Positioning Among the Peaks

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Global risk assets have rallied throughout 2021. Progress in ending the COVID-19 pandemic, massive fiscal stimulus, easy monetary policy and outstanding corporate earnings results have bolstered both markets and the economy. We believe the bull market's foundation remains strong heading into 2022.

Look Back to Move Forward

With better therapeutics, increasing vaccination rates and greater deployment of diagnostic testing, investors have begun to look cautiously beyond the pandemic. Vaccinating young children and the possibility of treating COVID-19 with a pill are major breakthroughs. While COVID-19 will be a persistent menace, the negative social and economic impacts will likely continue to fade in 2022.

Thankfully, fiscal stimulus from December 2020's $900 billion Consolidated Appropriations Act and March's $1.9 trillion American Rescue Plan Act strengthened the economy in the first half of 2021. And in November, President Joe Biden signed the more than $1 trillion bipartisan Infrastructure Investment and Jobs Act, potentially further aiding the economy's pandemic recovery. Less than a week later, the US House of Representatives passed the $2.2 trillion Build Back Better Act along party lines. While the bill faces a more difficult path in the US Senate, a modified version of Build Back Better is likely to make its way to President Biden's desk by the end of the year. Extraordinary fiscal spending will continue to reinforce the economy's rebound in 2022.

The Federal Reserve (Fed) has also done its part to keep the economy and markets humming. The Fed has increased its balance sheet by $1.4 trillion to $8.7 trillion so far in 2021.[1] At the same time, the Fed has kept the target federal funds rate pegged at 0 to 1/4 percent all year. Although the Fed announced plans in early November to begin tapering the pace of its asset purchases by $15 billion a month, its balance sheet is still expanding, but at a decelerating rate. And, most market participants don't expect the Fed to begin raising rates until the second half of 2022. Easy monetary policy should continue to be a tailwind for risk assets for at least the first half of the year.

While progress in defeating COVID-19, huge fiscal spending and accommodative monetary policy have been a wonderful supporting cast, phenomenal corporate earnings results have been the primary driver of stock market returns. According to FactSet, analysts are forecasting S&P 500 earnings growth of more than 40% for 2021. This unusually high growth rate is due to a combination of higher earnings and easier comparisons to lower earnings from 2020 due to the negative impact of COVID-19 on a number of industries. Both the breadth and magnitude of companies beating rising earnings expectations has been impressive. An encore earnings performance isn't likely. However, analysts are still expecting solid S&P 500 earnings growth of 8.7% on revenue growth of 7.1% for calendar year 2022.[2] Should actual earnings and revenue growth results come close to those forecasts, it would probably be enough to propel stocks higher in the new year.

Keep Your Stride as Risks Mount

As the bull market transitions from 2021 to 2022, a number of risks need to be carefully monitored. Supply chain disruptions across four dimensions — products (autos, semiconductors), transportation (shipping containers, trucking), labor shortages and energy shortfalls — continue to be a challenge for the global economy. Bottlenecks have contributed to higher and more persistent inflation than most market observers and central bankers had been expecting.

Rising inflation presents other potential risks for the global economy. Surging food and energy prices can be especially challenging for poorer nations and lower income families. As a result, geopolitical risks may be climbing. In the US, divisive budget, debt ceiling and Build Back Better negotiations will take place under the shadow of looming midterm elections in November 2022.

Complications in cleanly exiting the pandemic make determining whether inflation is truly transitory or more permanent nearly impossible. If central banks are already behind the inflation curve, as some economists suggest, they will need to accelerate monetary policy tightening to curb building inflationary pressures. However, if central banks prematurely tighten monetary policy, they risk curtailing already fragile global economic growth. Investors are not well prepared for this potential outcome.

Finally, despite all the progress made in 2021, COVID-19 risks and headlines are unshakable. Austria went into a major lockdown in late November to try to break the strong fourth wave of COVID-19 spreading across Europe. Germany is also considering more COVID-19 restrictions and even a full or partial lockdown. And the omicron variant discovered in South Africa has already prompted new travel restrictions. Pandemic risks are fleeting, but they have yet to be eliminated.

Navigate the Peaks with Three Strategies

With the S&P 500 Index closing at an all-time high more than 68 times so far in 2021,[3] it would be natural for investors to conclude that our outlook focuses on a peak in stock market levels — perhaps forecasting more modest returns or even a major stock market correction in the coming year. But, that's not the peak our outlook addresses. Our outlook seeks to help investors to deliberately maneuver among the peaks in valuations, supply chain disruptions, inflation and fiscal and monetary policy.

As you position portfolios for the year ahead, identifying profitable investment opportunities, determining whether supply chain challenges will improve or worsen and deciding whether inflation is transitory or permanent will be more difficult in an environment where fiscal and monetary policies are diverging. Our 2022 ETF Market Outlook attempts to put you on firmer footing in making these difficult investment decisions.

Consider these three strategies when constructing portfolios for 2022:

1. Blend Quality and Value in the Core

2. Target Real Income Opportunities

3. Focus on Inflation Beneficiaries

Theme 1

Blend Quality and Value in the Core

Having posted 58 new all-time highs so far in 2021, global equities are on pace to register their third consecutive year of double-digit returns — a startling run given it has occurred throughout a pandemic.[4] Unlike in past years, strong earnings-per-share (EPS) growth has fueled these gains. The 50% projected earnings growth rate for global equities in 2021 is the highest since 2010.[5] And in the US, S&P 500 firms posted a record-setting three consecutive quarters of 30% or greater growth on their way to likely registering a decade-best 44% growth rate for 2021.[6]

With forecasts still projected to be above the 15-year average,[7] earnings likely will remain a tailwind for US stocks in 2022, even if they do not reach 2021's double-digit peaks. Yet, as the new year progresses, sentiment and growth sustainability may become a bigger focus in earnings reports.

Firms may no longer surprise to the upside at 2021's record rates (over 80%),[8] without easy comparisons and the COVID-19 wild card having resulted in disparate analyst estimates to start 2021. In fact, as the cycle matures, monetary policy slowly normalizes in parts of the world, and partisan conflicts heat up, both with the kickoff of the US midterm election cycle and the possibility that the UK invokes Article 16 and reignites the Brexit battle,[9] equities may need to adjust to a higher macro volatility regime that could be impair sentiment.

However, buying growth in light of lower growth forecasts is not the answer. Broad-based valuations remain elevated, and growth stocks are overly extended and likely to face headwinds from a variety of sources. Therefore, blending quality and value may allow investors to better navigate this peak-growth terrain.

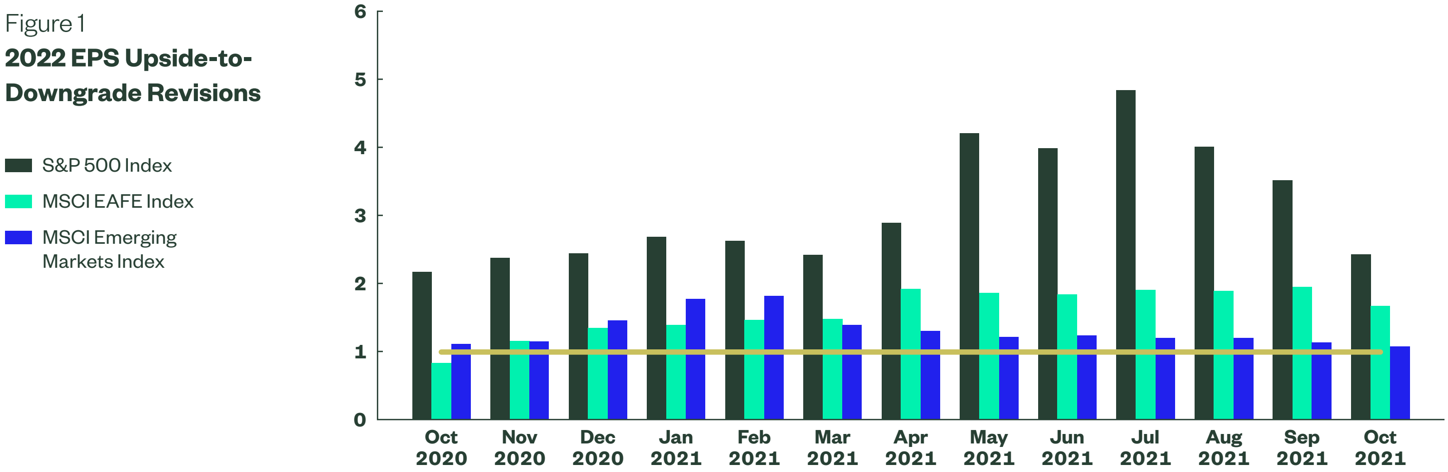
Growth Is Positive, But Becoming More Challenging

Forecasts for 2021 global economic growth are projected to peak at 5.9%, with expectations for 2022 and 2023 to fall to 4.9% and 3.6%, respectively.[10] While those rates are lower than the figures for 2021, they are still above the average growth rate for the past fifteen years.[11]

From a relative growth perspective, US stocks trailed the rest of the world in 2021 (44% versus 59%). But in 2022, US stocks are projected to grow their bottom line by 8.04% (above their 15-year average) compared to just 5.80% for non-US equities (below their 15-year average).[12]

The global figures are being dragged down by weak sentiment in emerging markets (EM) where low vaccination rates present reopening challenges in some nations. As a result, EM stocks have witnessed nearly the same amount of upside revisions to downside for their 2022 estimates (1.1), as shown in the following chart.[13] EM stocks also have the worst recent one-month change to their forecasts — declining by 24 basis points in October, following September's nearly 2% decline.[14]

Figure 1
2022 EPS Upside-to-Downgrade Revisions



Source: FactSet as of November 11, 2021 based on consensus analyst estimates. Characteristics are as of the date indicated and are subject to change.

Developed international equities have a 1.7 upside-to-downside revision, while US equities have a 2.4 ratio.[15] The US also has the upper hand in terms of the changes in its forecasts; developed international forecasts were lowered in September before rebounding slightly in October, while the US has held steady with no declines, only lesser increases.[16]

For those reasons, the US is our preferred region, followed by developed international. Meanwhile emerging markets remain a challenge, given the weak earnings sentiment, uneven COVID responses, and lingering questions on the Chinese economy (33% of a broad EM exposure).[17] China's "credit impulse," a measure of new lending as proportion of GDP and a gauge of economic activity, has yet to trough — falling for nine consecutive months.[18] When the impulse reading is negative, Chinese stocks have returned 5% less, on average, over the subsequent six months than when the impulse is positive — with negative returns occurring nearly half of the time.[19]

Focus on Quality, Not Quantity

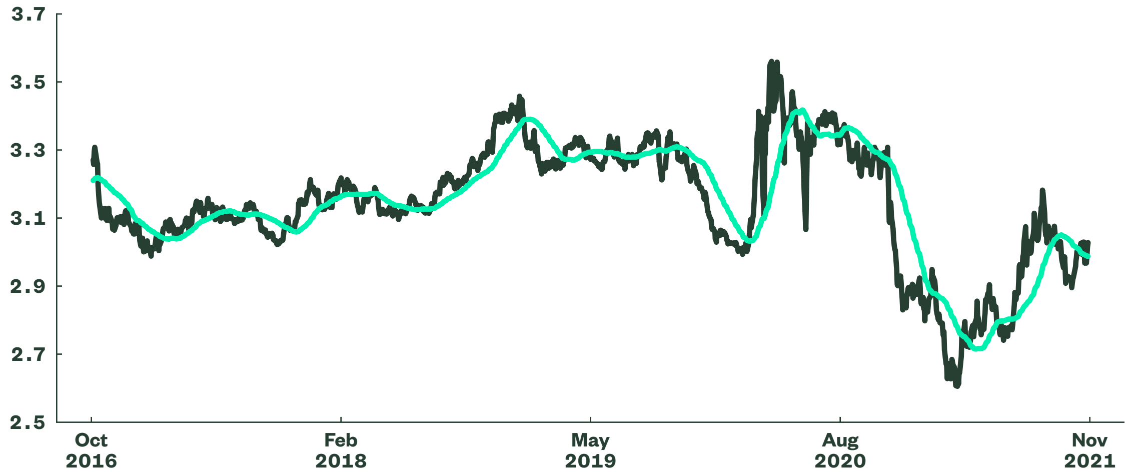
With growth transitioning to a simmer from a boil, there has been a greater emphasis on firms with higher quality balance sheets and reliable profitability. This differs from the behavior in the early part of the recovery.

During the first part of the pandemic rally, profitability was less of a concern. From May 2020 to May 2021, US stocks with negative earnings over the prior 12 months outperformed firms with positive earnings by 34%.[20] Since May 2021, that performance trend has flipped. Unprofitable firms have trailed profitable ones by 7%.[21] Unfortunately, that trend has not forced more firms to become profitable, as there are now over 1,100 firms with negative trailing 12-month EPS compared to 843 before the pandemic.[22] As growth slows, this is unlikely to drastically change — at least not in the near term.

Profitability, however, is different than growth. A firm can have a 40% year-over-year growth rate but still be unprofitable, as its EPS could have improved only from -$0.75 to -$0.45 per share. The ability to generate a profit is just one consideration of the quality factor, however. The other is centered on the reliability of growth. Or rather, the volatility of earnings. And pure high-quality stocks have started to noticeably outperform low quality stocks, as shown in the following chart. Yet, the relative performance ratio has yet to re-test pre-pandemic levels and just recently broke through its 50-moving day average — indicating there still may be more room to run even though high quality has outperformed low quality by 6.5% over the past three months.[23]

Figure 2
High Quality to Low Quality US Equity Performance

High Quality/Low Quality US Stocks
50-Day Moving Average



Source: Bloomberg Finance L.P., as of November 10, 2021. Based on the performance of the Nomura US High Quality Long Index and the Nomura US High Quality Short Index, concentrated factor baskets that remove style and sector biases. **Past performance is not a reliable indicator of future performance.** Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

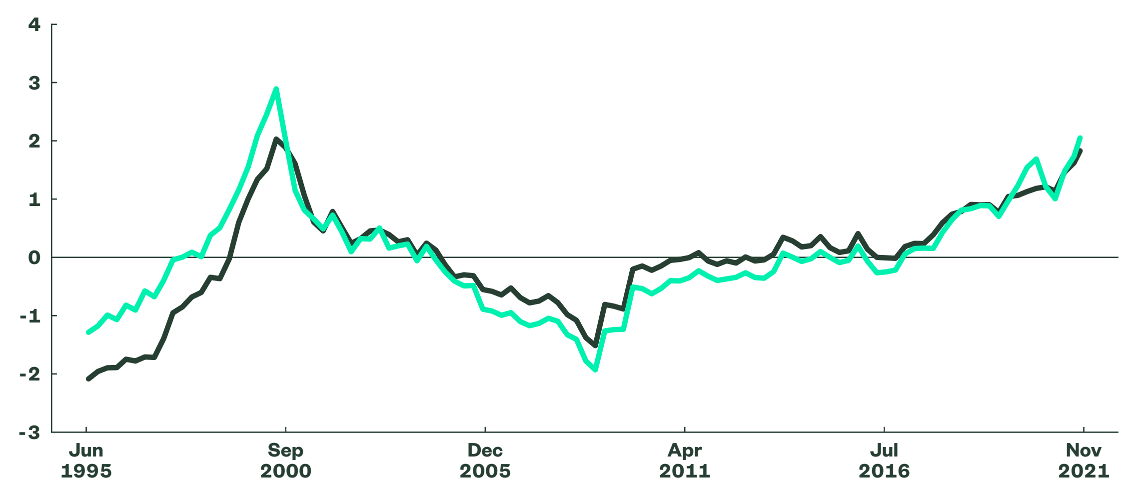
Value Has Value with Markets Rallying

With their recent runup, the valuations of traditional quality stocks have started to look a bit frothy like traditional growth stocks and the broader market. In an apples-to-apples comparison, firms within the MSCI USA Quality Index are trading in the 97th percentile relative to their own history, based on a composite metric of valuation indicators.[24] And on a relative basis to the MSCI USA Index, they are in the 71st percentile — not overly rich but not cheap either. Quality now appears to come at a price, and it is not alone.

Under the same analysis, growth stock valuations are also stretched on an absolute basis and relative to the broader market. For the latter, growth stocks are trading in the relative 97th percentile and 1.8 standard deviations rich to the market.[25] These valuations are ever so slightly shy of dot-com extremes. The numbers are worse when comparing growth to value. As shown in the following chart, growth is trading rich to value by over 2 standard deviations when using the same z-score process for the composite valuation metrics. This is consistent across the cap spectrum, as the premium difference of growth-to-value fundamental ratios is in the average 90th and 80th percentiles for mid- and small-cap stocks, respectively.[26]

Figure 3
Z-Score of Growth Minus Value Valuation Metrics

Growth to Market
Growth to Value



Source: Bloomberg Finance L.P., as of November 11, 2021. Based on SPDR Americas Research Calculations. Growth: S&P 500 Growth Index, Market: S&P 500 Index, Value: S&P 500 Value Index. The metrics used for this analysis are: Price-to-sales (P/S), Price-to-book (P/B), Price-to-earnings (P/E), Price-to-next-twelve-month-earnings (P/E NTM), Enterprise Value-to-EBITDA (EV/EBITDA), Enterprise Value-to-sales (EV/S).

One explanation for value trading at cheaper valuations than growth could be that investors are seeking more of a discount given the lower expected future growth. However, 2022 EPS growth forecasts show that the differential of growth projections for the next year between the two styles is quite similar, with value slightly higher at 10.0% versus 9.5% for a composite of value and growth styles throughout the cap spectrum[27] In fact, small-cap value stocks have the highest 2022 growth projections (16%) of any of the six style market segments.[28] Value may now be a better growth option given the price to access it.

Beyond the fundamental case made above, there are macro reasons to favor value as opposed to growth. Over the past 30 years, growth stocks' monthly excess returns to the broader market have a negative correlation to changes in interest rates (-17%), whereas value excess returns are positively correlated (+18%).[29] With the prospect for higher rates resulting from tighter monetary policy, longer-duration growth exposures (cash payments further out in maturity like a long-duration bond) could be further challenged from a total return perspective.

Fiscal policy could also detract from growth stocks' luster in 2022. The financing of President Biden's Build Back Better spending package calls for corporations with over $1 billion in revenue in the past year to pay a minimum 15% tax. Based on our analysis, the magnitude of stocks affected is low (11% of the S&P 500).[30] Yet, there are parts of the market that could be impacted on a more granular level.

The Technology and Communication Services sectors hold 33% of the 56 potentially impacted stocks.[31] Even though some stocks in those sectors may not be directly impacted, those two sectors make up roughly 60% of a traditional growth exposure.[32] Regulatory restrictions, another major focus during Biden's presidential campaign, also could be in play. And, if Build Back Better is passed, regulatory oversight on "Big Tech" could become more of an emphasis in Biden's domestic agenda.[33]

Implementation Ideas

While the growth witnessed in 2021 is likely to be the high point in this cycle, we are by no means approaching a trough. But the path ahead may become a bit more challenging than it was during the early stages of the recovery when less attention was paid to firm fundamentals and the "stocks only go up" mantra drove market action.

To navigate among the peaks of the next part of this rally, consider blending quality and value in the core with:

Quality and Value Multi-Factor Funds	**QUS** **SPDR® MSCI USA StrategicFactors℠ ETF**
	QEFA **SPDR® MSCI EAFE StrategicFactors℠ ETF**
High-Quality Dividend Strategies	**SDY** **SPDR® S&P® Dividend ETF**
Value Exposures	**SPYV** **SPDR® Portfolio S&P 500® Value ETF**

Theme 2

Target Real Income Opportunities

Global core bonds are poised to register their worst calendar year return (-4.3%) since 2005,[34] dragging down traditional 60/40 portfolios along with them. And duration risks continue to increase, with the overall duration of core bonds setting 21 new highs this year and currently sitting at the highest peak ever of 7.6.[35]

Given that the aggregate 10-year rate forecast for major G8 nations is a move from the current 1.12% to 1.40% in 2022[36] as some central banks start to tighten while others stay put, negative returns for core bonds could occur once again in 2022 from duration risks alone. But even if core bonds rebound into positive territory in 2022, as they historically have in the year following a negative return,[37] returns are likely to be negative after accounting for the effects of inflation — which is forecasted to be above trend for the next two years at 3.3% and 2.8%, respectively.[38]

While core bonds' returns were poor, below investment-grade credits posted gains this year (+5.06%).[39] And their outlook remains sound for 2022, with default rates expected to be just 1%, down from 3.5%;[40] 45% earnings before interest, taxes, depreciation (EBITDA) year-over-year growth in 2021;[41] the lowest gross leverage for firms since mid-2019[42] and roughly two upgrades for every downgrade.[43] Like equities, the backdrop remains supportive for credit, even with valuations stretched as spreads are tight (306 basis points versus a 550 basis point average).[44]

Increasing duration, diverging central bank policies and rising inflation will present real challenges in 2022. Therefore, target real income opportunities (yields above inflation expectations) with limited rate sensitivity. Naturally, however, that may lead to higher implicit equity risk in bond portfolios at a time when bond volatility is in the 92nd percentile over the past five years.[45] Therefore, seek to offset this real income credit risk with real income defensives and take on duration risk with Treasury Inflation-Protected Securities (TIPS) instead of nominals to add portfolio diversification.

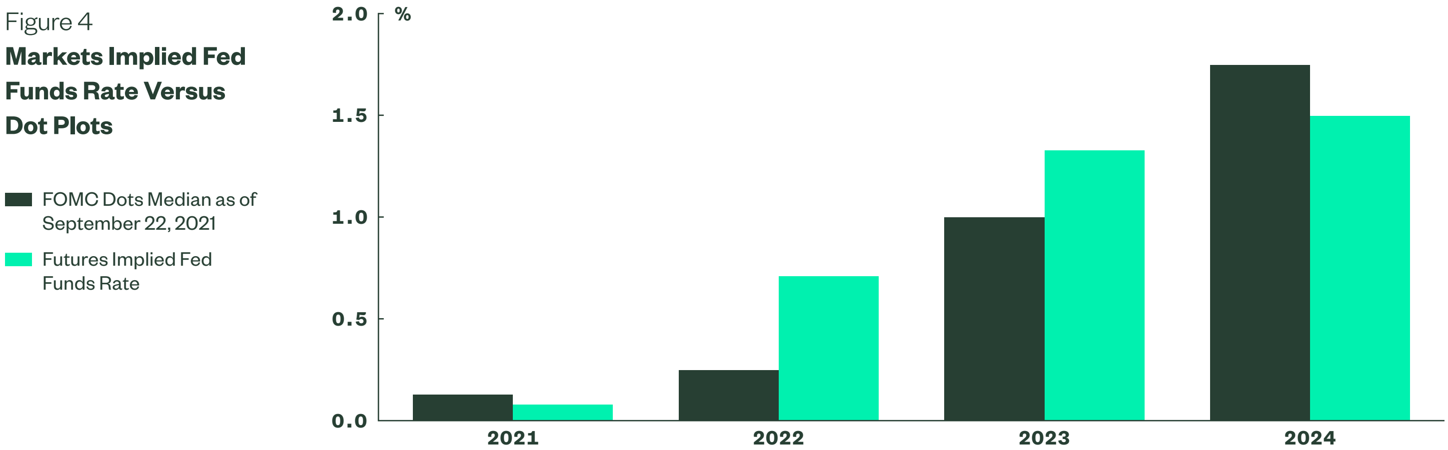
Bear in Mind Central Bank Divergence

In unison, global central banks slashed rates and initiated bond purchasing programs to thwart the economic calamity of the COVID-19 pandemic. Almost two years removed, central banks around the world are beginning to take diverging paths, with some tightening measures and others maintaining crisis-level policies.

The Fed is starting to taper purchases slightly, while the Bank of Canada is outright cancelling their purchasing plans based on region-specific inflationary pressures.[46] The European Central Bank (ECB) is looking to maintain emergency policies and keep rates low, while the Fed, the Bank of England[47] and the New Zealand Central Bank[48] are either already tightening or have announced tighter policy actions are coming soon.

These divergent central bank actions will not create the same tidal wave of liquidity that so fully supported risk assets throughout the early parts of the recovery. In particular, the Fed is projected to hike rates twice in 2022, based on consensus forecasts as shown in the following chart.[49] But both the Bank of Japan and the ECB are not quite there yet. And the People's Bank of China is on its own course given weakness in parts of the economy juxtaposed with elevated inflation that would make easing measures unlikely.

Figure 4
Markets Implied Fed Funds Rate Versus Dot Plots



Source: Bloomberg Finance L.P., as of November 12, 2021. Characteristics are as of the data indicated and subject to change.

In the US, there will be an upward bias on rates as the Fed tries to balance inflation and growth with its policy decisions. Yet, the yield curve is likely to flatten as it has in past tightening cycles. However, the flattening may have more of a see-saw action, rising and falling at times based on the latest economic data with no consistent directional trend. And the flattening is likely to be categorized as a bear flattener, as short-term rates (pushed by the Fed) are likely to rise faster than long-term rates.

All of this will differ from what occurs in other local markets, as the peak of coordinated monetary policies is likely behind us. The movement of 2-year yields, the most sensitive government bond rate to central bank actions, among major nations offers a fair representation of this. Canadian, Australian, UK and US 2-year yields have all risen this quarter, while German, French, and Japanese bonds have fallen.[50] The latter group will likely continue that trend given their central bank stances, or at least be restrained in 2022. This will limit the income potential from developed non-US bonds in 2022, a segment that still has 34% of its market value trading with a negative yield, let alone one below that of inflation.[51]

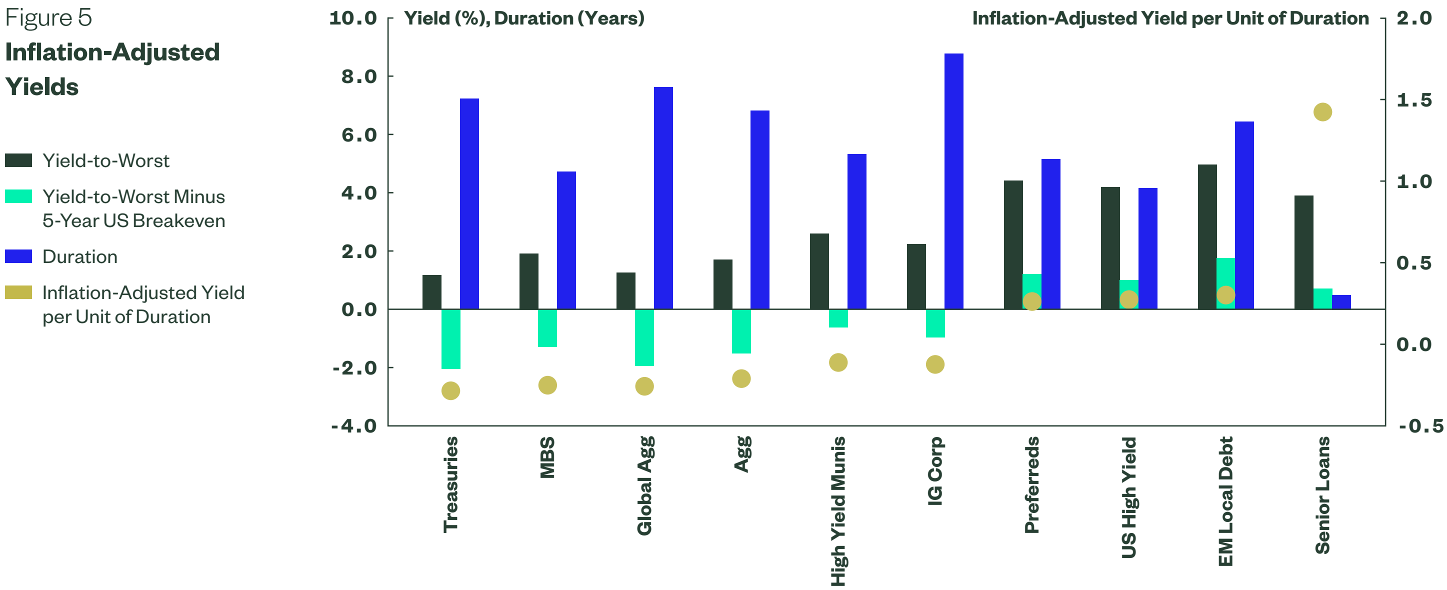
Meet the Real Income Challenge

The through line to all of this is that rates, even though they are set to rise in some nations, are still likely to be extremely low versus historical standards. The 45-year average yield on core bonds is 6.3%, while today the yield is 1.7%.[52] However, the long-term average is not a fair comparison given the changes in the economy and crisis-era policy tools that have pushed yields structurally low since the great financial crisis. Yet, today's yield is still well below the more recent 5- and 10-year averages (2.23% and 2.25%, respectively).[53]

To obtain at least the average income stream over the past decade, it would require 1.3x leverage. Even if it were attractive to use that much capital from a nominal perspective, the potential yield would still be below that of inflation expectations over the next five and 10 years. Breakeven rates are currently at 3.2% and 2.76%,[54] meaning that even a levered core bond portfolio would generate negative real income. A point reinforced by the fact that currently 96% of core US bond market value has a negative real yield after considering inflation expectations for the next five years.[55]

Given these dynamics, investors must target credit instruments that have a yield above inflation expectations. As shown in the following chart, this doesn't leave many options. Loans, preferreds, emerging market local debt (EMD), and US high yield are the only segments with a positive inflation-adjusted yield, as well as a positive inflation-adjusted yield per unit of duration.

Figure 5
Inflation-Adjusted Yields



Source: Bloomberg Finance L.P., as of November 12, 2021. Based on SPDR Americas Research Calculations. **Past performance is not a reliable indicator of future performance.** Treasuries: Bloomberg U.S. Treasury Index, MBS: Bloomberg U.S. MBS Index, Global Agg: Bloomberg Global Aggregate Index, Agg: Bloomberg U.S. Aggregate Bond Index, High Yield Munis: Bloomberg Municipal Yield Index, IG Corp: Bloomberg U.S. Corporate Bond Index, Preferreds: ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index, High Yield: ICE BofA U.S. High Yield Index, EM Local Debt: EM Local Currency Government Diversified Index, Senior Loans: S&P/LSTA Leverage Loan Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

For EMD this is a bit deceiving, as currency risk is a larger driver of returns and not duration. For instance, our research shows that there is an over 90% correlation of monthly returns of EMD and EM local currencies.[56] And given the expectation of higher growth and rising rates in the US relative to EM broadly, currency effects could be once again a drag on EMD returns and negate the attractive yield from a total return perspective.

Preferreds, US high yield, and senior loans remain the most attractive. Preferreds have the added potential benefit of being primarily investment-grade rated,[57] and fixed-rate high yield bonds have outperformed all other segments referenced in 2021,[58] despite having two percentage points of return subtracted due to duration impacts.[59] Yet, out of those three, while preferreds and high yield represent strong opportunities for yield in this market, loans might be the most ideal allocation right now.

Senior loans' floating rate structure may prove to be quite valuable should rate hikes impact the short end of the curve. In addition to mitigating any potential duration-induced return headwinds, their floating rate component increases the potential yield as the securities' underlying coupons adjust to the prevailing short-term market rate they are tied to.

Additionally, if the credit rally does stall or if macro risks pile up, loans that are more senior in their capital structure historically have witnessed lower relative levels of volatility than fixed rate high yield (4.50% vs. 6.52%).[60] The downside deviation for loans is also better than high yield (7.74% vs. 12.21%).[61] Overall, loans' potential to generate high income and the floating rate structure can possibly reduce the negative impact of higher rates, making loans an integral part of a diversified credit portfolio in this environment.

Barbell Bonds to Mitigate Risk

Barbelling credit with TIPS could add another real income stream, this time on the defensive side of a bond portfolio. Because TIPS are backed by the full faith and credit of the US government, they have low credit risk. Adding TIPS to a portfolio also could help counteract some of the equity risk introduced by overweights to credit.

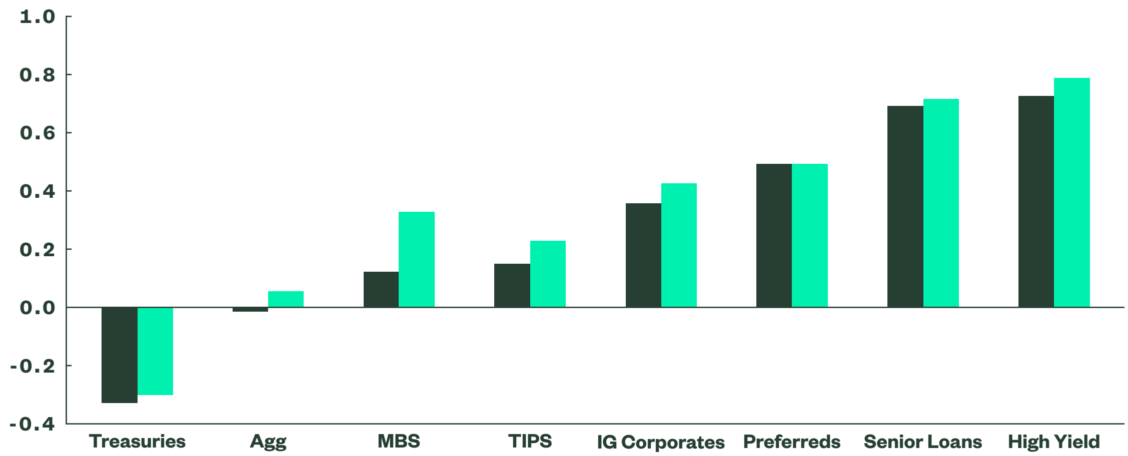
Price increases are being felt across many advanced economies because of pandemic-related factors, such as supply chain disruption, consumer demand and employee shortages. As a result, so far in 2021 owning TIPS instead of nominals has been a beneficial swap, as TIPS have outperformed nominals by 8.64%.[62] TIPS have also outperformed the Bloomberg US Aggregate Bond Index (Agg) by 7.70%,[63] even though they have a longer duration (8.4 years vs. 6.7 years).[64] Given that inflationary forces (still-accommodative policies even with a taper, plus increased fiscal spending) will likely remain high, a TIPS allocation may continue to be rewarded.

Overall, as a distinct asset class from Treasuries — and not a component of the widely followed Agg — TIPS tend to behave differently from other investments that are commonly found in core bond portfolios. TIPS are not perfectly correlated to common fixed income investments and have a low correlation to both US and international, as shown in the following chart,[65] making them a valuable portfolio diversifier.

Figure 6
Bond Sector Correlation to Equities

Correlation to S&P 500 Index

Correlation to MSCI ACWI Ex-US Index



Source: Bloomberg Finance L.P., as of November 12, 2021. Based on SPDR Americas Research Calculations. **Past performance is not a reliable indicator of future performance.** Treasuries: Bloomberg U.S. Treasury Index, MBS: Bloomberg U.S. MBS Index, Global Agg: Bloomberg Global Aggregate Index, Agg: Bloomberg U.S. Aggregate Bond Index, High Yield Munis: Bloomberg Municipal Yield Index, IG Corp: Bloomberg U.S. Corporate Bond Index, Preferreds: ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index, High Yield: ICE BofA U.S. High Yield Index, EM Local Debt: EM Local Currency Government Diversified Index, Senior Loans: S&P/LSTA Leverage Loan Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Therefore, including TIPS may help improve the risk/return profile of a diversified portfolio irrespective of the market's inflation dynamics. And since TIPS ETFs pay out all earned income in the portfolio, including the inflation adjustment that is applied to the fund's underlying securities (unlike individual TIPS), a TIPS ETF may be a better source of current real income than owning TIPS outright.

Implementation Ideas

Rates are likely to rise in 2022, but remain below that of inflation. This will put a strain on both positive total returns, as duration-induced price declines could wipe out any yield advantage, and real income generation. If rates were to rise by 100 basis points, 81% of core bonds' market value would still trade below the expected rate of inflation over the next five years.[66]

With duration at peak levels, extending out further on the curve to obtain yield may not be optimal given the current sizeable asymmetry between yield and duration — even if the curve does flatten modestly in 2022. To focus on real income opportunities, consider:

Senior Loans	**SRLN** **SPDR® Blackstone Senior Loan ETF**
High Yield	**SPHY** **SPDR® Portfolio High Yield Bond ETF**
Preferreds	**PSK** **SPDR® ICE Preferred Securities ETF**
TIPS	**SPIP** **SPDR® Portfolio TIPS ETF**

Theme 3

Focus on Inflation Beneficiaries

Persistent supply bottlenecks and strong consumer demand have kept inflation elevated in many developed countries. Most notably, year-over-year changes in the US Consumer Price Index (CPI) have been above 4% for seven straight months — the longest stretch since 1991 — with a 30-year high CPI print of over 6% in October.[67]

These pressures are likely to persist into 2022, even though the Fed continues to emphasize that predominantly transitory factors are driving this inflation surge. And while another 6% CPI year-over-year report is unlikely for this cycle, US inflation is forecasted to remain above trend for the next two years at 3.3% for 2022 and 2.3% for 2023[68] — bumping global forecasts to 3.3% and 2.8%, respectively.[69]

Because above-trend inflation puts pressure on margins, owning stocks that can pass through cost inflation with pricing increases may be beneficial. This means positioning portfolios toward market segments with lower relative labor intensity (employee-to-sales) and margins that are less impacted by wage inflation, as well as toward areas that historically have exhibited a strong relationship to inflation and inflation expectations.

Higher Prices Ahead

Expectations for higher prices are buoyed by the broad-based nature of these upward pressures. The Dallas Fed 12-Month Trimmed Mean PCE, a metric that removes components with the most extreme price changes, like gasoline and used cars, has steadily climbed to its highest level since 2008.[70] The Atlanta Fed's 12-Month Sticky CPI, a weighted basket of items where prices change relatively slowly, including household furnishings or alcoholic beverages, has also reached a 13-year high.[71] And the flexible, more fast moving Altana Fed Flexible CPI figure is at a 40-year high.[72]

The magnitude and breadth of these inflationary pressures suggest that inflation might not be transitory. In fact, according to the University of Michigan Surveys of Consumers, consumers anticipate an overall inflation rate of 4.8% for 2022, approaching its highest level since 2008, when oil prices were above $100/barrel.[73] Market-based short- and medium-term inflation expectations, as represented by the US 2-year and 5-year breakeven rates, also reached new post-global financial crisis highs in November, with the 5-year rate touching the highest level on record.[74]

Consumer, Small Business and Housing Trends

Supply chain issues that plagued topline Q3 economic growth (2% year-over-year growth)[75] may have masked certain inflationary pressures building beneath the surface. First, there was a strong gain in services spending. This may hint at greater momentum for inflation-adjusted services heading into the rest of 2021,[76] causing this measure that is still below pandemic levels to catch up to the growth already witnessed within goods.[77] A still healthy savings rate, continued momentum in the labor markets, and subsiding COVID-19 infections should further support stronger spending. Credit card trends, with delinquencies at all-time lows,[78] also reinforce healthy consumer behavior. Second, in the durable goods orders report, core orders continue to exceed shipments, indicating backlogs[79] that may point to investment productivity gains as inventories are built up to meet the demand.

Simply put, strong demand should support prices. And even if supply constraints start to ease, wage increases and rent trends may keep inflation elevated in 2022. Average hourly earnings of all private sectors have increased by more than 4% year over year for four consecutive months,[80] but still run below headline CPI inflation. This has resulted in negative real income levels of -1.3%, a figure well below the pre-pandemic average of +0.6%.[81]

Small businesses are also forecasting higher prices and wages. According to a National Federation of Independent Business survey, currently 53% of business owners are raising prices — the highest percentage ever.[82] And more than half plan to increase prices again in the next three months — another record rate that reflects how global price pressures are making an impact at the local community level. While influenced by supply chain disruptions, these price increases are also a result of how small local businesses are responding to elevated job openings. In the same survey, a record number of owners say they have either already raised or are expecting to raise wages in the coming months.

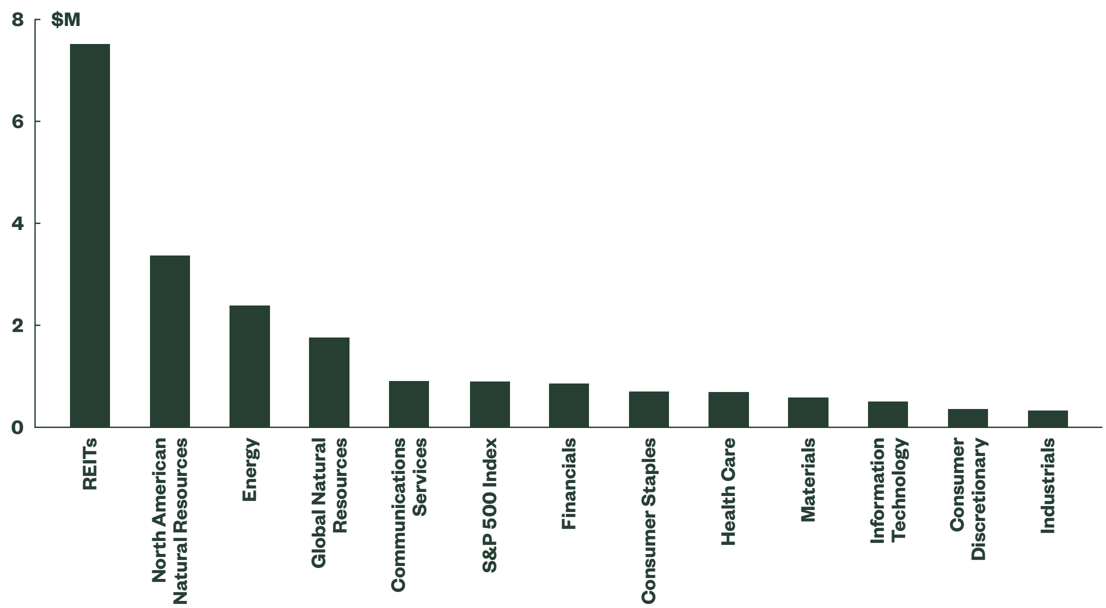
With record-high job openings and quit rates, more wage inflation is likely in 2022, as employers seek to hire enough workers to meet stronger consumer demand. And, if President Biden's Build Back Better spending package is approved, the roughly $2 trillion in new spending has the potential to boost prices in the short term, even if it's just from a signaling effect, as tax increases to finance this effort will be spread over many years.[83]

Inflation rates of rent and owners' equivalent rent (OER), which account 30% of headline CPI and 40% of Core CPI, were still below their pre-pandemic levels in October.[84] Yet, research by the Federal Reserve Bank of Dallas shows that strong housing price growth historically has led to rent and OER inflation for around 18 months.[85] Given that prices in the housing market have risen by 25% above pre-pandemic levels,[86] the research projects rent and OER inflation to accelerate above historical averages in 2022 and 2023, which could drive overall inflation higher.

Is the Price Right for REITs and Natural Resources?

The prospects of higher wages and overall consumer price inflation mean companies with less labor intensity and more capital intensity may feel less margin pressure in 2022 and beyond. As shown in the following chart, natural resources sectors and real estate investment trusts (REITs) have a higher sales-per-employee ratio than other sectors, indicating less labor intensity. Furthermore, as commercial activity and day-to-day life normalize, demand for commercial and residential real estate space will continue to recover. Combined with higher rent inflation in 2022, this supports REIT dividend growth and potential valuation appreciation.

Figure 7
Sales Per Employee

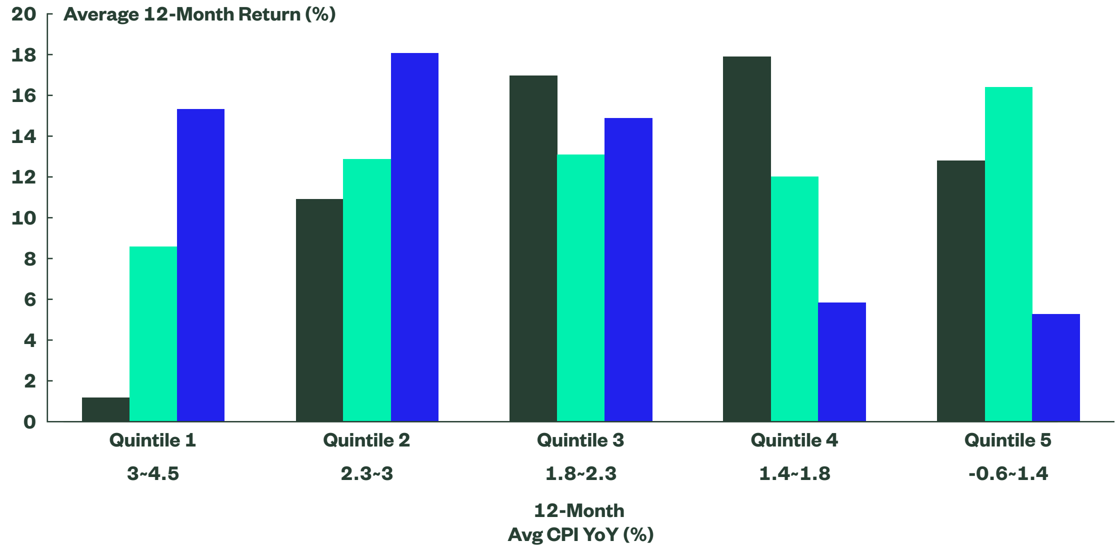


Source: FactSet as of November 10, 2021. Characteristics are as of the date indicated and are subject to change. REITs: Dow Jones® U.S. Select REIT Index, North American Natural Resources: S&P North American Natural Resources Index, Energy: S&P 500 Energy Index, Global Natural Resources: S&P Global Natural Resources Index, Comm. Svcs.: S&P 500 Communications Services Index, Financials: S&P 500 Financials Index, Cons. Staples: S&P 500 Consumer Staples Index, Health Care: S&P 500 Health Care Index, Materials: S&P 500 Materials Index, Info. Tech: S&P 500 Information Technology Index, Cons. Disc.: S&P 500 Consumer Discretionary Index, Industrials: S&P 500 Industrials Index.

Historically, from a return perspective, natural resources sectors and REITs have helped investors to combat inflation. When 12-month average CPI inflation was in the top quintiles (above 3%), REITs and natural resources equities outperformed broad equities by 14.0% and 7.5% on average over a 12-month period, as shown in the following chart. As of October, the rolling 12-month average CPI inflation rate had increased for seven straight months to sit at 3.4%, putting it within the high inflationary range and providing a supportive environment for REITs and natural resources equities.

Even if rolling average inflation moderates in 2022, falling into the second quintile range, REITs and natural resource equities may still outperform broad equities based on historical trends. Overall, sectors tied more closely to areas that can sell their goods and services at higher prices with little change to their own cost structure may benefit more from a higher inflationary environment.

Figure 8
Average 12-Month Return Over Different Inflation Periods (Since November 2002)



Source: FactSet as of November 10, 2021. **Past performance is not a reliable indicator of future performance.** REITs: S&P United States REIT index, Global Natural Resources: S&P Global Natural Resources Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

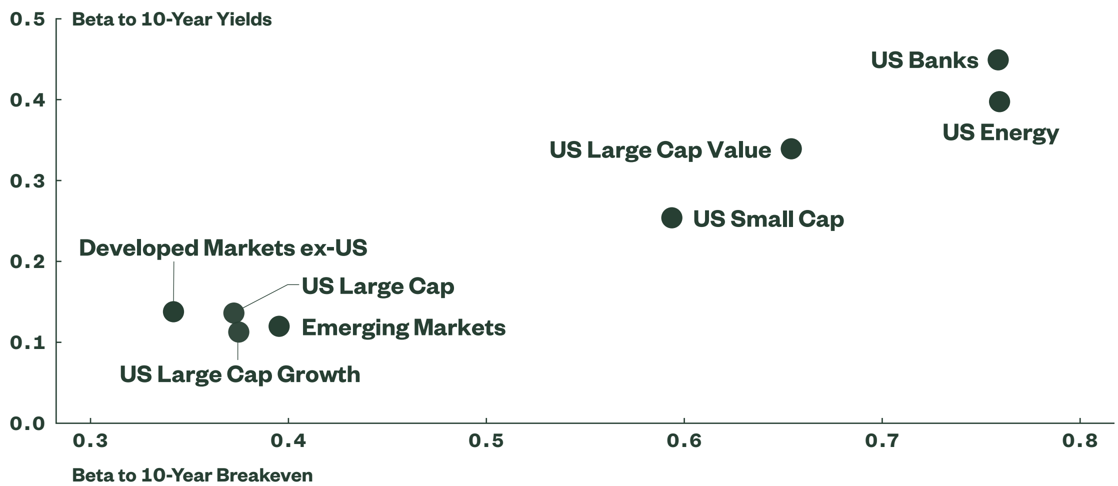
Tilt Toward Small Caps and Banks: Sensitive to Inflation

Historically, small caps have tended to outperform when medium-term inflation expectations rise, as their beta sensitivity to breakevens is much higher than that of large caps (0.60 versus 0.38).[87] However, since February 2021, relative performance of small caps has diverged from the upward trend in inflation expectations, lagging large caps by 16%, as challenges around the spread of the delta variant slowed down the recovery momentum.[88] In fact, the rolling the six-month correlation between the relative performance of small caps to large caps and the US 5-year breakeven rate is -37%, compared to a historical average of +40%.[89]

As the economic recovery resumes momentum following the peak in delta cases and inflation expectations remain elevated, small caps may close the performance gap with large caps in the coming months with the correlation tendencies potentially reverting to the mean. The resumption of growth and the ability to respond to inflationary pressures is evident in 2022's earnings. For 2022, small caps have consensus earnings growth that is six percentage points higher than that of large caps (13.97% versus 8%).[90] Plus, small caps' relative valuations to large caps are at a 15-year low based on the forward price-to-earnings ratio, further supporting the case for small caps for 2022.[91]

Inflationary pressures are also likely to increase nominal yields, as when the US 10-year rate reacted to the 30-year high CPI print in early November — soaring 11 basis points on the day for the third-largest one-day move in 2021.[92] This upward pressure on yields should create a constructive environment for bank stocks, as the banking industry has historically shown a high beta sensitivity to both nominal yields and inflation expectations, as shown in the following chart.

Figure 9
5-Year Beta to 10-Year Treasury Yields and Breakeven Rates



Source: Bloomberg Finance L.P., as of 10/31/2021. **Past performance is not a reliable indicator for future performance.** Developed ex-US: MSCI EAFE Index, US Large Cap Growth: S&P 500 Growth Index, US Large Cap: S&P 500 Index, Emerging Markets: MSCI EM Index, US Small Cap: S&P 600 Small Cap Index, US Large Cap Value: S&P 500 Value Index, US Energy: S&P 500 Energy Index, US Banks: S&P Select Banking Industry Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Beyond the macro, there is a fundamental case to be made for banks. Banks' strong earnings growth and surprises this year have mainly been driven by substantial reserve releases resulting from fast improvement in credit conditions. However, consumer and commercial loan growth has been slow to recover, constraining banks' top line growth. Yet, as the economic recovery continues and gives consumers and businesses the confidence to borrow, the long-awaited increase in loans may support banks' earnings growth in 2022.

In addition to the potential tailwinds from the rates market, loan growth should be additive to bank earnings growth and sentiment in the coming quarters. And if the Fed does start to tighten and tamp down inflationary spirits, potentially flattening the curve along the way, history has shown that there doesn't seem to be a strong correlation between the curve and net interest margins (NIMs).[93] In fact, during the last Fed rate hikes, banks' NIM improved along with the short-term yield increases, despite a flattened curve. A trend that research attributed to the banking environment following an extended period at the zero lower bound and abundant amounts of deposits and liquid assets in the banking system — an environment not unlike today.[94]

Implementation Ideas

2021's inflation reports will likely represent the peak of this current cycle. Yet, inflation is likely to remain above long-term averages in 2022. As not-so-transitory higher prices impact market segments differently, focus on inflationary beneficiaries and consider:

REITs	**RWR** **SPDR® Dow Jones® REIT ETF**
Natural Resource Equities	**GNR** **SPDR® S&P Global Natural Resources ETF**
US Small Caps	**SPSM** **SPDR® Portfolio S&P 600™ Small Cap ETF**
Banks	**KBE** **SPDR® S&P Bank ETF**

Glossary

Basis Point (bps) A unit of measure for interest rates, investment performance, pricing of investment services and other percentages in finance. One basis point is equal to one-hundredth of 1 percent, or 0.01%.

Beta Measures the volatility of a security or portfolio in relation to the market, with the broad market usually measured by the S&P 500 Index. A beta of 1 indicates the security will move with the market. A beta of 1.3 means the security is expected to be 30% more volatile than the market, while a beta of 0.8 means the security is expected to be 20% less volatile than the market.

Bloomberg US Aggregate Bond Index A benchmark that provides a measure of the performance of the U.S. dollar-denominated investment-grade bond market. The "Agg" includes investment-grade government bonds, investment-grade corporate bonds, mortgage pass-through securities, commercial mortgage-backed securities and asset-backed securities that are publicly for sale in the US.

Breakeven Rates The difference in yield between inflation-protected and nominal debt of the same maturity. If the breakeven rate is negative it suggests traders are betting the economy may face deflation in the near future.

Credit Impulse A measure of new lending as proportion of GDP and gauge of economic activity.

Composite Valuation A grouping of equities, indexes, or other investment securities in a standardized way. When applied to stock prices, a composite index can provide a useful statistical measure for the performance of the overall market, a specific sector, or an industry group. Composites are also created for investment analysis of economic trends, to forecast market activity, and as benchmarks for the relative performance of professional money managers.

Consumer Price Index (CPI) A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Indexes are available for the U.S. and various geographic areas. Average price data for select utility, automotive fuel, and food items are also available.

Currency Risk The possibility of losing money due to unfavorable moves in exchange rates.

Durable Goods Orders A broad-based monthly survey conducted by the U.S. Census Bureau that measures current industrial activity and is used as an economic indicator by investors.

Duration A commonly used measure, expressed in years, that measures the sensitivity of the price of a bond or a fixed-income portfolio to changes in interest rates or interest-rate expectations. The greater the duration, the greater the sensitivity to interest rates changes, and vice versa. Specifically, the specific duration figure indicates, on a percentage basis, by how much a portfolio of bonds will rise or fall when interest rates shift by 1 percentage point.

Earnings per Share (EPS) A company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability. It is common for a company to report EPS that is adjusted for extraordinary items and potential share dilution.

EBITDA Earnings before interest, taxes, depreciation, and amortization, is a measure of a company's overall financial performance and is used as an alternative to net income in some circumstances.

Glossary

Emerging Markets (EM) The economy of a developing nation that is becoming more engaged with global markets as it grows. Countries classified as emerging market economies are those with some, but not all, of the characteristics of a developed market. As an emerging market economy progresses it typically becomes more integrated with the global economy, as shown by increased liquidity in local debt and equity markets, increased trade volume and foreign direct investment, and the domestic development of modern financial and regulatory institutions.

Emerging Market Local Debt (EMD) Bonds issued by less developed countries.

Excess Returns Returns achieved above and beyond the return of a proxy. Excess returns will depend on a designated investment return comparison for analysis.

Flexible Consumer Price Index The Flexible Price Consumer Price Index (CPI) is calculated from a subset of goods and services included in the CPI that change price relatively frequently. Because flexible prices are quick to change, it assumes that when these prices are set, they incorporate less of an expectation about future inflation.

Growth A strategy that focuses on companies that have the potential to grow their earnings at a high rate.

Inflation The decline of purchasing power of a given currency over time. A quantitative estimate of the rate at which the decline in purchasing power occurs can be reflected in the increase of an average price level of a basket of selected goods and services in an economy over some period of time. The rise in the general level of prices, often expressed as a percentage, means that a unit of currency effectively buys less than it did in prior periods.

Inflation-Adjusted Return The measure of return that takes into account the time period's inflation rate. The purpose of the inflation-adjusted return metric is to reveal the return on an investment after removing the effects of inflation.

MSCI USA Index An index designed to measure the performance of the large- and mid-cap segments of the US market. With 625 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.

MSCI USA Quality Index Based on the MSCI USA Index, its parent index, which includes large- and mid-cap stocks in the US equity market. The index aims to capture the performance of quality growth stocks by identifying stocks with high quality scores based on three main fundamental variables: high return on equity (ROE), stable year-over-year earnings growth and low financial leverage. The MSCI Quality Indexes complement existing MSCI Factor Indexes and can provide an effective diversification role in a portfolio of factor strategies.

Net Interest Margins (NIMs) A measurement comparing the net interest income a financial firm generates from credit products like loans and mortgages, with the outgoing interest it pays holders of savings accounts and certificates of deposit (CDs). Expressed as a percentage, the NIM is a profitability indicator that approximates the likelihood of a bank or investment firm thriving over the long haul. This metric helps prospective investors determine whether or not to invest in a given financial services firm by providing visibility into the profitability of their interest income versus their interest expenses.

Owners' Equivalent Rent (OER) Measures how much money a property owner would have to pay in rent to be equivalent to their cost of ownership. OER is used to measure the value of real estate markets, where it can help direct individuals to either buy or rent based on total monthly cost.

Preferred Stock Preferred stockholders have a higher claim to dividends or asset distribution than common stockholders.

Quality Characterized by firms with strong balance sheets and high profitablity.

Glossary

Real Estate Investment Trusts (REITs) Companies that own or finance income-producing real estate across a range of property sectors. These real estate companies have to meet a number of requirements to qualify as REITs. Most REITs trade on major stock exchanges, and they offer a number of benefits to investors.

S&P 500 Index A stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States. It is one of the most commonly followed equity indices.

Sticky Consumer Price Index A subset of goods and services included in the CPI that change price relatively infrequently. Because these goods and services change price relatively infrequently, they are thought to incorporate expectations about future inflation to a greater degree than prices that change on a more frequent basis. One possible explanation for sticky prices could be the costs firms incur when changing price.

Trimmed Mean Personal Consumption Expenditures (PCE) The Trimmed Mean PCE inflation rate is an alternative measure of core inflation in the price index for personal consumption expenditures (PCE). It is calculated by staff at the Dallas Fed, using data from the Bureau of Economic Analysis (BEA).

Treasury Inflation-Protected Securities (TIPS) A type of Treasury security issued by the U.S. government. TIPS are indexed to inflation in order to protect investors from a decline in the purchasing power of their money. As inflation rises, TIPS adjust in price to maintain its real value.

Upside-to-Downside Revision A market breadth indicator that shows the relationship between the volumes of advancing and declining issues on an exchange. Investors typically use this indicator to determine the momentum of the market at any given time.

Value Characterized by lower price levels relative to fundamentals, such as earnings.

Yield The income produced by an investment, typically calculated as the interest received annually divided by the price of the investment. Yield comes from interest-bearing securities, such as bonds and dividend-paying stocks.

Yield-to-Worst The lowest potential yield that investors can expect when investing in a callable bond without the issuer defaulting.

Z-Score A numerical measurement that describes a value's relationship to the mean of a group of values. Z-score is measured in terms of standard deviations from the mean. In finance, Z-scores are measures of an observation's variability and can be used by traders to help determine market volatility.

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30 Screened for firms with more than $1 billion in revenue in the past three years and less than a 15% tax rate in 2020 per Bloomberg Finance, L.P., data as of November 11, 2021 and SPDR Americas Research calculations. Characteristics are as of the date indicated and subject to change.

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Prior to 02/26/2021, the SPDR® Blackstone Senior Loan ETF was known as the SPDR® Blackstone / GSO Senior Loan ETF.

Prior to 05/01/2021, the SPDR ICE Preferred Securities ETF was known as the SPDR Wells Fargo Preferred Stock ETF.

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Diversification does not ensure a profit or guarantee against loss.

Investing involves risk including the risk of loss of principal.

Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.

Returns on investments in stocks of **large U.S. companies** could trail the returns on investments in stocks of smaller and mid-sized companies.

Investments in **small-sized companies** may involve greater risks than in those of larger, better known companies. Returns on investments in stocks of small companies could trail the returns on investments in stocks of larger companies.

Non-diversified funds may invest in a relatively small number of issuers, a decline in the market value may affect its value more than if it invested in a larger number of issuers. While the Fund is expected to operate as a diversified fund, it may become non-diversified for periods of time solely as a result of changes in the composition of its benchmark index.

Passively managed funds hold a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to experience tracking errors relative to performance of the index.

A **"value" style** of investing emphasizes undervalued companies with characteristics for improved valuations. This style of investing is subject to the risk that the valuations never improve or that the returns on "value" equity securities are less than returns on other styles of investing or the overall stock market.

Although subject to the risks of common stocks, low volatility stocks are seen as having a lower risk profile than the overall markets. However, a fund that invests in **low volatility stocks** may not produce investment exposure that has lower variability to changes in such stocks' price levels.

A **"quality" style** of investing emphasizes companies with high returns, stable earnings, and low financial leverage. This style of investing is subject to the risk that the past performance of these companies does not continue or that the returns on "quality" equity securities are less than returns on other styles of investing or the overall stock market.

While the shares of ETFs are tradable on secondary markets, they may not readily trade in all market conditions and may trade at significant discounts in periods of **market stress.**

Foreign (non-U.S.) securities may be subject to greater political, economic, environmental, credit and information risks. Foreign securities may be subject to higher volatility than U.S. securities, due to varying degrees of regulation and limited liquidity. These risks are magnified in **emerging markets.**

Actively managed ETFs do not seek to replicate the performance of a specified index. These investments may have difficulty in liquidating an investment position without taking a significant discount from current market value, which can be a significant problem with certain lightly traded securities. The fund is actively managed and may underperform its benchmarks. An investment in the fund is not appropriate for all investors and is not intended to be a complete investment program. Investing in the fund involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

Investments in **senior loans** are subject to credit risk and general investment risk. Credit risk refers to the possibility that the borrower of a Senior Loan will be unable and/or unwilling to make timely interest payments and/or repay the principal on its obligation. Default in the payment of interest or principal on a Senior Loan will result in a reduction in the value of the Senior Loan and consequently a reduction in the value of the Portfolio's investments and a potential decrease in the net asset value ("NAV") of the Portfolio.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing in high yield fixed income securities, otherwise known as **"junk bonds"**, is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Because of their narrow focus, **financial sector funds** tend to be more volatile.

Preferred securities are subordinated to bonds and other debt instruments, and will be subject to greater credit risk. The fund may contain interest rate risk (as interest rates rise bond prices usually fall); the risk of issuer default; inflation risk; and issuer call risk. The fund may invest in US dollar-denominated securities of foreign issuers traded in the United States.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on **inflation-protected debt securities** can be unpredictable.

Investing in **REITs** involves certain distinct risks in addition to those risks associated with investing in the real estate industry in general. Equity REITs may be affected by changes in the value of the underlying property owned by the REITs, while mortgage REITs may be affected by the quality of credit extended. REITs are subject to heavy cash flow dependency, default by borrowers and self-liquidation. REITs, especially mortgage REITs, are also subject to interest rate risk (i.e., as interest rates rise, the value of the REIT may decline).

Because of their narrow focus, **sector funds** tend to be more volatile than broadly diversified funds and generally result in greater price fluctuations than the overall market.

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Not FDIC Insured
No Bank Guarantee
May Lose Value