A March rate hike is widely expected at this point, with balance sheet runoffs slated to begin in the second half.

That being said, anything more than two hikes in the context of substantial quantitative tightening (QT) might cause undue volatility without doing much at all on the inflation front. To a large extent, the seeds of 2022 inflation have already been sown: in supply chain problems, in excess savings, and in rental costs that are now closing the gap with prior house price appreciation. As such, any rate hikes would only be relevant for 2023 inflation, and we suspect that inflation would moderate naturally on its own as these factors fade. We think Fed tightening therefore should be a gradual exercise of calibrating the Fed Funds Rate toward the neutral rate, not a race to fight the past inflation battle. A gradual but sustained tightening cycle may be best as we continue to navigate away from the Covid shock.

## Eurozone: Normalization Will Underpin Performance

On the whole, the eurozone outperformed consensus expectations in 2021, vindicating our positive take on the region. However, that positive overall picture obscured important country-level divergences, particularly a big disappointment in Germany. We had expected more resilience in consumer spending, but whether due to domestic political changes, innate cautiousness, or persistent mobility constraints, German consumer spending has badly undershot our expectations. Supply chain challenges in auto manufacturing have also dealt a heavier blow to German economic activity than we had anticipated. Not only have we repeatedly downgraded Germany's 2021 GDP growth forecast, but in December we also trimmed the 2022 projection as well, down four-tenths to 4.4%. Absent a commensurate increase in wages, the current inflationary surge would undermine spending growth despite healthy household balance sheets.

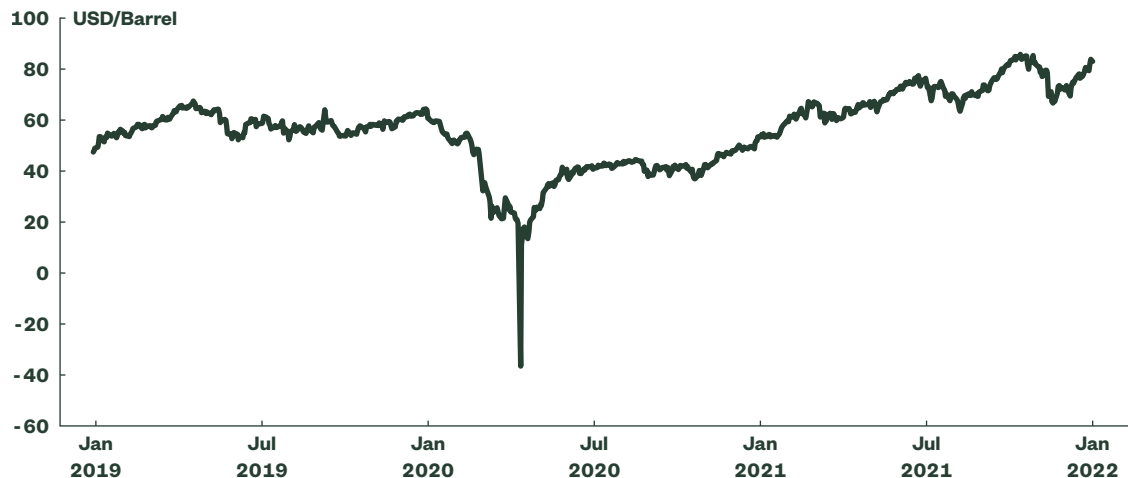
Robust growth momentum in the rest of the eurozone offset weakness in Germany last year, but the inflation spike is undermining consumers' purchasing power across the continent. We trimmed the regional growth forecast by two-tenths in December, to 4.4%, and see risks as skewed to the downside. Compared with the US, Omicron is likely to have a more pronounced negative impact on growth in the short term given more aggressive mobility restrictions. On the other hand, progress toward full normalization in services, pent-up demand and elevated household savings rates, and supportive fiscal policy will underpin 2022 performance.

## Inflation and the ECB

As in the US, the eurozone's inflationary flare-up has proven far more intense than predicted even a few months ago. A slower start to the inflation spike kept the 2021 average relatively contained, but surging energy costs suggest that 2022 inflation will be just as high.

Figure 4  
**Higher Oil Prices Are  
a Boon to Some and a  
Challenge to Others**

■ World, Crude Oil, WTI,  
Global Spot, Close, USD



Source: Macrobond, State Street Global Advisors Economics. Past performance is not a guarantee of future results.

The ECB was very conservative in its growth and inflation forecasts at the start of 2021 and has since made repeated upward adjustments on both fronts. Even so, given the lack of evidence for second-round inflation effects emanating from the labor market, the ECB has a better argument than the Fed with respect to the transitory nature of the current inflation episode. It will therefore remain extremely patient as it contemplates the removal of policy accommodation. Tweaks to asset purchases are likely in 2022 (including an end to PEPP in March), but actual rate hikes are not.

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## United Kingdom: Constrained by Covid

Despite high vaccination rates, the UK economic recovery is still constrained by elevated Covid infections. Global supply chain issues and labor shortages are additional hurdles. The economy performed close to expectations in 2021 (we estimate growth of 6.9%), but we have trimmed the 2022 projection by half a percentage point to 5.1% in December. High inflation is bound to have some negative impact on consumer spending.

Business investment is slowly recovering, but remains substantially below late 2019 levels. And the UK has been building inventories for the past four consecutive quarters — which is unusual given developments elsewhere. This implies less support from inventory accumulation going forward.

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### Inflation and Brexit

While global supply issues are expected to ease in coming months, the UK recovery may be held back by other structural labor and investment shifts linked to the Brexit aftermath. The recovery in private consumption has been sluggish so far but should accelerate as the country moves past lockdowns, enabling consumers to deploy sizable savings more freely. On the other hand, high inflation is a headwind that is likely to remain strong for some time; this means that, on an annual average basis, real consumer spending barely returns to its 2019 level in 2022.

Headline CPI inflation accelerated to 5.1% y/y in November, driven mainly by surging energy prices. While some base effects are going to fade, energy prices will remain elevated and are poised to rise further in the spring. Unlike trends that are seen elsewhere, UK 2022 inflation is likely to be far above the 2021 average.

The Bank of England is starting to respond. A tiny 15 bp hike in December is a sign of things to come. At this point, we see three rate hikes in 2022.

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## Japan: Persistent Challenges

Japan's already weak growth forecasts were trimmed further in the latest update in response to the economy's uninspiring (some might describe it as dismal) performance in 2021 and a lack of convincing evidence that a turnaround is imminent. The 2021 real GDP growth forecast now stands at only 1.7%, down almost a full percentage point since September. A sizable contraction in the third quarter was the main culprit as the country battled Covid. Since then, vaccination rates have surged to the point where Japan is now among the global leaders on the vaccine front, which should provide a more supportive backdrop as we move into 2022. We have actually raised the 2022 forecast by two-tenths to 3.2% on the view that some of the consumer spending that did not materialize in 2021 would do so next year. There is a lift to growth from fiscal policy as well, and from an anticipated improvement in exports. Even so, risks to this forecast remain.

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### No Pricing Power

Inflation is non-existent, which is surprising given the global environment. Consumer prices are set to actually decline incrementally in 2021. With PPI inflation hovering in the neighborhood of 9.0%, this suggests a severe lack of pricing power for firms. Wage inflation is equally moribund, and so 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 current 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; also, the BoJ is unlikely to change its playbook any time soon.

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# Emerging Markets Outlook

## **Simona Mocuta**

Chief Economist

Global Macro and Policy Research

The incoming macro data out of emerging markets (EM) remains mixed, mirroring Covid developments. Concerns around vaccine efficacy also reduce the signal value from vaccination rates. China is a case in point. We think it doubtful that the country can sustain its Zero-Covid policy beyond the middle of the year without incurring too onerous of an economic cost.

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### **Skies Are Not Yet Clear**

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By and large, our forecasts for emerging markets as a whole have held up well in the face of incoming data. We've kept our China forecast unchanged at 5.0%, which seems reasonable given indications of more macro policy support (China is an exception to the global policy tightening trend). The risks to this forecast seem roughly balanced. The broad EM growth forecast was also left unchanged in December; we expect real GDP growth of 5.0% this year.

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### Path to Policy Normalization

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Unlike their developed market (DM) counterparts, emerging market central banks are far further ahead on the monetary policy normalization path; many could be done tightening by mid-year. First and foremost, this has been driven by concerns around inflation, particularly in the context of non-reserve currencies and high debt burdens. The upshot here relative to past cycles seems twofold. First, risks of EM currency weakness associated with DM central banks tightening in earnest should be mitigated by EMs' own earlier tightening cycle. Second, EMs as a whole could be looking at a more supportive macro policy backdrop in 2023, which bodes well for EM growth prospects then.

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# Global Capital Markets Outlook

## Jeremiah Holly

Senior Portfolio Manager  
Investment Solutions Group

Threading a needle is a difficult thing to do, especially without the proper tool. Your author learned this the hard way as he attempted to patch an old winter coat. Call it a small-scale experiment in ESG-oriented behavior — repairing and reusing rather than buying anew. Yet no amount of regime indicators, financial statement analysis or EGARCH modeling — the usual tools of our trade — could help me fit that little string through a tiny hole, or “eye” as it is evidently known. The solution, as it turns out, is as simple as it is elegant. A needle threader is all you need.

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## Searching for Balance

Financial markets, and the world more broadly, have had to grapple with a lot of delicate balancing acts throughout the course of the pandemic. In some cases there has been brilliant success in threading the proverbial needle. The development of mRNA vaccines that are able to provoke a sufficient, but not overwhelming, immune response to Covid-19 stands high on the list. In other areas the search for long-term solutions goes on. The degree to which work takes place at home versus in the office is an evolving question, one for which there is likely no easy or unilateral solution. And then there are the obstacles that we are only beginning to confront. While swift and sizable fiscal and monetary policy support helped economies and markets over the past two years, the trick ahead lies in how to dial these programs back while maintaining financial and economic stability. Tools exist to aid in managing this transition. But in the world of finance, needle threading is a complicated affair.

As we evaluate the various risks and rewards that present themselves across global asset classes, we start the year in a somewhat more cautious stance. In global equities we hold only a modest overweight allocation. And while some might argue that there is in fact no alternative to investing in equities, equity risk premium estimates don't appear particularly remunerative and our quantitative models have been moving in an incrementally less bullish direction. Bonds have once again experienced some volatility (to the downside in price terms), but this has often led to reversionary fund flows into the asset class. In commodities we continue to see some of the best risk-adjusted returns, notwithstanding some of the Omicron-induced setbacks that afflicted the complex at the tail end of 2021. But with still-favorable momentum, strong growth, and limited investment in supply, the tailwinds that lifted commodities to be one of the best-performing assets in 2021 largely remain in place.



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## Risk Environment in Balance

Whether we talk about needle threading, balancing risks, or seeking to maintain a goldilocks set of conditions within global capital markets — our assessment of the risk environment takes on a more nuanced approach. To be sure, as risk indicators start to tick higher, whether they relate to equity volatility, credit spreads, or any other data point that may reflect investor sentiment, that is often a warning sign. But in assessing different dimensions of risk, we find that there is no needle to be threaded, no fulcrum to orient around, no porridge to cool (or heat up). Rather, there are a range of regimes that evolve in a less-than-linear way. For example, when forward-looking risk indicators escalate, that is generally a signal to reduce exposure to equities, up to a certain point. Once a certain threshold has passed, more often than not, those same fulminating factors can just as easily represent a buying opportunity. Our analysis suggests these gauges work similarly at the other extreme, i.e., when risk indicators are benign that environment can persist and support investment in growthier asset classes, so long as they don't get "too benign."

Looking back to 2021, our Market Regime Indicator (MRI) spent much of the year in Low Risk Aversion and Euphoria, and that contributed to our risk-on stance in the portfolios, even if it was moderated in times of Euphoria. The only two years in recent memory where the MRI spent more time in those relatively low-risk regimes were 2012 and 2017. If we look forward to what markets experienced in the following years, 2013 served up a vicious taper tantrum but stock markets still advanced by more than 20%. And in 2018, markets were in good shape up until the very end of the year, when slowing data and fears of a monetary policy mistake shook risk assets to their core. Will the good times roll on in 2022? As of right now, our MRI is not offering up much insight. It remains in a Normal regime — neither too hot nor too cold, but not necessarily just right either.

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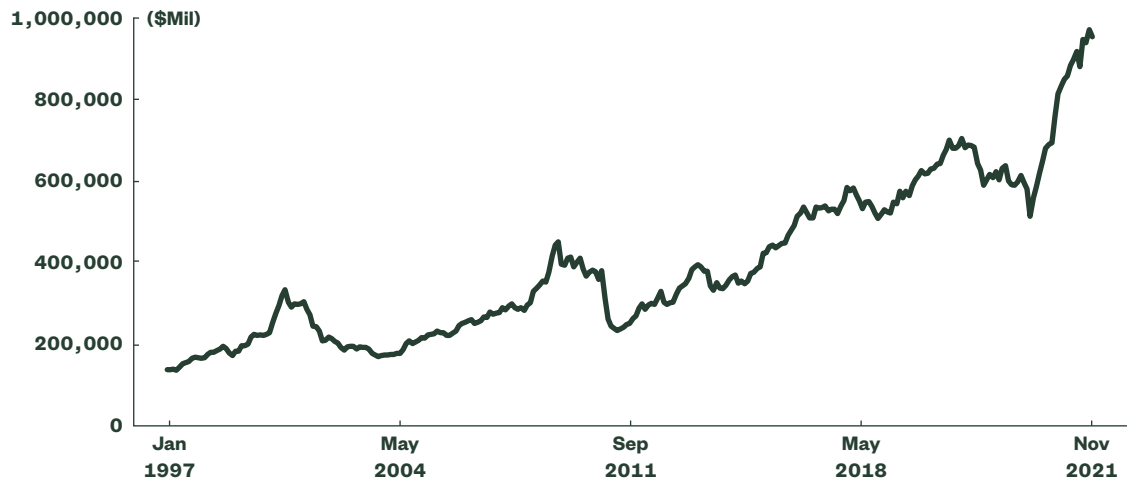
## Better Equity Expectations Outside the US

So, if the MRI is not going to provide the key to what may take shape as we kick off 2022, let's consider some of the more pertinent developments related to our equity research. On the one hand, our equity modeling continues to point to reasonably good times ahead. But on the other hand, those same models have weakened meaningfully from where they stood for much of 2021. Certain aspects of our modeling, including a broad set of valuation indicators, have been dampening our expected returns in equities for some time. But the weakness, while not dramatic, has become more widespread and can be found across macroeconomic factors, sentiment, as well as momentum.

So what might be to blame for the relative diminution in the near-term forecasts for global equities? From a macroeconomic and market structure standpoint, inflationary risks and lessened dispersion among stocks are among the factors weighing on our outlook. And while equities might well serve as an inflation hedge, with producer prices rising at a double-digit clip in many parts of the world alongside building wage pressures, it's hardly inconceivable that the recent patterns of consistently exceeding earnings expectations could run into some bumps in the road. The same forces might well be weighing on sentiment as earnings and sales estimate revisions have come off the boil. Rock-bottom interest rates have supported all manner of financial assets and helped to inflate the level of margin debt as well (see Figure 5). Though not terribly worrisome in relation to the total market capitalization of equities, with this corner of the market pushing up against \$1 trillion it's not something to ignore.



Figure 5  
**Debit Balances in  
 Consumers' Securities  
 Margin Accounts  
 (\$ million)**



Source: State Street Global Advisors, FINRA as of December 2021.

On the valuation front, there are numerous factors that might argue for restraint on the part of erstwhile equity advocates. Dwindling dividend yields and expanding enterprise values can make comparisons with history look a bit daunting. And from a cross-asset standpoint, the increase in bond yields might well have equity risk premium enthusiasts questioning whether they would prefer to be owners or lenders with their investable capital. But with nearly half of the companies in the S&P 500 sporting dividend yields north of the 10-Year Treasury, perhaps the cross-asset valuations aren't that bad after all. In our view, again, a judicious equity stance seems warranted.

While our overall equity outlook has moderated, our expectations with respect to regional equity markets have shifted more meaningfully. The stock market in the United States has been a standout performer for a long time — and we have mostly been aligned with that trend. But we have started to see a more diverse set of factors suggest that US advantages might be eroding. Remember, it was only a touch over three years ago that Apple was celebrated as the first listed company to reach \$1 trillion in market capitalization. In the quarter just passed it touched \$3 trillion — an accomplishment that is as impressive as it is disconcerting. Consistent with that past record, the only set of factors that we evaluate which hasn't waned for the US and North American markets has been price momentum.

By contrast, European equities have risen up the ranks in our view. Relative sentiment in terms of earnings and sales expectations have been a big driver of this shift, and our economic baseline is for stronger 2022 economic growth across the Eurozone and UK when compared with the US. In the Pacific region, and Japan specifically, the growth outlook is not as robust in absolute terms, but after a very weak 2021 it has more room to rebound. The persistent weakness in the yen also contributes to the potential for Japanese equities to make up some ground to the extent that it can reinforce improved growth expectations and, ultimately, corporate profitability.

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**Fixed Income:  
 Obvious Risks,  
 Inconspicuous  
 Opportunities**

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When thinking about the risks that lay ahead in the world of interest rates, I am reminded of Jim Grant's (somewhat distant) assessment of the responsibilities of the Federal Reserve. In his words:

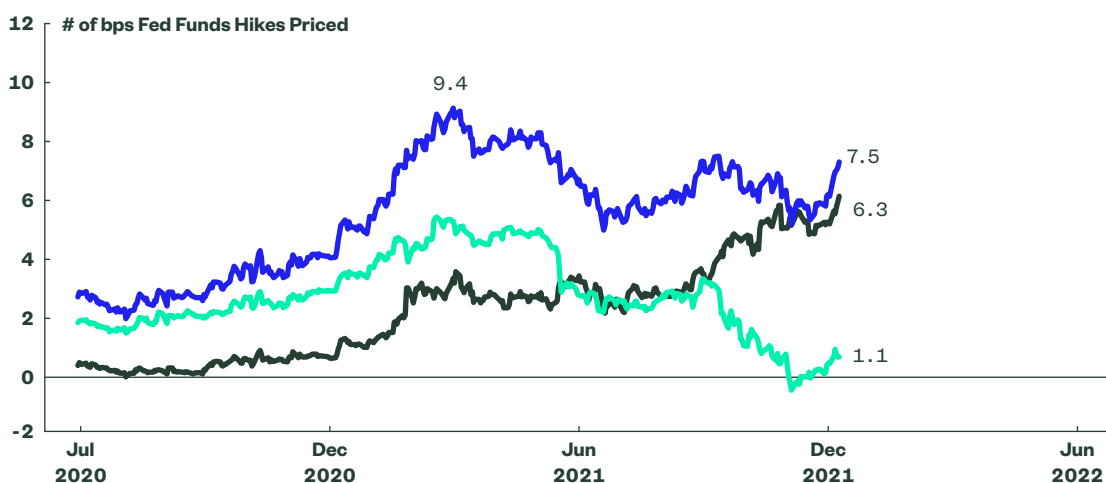
**“There was almost nothing that the Fed was not expected to do. It was held accountable for economic growth (not too much and not too little), the rate of inflation, the level of interest rates, the solvency of the nation's banks, and, in conjunction with the Treasury Department, the state of the dollar and the complementary condition of the Mexican peso.”<sup>1</sup>**

With the exception of the peso, it seems as though all of these responsibilities remain, and we could add many others to the list: maintain proper functioning in money markets, act as lender of last resort, act as buyer of last resort, ensure equity in economic growth, protect consumers, and, if there's time, build a digital currency as well. Important goals no doubt, but a tall order nonetheless.

Meeting all of those important and diverse goals will require deft maneuvering across a range of tools, ranging from interest rate policy and forward guidance to lending operations and the unwinding of asset purchase programs. That some degree of volatility is expected during this transition does not come as much of a surprise. Figure 6 illustrates the difficulty that markets have had in setting their own expectations for where short-term interest rates are going to land, especially as it relates to timing.<sup>2</sup> In the middle part of 2021 markets had been pricing-in nearly six rate hikes during the out years of 2024 through 2026, and those expectations have been pulled forward dramatically.

Figure 6  
Market Difficulties in Setting Expectations on Short-Term Rates

■ Hikes by end 2023  
■ Hikes in 2024 thru 2026  
■ Total thru 2026



Source: State Street Global Advisors, Bloomberg Finance L.P.

But does an upcoming Fed rate-hiking cycle coupled with high inflation risks inevitably mean that bonds will fare poorly as we work our way through 2022? On this question we are not so sure. The one entrenched signal that we are seeing from our quantitative evaluation of bond markets is that curves are still too steep — not necessarily that interest rates are too low. Surely, inflation can continue to surprise the upside and put the Federal Reserve in a bind whereby more aggressive bear steepening emerges. But with PMIs appearing to have topped and net Treasury supply set to fall in 2022, there are also some underappreciated supports to bond markets as well.

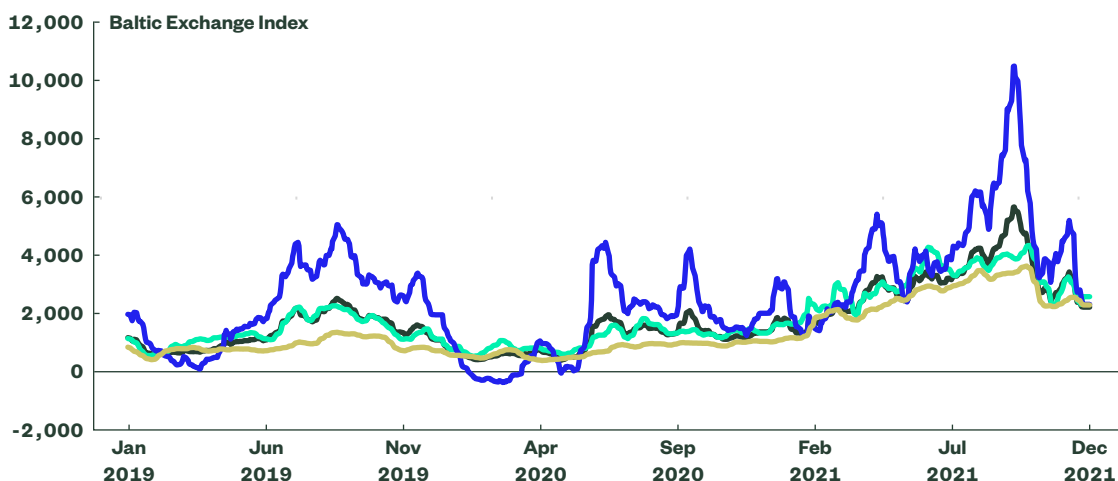
## Commodity Risks Skewed to the Upside

If Chair Powell and other central bankers have to tiptoe into the waters of their decision making — assessing every word in their press releases, every basis point of change in their policy rates and corridors — commodity market participants generally have to jump right in and let prices land where they may. Steep supply and demand curves alongside long lead times in the production of many commodities mean that commodity availability can't turn on a dime. Certain commodities, of course, are storable over longer periods or otherwise subject to human policymaking. The relentless focus on OPEC policy decisions, even if member countries don't always adhere to the production targets, offers a case in point.

We continue to see a favorable risk and return trade-off for broad commodity investment. A slightly backwarddated curve structure, still firm momentum, and strong expected levels of global growth (even if they are lower than last year) point to a good foundation for the asset class. It isn't a risk-free investment by any stretch and will always come with increased interim volatility. Add to that ongoing Covid concerns and dramatically lower shipping rates, and one could question whether the rally in commodities might be confined to the rear-view mirror. But the spread of Omicron offers an upside as well to the extent that it bolsters immunity on otherwise unprotected individuals and populations. And if we dig into the dip in the Baltic Dry Index — most of the volatility has occurred in the shipping rates for Capesize vessels (see Figure 7),<sup>3</sup> the largest of the dry cargo ships whose routes are concentrated in Southeast Asia. If this were a reflection of slowing growth in China, then the ramifications might be widespread, but to the extent recent coal shortages created episodic aberrations in shipping costs, the downturn may be less reflective of the health of the global economy. Other supports for our overweight allocation come from the geopolitical front, where risks are decisively skewed to the upside. Political unrest in Nigeria and Libya continue to keep meaningful amounts of oil on the sidelines, while the potential conflict between Russia and Ukraine would have a substantial impact on both oil and natural gas prices. With inventories at current levels and countries struggling to reach output quotas, any supply disruption would have a significant impact on prices, particularly when the lack of global spare capacity is considered.

Figure 7  
**Significant Rate  
 Volatility in the  
 Biggest Ships**

■ Baltic Dry Index —  
 Closing Price  
 ■ Baltic Panamax Index —  
 Closing Price  
 ■ Baltic Capesize Index —  
 Closing Price  
 ■ Baltic Supramax —  
 Closing Price



Source: FactSet, Baltic Exchange as of December 2021.<sup>3</sup>

Lack of spare capacity in commodities, leading to irascible interest rate and inflation expectations that render equity investors more circumspect — this is but one of many possible paths that markets could take given the delicate balances in play for 2022. Inevitably the solutions, for the markets and our portfolios, will require some adaptations as we progress through the year. In the world of finance, needle threading is a complicated affair.

## Endnotes

- 1 Grant, James. *The Trouble with Prosperity*. 1996. Page 136.
- 2 Chart courtesy of Jerry McGuire and Geoff Preston of the Investment Solutions Group — Total Portfolio Solutions.
- 3 The Baltic Dry Index tracks the price of transporting dry bulk cargo like cement, coal, iron ore, and grain on bulk freighters. As many of these commodities are raw materials that go into production of finished goods,

the BDI is often taken to be an indicator of economic growth and production. Capesize vessels receive a 40% weight in the index, whereas the smaller Panamax and Supramax sized vessels each receive a 30% weight. Definitions sourced from NASDAQ and the Baltic Exchange.

Sources: Bloomberg, FactSet, J.P. Morgan, Barclays, MSCI, Morgan Stanley, and The Economist as of December 31, 2021.

## SSGA Forecasts as of December 31, 2021

	2021 (%)	2022 (%)
<b>Real GDP Growth</b>		
Global	5.8	4.6
US	5.6	4.4
Australia	4.2	3.7
Canada	4.9	4.2
Eurozone	5.2	4.4
France	6.6	4.0
Germany	2.9	4.4
Italy	6.3	4.5
UK	6.9	5.1
Japan	1.7	3.2
Brazil	5.0	2.6
China	7.9	5.0
India	9.0	7.0
Mexico	5.2	3.0
South Africa	4.0	3.1
South Korea	3.9	2.8
Taiwan	6.0	3.0
<b>Inflation</b>		
Developed Economies	3.5	3.4
US	4.7	4.4
Australia	2.7	2.7
Canada	3.4	3.3
Eurozone	2.4	2.4
France	1.7	2.1
Germany	3.1	2.6
Italy	1.8	2.3
UK	2.5	4.2
Japan	-0.2	1.0
China	1.0	2.3

	December 31, 2021 (%)	December 31, 2022 (%)
<b>Central Bank Rates</b>		
US (upper bound)	0.25	0.75
Australia	0.10	0.10
Canada	0.25	1.00
Euro	0.00	0.00
UK	0.25	1.00
Japan	0.00	0.00
Brazil	9.25	11.00
China	4.35	4.25
India	4.00	4.25
Mexico	5.50	6.00
South Africa	3.75	4.50
South Korea	1.00	1.50
<b>10-Year Bond Yields</b>		
US	1.51	1.91
Australia	1.67	1.79
Canada	1.43	1.85
Germany	-0.18	-0.07
UK	0.97	1.40
Japan	0.07	0.14
<b>Exchange Rates</b>		
Australian Dollar (A\$/\\$)	0.73	0.78
British Pound (£/\\$)	1.35	1.48
Canadian Dollar (\\$/C\\$)	1.26	1.20
Euro (€/\\$)	1.14	1.19
Japanese Yen (\\$/¥)	115.16	105.00
Swiss Franc (\\$/SFr)	0.91	1.02
Chinese Yuan (\\$/¥)	6.37	6.48

One-Year Return Forecasts	USD (%)	EUR (%)	GBP (%)	JPY (%)	AUD (%)	CAD (%)
S&P 500	5.8	0.8	-3.3	-3.5	-1.2	0.9
Russell 2000	6.5	1.5	-2.6	-2.9	-0.6	1.6
MSCI EAFE	6.9	1.8	-2.3	-2.5	-0.2	1.9
MSCI EM	8.1	3.0	-1.2	-1.4	0.9	3.1
Barclays Capital Aggregate Bond Index	1.2	-3.6	-7.5	-7.7	-5.5	-3.5
Citigroup World Government Bond Index	-0.2	-4.9	-8.8	-9.0	-6.8	-4.8
Goldman Sachs Commodities Index	6.9	1.8	-2.3	-2.5	-0.2	1.9
Dow Jones US Select REIT Index	3.1	-1.8	-5.8	-6.0	-3.7	-1.7

State Street Global Advisors Forecasts as of December 31, 2021.

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 \$3.86 trillion<sup>†</sup> under our care.

\*Pensions & Investments Research Center, as of December 31, 2020.

<sup>†</sup>This figure is presented as of September 30, 2021 and includes approximately \$59.84 billion 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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### 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.

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**Belgium:** State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Brussels, Belgium. T: +32 2 663 2036. State Street Global Advisors Belgium is a branch office of State

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