2022
Global Market Outlook

Continuing the Climb

STATE STREET GLOBAL ADVISORS

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Continuing the Climb

While the world maintains its focus on the battle against COVID-19, there are reasons for optimism in the months ahead. We believe the current economic recovery will continue to deliver above-potential global growth. But as we move past peak growth and peak policy accommodation, the recovery that follows will likely be uneven and multi-layered. Many risks to the outlook remain, including uncertainty about inflation.

Outlooks

Life After Peak Growth and Peak Policy Accommodation

Above-potential growth will persist in an uneven and multi-layered recovery.

Hawkish Central Banks to Pressure Rates Higher

Increases in short-term yields are likely, though long-term yields will remain anchored.

Earnings Growth to Boost Equities Despite Market Volatility

European equities will benefit from more attractive valuations and a skew toward cyclicals.

Macroeconomic

Life After Peak Growth and Peak Policy Accommodation

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While the world maintains its focus on the battle against COVID-19, there are reasons for optimism in the months ahead. We believe that the current economic recovery will continue to deliver above-potential global growth; markets are indeed "Continuing the Climb." But as we move past peak momentum and peak accommodation, the recovery that follows will likely be uneven and multi-layered. Many risks to our outlook remain, including uncertainty about the nature of inflation.

Other urgent issues are returning to the fore. The search for yield in a relatively low-rate environment is causing investors to rethink their fixed income strategies. The climate crisis — one of the defining challenges of our era — is causing investors to search for ways to express their views on climate and related topics. And because the macro rationale for China investment remains intact, investors are searching for the most appropriate ways to access that market. We'll explore these themes and more in this year's Global Market Outlook.

2022 Outlook

From a macroeconomic perspective, 2021 was an extraordinary year. Economists and investors alike are now pondering what the new year will bring. As the recovery continues to deliver above-potential growth globally, we believe it will do so with a bit of a rotation tilt that allows, for example, the eurozone to narrow — and perhaps even close — the growth gap with the US.

The global growth narrative is far from uniform. In emerging markets (EM), growth headwinds persist as lagging vaccination levels, rising interest rates, electoral uncertainties, and other domestic policy considerations take their toll. In China, we have downgraded 2022 growth expectations to just 5.0% and still see near-term risks skewed to the downside.

The pandemic remains an important driver of performance; the COVID battle has not been won just yet. One cannot overstate the importance of vigilance in continuing the COVID fight at this stage of the business cycle. This is because the lowest-hanging "re-opening" fruit has already been harvested, and the gains that come next will be harder-won and more modest. In light of the stellar returns of the past year, this is even more true in financial markets than in the real economy. In addition, because financial markets are notoriously forward-looking, the concerns that will accompany the removal of fiscal and (especially) monetary policy accommodation will become more prominent by the middle of 2022.

Inflation

In many ways, the twin dynamics of high growth and high inflation that dominated the macro narrative in 2021 will extend into 2022. However, while inflation steadily built over the course of 2021, it should steadily decline from mid-2022 onward. The current annual average rate of inflation remains elevated by virtue of arithmetic, but by the middle of 2022 the acute inflation worries that currently dominate headlines should markedly subside. After all, base effects are likely to become serious headwinds a year from now. That said, we do not expect inflation to suddenly disappear. Rather, we expect to see a degree of "inflation rotation" take hold — particularly in the US — as shelter-cost inflation intensifies and offsets easing inflation pressures in other areas. Moreover, though worries around cyclical inflation will subside, the intense debate over possible structural changes to inflation is likely to persist. The two key indicators that we watch in this regard remain business/consumer inflation expectations and wage inflation. Both have moved sharply higher in 2021 to touch multi-year highs, but we would need to see current levels persist before a convincing argument for structurally higher inflation can be made.

We also think that it is worth considering more broadly whether a combination of highly accommodative macro policy, rising production costs in a scenario of "peak globalization," new costs associated with the green energy transition, and renewed global focus on equitable growth and income redistribution will create a fertile ground where persistently higher rates of inflation might take root. Investors might consider some protection against such a scenario.

Fiscal and Monetary Policy

We are past the moment of peak monetary policy accommodation. EM central banks have clearly led the move toward higher interest rates so far. Given EM's higher sensitivity to food price inflation, and that in general inflation expectations are less well anchored in EM than in developed markets (DM), this is a reasonable dynamic. Expect DM central banks to jump on the rate-hike bandwagon in increasing numbers over the course of 2022.

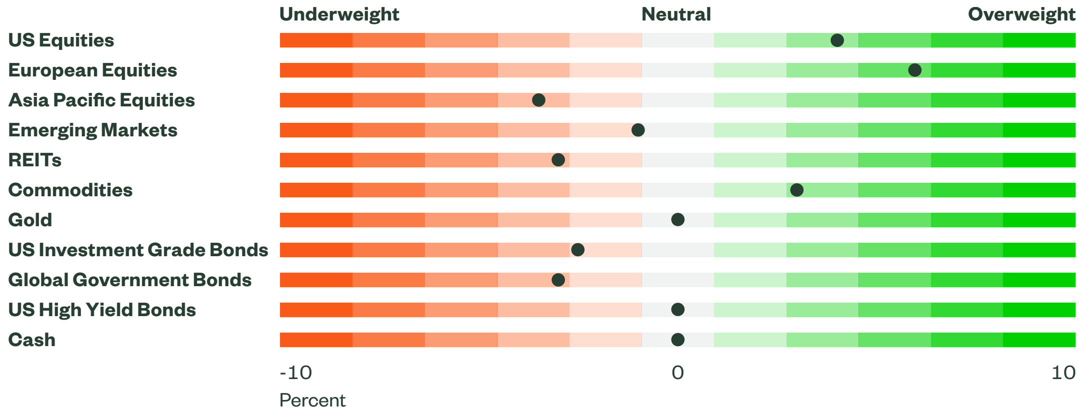
For the Fed, the immediate focus is on tapering and then ending asset purchases. The Fed may well accelerate the pace of its quantitative-easing taper in the first quarter as a precautionary step toward creating more optionality around the timing of its first rate hike. Even so, many uncertainties remain regarding the pace of tightening. Recently, markets have swung violently, buffeted by more aggressive pricing-in of tightening expectations, followed by central-bank pushback against those same expectations.

Our view is that much of the inflation we are experiencing today is "baked into the system" — i.e., caused by past fiscal stimulus and current supply chain challenges that central banks are powerless to resolve. Therefore, central-bank efforts to fight inflation with aggressive rate hikes might not only be detrimental to growth, but also ineffectual in taming inflation quickly. Fortunately, central banks know this and will seek to regain control of market and investor expectations. With a bit of luck, the task of central banks should become easier in coming months, allowing for a policy of steady but gradual normalization over 2022 to 2023.

Tactical Portfolio Positioning

Against this macroeconomic backdrop, State Street's latest monthly tactical portfolio positioning, summarized in Figure 1, remains supportive of risk assets — although we are conscious of near-term risks to the outlook.

Figure 1
Our Latest Monthly Tactical Portfolio Positioning Remains Supportive of Risk Assets
Summary of Asset-Class Views



Source: State Street Global Advisors, as of November 11, 2021.

Highlights from, and recent changes to, our tactical portfolio positioning include:

- We continue to build a position in European equities, which score well across most of the factors we monitor. Valuation, price momentum, and quality are favorable, and sales and earnings estimates have been significantly upgraded.
- US equities look reasonable, as buoyant macro factors offset negative valuations. Price momentum, particularly longer-term measures, aid the outlook, but sentiment has moderated and is now neutral. We are overweight both US small caps and US large caps.
- Slowing China growth and expectations for further weakening helped to drive the deterioration in our EM outlook. Appreciation of the US dollar is negative for EM, as are low sentiment scores for cyclical sectors.
- Within fixed income, we have increased our allocation to high yield bonds, which allows us to improve our expected return while picking up additional yield.
- From a sector perspective, we have maintained our allocations to technology and financials, and a partial allocation to energy. We rotated out of consumer staples and initiated a partial allocation in materials.

Macro Takeaways

The recovery will continue to deliver above-potential global growth, but recovery will also be uneven.

- The eurozone has a chance to narrow — or even close — the growth gap with the United States.
- The lowest-hanging fruit from the re-opening trade has already been harvested; future gains will be more modest.

High growth and high inflation will extend into 2022; however, we think inflation will steadily decline from Q2 2022 onward.

- Conditions for structurally higher inflation could be set by highly accommodative macro policy, rising production costs, new costs associated with the switch to green energy, and renewed global focus on equitable growth and income redistribution.

- Central-bank efforts may prove ineffectual and could also hurt growth prospects — but central banks are aware of this possibility and will seek to regain control of market and investor expectations.

We remain overweight to risk assets in our tactical portfolio and have continued to build our position in European equities, which are attractively valued and score well on most of the attributes we monitor.

Fixed Income Market

Hawkish Central Banks to Pressure Rates Higher

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Global Head of Active Fixed Income

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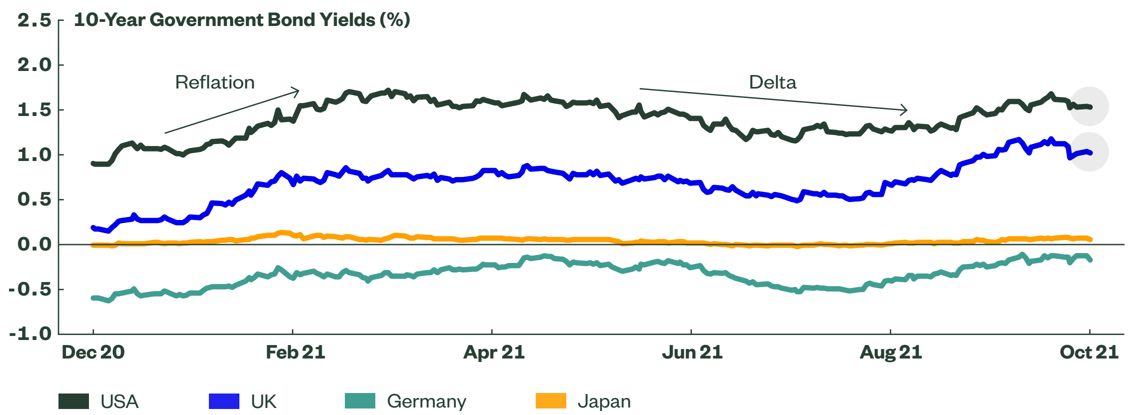
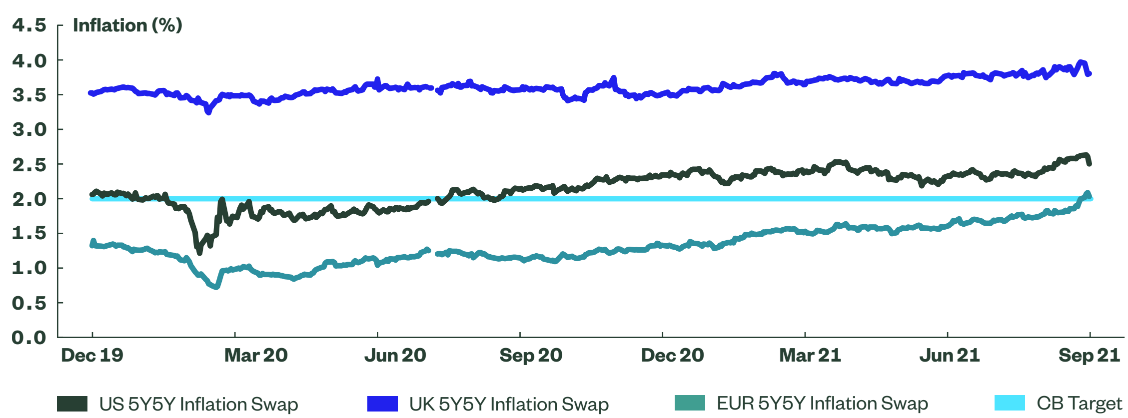
2021 has been an environment characterized by strongly above-trend growth and above-target inflation, as shutdowns and economic restrictions gave way to vaccination campaigns, reopenings and surging demand for goods and services. This has led to a rising rate environment, but the path has not been linear. Yields surged higher in the first quarter of the year on the reflation narrative, giving way to a “delta dip” over the summer, but rates resumed their upward climb starting in the third quarter. In this context, sovereign rates have seen negative performance while riskier fixed income sectors have seen positive excess returns, as spreads have tightened since 2020 (Figure 1).

Figure 1
After the Summer Delta Grind, Sovereign Yields Are Backing Up as the Spotlight Shifts to Inflation Concerns



Source: Bloomberg Finance LP, as of November 2, 2021.



Source: Bloomberg Finance LP, as of October 31, 2021.

Going into 2022, all eyes are on inflation, as Consumer Price Index (CPI) prints continue to hit multi-decade highs. We expect inflation to begin to ease starting mid-2022, as the high second-quarter prints from this year present more challenging comps. However, volatility in monthly inflation will continue into 2022, with supply-chain challenges persisting beyond initial expectations.

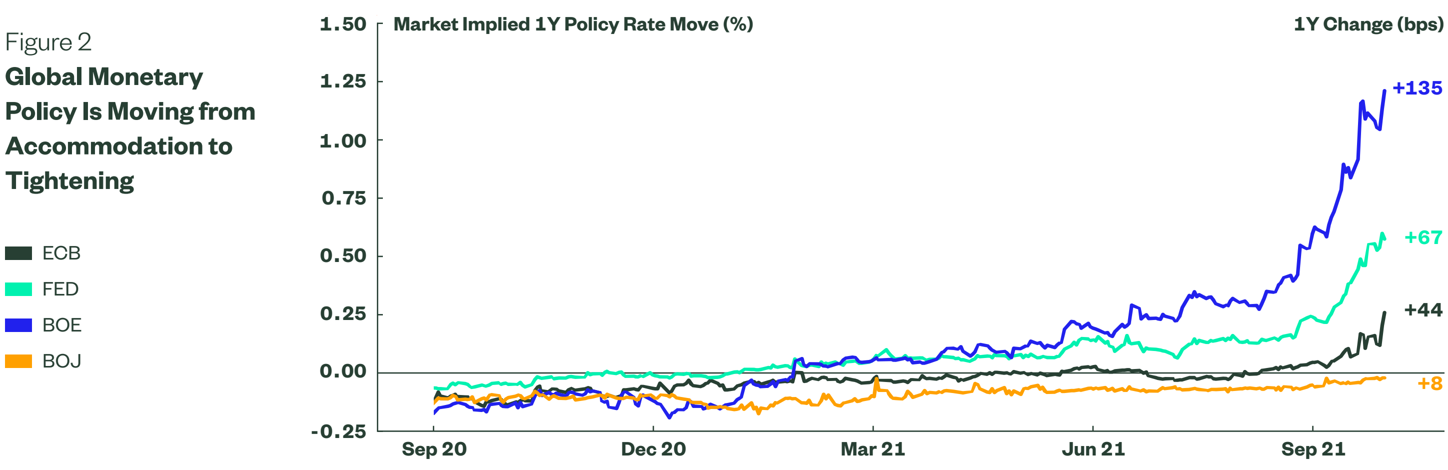
In this piece, we'll discuss three key dimensions of our outlook for 2022:

- Despite our expectations for a moderation in inflation in 2022, we expect a more hawkish stance from global central banks.
- While higher rates year-to-date indicate that the markets also expect central-bank tightening, we believe that recent sovereign rate increases are overshot.
- And finally, we believe that spread product will continue to remain relatively tight given strong credit fundamentals.

Central-Bank Pivot from Accommodation to Tightening

Amid a strong macroeconomic backdrop, we are seeing the shift from monetary accommodation to tightening. Central banks around the world have pivoted to more hawkish stances, prioritizing the withdrawal of stimulus that was performed via quantitative easing (QE). The Federal Reserve and others have begun tapering their COVID-era asset purchase programs; for example, the Fed announced in November that it would start tapering its $120 billion-per-month QE program at a rate of -$15 billion per month ($10 billion of Treasuries, $5 billion of agency mortgage-based securities [MBS]), with the aim to end the program by mid-2022. In addition, central banks have signaled that the first rate hikes since the pandemic began are on the horizon. Front-end yields have backed up accordingly, and interest-rate swap markets have pulled forward rate-hike expectations dramatically since September (Figure 2).

Figure 2
Global Monetary Policy Is Moving from Accommodation to Tightening

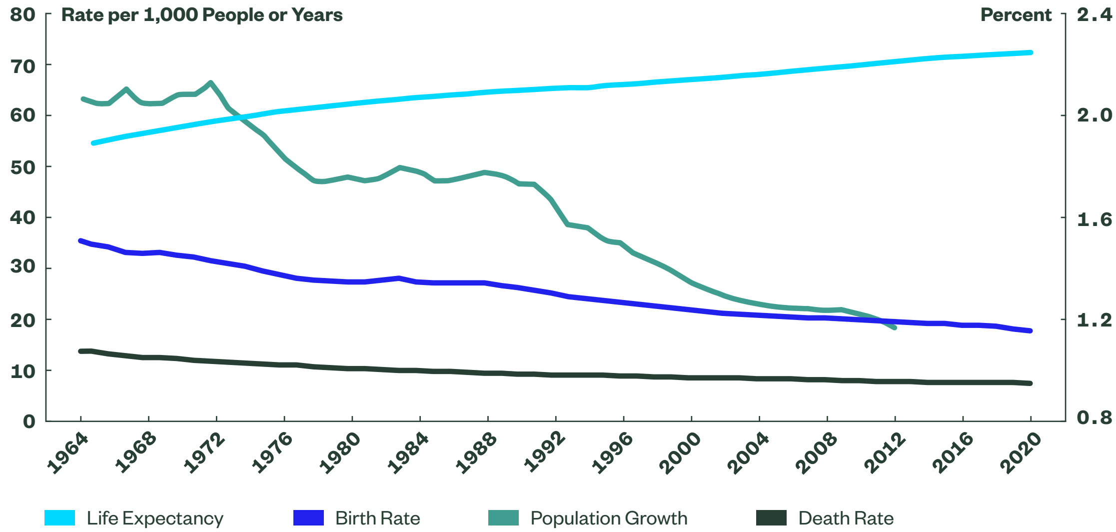


Source: Bloomberg, as of November 1, 2021.

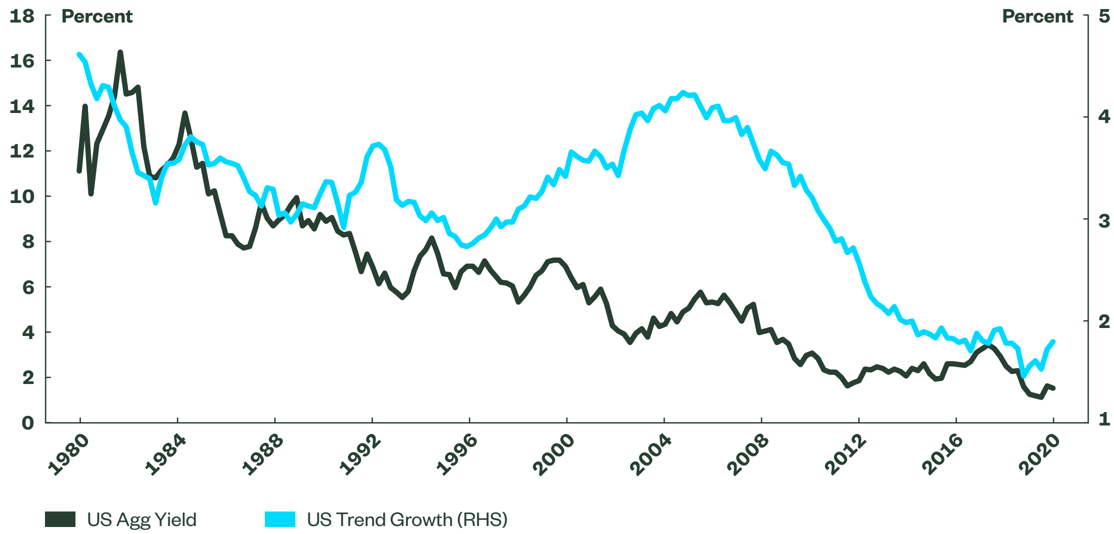
Have Market Expectations Moved Too Far Too Fast?

Policy rate increases in 2022 seem to be a foregone conclusion, especially given the continuing stickiness of inflation, but have government yields moved too high too quickly? Possibly, for a few reasons. First, we think the longer-term structural low-growth, low-yield world (Figure 3) will not change materially as COVID transitions from pandemic to endemic in the coming years.

Figure 3
Global Demographic Trends Point to Continued Low-Growth, Low-Yield Environment Post-Pandemic



Source: World Bank. Data are annual from 1964 to 2020.

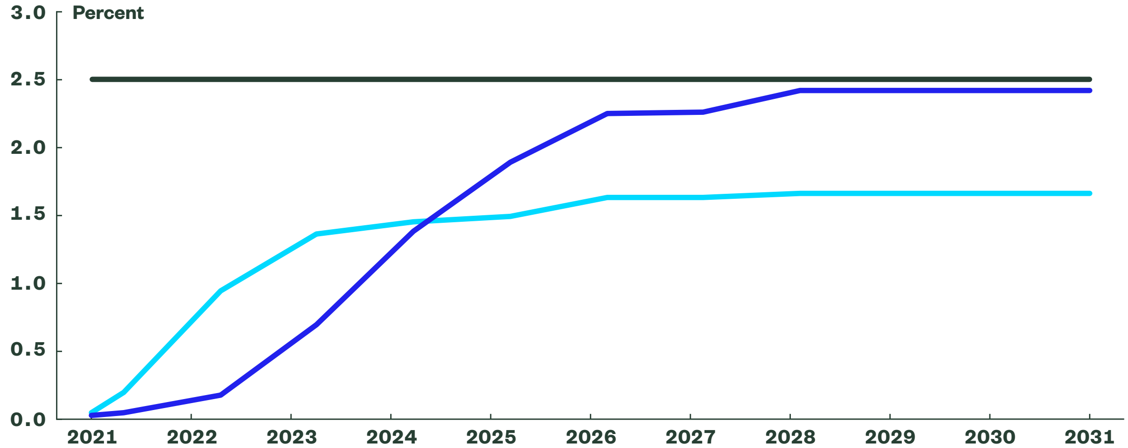


Source: State Street Global Advisors, Bloomberg. Data are quarterly from March 1980 to June 2021. US trend growth is calculated as 10-year annualized labor force growth plus 10-year annualized labor productivity growth. US Agg yield is yield-to-worst.

Second, while supply chain challenges and well-above-target inflation are expected for the next 6 to 12 months (at least), we believe these inflationary pressures will ultimately dissipate. Finally, while short-end yields have shot higher, long-end yields have been more anchored, leading to a bear flattening year-to-date. The modest uptick in the long end could imply that inflation and growth expectations are more muted and the short-end has moved up too fast. Despite the back-up in the front end, interest rate swap markets in the U.S. continue to price in a longer-term Fed Funds Rate of under 1.75% (Figure 4), well below the 2.5% reflected in the Federal Reserve dot plot.

Figure 4
Treasury Swap Markets Reflect a Policy Rate Under 2% Going Forward. Does This Suggest a Less Robust Recovery?
Fed Funds Path Implied by US Rates Market

As of Nov 12, 2021 (10yr: 1.58%)
As of Mar 31, 2021 (10yr: 1.78%)
Median Fed "Dots" LT Projection



Source: State Street Global Advisors Analysis and Bloomberg Finance LP, as of November 12, 2021.

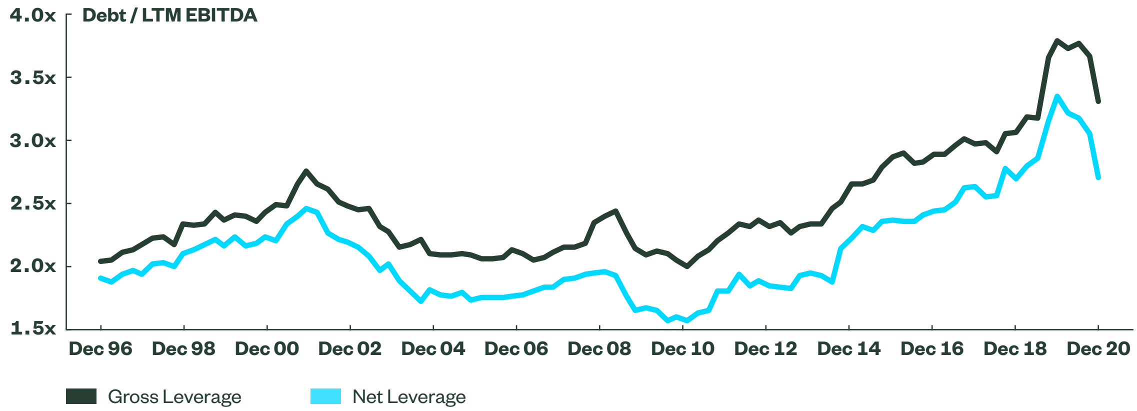
Markets remain skeptical of just how much rates can rise from current levels on a longer-term basis — and so are we. We expect curves to flatten further as front-end yields continue to be pulled upward while the back end remains more anchored.

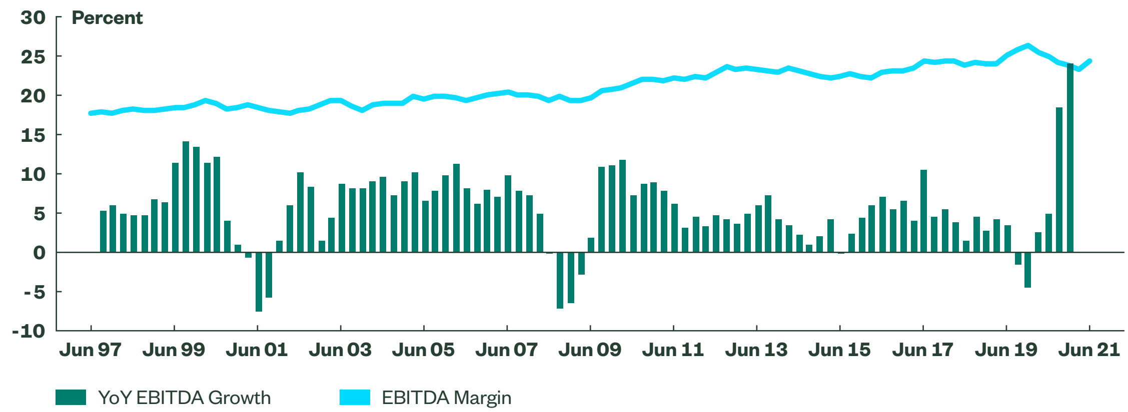
Improving Fundamentals Will Support Tight Credit Spreads

Spreads within riskier fixed income sectors like investment grade (IG) and high yield (HY) credit should continue to be well supported by a fundamental picture that has bounced back quickly after a challenged 2020. The overwhelming policy response during COVID, including central banks' asset purchases of IG and some HY corporate bonds/bond ETFs, helped stabilize credit spreads quickly and limit the depth and breadth of the downturn. Within the current credit cycle, we have transitioned from downturn, to repair, to expansion in less than two years. As a result, IG corporate fundamentals in the form of leverage ratios, margins and EBITDA growth have improved markedly and are now back to pre-COVID levels (Figure 5). We expect credit spreads to remain relatively compressed moving into 2022 despite valuations already near long-term tights, based on strong fundamentals and foreign investors' continued demand for yield. Lastly, the more upbeat "rising stars" backdrop will help enable a benign default and downgrade environment. Despite valuations, riskier fixed income spreads still handily outpace government yields and should be a good source of carry in 2022.

Figure 5

IG Fundamentals Have Quickly Bounced Back to pre-COVID Levels, Supporting Valuations





Source: Bank of America. IG fundamental data are quarterly from December 1996 to June 2021. Data shown are the median values for the broad universe of US high grade non-financial issuers.

Risks to Our Outlook

Risks to our expectations are all centered around inflation. If we continue to see month-over-month prints near 1%, central banks may have no choice but to begin hiking policy rates quickly, thereby putting a damper on the recovery. High levels of inflation plus dramatically slowing growth is the worse-case scenario, as there are no easy solutions to deal with stagflation. On the other hand, inflation slowing rapidly to levels below the Fed's 2% target would suggest that the structural low-growth, disinflationary forces (demographics and technology, among others) are stronger than we thought and would likely require fiscal policy to help address these challenges.

Closing Thoughts

- We expect global central banks to take on more hawkish posture in 2022.
- While short-term rates have moved higher in response to potential rate hikes in 2022, we believe that the increase in yields and hawkish tone of the Fed could serve to accelerate the economic cycle.
- Entering 2022, we expect yields to rise further in the front end as rate hike expectations continue to be pulled forward. Any back up in longer-maturity yields should remain relatively contained, resulting in continued curve flattening.
- We expect credit spreads to remain tight, and investment grade credit should continue to be a good source of carry and incremental yield (over U.S. Treasuries) in 2022.

Earnings Growth to Boost Equities Despite Market Volatility

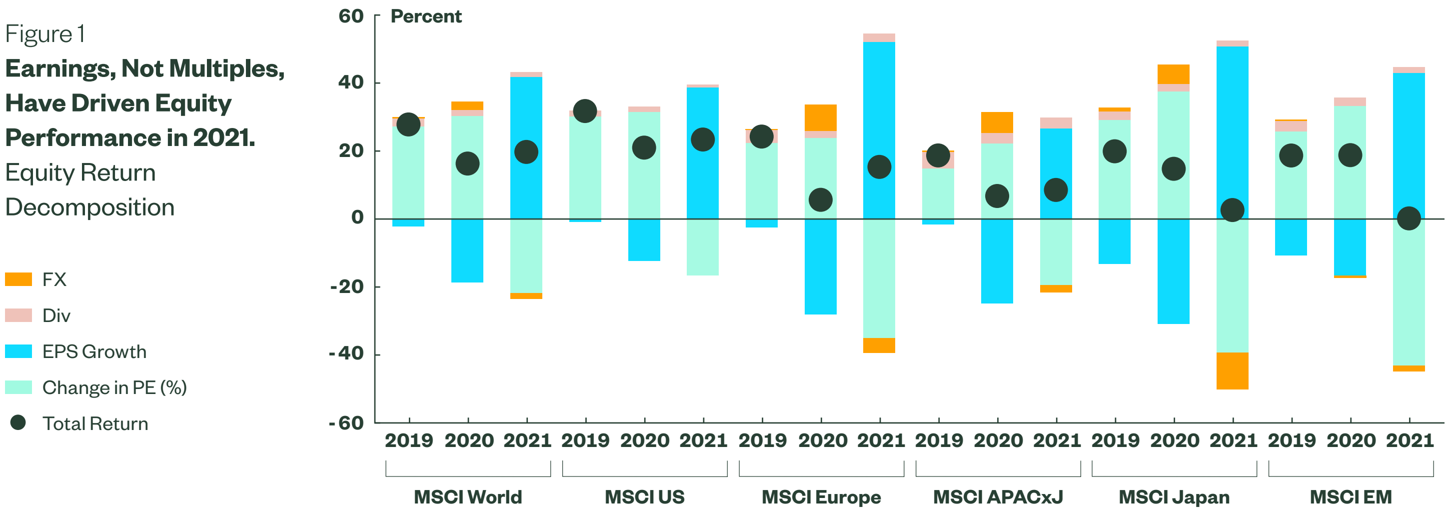
Gaurav Mallik
Chief Portfolio Strategist

Powered by unprecedented monetary and fiscal support, equities markets performed strongly in 2021. The coming year presents a complex picture as the global economy finds itself on an uncertain climb toward recovery. Monetary intervention is dwindling as inflation proves to be stickier than originally hoped; bond yields could surprise to the upside. Increased volatility is also looming, as equities markets rise and fall in response to the ebb and flow of the global pandemic, and in response to policy signaling.

We continue to favor equities compared with other asset classes, because they still offer relatively attractive excess returns. The equity risk premium (ERP) for developed markets, for example, stands at 4.8% as of September 1, 2021. This represents a drop compared with the same time last year; however, the ERP remains positive and, as of this writing, remains above long-term averages in both developed and emerging markets.

In a welcome change from prior years, earnings, not multiples, have driven equity performance so far in 2021 (see Figure 1). With risk to bond yields falling to the upside, earnings must continue to come through for equities markets to continue to rally further.

Figure 1
Earnings, Not Multiples, Have Driven Equity Performance in 2021.
Equity Return Decomposition



Source: State Street Global Advisors, Bloomberg, as of October 31, 2021. Chart references MSCI regional indices; MSCI EM refers to the MSCI Emerging Markets index. PE = price to earnings ratio; EPS = earnings per share.

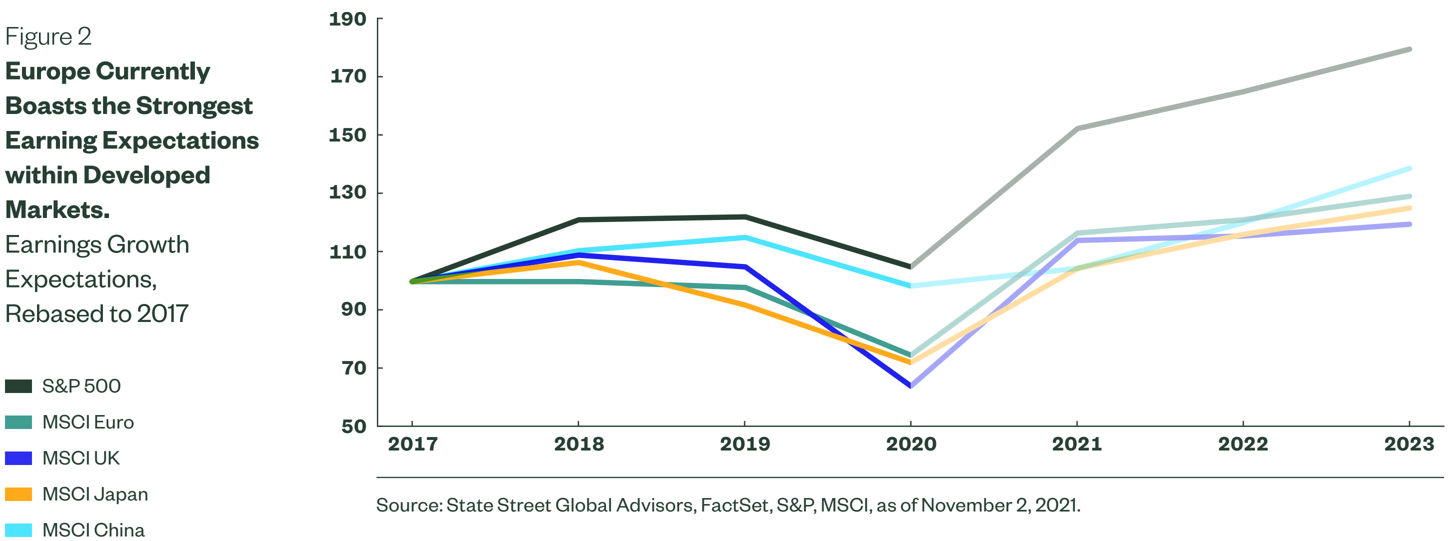
There has been good news on that front in the most recent earnings season. Corporate earnings have surprised to the upside, and — perhaps even more importantly — forward guidance for 2022 has been strong. We believe companies are in a good position to deliver on that guidance. The average price-to-equity ratio for the MSCI World stands between 19 and 20 as of this writing[1] — a level we consider to be sustainable (although we recognize that the recent ballooning of multiples could lead to a short-term contraction). We also believe that yields will remain below 2%. In short, the stage seems to be set for equity prices to continue to move up, and we believe that stock returns and prices will continue to be driven by earnings, dividends, and buybacks.

With this background in mind, here are the points that we believe are most important for equity investors to consider in 2021:

Volatility is making a comeback. Aggregate levels of volatility have settled in at a higher level in 2021 than we've experienced in recent years; caution is warranted heading into 2022. In particular, we think investors may benefit from seeking pockets of the equities market where reasonable valuations can give more of a cushion against volatility.

European equities are in a sweet spot. US stocks have led global equity performance for years – but we think Europe will pull ahead in 2022. In the search for reasonable bargains and strong return potential, we think European equities will represent a find in the coming year. European stocks offer attractive valuations relative to their US counterparts. The current price-to-earnings discount for MSCI Europe is below 10-year averages,[2] and relative earnings per share (EPS) and relative prices for European stocks compare quite favorably to the same measures for US stocks.[3] Furthermore, European equities currently boast the strongest earnings and growth expectations across developed markets. If our expectations for US equities exceeded those for Europe in the past, those expectations were based in part[4] on anticipated earnings. With earnings growth in Europe now expected to outstrip the US, we think equity markets are poised to catch up.

Figure 2
Europe Currently Boasts the Strongest Earning Expectations within Developed Markets.
Earnings Growth Expectations, Rebased to 2017



Source: State Street Global Advisors, FactSet, S&P, MSCI, as of November 2, 2021.

Cyclical stocks will benefit from hard infrastructure spending. A wave of infrastructure spending, exemplified by the recent passage of a $1 trillion infrastructure bill in the US, will benefit cyclical sectors including industrial, materials, energy, and financial firms. Indeed, a substantial portion of our confidence in continued earnings strength is based on our expectation that cyclical stocks will benefit from renewed government emphasis on hard infrastructure. These latest moves build on existing trends to further benefit cyclical stocks; industrials reported the strongest earnings in the most recent earnings season, while a gradual steepening of the yield curve has benefited financials. Note, too, that an upward trend for cyclical stocks is likely to benefit European equity markets, which skew toward cyclicals.

Caution is still warranted in emerging markets. If earnings are likely to be the primary fuel for equity-market growth in the coming year, emerging market equities will remain challenged. Emerging market companies have yet to fully benefit from the reopening trade, as their efforts to boost vaccination rates continue. For that reason, we expect growth in emerging markets to take shape later in 2022, as vaccination rates improve. We expect emerging markets to offer substantial opportunities in future, even as we remain neutral for now on emerging market equities.

It is important to note that we see China as distinct from other emerging markets; in fact the addition of a standalone China component to a global equity allocation has the potential to improve diversification, not just with respect to developed markets, but with respect to other emerging markets. For investors seeking diversification and the return potential of one of the world's largest economies, separate consideration of China equity investment can help tailor return and risk exposures to particular objectives. Skilled active management may also allow investors in China equities to take advantage of relatively high dispersion among Chinese stocks and more effective management of the unique opportunities and risks that China's equities market presents.[5]

Quality will surpass growth as inflationary pressures rise. Buoyed by a massive injection of monetary and policy stimulus, growth has been the clear factor winner through the pandemic, but we believe the baton will pass to quality as inflationary pressures continue to rise and monetary policy tightens. Given relatively flat yield curves, we think value will continue to be challenged (although value looks attractive on a historical basis), but small-cap companies are likely to prosper as fiscal policy moves from global to local action.

Closing Thoughts

As we prepare this equity market outlook, we're keenly aware of key points of uncertainty that pose risks to our base case. Markets are less complacent now than they have been recently, but they remain fragile and vulnerable to shocks. Any move toward tighter monetary policy in response to persistent, higher inflation could threaten markets' fragile exuberance. For equity investors, commodity sectors and cyclicals represent the best hedge against inflation, while higher background volatility can be mitigated by managed-volatility and defensive equity strategies.

In light of these risks — and considering the growing dispersion in performance with respect to the fundamental measures, including earnings, that are most likely to drive returns — we see an opportunity for active management in the coming year.

In general, we're keeping a close eye on the potential for rotation into a higher-inflation regime as we look forward to 2022. For the next year, we favor segments of the market that we believe are most likely to come through on earnings: European equities, cyclical sectors, and quality stocks.

Investment Themes

Getting the Most Out of Fixed Income

Income, liquidity, and diversification goals are still achievable in a low-rate world.

Keeping Pace with the Climate Transition

The transition to a low-carbon economy could occur faster than investors may think.

Why It's Time to Reconsider Your China Exposure

The size of the market and the magnitude of the opportunity require a dedicated China approach.

Fixed Income

Getting the Most Out of Fixed Income

Thomas Coleman
Global Head of Fixed Income Investment Strategists

Interest rates have been stubbornly low for years — a trend we think likely to continue. Although bond yields have risen compared with their lows of the past year, along with many investors, we're skeptical of the case for meaningfully higher rates. As a result, investors are justifiably considering alternatives to fixed income that may offer more return potential.

But focusing on return alone can lead investors to overlook the critical role that fixed income can play in diversifying portfolio exposures. Developed-market sovereign bonds, particularly US Treasuries, have significant risk diversification benefits that can help to offset pain in risk assets. Furthermore, particularly for investors who have sought returns through exposure to illiquid private assets, the relative liquidity of public fixed income can help to efficiently implement portfolio asset-allocation shifts when market volatility strikes.

We also think it's important not to overlook the potential for certain areas of the fixed income market, including emerging market debt, to provide meaningful returns and yield enhancement. Chinese bonds, for example, enjoy a yield advantage over the bonds of their developed market (DM) peers. The low correlations of Chinese bonds compared with DM bonds also suggests substantial diversification potential in a fixed income portfolio.

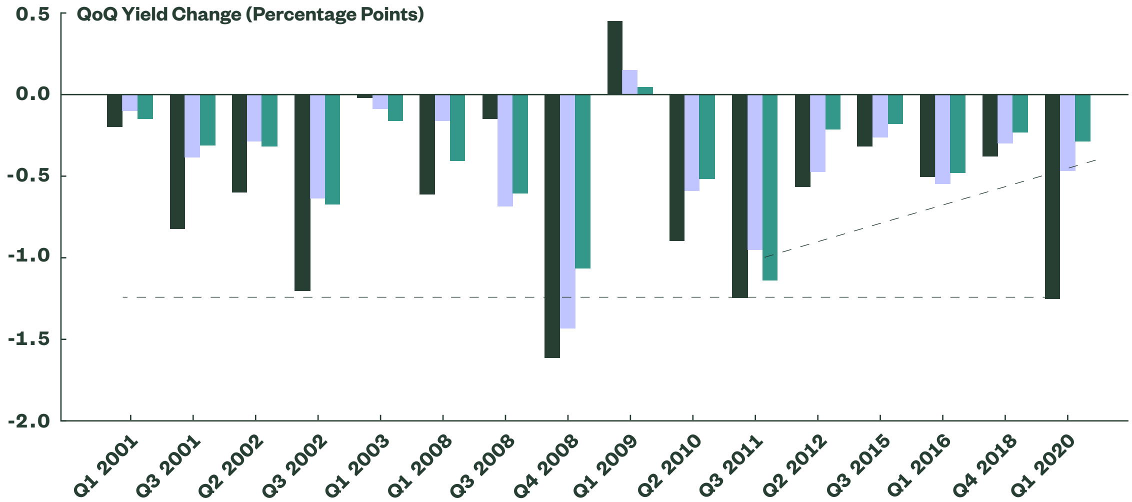
Risk Diversification

The longstanding presumption, borne out by fact, is that in periods of stress in risk markets, investors will seek the safe haven of DM sovereign bonds. Indeed, US Treasuries and the mighty US dollar represent the highest standard for risk-free assets. The resulting demand for US Treasuries drives yields down and prices up, which then diversifies falling asset values elsewhere in a portfolio.

As global yields approached and then fell through zero — a threshold that had previously been considered a floor — many questioned whether the diversification property of DM sovereign bonds would persist.

The data shows that DM sovereign bonds have indeed continued to be diversifying in this context. When we look at the negative interest rate era across developed markets, we notice something interesting: during the most significant fixed income market dislocation during this period (which took place in Q1 2020), US Treasury yields fell significantly more than those in lower-yielding European peer markets. US Treasuries were, in other words, more diversifying than other, lower-yielding sovereign bonds. Certainly the safest-haven status of US Treasuries was a benefit during this period; this phenomenon also took shape because the starting level for US Treasuries was elevated compared with other DM bonds. Figure 1 compares US Treasury bonds' performance during this period, compared with German bunds and UK gilts.

Figure 1
Lower-Yielding Sovereign Bonds Have Offered Less Diversification Benefit Than US Treasuries
10-Year Sovereign Yield Changes When Equities Decline Less Than 5%



Source: Bloomberg LLP, State Street Global Advisors, as of October 31, 2021.

When yields are low and both the income- and total return-generating potential of fixed income are subdued, we believe every dollar invested in fixed income should be maximized. This leads to the case for extending the duration of US Treasury holdings in a portfolio in order to deliver maximum diversification benefit; doing so opens the door to consider a more capital efficient use of funds allocated to fixed income. In the most significant equity market sell-offs in recent memory (in 2008, 2011, and 2020), the corresponding rallies in long US Treasuries approached and even exceeded equities-market declines (see Figure 2).

Figure 2
Rallies in Long US Treasuries Offset Most Significant Equity Sell-offs

Quarterly Total Returns	Q4 2008 (%)	Q3 2011 (%)	Q1 2020 (%)
MSCI World NR USD Index	-21.8	-16.6	-21.1
Bloomberg US Long Treasury Index	+18.7	+24.7	+20.9
Bloomberg US Treasury Index	+8.8	+6.5	+8.2
Bloomberg Global Treasury Major Hedged USD Index	+6.3	+3.8	+3.7

Source: MSCI, Bloomberg, State Street Global Advisors as of October 31, 2021

Liquidity

The asset allocation of the typical portfolio has evolved far beyond the 60% equities/40% fixed income standard of yesterday. Incorporating alternatives in a portfolio can bring many risk and return benefits but can also introduce liquidity constraints. The illiquidity of many alternative investments creates challenges for investors seeking to efficiently implement asset allocation shifts and to meet ongoing cash flow needs. Liquidity is usually a term connected to cash and Treasuries, but in the context of this investment landscape, we think liquidity should be considered in relative terms.

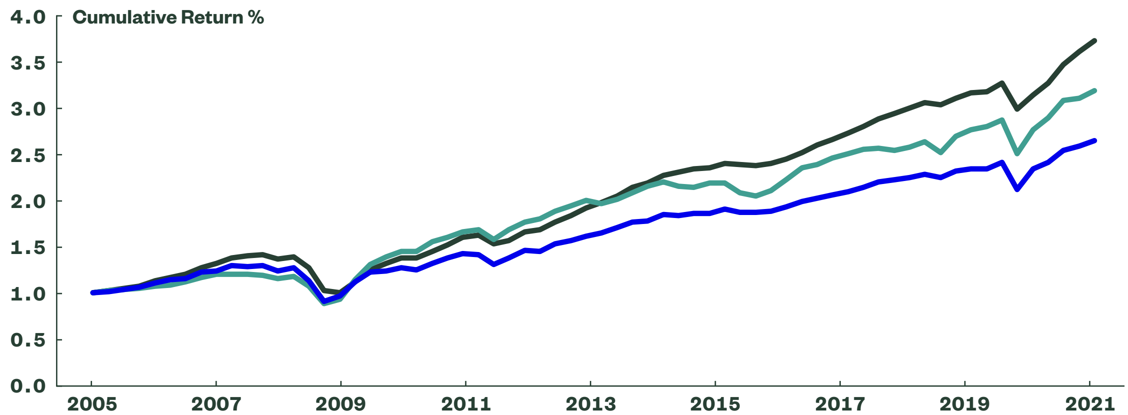
Take, for example, private credit and high yield fixed income. The draw of private credit for many investors stems from *elevated income* driven through a *leveraged portfolio* structure invested in private lending activities. The private nature of the investments means that assets are only periodically assigned valuations. Because these assets are not freely traded, the effect is a smooth return profile compared to investments that are regularly marked to market; however, private credit suffers from very challenged liquidity.

On the other hand, high yield offers *elevated income* driven through investment in *leveraged companies*. While there are certainly periods when accessing liquidity in high yield can be difficult, high yield is marked to market daily and in general high yield is much more liquid than private credit. These complementary properties suggest that using high-yield fixed income in combination with private-asset investments can provide investors with the best of both worlds: access to a diversified spectrum of high-income investments, capture of a liquidity premium, and the flexibility to trim or add exposure opportunistically.

This is supported by the long-term return outcomes realized in both high yield and private credit. While observed returns in private credit have been higher than those in high yield, deleveraging the returns on private credit and subjecting the returns to market volatility (akin to high yield) reveals that high yield is a quite strong proxy (see Figure 3). In this manner, the relative liquidity of high yield can improve portfolio risk characteristics of a "modern" portfolio that includes an allocation to private credit.

Figure 3
High-Yield Fixed Income and Private Credit Together Can Increase Portfolio Flexibility
Relative Performance of Public and Private Credit

Observed Private Debt Returns
US High Yield
Leverage Adjusted and Unsmoothed Private Returns



Source: Burgiss Group LLC, Bloomberg Finance L.P. Data are quarterly from June 30, 2005 to June 30, 2021. Private returns used are time weighted rates of return (TWRR) for Burgiss' Private Debt Universe for the US geography. Results are net of fees and carried interest.

Key Takeaways for Investors

- Faced with the prospect of persistently low interest rates, alternatives to fixed income that may offer more return potential are understandably appealing.
- Globally stimulative fiscal and monetary policies will provide support for spread sectors and the income they provide: corporate and structured credit, investment grade and high yield credit, and emerging markets debt.
- We think investors may benefit from using allocations to DM sovereign bonds, especially long-maturity US Treasuries, to diversify risk exposures away from fixed income.
- We believe liquidity should be thought of on a relative basis: For example, investors who have sought returns through exposure to illiquid private assets may particularly benefit from the relative liquidity of public fixed income, which can help to efficiently implement portfolio asset-allocation shifts when market volatility strikes.
- An allocation to Chinese bonds can introduce both income and diversification benefits to a fixed income portfolio. Inclusion in major indices has broadened the investor base for Chinese bonds and created favorable demand technicals.

ESG

Keeping Pace with the Climate Transition

Carlo Maximilian Funk
EMEA Head of ESG Investment Strategy

Climate change has already become one of the most prominent line items on the world's agenda. But we believe that its impact on the global macroeconomy is just beginning and increasing in pace. In our view, investors should think of the transition to a low-carbon economy as a multi-dimensional shock event, spread out over time, that will have major regulatory and economic consequences and profound investment implications. Investors who think the pace of climate-related change in markets/economies will be slow could be in for a major surprise.

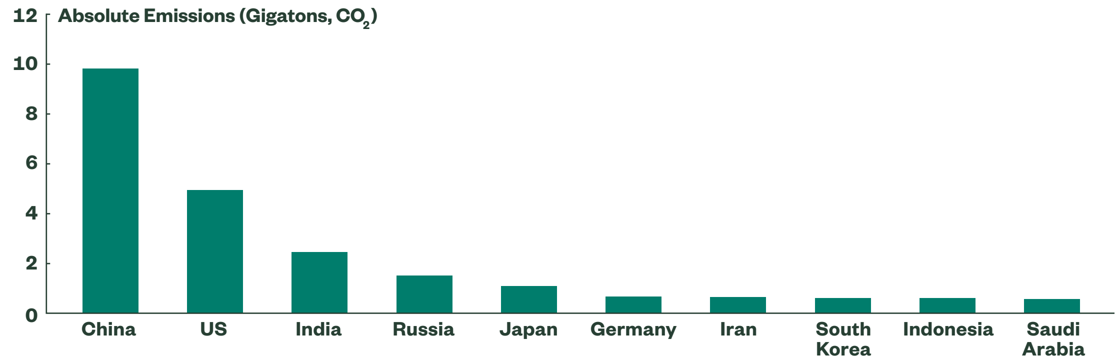
A Stronger and Faster Transition

Recent events, country-specific incentives, and multiple positive feedback loops are setting the stage for faster movement toward decarbonization in 2022 and beyond.

First, COP26 highlighted the urgency of global action. Under the Paris Agreement in 2015, nearly every country agreed to work together to limit global warming to well below 2 degrees Celsius, with an aim of 1.5 degrees. However, data shows that the targets that countries announced in Paris do not remotely reach that goal. COP26, which was seen as an opportunity for countries to make more aggressive targets, resulted in a wide range of outcomes. (For more of our thinking on the ramifications of COP26, see Post COP26: Outcomes and Opportunities.)

Second, we note that decarbonization has second-order effects that could drive heavier participation from developed and emerging markets. For example, geopolitical superpowers (the US, China, and Europe) are incentivized to stay on top of the race to become a climate leader because the transformation to a low-carbon economy will come with enormous opportunities (similar to other disruptive shifts, like digitalization). India is seeking to become a global power, but it is also the third-largest emitter behind China and the US (see Figure 1). India's pledges made at COP26 are less aggressive than those of other countries, but the fact that India made a net-zero pledge is still a significant development. Also, most developed market economies are net energy importers under the current fossil fuel regime. Decarbonization could therefore improve the balance of trade for these nations (see Figure 2).

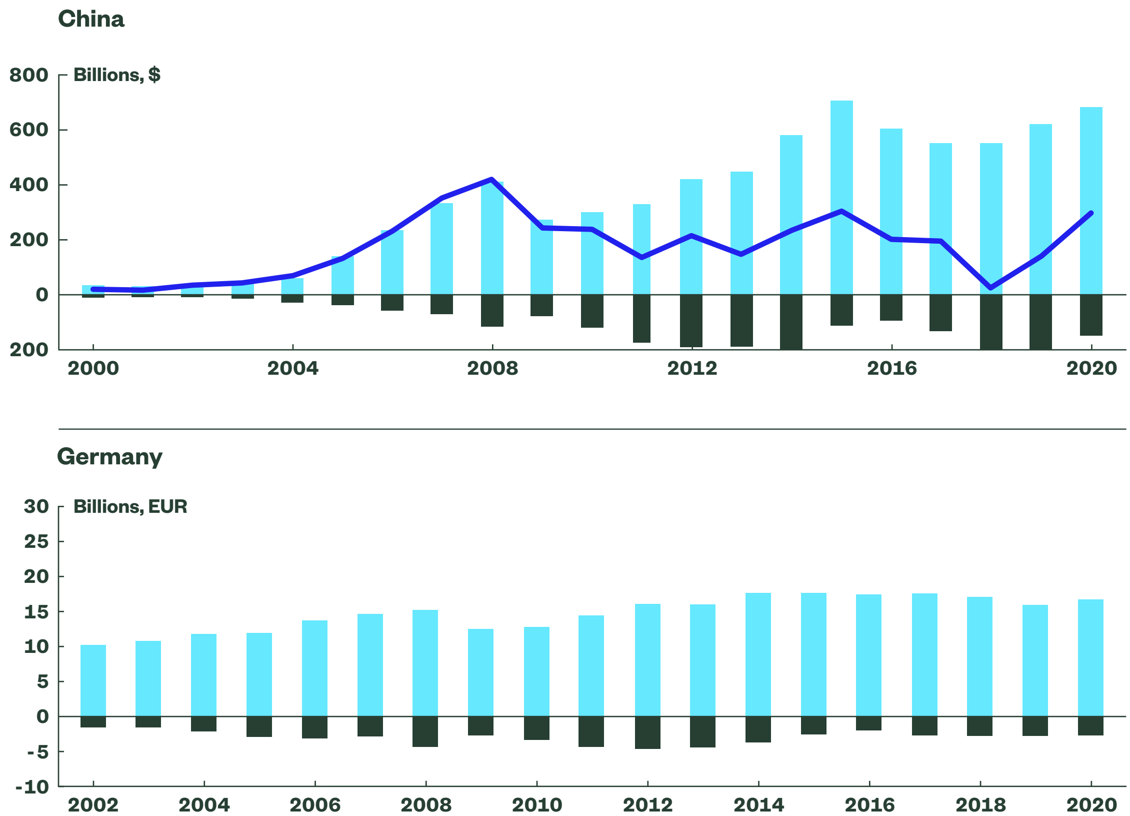
Figure 1
India Represents an Opportunity for Increased Decarbonization



Source: BP Statistical Review 2020; World Bank data, 2019.

Figure 2
Decarbonization Could Improve the Balance of Trade

Non-Oil Trade Balance
Oil Trade Balance
Current Account Balance



Source: State Street Global Advisors Macro Policy Research, German Federal Statistical Office (Statistisches Bundesamt). China national sources (various). As of January 1, 2020.

Finally, positive feedback loops underpinned by innovation will likely lead to a mass displacement of fossil fuels by renewables — potentially much more quickly than many would anticipate. These loops include:

The volume-cost feedback loop. As renewable energy volumes rise, costs for businesses and consumers fall, which then spurs more volumes. On the flip side, falling fossil volumes mean lower utilization rates, which increase fossil fuel costs and drive down demand. Capital spending by the incumbent energy sector has already started to drift lower — even as crude oil prices have ticked higher — as oil and gas companies have reduced spending on petroleum.

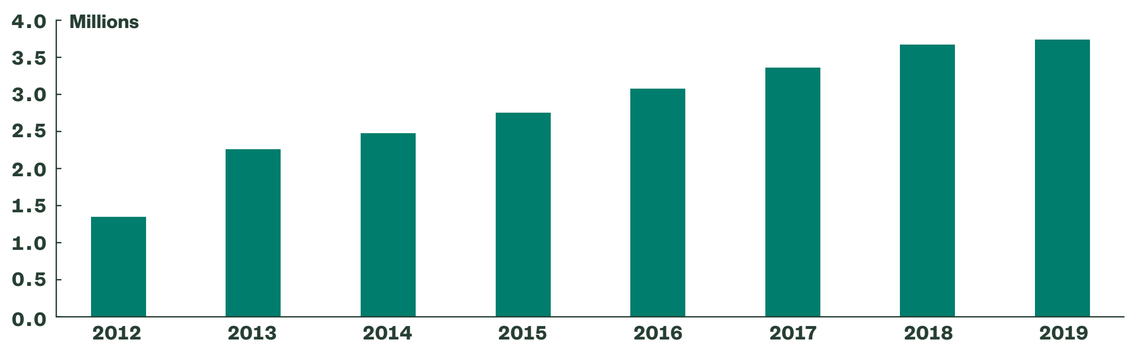
The technology feedback loop. As more electric vehicles come on the road, battery costs decline, which then increases renewable penetration. By contrast, peaking fossil fuel demand means a collapse in the innovation of fossil fuel-based technologies.

The expectations feedback loop. As demand for renewable energy continues to grow, oil and gas incumbent earnings and operational forecasts will look less credible. As traditional energy companies' models change, so too do the perceptions of investors and policymakers, driving price movement and revised expectations.

The finance feedback loop. As growth in renewable demand leads to more capital contribution from investors, the cost of capital for renewable energy companies falls, enabling even more expansion. In contrast, the greener economy will force fossil fuel companies to face higher costs of financing. Note, for example, that an annual $1 trillion in green bond issuance is expected by 2023, versus $228 billion in the first half of 2021, according to the Climate Bonds Initiative.[6]

In addition, **the broader society feedback loop, the politics feedback loop,** and the **geopolitics feedback loop** will further accelerate this transformation. As society becomes more concerned with the climate crisis and comes to better understand the financial benefits of renewable technology, people will likely change their behavior. Politicians in turn will likely realize that renewables can generate more "gain" than "pain" (see Figure 3), and geopolitical superpowers may see similar opportunities, leading to a race of one-upmanship that accelerates the movement toward decarbonization. (For more details, see Spiralling Disruption: The Feedback Loops of the Energy Transition.)

Figure 3
Job Generation from Renewables Could Move Policy Agendas
Solar Jobs



Source: State Street Global Advisors Macro Policy Research, German Federal Statistical Office (Statistisches Bundesamt). China national sources (various). As of January 1, 2020.

Implications for Investors

While we have already seen long-term investment move away from the incumbent energy sector, we know that most diversified investors still have significant exposure to fossil fuels via various value chains, both in the equity and fixed income markets. To manage the climate transition, investors should consider the following:

The need to obtain clarity regarding their exposure to the fossil fuel sector and the associated risks. A massive economic depreciation exercise for carbon-heavy assets, alongside an appreciation exercise for carbon-neutral assets, is looming, and this situation will present risks as well as opportunities. Investors with a solid understanding of the regulatory and economic implications of the transition to a low-carbon economy can build more resilient portfolios and take advantage of these opportunities. Portfolio analysis using forward-looking climate metrics is a key element of this process, so finding the correct analytical tools regarding transition forecasts and physical risk models is crucial for investors.

The increasing importance of stewardship and engagement. It is well understood that divestment alone is not an adequate option for investors and can, at times, also curb the benefits of efforts to allocate capital sustainably (see Engage or Divest? The Question at the Heart of Climate Impact).

The consequences of regulatory change — better disclosure and new financial models with which to integrate changing ESG criteria. The IFRS Foundation announcement regarding the establishment of the International Sustainability Standards Board (ISSB) is an important step in the quest for better ESG disclosure. The inclusion of carbon pricing into equities-market valuations still poses modelling challenges for investors, and pricing considerations will have implications on valuations and credit analysis.

The effect of decarbonization on corporate earnings. Government fiscal policies to help build sustainable economies could also lead to company balance sheet damage from tax increases, even if these tax hikes are shared with households. In addition, decarbonization is a structural inflation driver for economies, as the inputs and technologies for sustainable businesses are still in their infancy. This could hit carbon-intensive sectors particularly hard. On the positive side, investors could benefit from opportunities in green technology such as low-carbon steel and cement, carbon offset technologies, and biofuels (just to name a few). Investors could also benefit from the pairing of greening and digitization, with an expected acceleration in software and artificial intelligence (AI) related to climate change.

Closing Thoughts

Investors are facing a potentially parabolic rise in climate awareness in coming years, and positioning for this reality is prudent for portfolio management. The drivers of increasing interest in decarbonization include the outcomes of COP26 and many positive feedback loops that will push climate even more to the forefront. Investors will likely benefit from greater disclosure requirements, but they will also need to effectively integrate climate risks and opportunities into financial models and deeply understand their carbon exposure.

Encouragingly, results from our recent global ESG survey of 300 institutional investors showed that most investors plan to implement decarbonization targets over the next three years (i.e., 71% in Europe, 70% in Asia Pacific, and 61% in North America). Investors plan to use a wide range of asset classes to express their climate targets and, in a change from our prior survey,[7] they cite their responsibilities to drive the economic transition and to help to solve the global climate crisis as their top two reasons for pursuing climate investment strategies. These survey responses could imply that many market participants understand the expected acceleration in decarbonization, but they also show investor momentum — yet another potential driver of climate-related market movement. In sum, we believe that preparation for this shifting landscape is key.

China

Why It's Time to Reconsider Your China Exposure

Elliot Hentov, Ph.D.
Head of Policy Research

In 2021, China's economic slowdown, zero-COVID strategy, and regulatory interventions led to many negative headlines. From an investment perspective, we think it's important to look beyond the headlines at the underlying trends at work in China. Our examination of those trends leads us to believe that Chinese assets remain appealing. At the same time, we think that the Chinese market has evolved to require a differentiated approach. Investors should consider positioning their China exposure on a standalone basis, with a preference for active strategies and an expectation that their China allocation's portfolio share will grow.

Macroeconomic Outlook

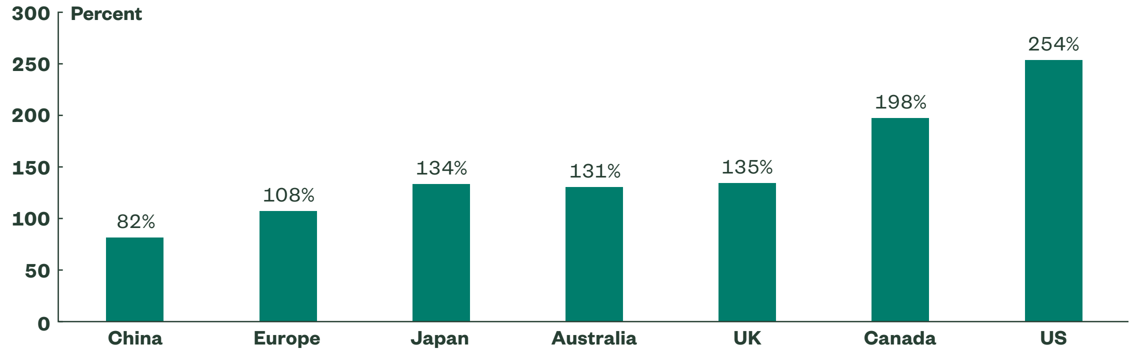
The macro rationale for China investment remains intact. While the country's growth trend is decelerating, its growth rate will remain far above that of developed markets and slightly above that of other emerging markets. Even if annual GDP growth were to slow to a persistent level of 4% to 5%, this would provide a lot of room for companies to grow their earnings at an attractive rate. Moreover, China's size means that its companies can take advantage of a larger home market — China's domestic economy is larger than the economies of all other emerging-market countries combined.

In addition, there are some distinct competitive dynamics at play in China. The country remains a large net creditor, and its unique political system means that it has built up a sizable capital base in the form of hard and soft infrastructure. This capital base should still deliver outsized productivity gains for a country at this income level.

Investment Thesis

While some of our macro arguments are debatable, our core investment thesis is not. China's equities market appears structurally undervalued. China's equities-market capitalization is stuck at 82% of GDP, far below that of any developed market. Figure 1 uses the Buffett Ratio[8] to show the comparison. This relatively low ratio provides leverage for China, as we estimate that market-cap-to-GDP should reach 100% by 2025, driven by new stock issuance and the growth of the current market. In addition, cyclical markers also indicate excessive discounting, with China's current price-to-earnings ratio falling well below 20-year averages and global/developed-market benchmarks.

Figure 1
China's Equities Market Appears Structurally Undervalued, As Evidenced by Its Relatively Low Buffett Ratio
Buffett Ratio (Market Capitalization to GDP) of Select Equity Markets



Source: MSCI Indexes, FactSet, Bloomberg, State Street Global Advisors, as of October 29, 2021.

Second, despite the size of the China market, global investors currently have relatively little exposure. The economy represents roughly one-sixth of the global economy, but Chinese equities represent only 4% of the MSCI ACWI (on a free float basis). All other EM countries make up about 8% of the MSCI ACWI.[9] The bond side looks much the same, with foreign investors owning only 3.2% of the Chinese bond market. By comparison, bond markets in India, Brazil, and Russia have foreign investor participation rates in the double digits, and they represent the most closed markets among the G-20. All of these China figures reflect several years of net capital inflows, as well as inclusion in major indices.

Third, Chinese assets retain very low correlation to other markets and maintain excellent diversification features. The pandemic illustrated how much China follows its own economic cycle and its own policy priorities. Limited integration with global financial markets also helps to reduce correlation with other markets. And while China's equity correlation with other emerging markets has picked up in recent years (see Figure 2), it still remains below that of any other comparable correlation pair (its correlation with developed markets has remained low).

Figure 2
Chinese Assets Retain Very Low Correlation to Other Markets
10-Year Monthly Equity Correlations for Select Markets

	China	EM ex-China	Japan	Europe	DM
China	1				
EM ex-China	0.68	1			
Japan	0.52	0.66	1		
Europe	0.55	0.79	0.72	1	
DM	0.59	0.79	0.76	0.92	1

Source: State Street Global Advisors, FactSet, Bloomberg as of October 29, 2021. Correlation data calculated using monthly returns from June 2004 to October 2021.

Such diversification is particularly hard to achieve in today's investment landscape, and Figure 3 demonstrates that this gap is even more pronounced for Chinese bonds. Exhibiting the lowest correlation among major bond indexes, Chinese bonds clearly do not move with the global monetary cycle.

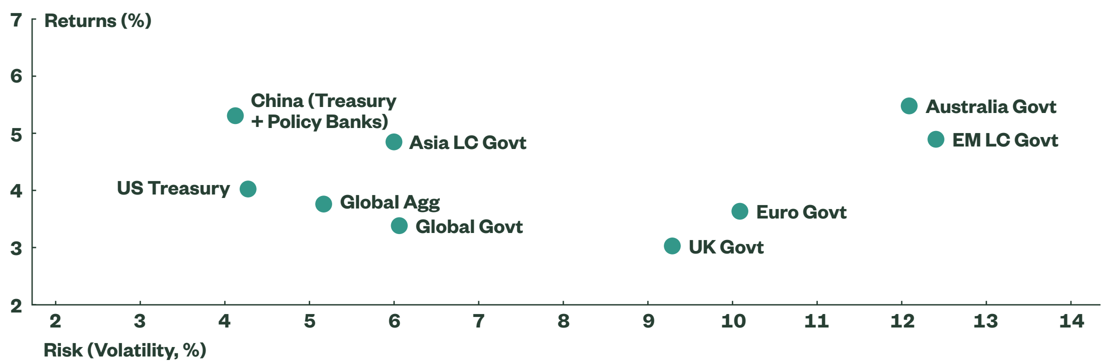
Figure 3
Chinese Bonds Clearly Do Not Move with the Global Monetary Cycle
Fixed Income Asset Correlations for Select Markets (Based on USD Unhedged Returns)

	China Treasury and Policy Bank	Global Agg.	US Agg.	Euro Agg.	Japanese Agg.	Sterling Agg.
China Treasury and Policy Bank	1.00	0.24	0.11	0.21	0.21	0.15
Global Agg.	0.24	1.00	0.71	0.87	0.63	0.64
US Agg.	0.11	0.71	1.00	0.40	0.50	0.38
Euro Agg.	0.21	0.87	0.40	1.00	0.25	0.61
Japanese Agg.	0.21	0.63	0.50	0.25	1.00	0.11
Sterling Agg.	0.15	0.64	0.38	0.61	0.11	1.00

Source: State Street Global Advisors, FactSet, Bloomberg, as of October 29, 2021. Correlation data calculated using monthly returns from June 2004 to October 2021.

Another strong argument in favor of Chinese bond allocations is that China has maintained a healthy yield premium over developed markets. Given the rebound in global growth, this premium is narrowing from its recent highs, but it is still likely to persist for many years. The combination of yield premium and modest volatility makes Chinese Treasury and Policy bonds outliers in terms of the risk/return ratio among most bond indices (see Figure 4). The question of exchange-rate risk remains, but here, too, policy objectives have clearly sought to maintain stability. The real effective exchange rate has remained within a 6% range for more than five years, the longest stretch since China's economic liberalization. China's policymakers have the unique ability to engineer exchange-rate stability and have telegraphed their intention to continue to do so.

Figure 4
Chinese Treasury and Policy Bonds Are Outliers in Terms of Risk/Return Ratio
Risk/Return of Major Bond Indices



Source: SSGA, Point, Bloomberg, JPMorgan, as of June 30, 2021. China Treasury and Policy Bank = Bloomberg Barclays China Treasury and Policy Bank USD unhedged index; Global Aggregate = Bloomberg Barclays Global Aggregate USD unhedged index; US Aggregate = Bloomberg Barclays US Aggregate index in USD; Euro Aggregate = Bloomberg Barclays Euro Aggregate USD unhedged index; Japanese Aggregate = Bloomberg Barclays Japanese Aggregate USD unhedged index; Sterling Aggregate = Bloomberg Barclays Sterling Aggregate USD unhedged index Past performance is not a reliable indicator of future performance. Index returns reflect capital gains and losses, income, and the reinvestment of dividends.

Closing Thoughts

Given China's idiosyncratic features compared with other emerging markets, the ongoing evolution of its growth story, and the unique risks involved, we believe that investors would be well-served to give particular, dedicated consideration to China investment. This may include a separate portfolio allocation to China, which would allow investors to tailor and adjust their China exposures to meet their particular return and risk objectives over time. By breaking out China from EM, investors may receive a more favorable return from owning the systematic risk, which is of course higher in a China-only exposure than in a more diversified EM exposure.

Endnotes

1 Source: Bloomberg LLP, as of October 31, 2021.

2 Source: State Street Global Advisors, MSCI, FactSet, as of October 31, 2021.

3 Source: MSCI, FactSet, State Street Global Advisors, as of October 29, 2021.

4 The structural backdrop in Europe has also improved drastically in our view, as the restrictive Stability and Growth Pact gives way to the New Generation EU (NGEU) recovery instrument, which has ushered in challenges to traditional taboos connected to fiscal rules and debt mutualization. For more of our views on Europe's investment potential, see *Europe Comes in From the Cold* (August 31, 2021).

5 For more on China equity investment, see *Key Considerations for Investment in China Equities* (October 29, 2021).

6 Jones, Liam. 2021 Green Forecast Updated to Half a Trillion — Latest H1 Figures Signal New Surge in Global Green, Social & Sustainability Investment. Climate Bonds Initiative, as of August 31, 2021.

7 State Street Global Advisors, Into the Mainstream: ESG at the Tipping Point (November 2019).

8 The ratio of total market capitalization to gross domestic product.

9 Source: MSCI, as of October 31, 2021.

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