

FOURTH QUARTER 2021

AND THE BAND PLAYED ON

The Titanic took approximately two hours and forty minutes from its initial iceberg collision to its foundering. The ship's band — hoping to help keep passengers calm — continued to play (waltzes and ragtime numbers*) for nearly all of that time, only stopping less than thirty minutes prior to the ship going under. Today's financial markets also keep "playing" amid threats of sinking economic prospects. Global equity markets gained 7% in the quarter (and 19% on the year) despite an ongoing pandemic and the 10-year Treasury yield closed out the year at a once unthinkable 1.5% despite high inflation (7%). How should we think about this heading into 2022?

The unsinkable Titanic. It was said "God himself could not sink this ship." With 16 airtight hull compartments — four of which could fill without the ship losing buoyancy — the claim seemed credible. Short of divine intervention, today's financial markets also seem unsinkable. Even in the face of 30-year inflation highs, corporate profit margins have increased and stock valuations remain elevated. A once-in-a-century pandemic has not slowed markets either; global equities are up 30% since COVID's start. Beyond healthy corporate fundamentals, low interest rates and well-functioning credit markets are providing a ballast. The current 1.5% yield on the 10-year U.S. Treasury (UST) is about as low as interest rates have gone. Outside of the worst of the pandemic (where the 10-year UST yield hit 0.5%), the all-time low is 1.4% (set in July 2016).

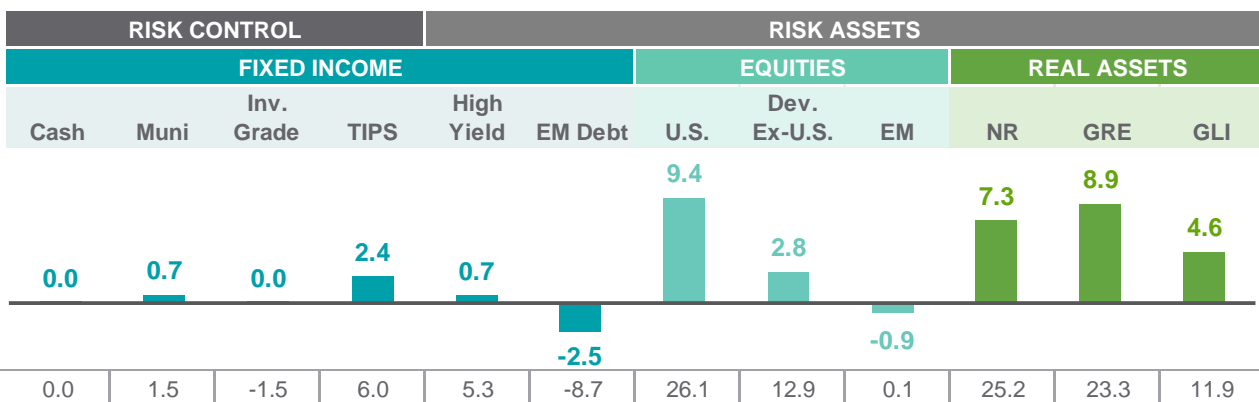
Watching out for icebergs. So, what could sink this ship? Federal Reserve action is high on the list. Should inflation persist and the Fed be forced to raise interest rates more than investors anticipate, stock markets could suffer. Investors are already braced for more restrictive central banks in 2022; consensus calls for the Fed to raise rates roughly three times in 2022 — so there is some cushion. Another obstacle for the economy to navigate is the reduced thrust from fiscal policy as the past two years of stimulus is not repeated. The consumer and investment engines will need to fire to fill the void.

The importance of being prepared. Perhaps due to overconfidence in the Titanic's ability to stay afloat, the ship was woefully short on lifeboats (about one-third of what was needed). As a result, of the 2,000+ passengers on board, only around 700 survived. Surviving a fall in the stock market comes down to ensuring sufficient risk-control assets (investment grade fixed income, inflation-linked bonds and cash) aligned with risk tolerance. Some question the ability for longer duration bonds to provide the same level of protection as they have historically given currently low interest rates with upside risk. But never have investment grade bonds been significantly correlated with stocks (>0.5); and, at the very least, these bonds would still provide significant downside protection.

**The last song played is widely believed to be "Nearer, My God, to Thee" but cannot be confirmed; some argue the bandleader (Wallace Hartley) would never have played such a solemn hymn.*

FOURTH QUARTER 2021 TOTAL RETURNS (%)

Most risk assets rebounded nicely in the fourth quarter — even in the face of ongoing pandemic and inflation headwinds.



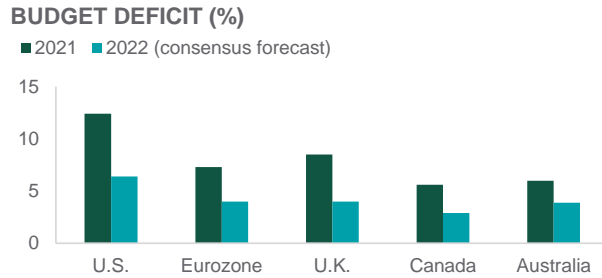
Source: Northern Trust Asset Management, Bloomberg. NR: Natural Resources; GRE: Global Real Estate; GLI: Global Listed Infrastructure.

KEY DEVELOPMENTS

Time for the Consumer to Step Up

A key risk heading into 2022 is the need for the private sector — both the consumer and corporations (in the form of capital expenditures/investment) — to fill in for less government stimulus. As seen in the chart, budget deficits are set to be cut in half over the next year. While governments will still be spending, it's the year-over-year (y/y) change that impacts economic growth — and that y/y change will be negative. Incidentally, less government debt issuance also mutes the impact of reduced central bank purchase programs.

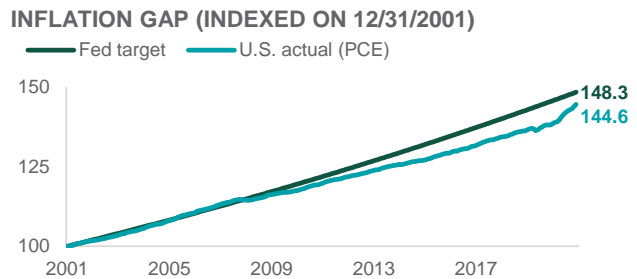
FISCAL DEFICITS AROUND THE WORLD



Inflation is Playing Catch Up

Last year brought us something we haven't seen in a while: Inflation. The broadest measure of U.S. inflation (Consumer Price Index) was up 7% last year, while the Fed's preferred measure (core Personal Consumption Expenditure) was up 5%. While something to watch, it's worth noting the U.S. (and most other countries around the world) are still playing catch up to the 2% trajectory most central banks target (see chart, showing the past 20 years). As such, central banks may be more tolerant of inflation — but not too tolerant.

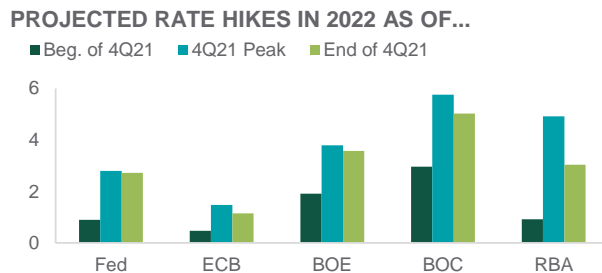
INFLATION'S 20-YEAR TRAJECTORY



Monetary Policy Expectations Have Gone Up

Because of higher inflation, investors have moved up their expectations for central bank tightening. Focusing on the Fed, its fourth quantitative easing program is scheduled to wrap up by March and markets have now priced in around three rate hikes in 2022. Other central banks — including the European Central Bank (ECB); Bank of England (BOE); Bank of Canada (BOC) and Royal Bank of Australia (RBA) — saw adjustments higher last quarter as well (see chart). Risk assets likely can tolerate some rate hikes, but not too many.

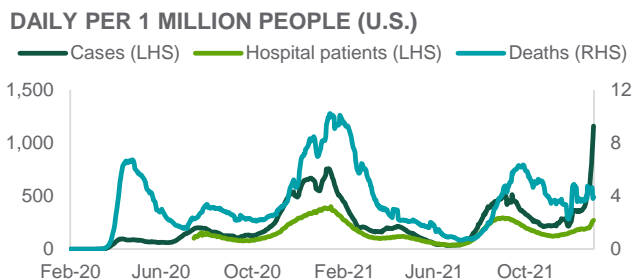
EXPECTED MONETARY POLICY IN 2022



COVID Deaths Not Going Up (as Much)

Unfortunately, the pandemic has been a “key development” for many of our quarterly reports over the last two years. The bad news is it made the list again due to the spike in cases driven by the Omicron variant. The better news is, thus far, hospitalizations and deaths have been much less severe. This fact, combined with a growing aversion to economic shutdowns and restrictions, allowed many risk assets to ignore this development. Going into 2022, COVID-19 is still something to watch, but not to be overly fearful of.

EVALUATING THE WAVES OF COVID-19



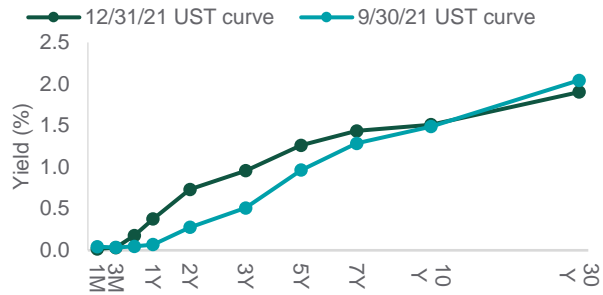
Source: Northern Trust Asset Management, Bloomberg, Our World In Data. LHS and RHS mean left-hand side and right-hand side, respectively. Data as of 12/31/2021.

MARKET REVIEW

Interest Rates

Front-end rates rose as the Fed reduced pandemic emergency measures and pulled forward its rate hike projections in response to upside inflation risks. The 2-year Treasury yield nearly tripled during the quarter. Despite elevated short-rate volatility, the long end of the Treasury curve refused to follow suit. Back-end yields fell as markets priced in more rate hikes, and longer term inflation expectations barely budged during the quarter. Higher short rates and stubborn long-end behavior leave a flatter curve heading into 2022.

U.S. TREASURY YIELD CURVE



Credit Markets

Credit spreads widened during most of the quarter as heavy supply exacerbated performance headwinds that spilled over during periods of broader market volatility. Investment grade spreads recovered some but not all of that spread widening and ended the quarter 7 basis points (bps) wider. High yield spreads recovered all and more of the spread widening and ended 6 bps tighter. Credit risk proved to be more rewarding than interest rate risk as high yield returns outpaced investment grade returns in the quarter (and for the full year).

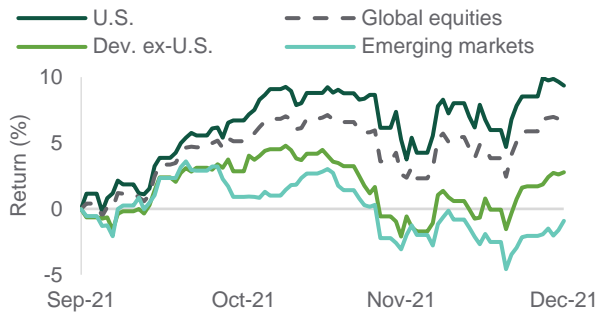
CREDIT SPREADS



Equities

Despite higher inflation and rising short-term interest rates, global equities finished the year strongly with a 6.8% quarterly return. Companies were largely able to pass on cost pressures, profit margins were durable and earnings marched higher. This was particularly true for U.S. companies, as U.S. equities returned 9.4%. Developed ex-U.S. equities reported similar earnings growth but greater Omicron-related pressure led to a more muted return (2.8%). Emerging market equities fell 0.9% on a mix of growth and regulatory headwinds.

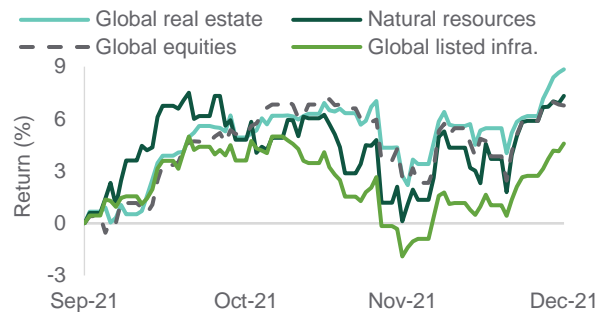
REGIONAL EQUITY INDICES



Real Assets

Global real estate (GRE) finished the year strongly with an 8.9% quarterly return. After a weak 2020, GRE outperformed global equities in 2021 with help from moderating virus headwinds and falling longer term interest rates. In fact, since the 10-year Treasury yield peaked in March, GRE has returned 22.9% on an annualized basis. Natural resources also returned more than global equities on the quarter (7.3%) as commodity demand held up and investors took a liking to the asset class' inflation protection properties.

REAL ASSET INDICES



Source: Northern Trust Asset Management, Bloomberg. Returns in U.S. dollar terms. UST = U.S. Treasury.

MARKET EVENTS

■ 4Q 2021 global equity total return: 6.8%



OCTOBER	NOVEMBER	DECEMBER
<p>5 Global energy prices surge to new records as shortage fears mount.</p>	<p>3 Fed announces it will begin tapering at a pace of \$15 billion per month with the option to adjust the pace if needed.</p>	<p>7 Congress announces compromise to lift debt ceiling (signed into law on 12/16/2021).</p>
<p>14 September Federal Reserve meeting minutes signal asset purchase tapering should begin later this year and potentially end by mid-2022.</p>	<p>5 House of Representatives passes \$555 billion bipartisan infrastructure bill (signed into law in mid-November).</p>	<p>8 Pfizer-conducted lab study shows three doses of its vaccine offer similar protection against Omicron as two doses did for the original strain.</p>
<p>26 China 10-point plan on how it will address its economic challenges points to targeted stimulus and ongoing regulatory headwinds.</p>	<p>10 U.S. CPI surprises to the upside at 6.2% year-over-year (y/y) and inflation pressures broaden.</p>	<p>15 U.S. CPI rises to 6.8% y/y — the highest reading in over 30 years but in-line with expectations.</p>
<p>27 Bank of Canada votes to end quantitative easing and announces it is considering raising rates sooner than previously thought.</p>	<p>26 South Africa warns of fast-spreading Omicron variant and World Health Organization labels it a variant of concern.</p>	<p>19 Fed doubles the pace of tapering and new dot plot shows median projection of three rate hikes in 2022.</p>
<p>28 President Biden unveils new \$1.8 trillion reconciliation framework that doesn't include direct corporate or personal tax rate hikes.</p>	<p>30 In congressional testimony, Fed Chair Powell suggests accelerating tapering and retiring the word "transitory" (as it relates to inflation) is appropriate.</p>	<p>22 Food & Drug Administration (FDA) authorizes Pfizer's COVID-19 treatment pill, Paxlovid.</p>

Indexes used: Bloomberg (BBG) 1-3 Month UST (Cash); BBG Municipal (Muni); BBG Aggregate (Inv. Grade); BBG TIPS (TIPS); BBG High Yield 2% Capped (High Yield); JP Morgan GBI-EM Global Diversified (Em. Markets Fixed Income); MSCI U.S. Equities IMI (U.S. Equities); MSCI World ex-U.S. IMI (Dev. ex-U.S. Equities); MSCI Emerging Market Equities IMI (Em. Markets Equities); S&P Global Natural Resources (Natural Resources); MSCI ACWI IMI Core Real Estate (Global Real Estate); S&P Global Infrastructure (Global Listed Infrastructure).

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