TD Wealth

“D” is for Diversification

Portfolio Strategy Quarterly | Q1 2022

January 17, 2022

Wealth Investment Office

In this issue

“D” is for diversification.

As we start a brand new year, there are factors that lend themselves favourably to the investment landscape, and those that do not. If only we know which ones were predictive of overall gains and losses. The fact that we don’t is one of the cruel realities of being human, of course, but it’s also one of the things that makes it so enjoyable.

We think there are two ways to tackle 2022. First, it’s important to frame the now. We may not know tomorrow, but we can know how we are going to best make decisions in the present to survive and thrive as we move forward. We do this with our regime score, which takes into account seven sets of variables. We score each set of variables from 0 to 100 based on a number of quantitative and qualitative factors. Based on this score, we continue to see a good (but not great) investment environment.

The second way to tackle to 2022 is through diversification, which is where the title of this issue is derived. At the end of the day, speculating on the year ahead is both fruitless and tiresome. Instead, it’s best to focus one’s efforts on asset allocation, which explains more than 90% of the variability of portfolio performance over time, especially over the longer term.

Uncertain things can and will occur, but we can be certain of two things: (1) that you have a well-crafted, appropriately priced, asset- and risk-diversified portfolio; and (2) that you understand with certainty how you will make decisions during uncertain times.

Stay safe and be well,

Brad Simpson

Chief Wealth Strategist, TD Wealth

Cracking Complexity

Complexity

Omicron 30

Thirty basis points — that's the anticipated impact of Omicron on global growth for 2022. Economies have shown resilience to each new pandemic wave, and prolonged lockdowns are not expected. Growth is still forecast to come in at an attractive 4.4% (down from 4.7%).

Real Defensive

We've seen recent strength in defensive sectors, which include real estate and other real assets. Since 1972, for instance, REITs have outperformed the S&P 500 for 80% of 12-month periods when inflation was high and growing, with most gains coming from yield income.

Down, not out

Annual earnings growth estimates have declined sharply from their peaks in March 2021 — from over 60% to around 14% — but that's still above historical rates. Since 2013, earnings growth has averaged 5.3%.

3-2-1 Liftoff

Both the Fed and ECB have announced their intent to wind down asset-purchase programs by end of March, after which they will likely begin to hike rates. The Fed is expected to deliver three hikes, to 1%, by end of year, while in Canada, the hot labour market will likely prompt four hikes, to 1.25%.

Rising with Rates

A withdrawal of stimulus does not portend a fall in stocks. Indeed, the S&P 500 rose an average of 7.4% over the past 11 policy rate-hike periods (lasting an average of 10.5 months), with 10 of the 11 periods seeing positive returns.

Up 8.1, Down 4.6

Omicron has delayed the resurgence of the services industry, with consumer spending still down 4.6% from 2019. Spending on goods, meanwhile, is up an astonishing 8.1%. This helps to explain some of the recent supply crunches and inflationary pressures.

The Early Exit

The tight labour market is being exacerbated by an exodus of baby boomers retiring amid the pandemic. In the U.S., the unemployment rate fell to 3.9% in December. Continued economic growth is expected to see this rate fall below its pre-pandemic low by end of year.

Persistent wage increases

Pricing pressures from supply-chain issues are likely to be temporary. Rising wages are not. Over the first three quarters of 2021, the cost of employment rose 3.7%. The tight market is likely to keep inflation elevated for a while.

Adaptation

Be Compensated

The goal of factor diversification is to reduce unintended risk exposures and target exposure to compensated factors while minimizing exposure to uncompensated factors.

Tactics on the Margins

Tactical or dynamic shifts should only be made at the margin, in an intentional and risk-controlled manner. Strategic asset allocation remains the principal driver of portfolio performance and is paramount in helping investors achieve their objectives.

Remember the 10/10/10 Rule

How are you likely to feel about this in 10 minutes vs. 10 months vs. 10 years? Be patient. There's a reason it's considered a virtue.

7 Years Bad Luck

Markets are awful at predicting policy rate hikes. In 2008, investors were bracing for hikes, which didn't actually occur until seven years later. Then, in 2015, they vastly underestimated the speed of those hikes. Bottom line: The Fed responds to data, not sentiment.

High-odds Proposition

Over the long term, it's been almost impossible to lose money on the broad market. The probability of making at least some money on the S&P 500 over a five-year period is 85%; over a 20-year period it's 100%.

True Diversification

To prosper in this new world, investors need a contemporary portfolio approach with true diversification, balancing: (1) broad asset allocation and (2) risk-factor diversification with (3) a deep understanding of financial behaviour.

Process Over Prediction

We manage investments based on a guiding set of principles designed to work in a world that's constantly changing. We focus on investor's goals and true diversification. We build resilient portfolios that aim to perform regardless of the environment.

Foursquare

There are four basic economic environments: rising growth, falling growth, rising inflation and falling inflation. Markets react as economies shift from one to another, but transitions are unpredictable and can be fraught. We don't predict the future, we invest in all four areas.

PSQ1.2022 | Executive Summary

House Views | Fixed income, modest underweight: While we maintain an overall underweight recommendation on fixed income, we believe fixed income exposure within portfolios remains important as bonds can provide investors with consistent income and diversification benefits and they can insulate portfolios during periods of elevated volatility. • **Equities, modest overweight:** We expect global equities to deliver positive performance in 2022; however, gains are likely to moderate from 2021 levels. Positive returns should be driven by strong corporate fundamentals and growth in corporate earnings and economic activity.• **Real assets / Alternatives, modest overweight:** Alternative assets can act as a key portfolio complement, helping to provide a yield enhancement over traditional fixed income assets. • **Sub-classes:** While the Fed has adopted a more hawkish stance on interest rate policy normalization, which reduces the expected USD interest rate differentials with other currencies, we continue to favour the CAD. The combination of a hawkish BoC, robust economic performance, labour market strength, as well as increasing capital inflows and strong commodity prices should all contribute to strength in the loonie. While gold maintain be supported by inflationary pressures in the near term, we do not anticipate a significant surge in demand from current levels and as such we maintain a neutral outlook for gold.

Factor Analysis | Asset classes that benefit from economic recovery posted a strong performance in Q4 as confidence returned and the perceived risk of accelerating inflation waned. Inflation expectations fell late in Q4 in response to aggressive policy shifts by central banks, even though actual inflation and inflationary concerns remained at multi-decade highs. In this environment, inflation-linked bonds outperformed as expected. • Falling-growth assets, particularly nominal government bonds, were flat for the quarter, despite looming policy rate hikes and cutbacks in central-bank bond purchases. Key government bond yield curves flattened as shorter-term yields sold off in response to broad monetary tightening; longer-term yields rallied as investors priced in lower inflation and slower economic growth longer term as an outcome of the tightening.

Economy | The extreme virulence of the Omicron variant will be enough to cause governments to impose additional restrictions in order to protect their health-care systems from being overwhelmed with additional cases. This will impart a hit on global growth in the new year. The good news is that economies have shown increased resilience to each new wave of the virus. With boosters, vaccinations for children, and increasingly effective treatments, extended periods of lockdowns are unlikely. The ongoing pandemic, however, may prolong supply-chain disruptions that have slowed production and lifted inflation. Economic data in North America have surprised on the upside in recent months. Balanced against recent health developments, the outlook for 2022 is broadly unchanged. While growth is expected to slow in 2022, it is likely to remain above-trend in both Canada and the United States. With the ongoing recovery and elevated pricing pressures, central banks will continue to withdraw emergency supports. The Bank of Canada has signaled its intention to raise the overnight rate when the output gap closes, which we judge will be in the second quarter of 2022. With the labour market far exceeding expectations, we have upgraded our view that the central bank will need to deliver on four rate hikes, bringing the overnight rate to 1.25% by year's end. The Fed is expected to follow in the same quarter, but with a later starting point, given that it must first complete the unwinding of QE measures. We judge the upper bound of the federal funds target range will rise a total of 75 basis points to 1.0% by the end of next year, but there's upward risk to this outlook if inflation measures prove to be sticky.

Fixed Income | Central banks in Q4 further reduced bond buybacks, clearing the way for policy rate hikes to control rising inflation. We expect policy-rate normalization to dominate 2022 as global central banks tighten at different speeds. Within fixed income markets, corporate debt still holds opportunities, although it's expected to stay range-bound. We remain modestly constructive on investment-grade credit, while continuing to monitor expensive valuations. IG credit remains resilient to interest-rate volatility and it has a broad investor base to digest sustained supply. In addition, the higher yield compensates for underlying risks. We maintain our underweight view on government bonds.

We also maintain our defensive view on high-yield credit. Historically low yields and tight spreads imply modest returns in coming quarters, though it's worth repeating that bonds aren't meant to capture upside risk. They provide quality income and stability through downside protection.

■ **Equities** I In the fourth quarter, key central banks turned hawkish and the Omicron variant of Covid-19 emerged, while high inflation continues to cloud equity markets. Despite these risks, we continue to be overweight equities and hold a positive outlook. Although 12-month forecasts for economic and earnings growth have declined from their peaks, they remain higher than historical growth rates. The expansion of margins in 2021 pushed the ratio of net debt to EBITDA to 1.4 in 2021 from 5.1 in 2008. Equities, moreover, usually have not corrected during periods of bond-purchase tapering and rate hikes, especially in the initial rounds. Monetary tightening increases the underlying volatility of equities but doesn't usually send them for a tumble unless a central bank makes an unexpected or aggressive move. We have moved towards a mid-stage recovery where high-quality stocks are expected to benefit. For most of 2021, investors seemed to pursue a bifurcated equity strategy between cyclicals vs. defensives and growth vs. value. The current environment — with slowing economic growth, potential risks from Omicron, and the narrowing gap in 12-month forward EPS growth between cyclicals and defensives — calls for a diversified equity strategy. The role of defensives is expected to increase in coming months and performance dispersion between cyclicals vs. defensives and growth vs. value is expected to decline. Given the risk of inflation and monetary tightening on the horizon, we also recommend maintaining exposure to inflationary trades through commodity equities or real assets and short-duration plays like value stocks.

■ **Real Assets** I Strong global investment volumes continue to push real assets past previous peaks. Investment activity in Q3 of last year was more than 15% higher than pre-pandemic levels, with demand for industrials and multi-family assets leading the way. In a world starved for yield, high inflation compounds the problem by eroding the real or inflation-adjusted value of cash flow that investors receive. Given the persistent inflationary environment, TD Wealth maintains a modest overweight stance on real assets. These holdings remain a key allocation in portfolios because they offer protection against inflation and provide real returns to investors.

■ **Currencies** I Central banks sit at a crossroads, tasked with keeping inflation in check and supporting a varied growth outlook. Real rates should rise, driven by tighter monetary policy and the Fed's determination to conduct quantitative tightening this year. This implies more duration supply and higher real rates, which is toxic for funding currencies (EUR and JPY) and supportive of the USD. However, we are wary of projecting a new USD bull market, likely cycles are just much shorter. Looking at the last four Fed rate hike cycles, USD rallies were strongest about four months ahead of lift-off. We are bullish on the loonie near-term. The Bank of Canada may hike sooner than expected to contain inflation expectations and energy prices are expected to be supportive through the winter months.

■ **Commodities** I Industrial metals in 2021 benefitted from a fierce recovery in the demand for goods, fuelled by stimulus cheques. However, macro headwinds are building. Industrial metal demand is set to face tighter monetary and fiscal policy in 2022, along with a synchronized slowdown in both Chinese and U.S. growth profiles. • Consensus expectations for the energy market point to lower prices, as a global surplus emerges for the new year. Indeed, while the global oil market remains tight, expectations are firming for a period of relief from higher prices as global oil supplies rise at a faster clip than demand. • TD Securities expects gold prices to benefit from "lower for longer" interest rates and higher-than-expected inflation. Investors and central bankers may increasingly look to gold as protection from negative real yields.

“D” is for Diversification

Brad Simpson, Chief Wealth Strategist, TD Wealth

The beginning of the year is a difficult time for many investors, particularly when the preceding year's returns were as good as they were in 2021. So, to cut to the chase, please find our following thoughts for 2022.

The Economy and Inflation

TD economists expect that, in 2022, global real economic growth will slow to 4.4% (Figure 1). Core inflation is likely to remain elevated over the course of the next year. Falling energy prices will take some wind from the headline growth rate, but with a tight labour market, core inflation will remain above the 2% mark through the year.

Granted, inflation levels are elevated, but the risk of runaway inflation is perceived to be low, especially given the likelihood of relief on supply constraints and policy tightening by major central banks. Prices may stay above the traditional 2% target for years, but they're not expected to rise 5% every year like they did in the 1970s.

We hold that the U.S. policy rate is likely to rise a total of 50 to 75 basis points by the end of the year (to a rate of 0.75% to 1%), but there's upward risk to this outlook if inflation measures prove to be sticky. The intention is to raise the rate when the output gap closes, which we're forecasting for the second quarter of 2022. In Canada, with the labour market far exceeding expectations, TD Economics has accelerated its forecast, estimating that the Bank of Canada will need to deliver on four rate hikes by year's end, bringing it to 1.25%. As for the European Central Bank, it has announced the end of its pandemic emergency purchase program by March 2022 and has voiced increasing concerns about inflation. And finally in China, where the economic slowdown is the biggest concern, all signs point to easing in 2022.

Equities

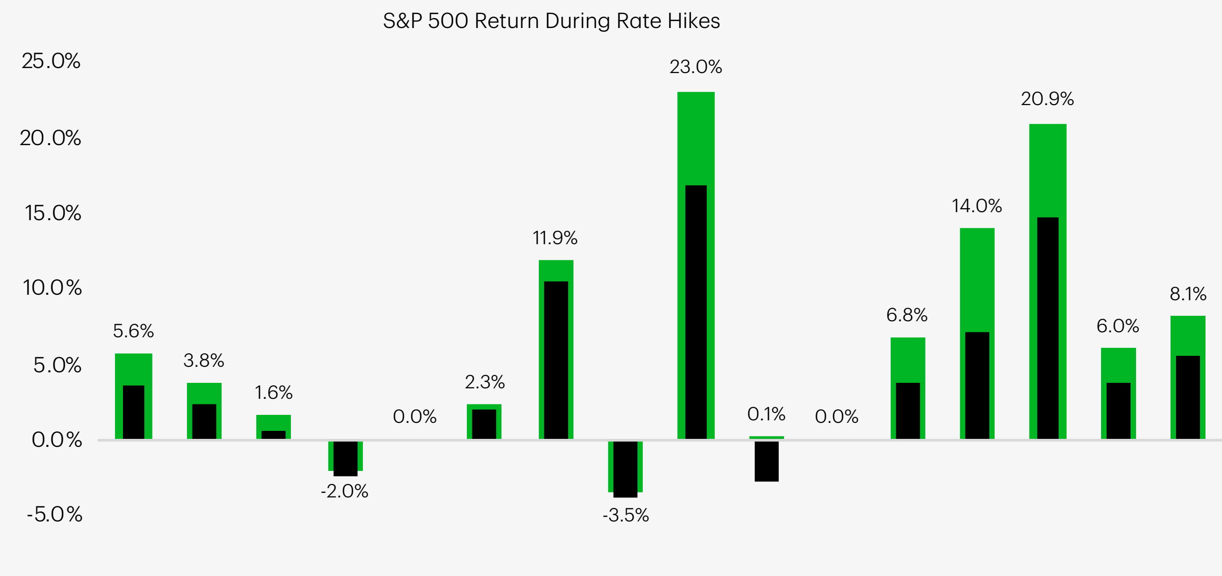
With policy rate hikes set for 2022, equity investors naturally begin to climb the wall of worry; however, rising interest rates are not usually negative for equities. Performance since 1983, for example, has been largely positive (6% on average) during previous rate-hike cycles (Figure 2).

Figure 1: Growth for the year ahead

Global Economic Outlook				
Annual Per Cent Change Unless Otherwise Indicated				
	2019 Share*	Forecast		
	(%)	2021	2022	2023
World	100.0	5.8	4.4	3.6
North America	19.2	5.5	4.0	2.7
United States	15.8	5.7	4.1	2.6
Canada	1.4	4.5	4.4	3.1
Mexico	1.9	5.3	3.0	3.0
European Union (EU-28)	15.4	5.1	4.1	2.0
Euro Area (EU-19)	12.5	5.1	4.1	1.9
Germany	3.5	2.6	3.7	2.1
France	2.4	6.7	3.8	1.9
Italy	2.0	6.3	4.2	1.4
United Kingdom	2.4	6.9	4.7	2.0
EU accession members	2.9	4.8	4.4	2.4
Asia	43.2	6.4	5.1	4.9
Japan	4.1	1.8	2.6	1.3
Asian NIC's	3.5	5.0	3.2	2.6
Hong Kong	0.3	6.7	3.9	3.2
Korea	1.7	3.9	2.8	2.5
Singapore	0.4	6.6	4.5	2.7
Taiwan	0.9	5.9	3.5	2.7
Russia	3.1	4.6	2.4	1.8
Australia & New Zealand	1.2	4.1	3.2	3.1
Emerging Asia	31.4	7.4	6.0	6.0
ASEAN-5	5.7	2.8	5.7	5.6
China	17.3	8.1	5.4	5.7
India**	7.1	9.3	7.7	7.1
Central/South America	5.6	6.9	2.6	2.6
Brazil	2.4	4.9	1.5	2.2
Other Emerging Markets	13.0	4.5	3.6	3.3
Other Advanced	1.1	4.4	3.8	2.2

*Share of world GDP on a purchasing-power-parity (PPP) basis. Forecast as at December 2021. **Forecast for India refers to fiscal year. Source: IMF, TD Economics.

Figure 2: Interest rate hikes and equity returns



	Mar 83 to Aug 83	Mar 84 to Aug 84	Jan 85 to Mar 85	Jul 85 to Sep 85	Apr 86 to Apr 86	May 86 to Jun 86	Jan 87 to May 87	Aug 87 to Sep 87	Mar 88 to May 89	Feb 94 to Feb 95	Mar 97 to Mar 97	Jun 99 to May 00	Jun 04 to Jun 06	Dec 15 to Dec 18	Avg Return	Return (1983-2018)
Nominal Returns	5.6%	3.8%	1.6%	-2.0%	0.0%	2.3%	11.9%	-3.5%	23.0%	0.1%	0.0%	6.8%	14.0%	20.9%	6.0%	8.1%
Real Returns	3.6%	2.3%	0.6%	-2.4%	0.0%	1.9%	10.4%	-3.9%	16.8%	-2.7%	0.0%	3.7%	7.2%	14.7%	3.7%	5.5%

Source: Bloomberg Finance L.P. as of December 31, 2021.

Our overweight stance on equities is being maintained on a strategic basis. We expect global equities to deliver positive performance in 2022; however, gains are likely to moderate from 2021 levels. Positive returns should be driven by strong corporate fundamentals and growth in corporate earnings and economic activity. And it should be reinforced by resilient consumer spending and demand.

While we remain positive on both U.S. and Canadian equities markets, we have upgraded our view of Canadian equities to Maximum Overweight and shifted to a Neutral view for US equities. This is due to higher expected earnings growth in Canada driven by favourable conditions for financials, energy and materials, which make up a greater share of the Canadian market.

We maintain a constructive view on U.S. equities. While returns are expected to moderate, we believe corporations will continue to grow revenue and earnings, which will keep returns positive over the next 12 to 18 months.

Our thesis for Canadian stocks is bullish entering 2022. Following an extended period of relative underperformance for the S&P/TSX Composite Index, the outlook for the economy and corporations continues to improve. Expected dividend increases, share buybacks, a strong backdrop for commodities, and attractive relative valuations all support this thesis.

We are optimistic, moreover, on European economic growth prospects, given that manufacturing PMI data across Europe has remained broadly expansionary.

We maintain a modest underweight outlook for Chinese equities. The turmoil in China's property sector will likely continue to weigh on economic growth and investor sentiment. Policy intervention and improving external demand may provide some relief, but our outlook remains cautious.

We believe equity markets will continue to deliver positive returns — albeit lower than those of the past 12 months — so long as economic growth remains positive. Slower earnings growth, lofty valuations and concerns about tighter monetary policy will all act as headwinds to equity performance over the near term and create an environment of uncertainty, but these are unlikely to stand in the way of positive performance.

Fixed Income

While we maintain an overall modest underweight stance on fixed income, due to low real returns, we believe fixed income exposure within portfolios remains important. Bonds can provide investors with consistent income and diversification benefits, and they can insulate portfolios during periods of elevated volatility.

We expect government bond yields to grind modestly higher as central banks raise policy rates, but in a multi-asset portfolio context, we believe duration can be a diversifier. We continue to look for unconventional yields as interest rates, bond yields and credit spreads remain low by historical standards. Private mortgages, private credit and dividend-paying equites (with hedges in place) look attractive.

Real Estate

We maintain a positive outlook for global real estate. Returns saw a rebound in 2021, demonstrating the importance of portfolio construction through geographic and property-type diversification.

Within Canadian real estate, transaction activity rebounded significantly in 2021. Investor enthusiasm has been most pronounced for industrial and multi-family assets, where these assets — despite a prolonged pandemic — are exhibiting strong fundamentals and a persistent supply/demand imbalance, leading to sustainable income growth and valuation support.

Infrastructure

Infrastructure returns in 2021 were strong given rebounding economies amid loosening quarantine measures. We see significant opportunity looking forward as the need for new infrastructure intensifies. The commitment from many governments to decarbonize their economies underscores the opportunity in renewable energy and power infrastructure to meet net-zero targets globally.

Covid-19

The Omicron variant has been aggressive in its spread, with cases surging around the world in what looks like the fifth wave of this pandemic. However, high vaccination rates in many countries have limited the severity of illness, with fewer deaths and hospitalizations. In South Africa, the surge in cases appears to have peaked, and in the UK, despite a substantial rise in cases, hospital and ventilator occupancy remains manageable.

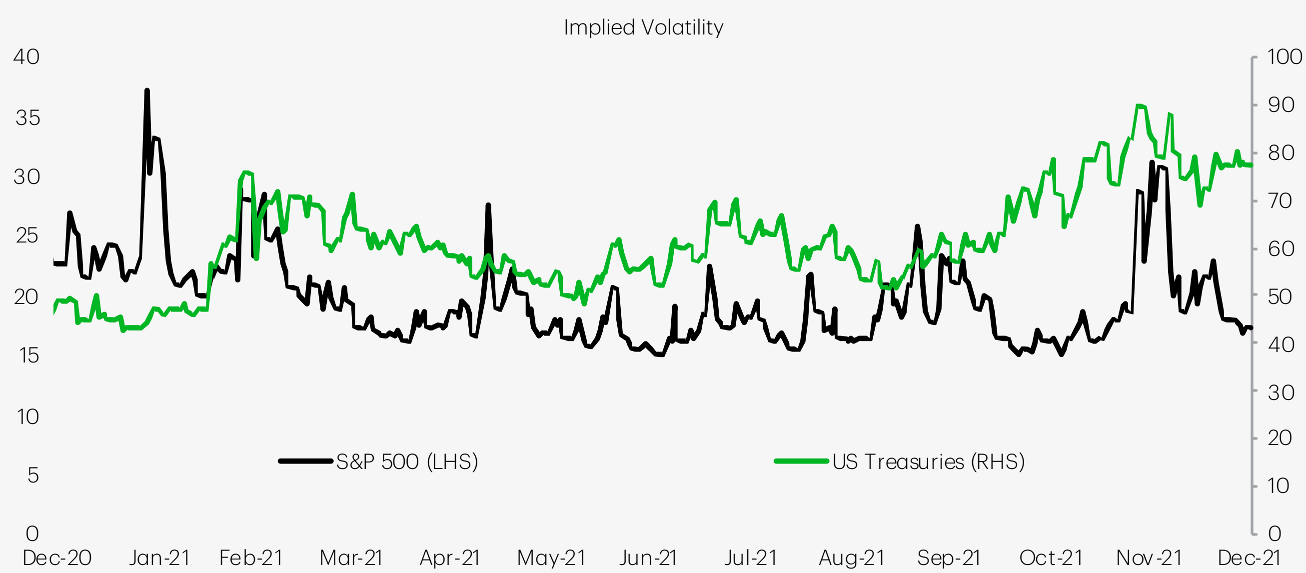
Geopolitics

The global balance of power has the potential to be a central catalyst in 2022. In the United States, ongoing polarization continues to strain the foundation of the union. The U.S. mid-terms in November could see the Democrats lose congressional control and lead to even more gridlock, and perhaps unrest. Meanwhile, U.S.-China relations continue to be a concern as commercial competition takes on a political dimension. Increased tension in Europe is also on the horizon, with a spring election in France that looks to be very divisive. Add Russia and the Ukraine into the mix, and there are a lot of potential tripwires that could lead to volatility in global financial markets in the year ahead.

Directional

After spiking at the beginning of December, the implied volatility for stocks (and bonds) has fallen as a sense of calm returns to markets (Figure 3). Our current preference is to use diversifiers to buffer against expected volatility. Private equity and real estate can provide attractive sources of return while benefitting from an overall economic recovery. Hedged strategies employing options continue to be favourable. In addition, market-neutral strategies make sense in this environment, given their tendency to exhibit low or zero beta, lower market risk and lower market volatility, and because of their mandate to generate returns through stock selection.

Figure 3: Low volatility coming to an end?



Source: Bloomberg Finance L.P. as of December 31, 2021.

Conclusion: Where to find certainty

At the end of the day, investors are transfixed by one question: what is going to happen in 2022? Or in other words, is there going to be a correction. Well, if we look for the kind of pitfalls that could cause financial pain as we move ahead, we find no shortage. For example:

- lofty valuations in both stocks and bonds
- central-bank tightening and the threat of policy mistakes
- removal of quantitative easing
- the continuing pandemic and emergence of Omicron
- low vaccination rates in the U.S. and questions about vaccine efficacy against variants
- risk of further shutdowns and supply bottlenecks
- U.S. mid-term elections and potential unrest
- escalating inflation across developed markets
- labour shortages and growth slowdown around the world (and especially China)
- geopolitical conflicts (Ukraine, Taiwan, Iran)
- climate, policy and extremes

Conversely, there are numerous inputs that paint a far more positive picture:

- robust economic growth
- strong credit conditions
- abundant liquidity with relatively accommodative monetary policy
- strong risk appetite even as the Fed accelerates its tapering program
- abundant corporate cash and dry powder (fuelling dividend increases and buybacks)
- strong flows into risk assets
- strong consumer demand for goods
- lower risk of inflation as central banks begin to tighten
- strong and still rising corporate earnings
- strong profit margins, which have not been adversely affected by rising inflation
- strong and rising spending on capital expenditures
- low debt-servicing costs for corporations and households
- higher spreads, which means better valuations and fewer excesses
- strong employment figures, with record open positions

If only we know which list best portends the next 12 months. The fact that we don't is one of the cruel realities of being human, but it's also one of the things that makes it so enjoyable. We have the ability to discern probable outcomes, but are then frustrated by our inability to predict accurately, no matter how hard we try. This tension has driven us from the discovery of fire, to the Enlightenment, to our current advances in AI and machine learning. We are seemingly hard-wired to want to know what comes next. But because financial markets are open and complex systems — made up of individuals who are constantly manipulating the patterns they find — the systems evolve in a way that is near impossible to predict.

We think there are two ways to tackle 2022. First it's important to frame the now. We may not know tomorrow, but we can know how we are going to best make decisions in the present to survive and thrive as we move forward. We do this with our regime score, which takes into account seven sets of variables. We score each set of variables from 0 to 100 based on a number of quantitative and qualitative factors.

Previous bear markets have occurred when this regime score falls below 30. For example, during the dot-com collapse and the global financial crisis, our regime score would have fallen to lows of 24 and 15, respectively. The current value has been falling from a pandemic peak of 90 in April 2020 to 38 as of the end of December. This indicates that, while market conditions have deteriorated since April 2020, they remain above what we consider to be a threshold that would imply a high likelihood of a bear market.

All in all, things are still pretty good. Purchasing managers' indices are at record highs, with solid capital-expenditure growth and positive M&A activity. Earnings and profitability are also very positive. Credit conditions are good, with acceptable leverage and strong lending standards. Credit spreads are low, which indicates lower perceived risk of corporate default. And finally, while inflation levels are elevated, the risk of runaway inflation is low, especially with the expectation of relief on supply constraints and policy tightening by major central banks.

As a result, our regime work continues to point to a good (but not great) investment environment. At 38, we still consider markets to be in the "fair value" zone (Figure 4). While economic growth indicators are slowing, they are still above trend and we believe markets continue to exhibit healthy long-term fundamentals.

The second way to tackle to 2022 is through diversification, which is where the title of this issue of PSQ is derived.

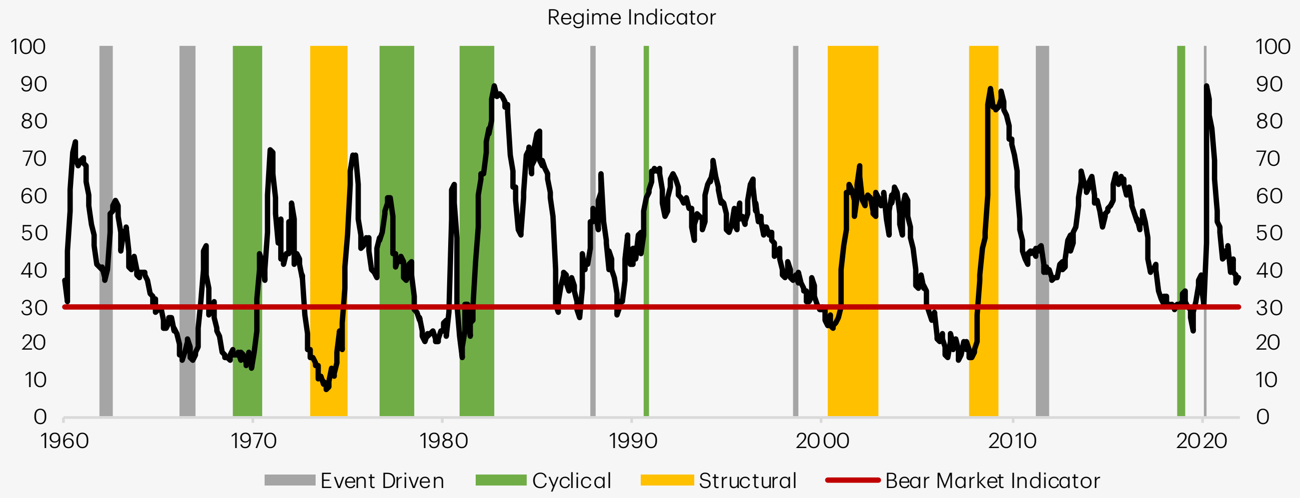
At the end of the day, speculating on the year ahead is challenging, and often fruitless. Instead, it's best to focus one's efforts on asset allocation, which explains more than 90% of the variability of portfolio performance over time, especially over the longer term (Figure 5).

This has always been true, no matter what age we find ourselves in. The first book on double entry bookkeeping is attributed to Benedetto Cotrugli back in 1458: Delia Mercatura et del Mercante Perfetto (Of Trading and the Perfect Trader). While his contribution to double entry bookkeeping was a major development in security analysis, his thoughts on diversification are no less important — and still work today!

"You must never risk too much on a single throw, by land or sea: however rich you may be, at the most five hundred ducats a shipload, or a thousand for a large galley."

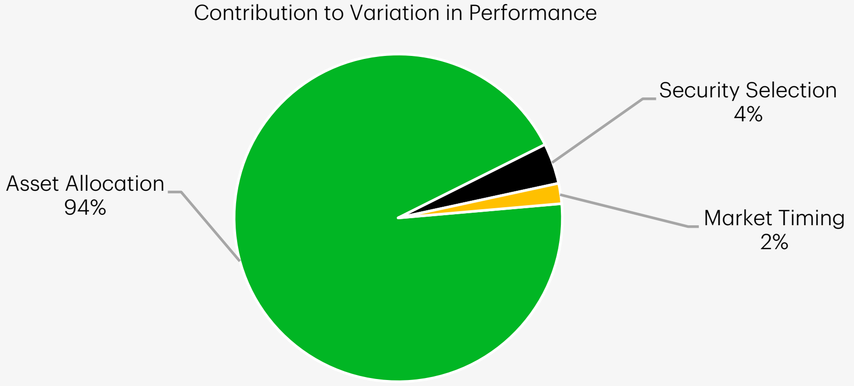
So, as we move into 2002 the key to success is understanding that uncertain things can and will occur. We can, however, be certain of two things: (1) that you have a well-crafted, appropriately priced, asset- and risk-diversified portfolio; and (2) that you understand with certainty how you will make decisions during uncertain times. □

Figure 4: Still within the "fair value" zone



Note: The indicator is scaled form 0 to 100. The higher the more bullish, the lower the more bearish. Most of the previous bear markets are captured when this indicator is falling below 30. Source: TD Wealth and TD Asset Management, as of January 10, 2022.

Figure 5: Asset mix determines long-term performance, not trading tactics



Source: Gary P. Brinson, CFA, Randolph Hood, and Gilbert L. Beebower, "Determinants of Portfolio Performance", Financial Analyst Journal. 1986. Roger Ibbotson and Paul Kaplan, Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance? Financial Analysts Journal. January 2001.

Leading Macro Indicators

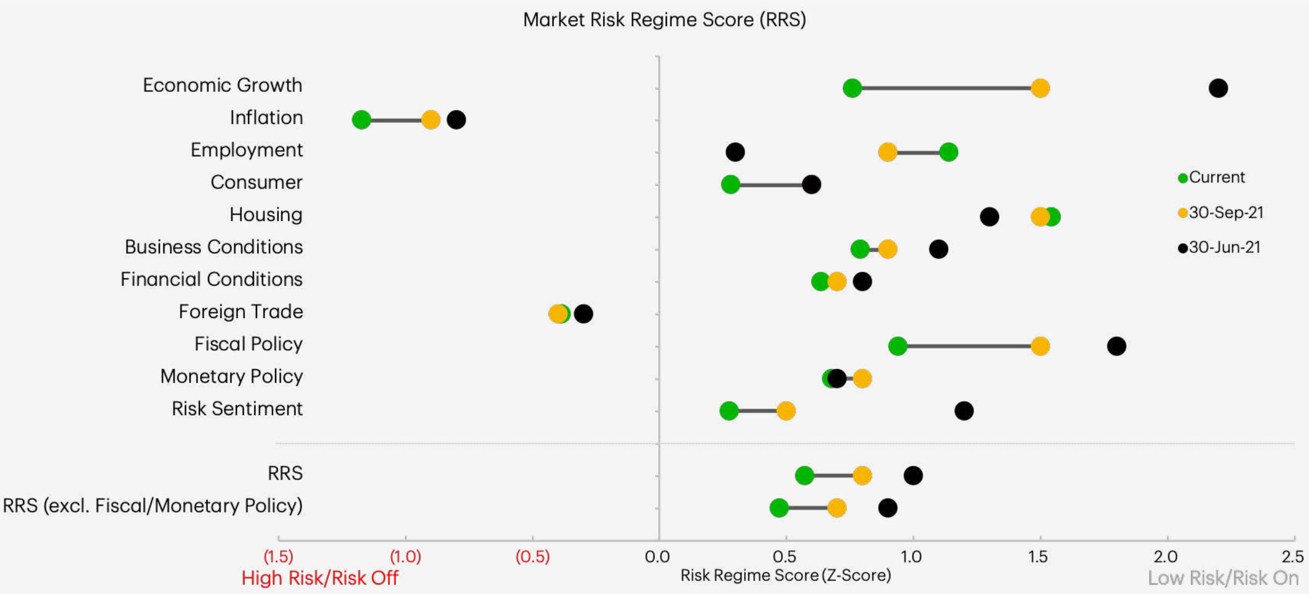
Overall risk regime score neutral to resilient despite deteriorating conditions

As part of our process-driven approach to investment management, we monitor many variables to inform our understanding of the market and the macroeconomic environment. For each indicator, we calculate current values and compare them against recent trends and long-term history using a standardized approach that makes it possible to aggregate across indicators. Figure 1 and 2 summarize the overall condition and aggregate score of the indicators.

Figure 1: Market Risk Regime Scores

Indicator	Overall Condition	Current	Sep-21	Jun-21	Mar-21
Economic Growth	Strong	0.8	1.5	2.2	2.0
Inflation	Weak	(1.2)	(0.9)	(0.8)	0.6
Employment	Strong	1.1	0.9	0.3	0.4
Consumer	Neutral	0.3	0.6	0.6	0.3
Housing	Strong	1.5	1.5	1.3	1.2
Business Conditions	Strong	0.8	0.9	1.1	1.0
Financial Conditions	Neutral	0.6	0.7	0.8	0.7
Foreign Trade	Neutral	(0.4)	(0.4)	(0.3)	(0.3)
Fiscal Policy	Accomodative	0.9	1.5	1.8	1.9
Monetary Policy	Neutral	0.7	0.8	0.7	3.2
Risk Sentiment	Neutral	0.3	0.5	1.2	1.3
Risk Regime Score (RRS)	Neutral	0.6	0.8	1.0	1.4
RRS (excl. Fiscal/Monetary Policy)	Neutral	0.5	0.7	0.9	1.0

Figure 2: Movement in market risk regime scores



Scores represent number of standard deviations away from long-term average
Source: Bloomberg Finance L.P. and TD Wealth as of December 31, 2021.

Risk conditions further weakened in Q4, according to our risk regime indicators. Economic growth, fiscal policy, inflation, and consumer indicators, as well as investor risk sentiment were the biggest contributors to the downtrend. Monetary policy and business and financial conditions also deteriorated. Despite weakening, economic growth remains strong buoyed by the recovery in employment, housing, and business activities. The outlook for corporate earnings also remains robust, although investors expect earnings growth to slow after multiple quarters of higher-than-expected results. And while the government and the Federal Reserve have started to pull back fiscal and monetary support, the level of accommodation remains high; credit conditions are still loose and real interest rates are expected to stay close to zero for the foreseeable future.

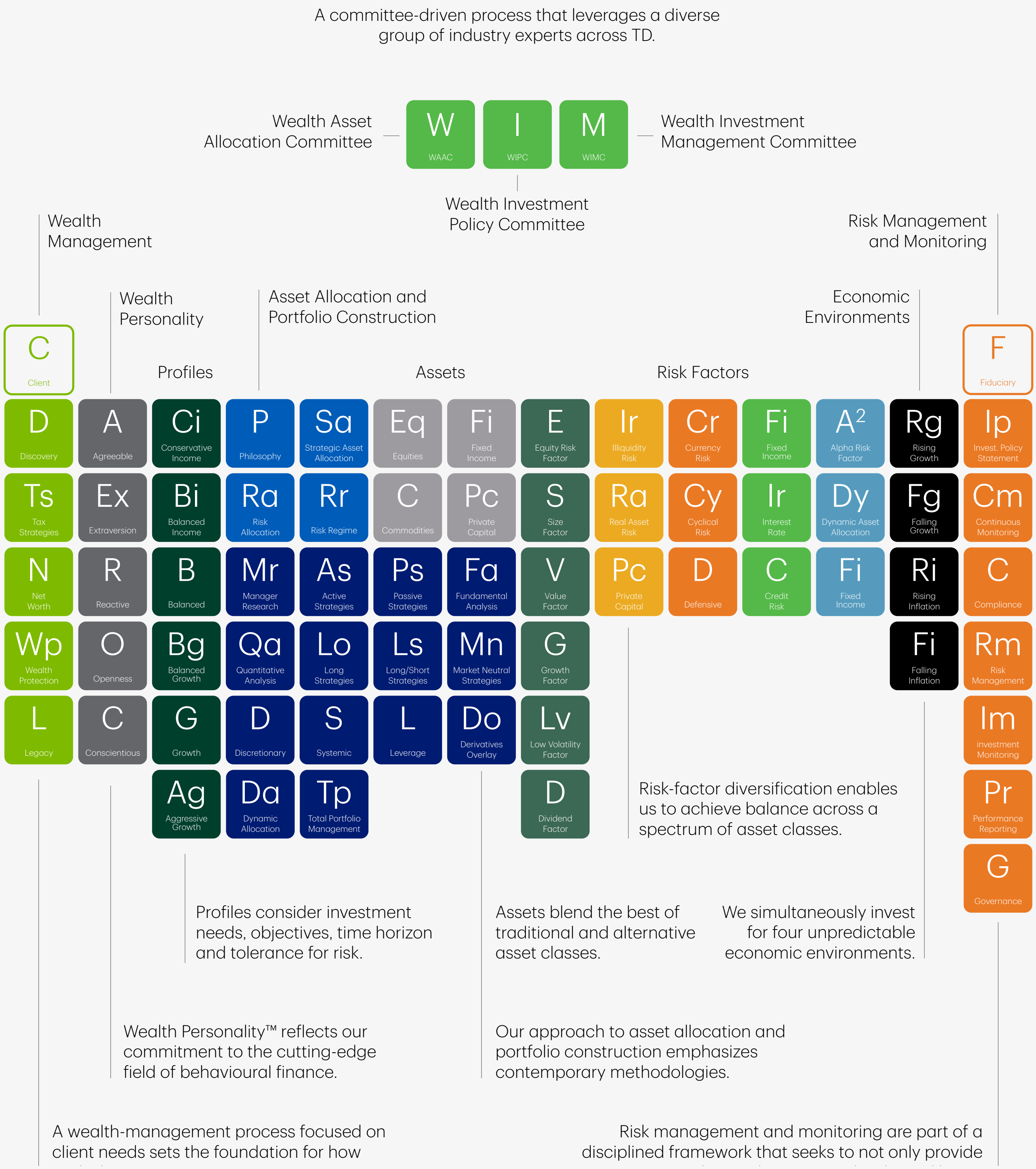
At the end of Q4, our overall market risk regime score stood at +0.6 (down from +0.8 at the end of Q3), which indicates a neutral to resilient regime that should be favourable for risk assets. Weaker growth, higher inflation, tighter fiscal and monetary policies, and lower investor risk appetite propelled the decline in the risk score. The economic growth score fell from +1.5 standard deviation above the historical norm to +0.8 while the inflation score slipped further from -0.9 to -1.2 and the fiscal policy score fell from +1.5 to +0.9. Risk sentiment also fell from +0.5 in Q3 to +0.3, as investors turned more cautious. Fiscal policy indicators deteriorated due to the end of pandemic spending and intractable obstacles to the Biden administration's hallmark social spending stimulus package. On the positive side, employment is still on the rebound after stalling earlier in the year. Overall, despite the ongoing threat from Covid-19 and the end of easy money, broad conditions continue to support risk assets. □

Back to Table of Contents | Reflection

Elements of Wealth Management

Investors are often left to make decisions without any formal process. Our solution? Follow an investment philosophy — a guiding set of principles designed to work in a world that's constantly changing, often with dramatic impact on financial markets. At TD Wealth, we call that philosophy "Risk Priority Management," and it provides the foundation for our decision-making process. That process is then broken down into its most basic components, similar to a periodic table of elements, as illustrated below, with groupings and weights. These components comprise our entire process, from wealth management to risk management to monitoring. All in all, there are 72 "elements" that fall into eight categories.

Figure 1: Elements

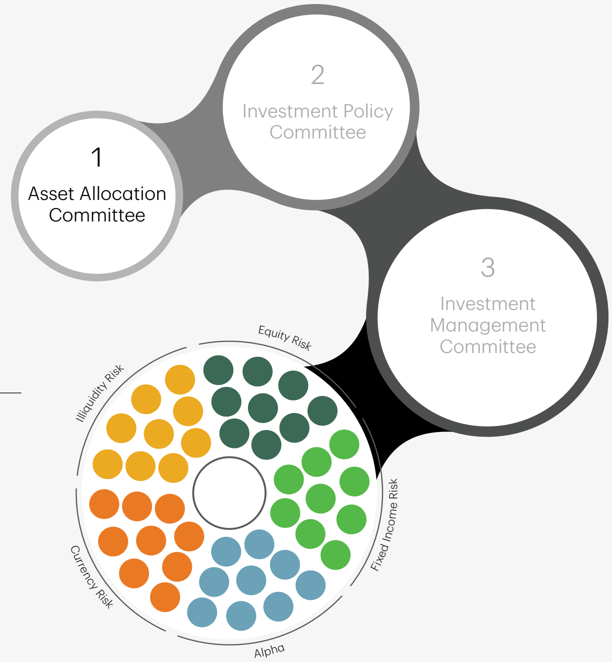


Wealth Asset Allocation Committee

The TD Wealth Asset Allocation Committee (WAAC) is composed of a diverse group of TD investment professionals. WAAC's mandate is to consider the financial market environment and provide direction and themes for equities, fixed income, real assets and sub-classes for the prevailing six to 18 months.

Considers the financial market environment and provides direction, themes and current stance.

Utilizing risk factors to manage exposures, we build and manage portfolios that blend the best of traditional and alternative asset classes.



Committee members:

Robert Vanderhooft, CFA	**Chief Investment Officer, TD Asset Management Inc. (Chair)**
Robert Pemberton, CFA	Managing Director, TD Asset Management Inc.
David Sykes, CFA	Managing Director, TD Asset Management Inc.
Michael Craig, CFA	Managing Director, TD Asset Management Inc.
Jeffrey Trip, CFA	Managing Director, TD Asset Management Inc.
Kevin Hebner, Ph.D.	Managing Director, Epoch Investment Partners, Inc.
Brad Simpson, CIM, FCSI	Chief Wealth Strategist, TD Wealth
Sid Vaidya, CFA, CAIA	U.S. Wealth Investment Strategist, TD Wealth
Glenn Davis, CFA	Managing Director, TDAM USA
Bryan Lee, CFA	Vice President & Director, TD Asset Management Inc.

Long-Term Capital Market Assumptions

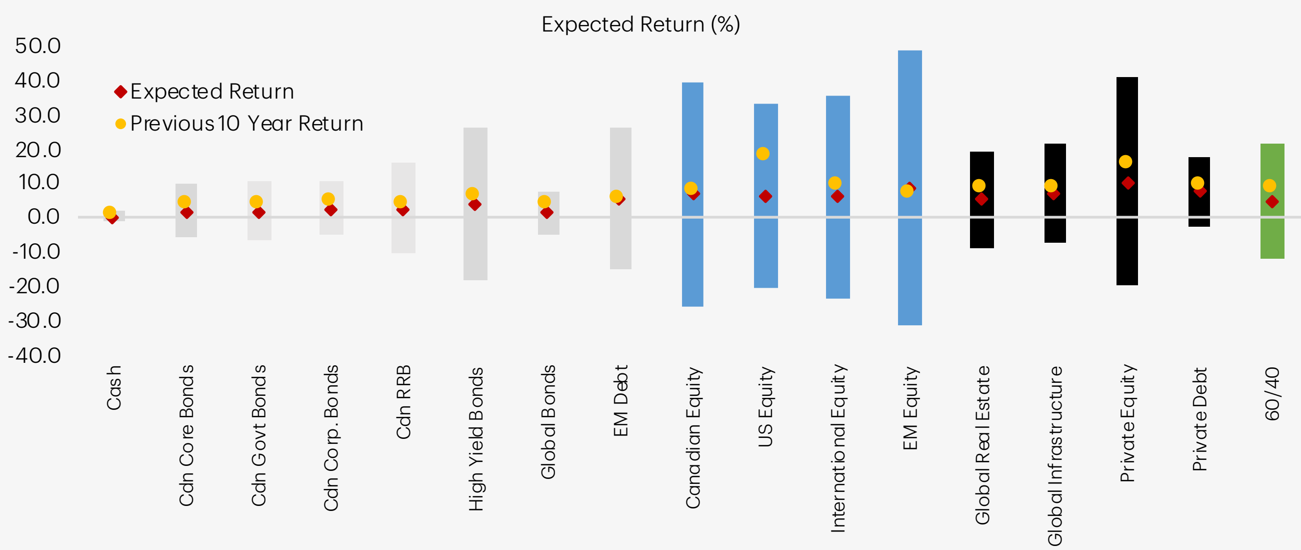
Financial Markets Over the Next Decade

Each year, TD Wealth's Investment Policy Committee (WIPC), in close collaboration with our partners at TD Asset Management, develops long-term capital market assumptions (CMA) that serve as our outlook on capital markets over the next seven to 10 years. These expected return and risk forecasts for major asset classes guide our decisions on strategic asset allocation and portfolio construction over the longer term. They are integral to our process-driven approach to investment management because they ground our investment process around a shared market outlook and a common set of economic inputs. We use the CMAs as building blocks to construct forward-looking policy asset mixes and portfolios for clients that are based on their unique circumstances and engineered to achieve their goals.

As we updated the CMA in late 2021, the world was facing an unprecedented spike in Covid-19 cases due to the rapid spread of the more infectious Omicron variant. Developed countries are implementing differing responses while scrambling to roll out booster shots for their populations. At the same time, inflation continues to escalate, having breached multi-decade highs. Key central banks are finally responding to the inflation threat by swiftly rolling back quantitative-easing programs and committing to earlier policy rate hikes. Data have emerged that the new Covid-19 variant appears milder, despite the record number of infections, leading risk sentiment and equity markets to recover from an initial selloff and record new highs. We've updated the CMAs against this chaotic backdrop, with the pandemic still raging in much of world, and with the onset of a new monetary regime.

Figure 1 illustrates our long-term expected return for each asset class, and dispersion of returns based on the risk profile of each asset. The return dispersion for each asset is important given our approach to forecasting, which eschews point estimates in favour of a range of outcomes around an average.

Figure 1: Long term expected return forecast



Capital Market Assumptions (%)	Cash	Cdn Core Bonds	Cdn Govt Bonds	Cdn Corp. Bonds	Cdn RRB	High Yield Bonds	Global Bonds	EM Debt	Canadian Equity	US Equity	International Equity	EM Equity	Global Real Estate	Global Infrastructure	Private Equity	Private Debt	60/40
Expected Return (2022 CMA)	0.1	1.9	1.7	2.5	2.6	3.9	1.2	5.6	6.7	6.1	5.9	8.5	5.3	7.2	10.4	7.5	4.6
Previous 10 Year Return	0.9	3.9	3.7	4.5	3.6	6.6	3.9	5.7	7.4	17.8	9.2	7.3	8.8	8.8	15.6	9.0	8.7
Difference	(0.8)	(2.0)	(2.0)	(2.0)	(1.0)	(2.7)	(2.7)	(0.1)	(0.7)	(11.7)	(3.3)	1.2	(3.5)	(1.6)	(5.1)	(1.6)	(4.1)
Expected Risk (StDev)	0.8	4.0	4.3	3.9	6.7	11.2	2.9	10.3	16.1	13.5	14.7	19.9	7.0	7.2	15.1	4.9	8.2
Previous 10 Year Risk	0.3	4.2	4.5	4.0	7.4	9.4	2.8	9.1	13.7	11.8	12.6	14.4	1.7	2.4	8.6	3.1	7.2
Sharpe Ratio (Expected)	0.0	0.4	0.4	0.6	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.7	1.0	0.7	1.5	0.6
Sharpe Ratio (Previous 10YR)	0.0	0.7	0.6	0.9	0.4	0.6	1.0	0.5	0.5	1.4	0.7	0.4	4.7	3.3	1.7	2.6	1.1
Expected Return (2021 CMA)	0.2	1.3	1.1	2.0	1.7	5.0	0.9	4.1	7.5	6.2	6.0	9.1	5.2	7.1	10.4	7.6	4.6
Difference	(0.0)	0.6	0.7	0.5	0.9	(1.1)	0.3	1.5	(0.8)	(0.1)	(0.1)	(0.5)	0.1	0.1	0.0	(0.1)	0.0

Source: TD Asset Management, TD Wealth as of September 2021.

The purpose of strategic asset allocation is to help clients construct asset mixes that maximize the likelihood of achieving their objectives, based on their unique profiles. Similar to last year's CMAs, we expect most asset classes to produce lower returns going forward compared to recent history. This is a function of still depressed bond yields and elevated valuations across most assets. For example, we expect core bonds to return 1.9% per year, with 2.5% from investment-grade corporate bonds. Even high-yield bonds are expected to return 3.9% per year. On the equity side, developed-market stocks are expected to generate returns of between 5.9% and 6.7% per year, led by Canadian equities. We expect greater return from emerging-market equities, given higher growth expectations. A representative 60% equity / 40% fixed income[1] portfolio is expected to return 4.6%, compared with a much higher 8.7% over the past decade. Investors are likely to generate more growth in private assets, such as private equity and private debt, and our CMAs reflect this view.

Figure 2 illustrates the trade-off between return and risk across key asset classes, from low-risk, low-return core bonds to higher-risk, higher-return credit and equities. EM equities are expected to generate the highest absolute return amongst equities, but at a much higher risk, so the risk-adjusted return (Sharpe Ratio) is comparable to Canadian and U.S. equities. Real assets and alternatives are expected to generate superior risk-adjusted returns, even when we de-smooth their returns to remove some of the impact of infrequent pricing. This doesn't take into account their diversification potential in relation to a portfolio made up of traditional assets. As a reference, we also show the expected return and risk for a generic 60/40 asset mix as well as TD Wealth's six strategic asset mixes. These return and risk numbers are grounded on our long-term market outlook. The purpose is to help advisors communicate with clients and set performance expectations according to their clients' risk profiles.

Figure 2: Tradeoff between Risk and Return

Source: TD Asset Management, TD Wealth as of September 2021

1. 40% Canadian core bonds, 18% Canadian equity, 24% U.S. equity, 12% international equity, and 6% emerging market equity

The updated CMAs are virtually unchanged from last year's. Fixed income yields are slightly higher and are the main determinant in the higher fixed income return forecasts. We've shown that fixed income yields are the dominant driver of forward bond returns, especially for core bonds. After all, most investors purchase bonds for their set income yields and not their limited upside potential. That's what lower-grade bonds and equities are for. Our forecasts for equities are almost identical to last year's mainly because these are long-term forecasts, based on consensus estimates for economic growth and inflation. The estimates that we use don't fluctuate much year to year and are based on a return to trendline growth and inflation. Underlying these estimates is an expectation that both growth and inflation will return to their pre-pandemic paths, which for most developed economies means real economic growth and inflation of about 2% per year. It may take a few years to get there from 2022 onward, with economic growth and especially inflation at elevated levels due to factors related to the pandemic, but our view is that growth and inflation will normalize and be more like the decade prior to the pandemic.

On a foundational level, the CMAs are built on key themes that we think will drive financial markets over the next decade. We will discuss these themes in detail in a separate CMA white paper. As with any transformation or dislocation, winners and losers will emerge from the dynamics that underpin these themes. What's important for us will be how these dynamics shape portfolio strategy and strategic asset allocation going forward. Forecasts are inherent in every decision we make as investors and allocators, whether they are conscious or subconscious. However, forecasts are as much of an art as a science and often fraught with estimation errors, which is why we provide a range of outcomes. Moreover, with the CMAs, we are not aiming to predict short-term events and cycles. Our focus is on identifying longer-term secular trends, which are more important for strategic asset allocation and portfolio construction. □

Figure 3: Direction from WAAC: Strategic Positioning

	Asset Class	Underweight		Neutral		Overweight
Fixed Income Modest Underweight	Domestic Government Bonds		●			
	Investment Grade Corp Bonds				●	
	Inflation Linked Bonds			●		
	High Yield Bonds		●			
	Global Bonds - Developed	●				
	Global Bonds - Emerging			●		
Equities Modest Overweight	Canadian					●
	U.S.			●		
	International				●	
	Emerging Markets excluding China			●		
	China		●			
Alternative / Real Assets Modest Overweight	Commercial Mortgages				●	
	Domestic Real Estate				●	
	Global Real Estate				●	
	Infrastructure				●	
Sub-Classes	Gold			●		
	Canadian Dollar vs U.S. Dollar					●
	U.S. Dollar vs Basket of Currencies		●			
	Cash		●			

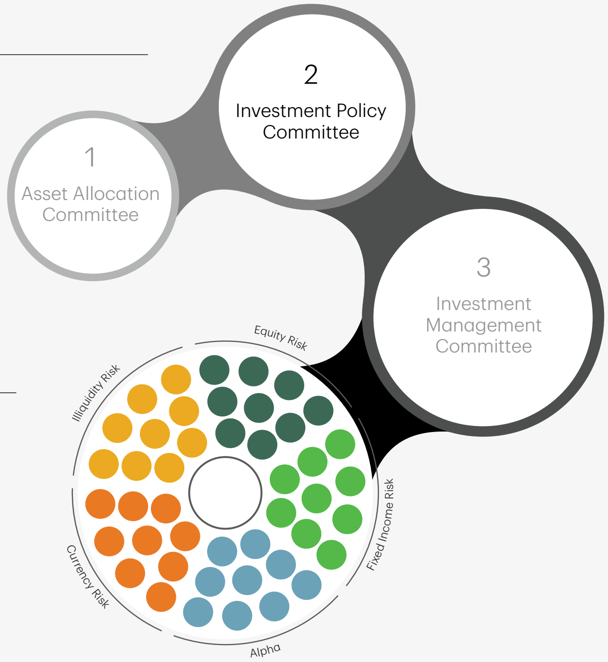
Source: TD Wealth Asset Allocation Committee, as of January 14, 2021.

Wealth Investment Policy Committee

The Wealth Investment Policy Committee is composed of a diverse group of TD investment professionals. WIPC's mandate is to interpret WAAC views and set general asset-class weights for each investor profile.

Interprets WAAC views and sets general investor profile asset class weights.

Utilizing risk factors to manage exposures, we build and manage portfolios that blend the best of traditional and alternative asset classes.



Committee members:

Brad Simpson, CIM, FCSI .... Chief Wealth Strategist, TD Wealth (Chair)

Michael Craig, CFA .... Managing Director, Head of the Asset Allocation & Derivatives, TDAM

Anna Castro, CFA .... Managing Director, TDAM

Jafer Naqvi .... VP & Director, TDAM

Christopher Lo, CFA .... Head of Managed Investments, TD Wealth

Van Hoang, FRM, CFA .... Senior Macro Strategist, TD Wealth

We employ a greater spectrum of asset classes including: fixed income, equity and real assets

Strategic and dynamic asset-class weights by investor profile

Asset Class	Balanced Income		Balanced		Balanced Growth		Growth		Aggressive Growth	
	Strat	Dyn	Strat	Dyn	Strat	Dyn	Strat	Dyn	Strat	Dyn
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fixed Income	63.0%	56.0%	48.0%	41.0%	33.0%	26.0%	23.0%	16.0%	0.0%	0.0%
Government	32.0%	28.0%	24.0%	20.0%	17.0%	12.0%	11.0%	6.0%	0.0%	0.0%
Corporate	31.0%	28.0%	24.0%	21.0%	16.0%	14.0%	12.0%	10.0%	0.0%	0.0%
Equity	35.0%	42.0%	50.0%	57.0%	65.0%	72.0%	75.0%	82.0%	98.0%	98.0%
Canadian	11.0%	15.0%	15.0%	19.0%	20.0%	24.0%	23.0%	27.0%	29.0%	34.0%
U.S.	14.0%	15.0%	20.0%	21.0%	26.0%	27.0%	30.0%	31.0%	40.0%	35.0%
International	7.0%	9.0%	10.0%	12.0%	13.0%	15.0%	15.0%	17.0%	19.0%	19.0%
Emerging Markets	3.0%	3.0%	5.0%	5.0%	6.0%	6.0%	7.0%	7.0%	10.0%	10.0%

Strat: Strategic, Dyn: Dynamic. Source: Wealth Investment Policy Committee, as of January 14, 2022.

Expanded Strategic and dynamic asset-class weights by investor profile

Asset Class	Balanced Income		Balanced		Balanced Growth		Growth		Aggressive Growth	
	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Fixed Income	56.0%	48.0%	41.0%	33.0%	26.0%	18.0%	16.0%	8.0%	0.0%	0.0%
Domestic Gov't Bonds	20.0%	19.0%	14.0%	13.0%	9.0%	6.0%	5.0%	1.0%	0.0%	0.0%
Invest. Grade Corp Bonds	19.0%	18.0%	14.0%	13.0%	9.0%	8.0%	6.0%	5.0%	0.0%	0.0%
Inflation Linked Bonds	4.0%	4.0%	3.0%	3.0%	2.0%	2.0%	1.0%	1.0%	0.0%	0.0%
High Yield Bonds	4.0%	3.0%	3.0%	2.0%	2.0%	1.0%	1.0%	0.0%	0.0%	0.0%
Global Bonds - Developed	6.0%	1.0%	5.0%	0.0%	3.0%	0.0%	2.0%	0.0%	0.0%	0.0%
Global Bonds - Emerging	3.0%	3.0%	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%
Real Assets	10.0%	13.0%	15.0%	18.0%	15.0%	18.0%	15.0%	18.0%	13.0%	13.0%
Mortgages/Private Debt	7.0%	8.0%	7.0%	8.0%	7.0%	8.0%	7.0%	8.0%	0.0%	0.0%
Real Estate/Infrastrucutre	3.0%	5.0%	8.0%	10.0%	8.0%	10.0%	8.0%	10.0%	13.0%	13.0%
Equity	32.0%	37.0%	42.0%	47.0%	57.0%	62.0%	67.0%	72.0%	85.0%	85.0%
Canadian	10.0%	13.0%	12.0%	15.0%	17.0%	20.0%	20.0%	23.0%	25.0%	30.0%
U.S.	13.0%	14.0%	17.0%	18.0%	23.0%	24.0%	27.0%	28.0%	35.0%	30.0%
International	6.0%	7.0%	8.0%	9.0%	11.0%	12.0%	13.0%	14.0%	15.0%	15.0%
Emerging Markets ex. China	3.0%	3.0%	5.0%	5.0%	6.0%	6.0%	7.0%	7.0%	10.0%	10.0%
Fixed Income	65.0%	58.0%	50.0%	43.0%	35.0%	28.0%	25.0%	18.0%	2.0%	2.0%
Equity	35.0%	42.0%	50.0%	57.0%	65.0%	72.0%	75.0%	82.0%	98.0%	98.0%

Strat: Strategic, Dyn: Dynamic. Source: Wealth Investment Policy Committee, as of January 14, 2022.

Dynamic positioning by risk factor weights

Assets	Positioning	Fixed Income Factor	Equity Risk Factor	Currency Risk Factor	Illiquidity Risk Factor	Alpha
Factor Positioning		Underweight	Overweight	Underweight	Overweight	Dynamic
Cash	Underweight	●				●
Fixed Income	Underweight					
Domestic Government Bonds	Underweight	●				●
Investment Grade Corp. Bonds	Overweight	●	●	●		●
Inflation Linked Bonds	Neutral	●		●		●
High Yield Bonds	Underweight	●	●	●	●	●
Global Bonds - Developed	Underweight	●		●		●
Global Bonds - Emerging	Neutral	●		●	●	●
Equity	Overweight					
Canadian	Overweight		●			●
U.S.	Neutral		●	●		●
International	Overweight		●	●		●
Emerging Markets ex China	Neutral		●	●		●
China	Underweight		●	●		●
Real Assets	Overweight					
Mortgages/Private Debt	Overweight	●	●	●	●	●
Real Estate/Infrastructure	Overweight	●	●	●	●	●

Source: Wealth Investment Policy Committee, as of January 14, 2022.

Economic Outlook

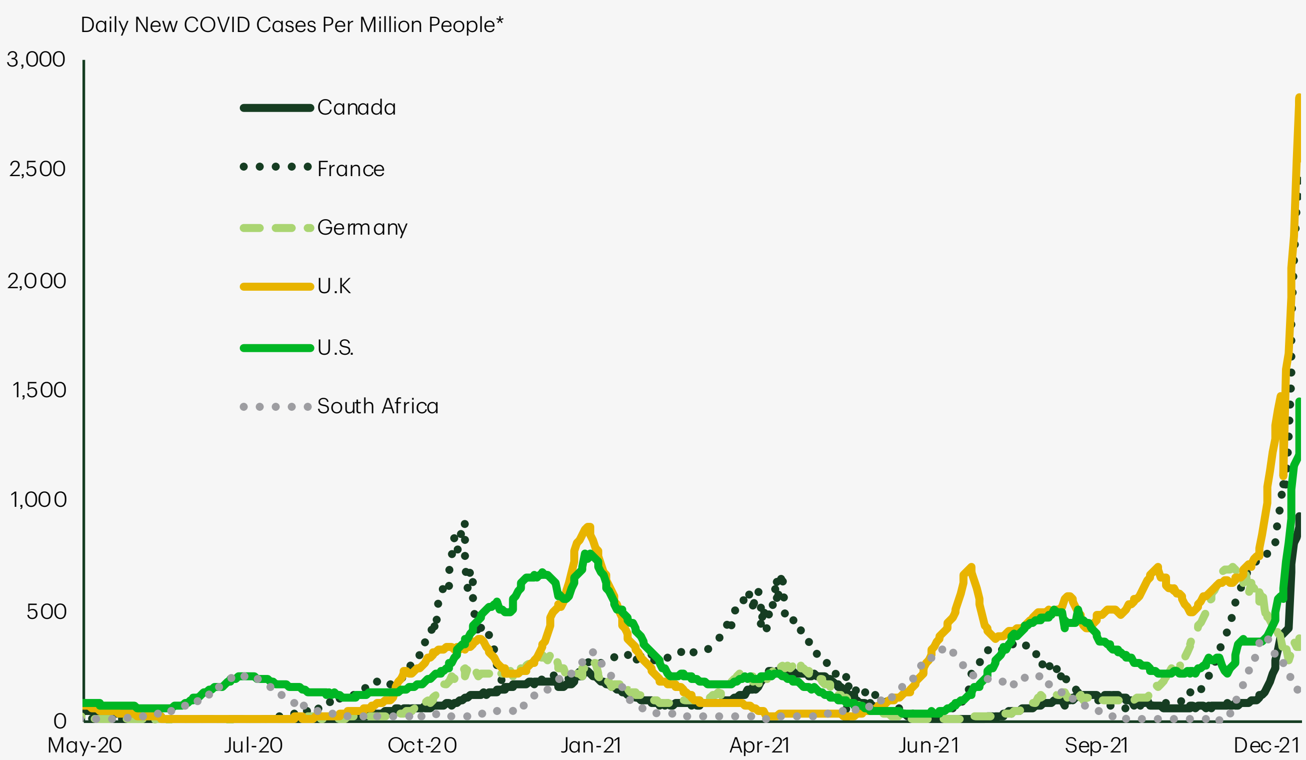
Economic Outlook Remains Upbeat in Spite of Omicron

TD Economics

This economic forecast update imbeds a modest downward revision to the economic outlook. Omicron has quickly overtaken the Delta variant as the dominant source of COVID-19 infections around the world. The new variant is much more contagious than previous variants but also looks to be less severe. Even so, it's added virulence is enough to cause governments to impose additional restrictions in order to protect their health care systems from being overwhelmed with additional cases. This will impart a hit on global growth in the New Year.

The good news is that economies have shown increased resilience to each new wave of the virus. With boosters, vaccinations for children, and increasingly effective treatments, extended periods of lockdowns are unlikely. The ongoing pandemic, however, may prolong supply chain disruptions that have slowed production and lifted inflation.

Figure 1: A Tsunami of Covid Cases to Start 2022



*7-day moving average.
Source: OWID, TD Economics. Last observation: January 3, 2022.

Economic data in North America have surprised on the upside in recent months. Balanced against recent health developments, the outlook for 2022 is broadly unchanged. While growth is expected to slow in 2022, it is likely to remain above trend in both Canada and the United States.

With the ongoing recovery and elevated price pressures, central banks will continue to withdraw emergency-level policy supports. The Bank of Canada has signaled its intention to raise the overnight rate when the output gap closes, which we judge will be in the second quarter of 2022. With the labour market far exceeding expectations, we have upgraded our view that the central bank will need to deliver on four rate hikes, bringing the overnight rate to 1.25% by year's end. The Fed is expected to follow in the same quarter, but with a later starting point given it must first complete the unwinding of QE measures. We judge the federal funds rate will rise a total of 75 basis points to 1.0% by the end of next year, but there's upward risk to this outlook if inflation measures prove to be sticky.

Back to Table of Contents |

Modest Downward Revisions to Global Growth

Compared to our September forecast, we have edged down global growth to 5.8% (5.9% previously) in 2021. The outlook for 2022 has been eased slightly to 4.4% from 4.7%.

The outlook was revised downward as supply chains have struggled under the pressure of intermittent shutdowns and ongoing input shortages. As new variants of the virus emerge, countries with low vaccine coverage present risks to interconnected supply chains.

Given the resiliency of demand, and ample vaccine supply in advanced economies and a growing number of developing ones, the main downside risk to growth is rising inflationary pressures and capacity constraints due to ongoing supply interruptions. One such risk comes from China's aggressive approach to containing COVID-19 outbreaks. Strict containment measures delay delivery of goods to end-consumers, increasing logjams and prolonging delivery times. Moreover, China presents a unique risk to the outlook into 2022 as it contends with an ongoing slowdown in the property sector and regulatory changes. That said, the projection is based on the expectation authorities will mobilize stimulus in 2022 to achieve a GDP growth target between 5.0% and 5.5%.

U.S Likely to Ride Out the Omicron Storm

Economic data in the United States has surprised on the upside in recent months. Balanced against recent health developments, the outlook for 2022 is broadly unchanged. In the meantime, the U.S. economy is closing out 2021 on a high note. Real GDP growth in the fourth quarter is set to post a blistering 7.0% annualized pace. The year as a whole is expected to record a stimulus-driven 5.7% growth rate.

Real GDP growth is expected to slow to 4.1% in 2022. The annual average for 2022 reflects strength at the end of 2021, and growth through the quarters is forecast to be 3.2% on a fourth quarter over fourth quarter basis. Even so, this "slower" growth rate is above the economy's underlying potential growth rate, resulting in an economy that will be pressing deeper into excess demand territory. With the re-opening boost in the rear-view mirror, higher interest rates will reign in demand and temper annual average real GDP growth to 2.3% in 2023.

Indeed, since last quarter's forecast, the labor market has proven tighter than expected. The unemployment rate dropped to 3.9% in December, ahead of expectations, even as more people joined the workforce. With so many baby boomers retiring, recovery in labor force participation among working age people can only do so much to help with labor shortages. As a result, continued healthy economic growth is expected to see the unemployment rate fall below its pre-pandemic low by the end of 2022.

Inflation is likely to remain elevated over the course of the next year, but slow from its peak at the end of 2021. Falling energy prices will take some wind from the headline growth rate over the course of next year, but with a tight labor market, core inflation will remain above the 2% mark through the year.

Figure 2: Global Outlook still Constructive

TD Economics December 2021 Quarterly Economic Forecast			
Indicator	Annual Average Change (%)		
	2020	2021E	2022F
World	**-3.0**	**5.8**	**4.4**
Advanced Economies	**-4.5**	**5.0**	**3.9**
U.S.	-3.4	5.7	4.1
Canada	-5.2	4.5	4.4
Eurozone	-6.5	5.1	4.1
Emerging Markets	**-2.2**	**6.3**	**4.8**
China	2.0	8.1	5.4

*Travel includes ex-fuel transportation goods and services, plus lodging away from home.
Source: BLS, TD Economics, as of January 5, 2022

Setback Early in 2022, but Canadian Recovery to Continue

The lifting of public health restrictions drove a strong quarterly real GDP gain of 5.4% annualized in the third quarter of 2021. That said, downward revisions lowered growth over history, leaving GDP a tad higher than expected previously. High frequency indicators suggest that despite extreme weather in B.C. and additional restrictions on activity to stem COVID-19 at the tail end of the year, GDP growth in the fourth quarter will be almost as strong as the third, taking annual growth to 4.5% this year.

Moving into 2022, economic activity is likely to slow in the first quarter due to additional health-related restrictions, but is anticipated to bounce back in the quarters that follow. Consumption growth is likely to lead the way, underpinned by employment gains and built-up savings. While delayed by the spread of Omicron in the first quarter, services consumption is slated to accelerate through the middle quarters of the year, as Canadians continue to release pent-up demand. As pandemic-related uncertainty fades, businesses should boost investment next year, resuming plans that were shelved due to the pandemic.

Above-trend growth is expected to lower the unemployment rate further in 2022 as the economy enters excess demand territory. As a result, inflation is expected to remain elevated through the year, albeit slowing as supply chains disruptions moderate.

2022 Will Mark the Start of Rate Hikes, Likely Not the End

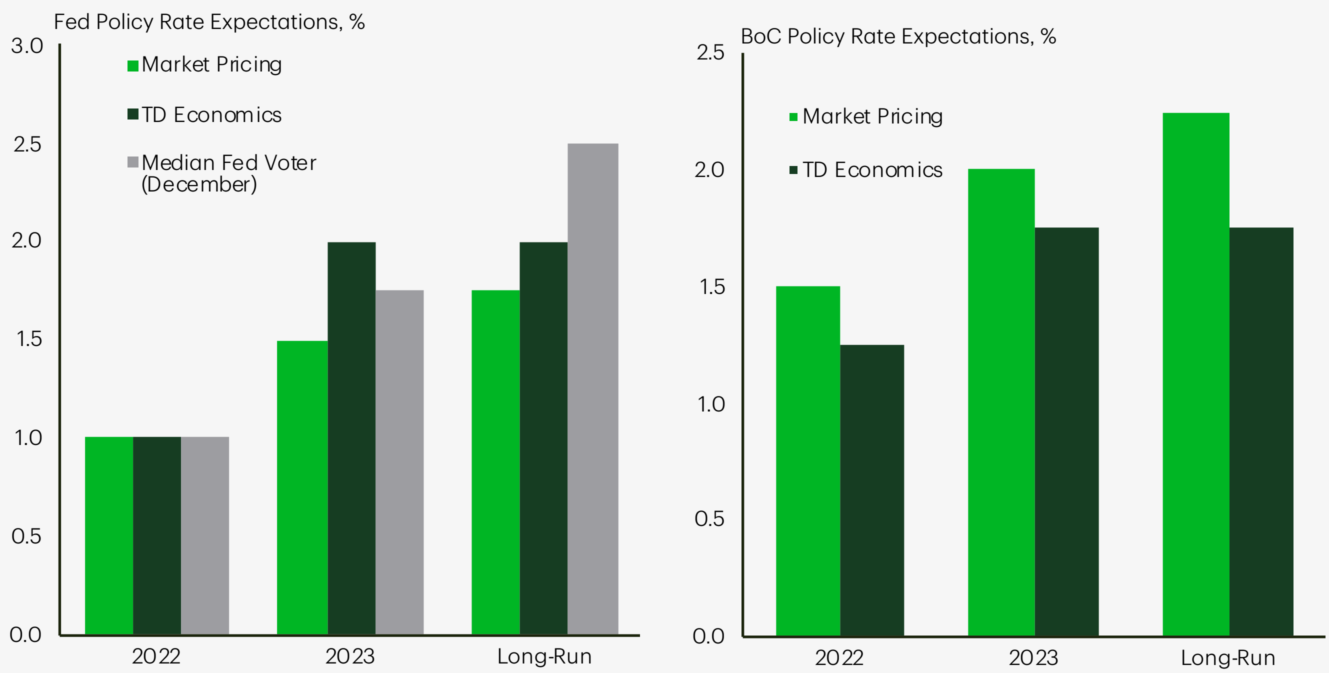
With ongoing economic improvement, in December the Federal Reserve announced a faster taper of its asset purchases with a goal to ending all net new purchases by the end of March 2022. This opens the door for a rate hike in the second quarter. The Fed is expected to continue its rate hiking cycle with a hike once a quarter until federal funds rate reaches 2.00% by 2023.

For the Bank of Canada, we have penciled in a rate hike in April 2022, followed by another in June 2022. After that, we have the Bank hiking once a quarter until the target rate reaches 1.75% in 2023.

Expectations for rising policy rates, the end of Quantitative Easing (QE) by the Fed, and elevated inflation should continue to push up government bond yields. This is already evident at the shorter end of the curve, but is likely to show up in higher 10-year rates.

The Canadian dollar will likely see some appreciation versus the U.S. dollar over the coming months as the Bank of Canada leads the Fed in raising interest rates. However, this could prove short lived once the Fed's policy path is further priced. There is some room for the euro and pound to appreciate as these currencies are trading below long-term fair value. We are less optimistic on EM currencies relative to the USD, given weakness in their respective economic recoveries. □

Figure 3: Central Banks Prepare to Hike Rates



Source: FOMC, Bloomberg LP, TD Economics, as of January 5, 2022

Asset Class Analysis

Contributors

Christopher Lo, CFA .... Head of Managed Assets, TD Wealth

Mansi Desai, CFA .... Senior Equity Analyst, Managed Investments, TD Wealth

Aurav Ghai, CFA .... Senior Fixed Income Analyst, Managed Investments, TD Wealth

Van Hoang FRM, CFA .... Senior Global Macro Strategist, Managed Investments, TD Wealth

Kenneth Sue, CFA, MBA, CAIA .... Senior Alternative Investments Analyst, TD Wealth

Christopher Blake, CFA, MBA .... Senior Portfolio Manager, Equities, TD Wealth

Chadi Richa, CFA, MBA .... Manager, North American Equities, TD Wealth

David Beasley, CFA, CMT .... Senior Portfolio Manager, Equities, TD Wealth

Kevin Yulianto, CFA .... Portfolio Manager, Equities, TD Wealth

Quarter in Review

Continued growth despite shift in monetary regime

Van Hoang FRM, CFA

Financial markets ended the fourth quarter on an erratic but firmly positive note despite adverse shifts in macroeconomic conditions and the emergence of a more infectious Covid-19 variant. Economic growth and corporate earnings expectations pulled back from recent peaks but continued to exceed expectations, which further bolstered capital markets. Meanwhile, strong demand coupled with supply chain issues and tight labour conditions aggravated price pressures forcing key central banks to concede that inflation will likely remain more elevated and persistent than anticipated. As such, major central banks shifted direction and fast-tracked plans to tighten monetary policies. The U.S. Federal Reserve (Fed), for example, began winding down its asset purchase program in the third quarter (Q3), sped up the pace of this tapering (now expected to conclude in March 2022), and expedited plans to raise the policy rate, with multiple rate hikes anticipated in 2022. This hawkish turn was largely expected but when combined with concerns about the Omicron variant, it triggered a broad selloff in risk assets and a rally in government bonds. Risk assets staged a strong recovery at the end of Q4 as encouraging data trickled in about milder symptoms from Omicron—despite soaring infections worldwide. Risk assets (notably equities) ended Q4 on a tear as investors remained upbeat about near-term economic conditions despite ongoing concerns about longer-term economic growth.

Performance through a macroeconomic perspective

If we look at Q4 through a macroeconomic perspective based on economic growth and inflation, rising growth and falling inflation assets such as equities have clearly outperformed (Figure 1). Asset classes that benefit from economic recovery posted a strong performance in Q4 as confidence returned and the perceived risk of accelerating inflation waned. Inflation expectations (as measured by breakeven inflation) fell late in Q4 in response to aggressive policy shifts by central banks, even though actual inflation and inflationary concerns remained at multi-decade highs as supply and demand shocks continued to send prices upwards. In a repeat of Q3, rising inflation risk again compelled major central banks to dial back monetary stimulus and bring forward timelines for rate hikes.

Figure 1: Asset Class Performance by Macroeconomic Environment

Economic Environment	Falling Inflation					Rising Inflation				
			MTD	QTD	1 Year			MTD	QTD	1 Year
Rising Growth	Equities	Global	3.7%	7.0%	20.9%	Commodities	GSCI	7.6%	1.5%	40.4%
		US	4.5%	11.0%	28.7%		Energy	11.0%	-1.3%	60.7%
		Canada	3.1%	6.5%	25.1%		Oil	13.6%	0.2%	55.0%
		EAFE	4.3%	3.9%	18.7%		Natural Gas	-18.3%	-36.4%	46.9%
		EM ex China	4.5%	1.1%	10.0%		Copper	2.9%	9.7%	26.0%
		China	2.2%	1.6%	-3.5%		Agriculture	3.0%	5.8%	24.7%
		US Small Cap	2.2%	2.1%	14.8%		Industrial Metals	5.0%	6.7%	29.6%
		Global REIT	8.7%	16.3%	43.1%					
		Global Infra	6.6%	4.6%	11.9%					
	Corporate Bonds	Global IG	-0.1%	0.0%	-0.8%	Emerging Market Debt	Hard	1.4%	0.0%	-1.5%
		Global HY	1.6%	-0.3%	2.5%		Local	1.2%	-3.2%	-9.2%
		Private Debt	0.6%	0.7%	5.2%					
Falling Growth	Nominal Gov't Bonds	Global	-0.9%	0.1%	-2.3%	Inflation-Linked Gov't Bonds	Global	-1.4%	3.1%	5.5%
		US	-0.5%	0.2%	-2.3%		US	0.3%	2.4%	6.0%
		Eurozone	-1.6%	-0.5%	-3.5%		UK	-5.7%	4.7%	3.9%
		Japan	-3.1%	-5.5%	-7.7%		Canada	3.6%	6.4%	1.8%
		Canada	1.7%	1.6%	-3.0%	Commodities	Gold	2.9%	4.0%	-4.3%

Note: All returns are in local currency unless indicated otherwise. Source: Bloomberg Finance LP as of December 31, 2021.

In a rising inflation environment, coupled with weakening economic growth, inflation-linked (IL) bonds outperformed as expected. Higher inflation expectations and falling real yields were modest contributors to returns for IL bonds as markets continued to view inflation as a transitory problem despite surging price pressures throughout the economy and the end of easy money policies. However, commodities performance in Q4 was muted as soaring Covid-19 cases stoked fears of further lockdowns and weighed on demand expectations. At the same time, falling growth assets, particularly nominal government bonds, were flat for the quarter despite looming rate hikes and cutbacks in central bank bond purchases. Key government bond yield curves flattened as shorter-term yields sold off in response to broad monetary tightening and longer-term yields rallied as investors priced in lower inflation and slower economic growth longer term as an outcome of the tightening.

The following sections summarize market performance during Q4 through our four-quadrant perspective.

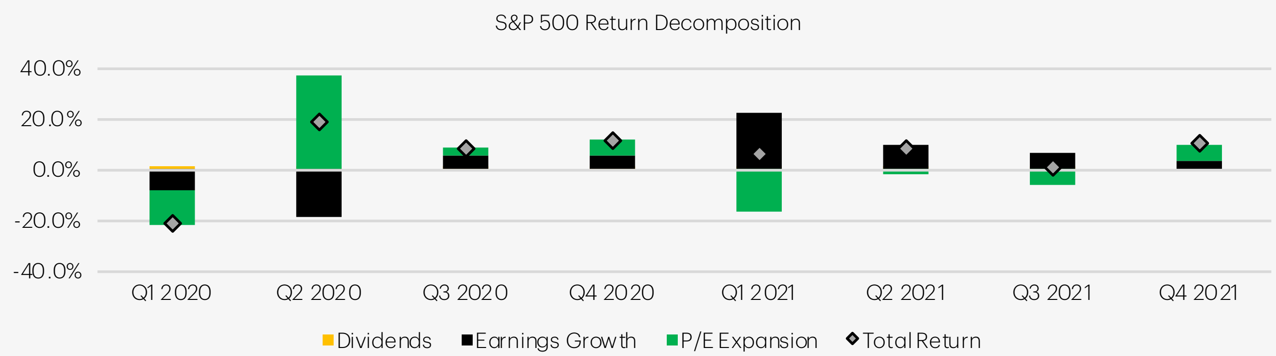
Rising Growth & Falling Inflation Assets

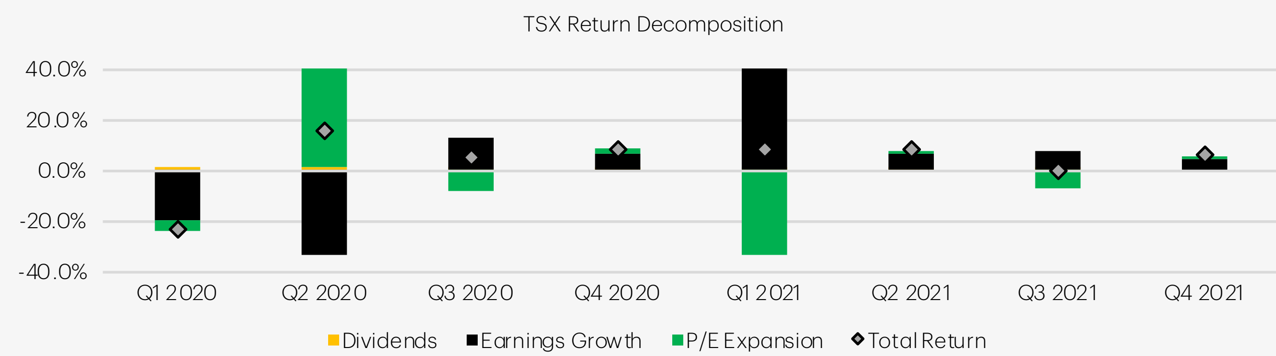
Despite some hiccups, equities continued to rally in Q4, concluding a third year of robust returns. Global equities rose 7.0%, led by U.S. stocks (11%) as American companies continued to beat expectations and produce strong corporate earnings growth. Developed markets outside the U.S. delivered a modest 3.9% return, hampered by surging Covid-19 cases and renewed lockdowns. Emerging markets (EM) posted minor losses, largely due to the weaker growth outlook and inflationary pressures, which have forced many

EM central banks to pump up interest rates. Chinese equities eked out a low positive return but continued to be weighed down by regulatory and debt problems, as well as concerns of about slowing growth. Although weaker than prior quarters, earnings growth was still the main driver of U.S. equity returns in Q4 despite worries about rising costs and falling profit margins (Figure 2). Multiples reversed their contracting trend and this new expansion further underpinned U.S. equity performance. Earnings growth was the strongest in over 20 years and was the dominant contributor to U.S. equities performance for the full year. Every sector but one posted gains in Q4 however there was wide dispersion in performance: real estate, technology, and materials all produced mid double-digit gains, while communications, financials, and industrials lagged. Technology continued to log robust sales and earnings growth while financials were hurt by the flattening yield curve and weakening growth outlook.

Canadian stocks underperformed with gains of 6.5% in Q4, led by materials and financials and hindered by energy, technology, and health care. Performance was driven by strong earnings growth as multiples remained flat (Figure 2).

Figure 2: Return decomposition of S&P 500 and S&P/TSX Composite



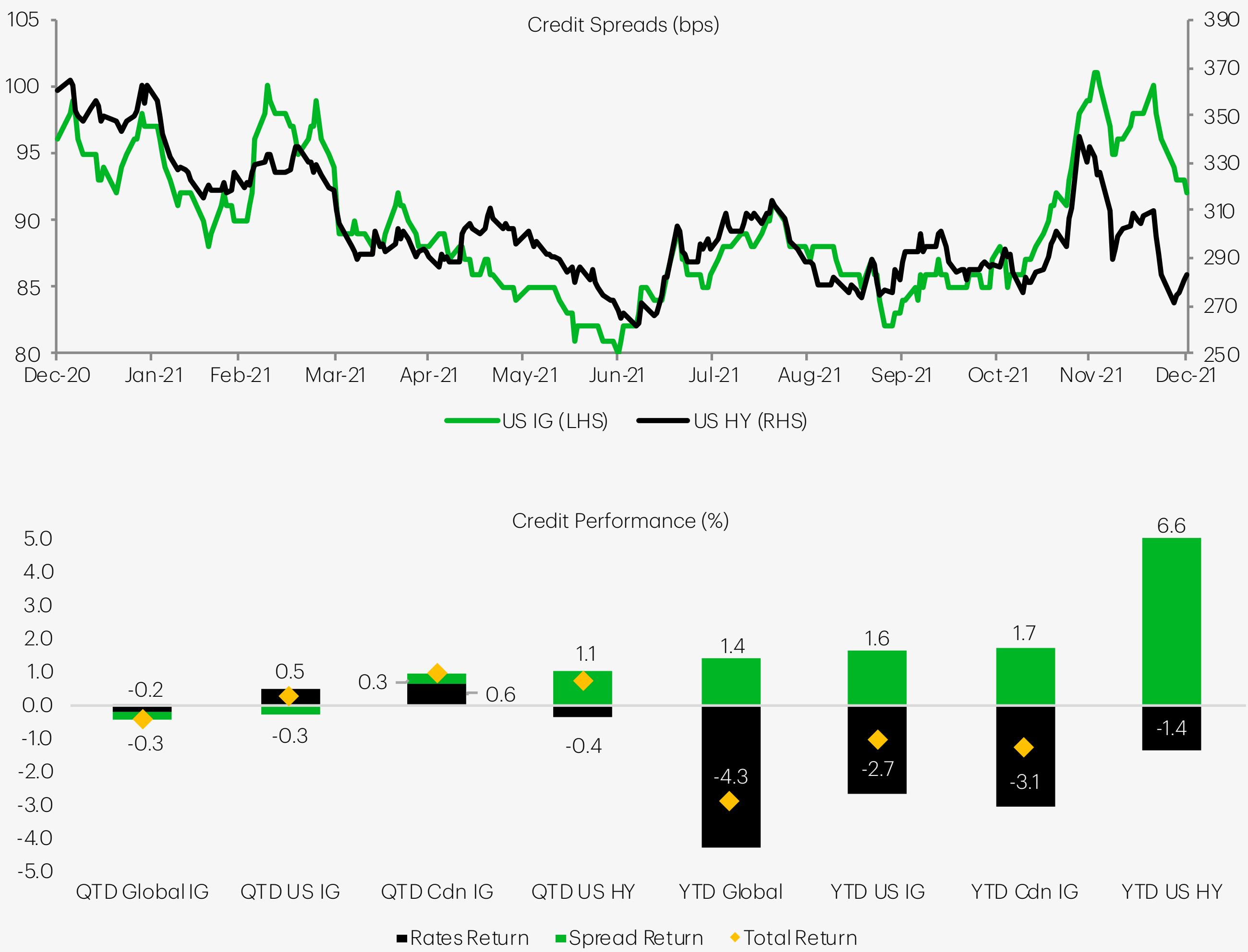


Source: Bloomberg Finance LP as of December 31, 2021

International stocks (developed markets excluding U.S. stocks) also underperformed with gains of 3.9% in Q4, as soaring Covid-19 cases and renewed lockdowns weighed on growth prospects. Despite rising inflation and looming monetary tightening, business confidence continued to be bullish with the eurozone composite Purchasing Managers' Index (PMI) at a still-expansionary 53 points (down from 56 at the end of Q3). By contrast, emerging market stocks underperformed again in Q4 with losses of 0.9% as policy makers attempted to tame soaring inflation by hiking interest rates, which dented growth prospects. Weakness in Chinese equities—especially foreign-listed companies--didn't abate either. However, Chinese stocks did tick up 1.6% in the quarter as the Chinese government released liquidity to stimulate growth. EM excluding China faced further headwinds from a stronger U.S. dollar in Q4 coupled with stagnant commodity prices.

Despite turbulent market conditions in Q4, corporate bonds—both investment grade (IG) and high yield (HY)—were flat as changes in spreads and government bond yields almost completely offset each other. Demand for credit continues to benefit from easy funding conditions and above-trend economic growth, which together drove robust new issuances and low corporate defaults. U.S. IG credit spreads widened by 10 basis points (bps), to 94 bps, and U.S. HY spreads tightened by 18 bps, to 271 bps (Figure 3). This widening (for IG) and tightening (for HY) was a modest factor on performance. However, both IG and HY credit spreads remained tight and well below their levels at the start of 2020 on the back of strong corporate and economic fundamentals. Changes in credit spreads varied across the credit-quality spectrum: spreads for lower-quality issuers widened substantially as investors turned to quality amid heightened market volatility.

Figure 3: U.S. corporate bond spreads and performance attribution



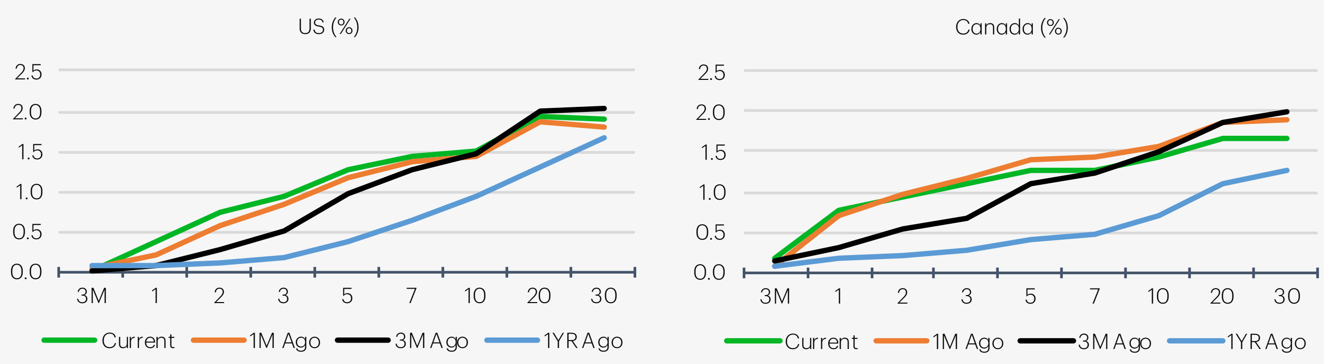
Source: FactSet and Bloomberg Finance L.P. as of December 31, 2021.

Falling Growth Assets

Nominal government bonds and other rate-sensitive assets, which tend to perform well when economic expectations are weak, were flat in Q4 as short- and medium-term yields rose in anticipation of policy rate hikes by major central banks, while long-term government bond yields slipped on expectations that tighter monetary policies will trim inflation and economic growth. U.S. 10-year government bond yields ended Q4 virtually unchanged at 1.51% as falling real yields offset rising breakeven inflation, but the U.S. yield curve flattened significantly (Figure 5). This bear flattening drove losses for short-duration assets and strong gains for duration-heavy assets, with the U.S. 20+ year Treasury rising by 2.7% in Q4. The U.S. Treasury also issued fewer bonds in response to lower government funding needs. Together, these policy shifts kept implied volatilities in bond markets elevated.

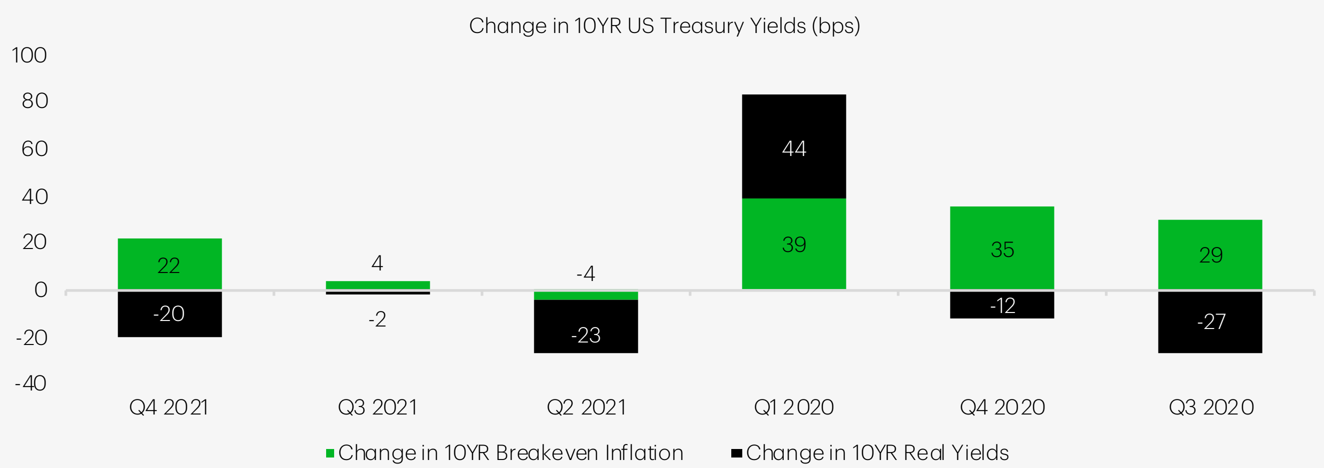
Canadian government bonds rose 1.6% in Q4 as the yield curve flattened, with the Bank of Canada (BoC) expected to tighten more aggressively than the Fed. Canadian 10-year government bond yields, for example, fell from 1.51% to 1.43% in the quarter (Figure 4). Eurozone government bonds were flat, as inflationary pressures accelerated while growth expectations weakened amid soaring energy costs, surging Covid-19 cases, and mass lockdowns. The eurozone bond yield curve also flattened but more modestly. German 10-year yields rose 2 bps, while equivalent Italian yields rose 31 bps. The weaker euro provided some support for exports but this was largely due to the Fed's hawkish move towards monetary tightening, and U.S. dollar strength, as investors sought safe havens, rather than euro weakness. The euro depreciated by 7.4% in 2021 and 1.8% in Q4 of 2021. The European Central Bank (ECB) reaffirmed its easy monetary policy (no rate hikes are expected in 2022) and announced it will wind down asset purchases amid inflationary concerns. The Bank of England (BoE) responded the most aggressively to heightened inflation risk and became the first G7 central bank to hike rates since the pandemic started, although this was in line with market expectations.

Figure 4: Government bond yield curves



Source: Bloomberg Finance LP as of December 31, 2021

Figure 5: Contributions to changes in 10yr U.S. Treasury yields



Source: Bloomberg Finance LP as of December 31, 2021

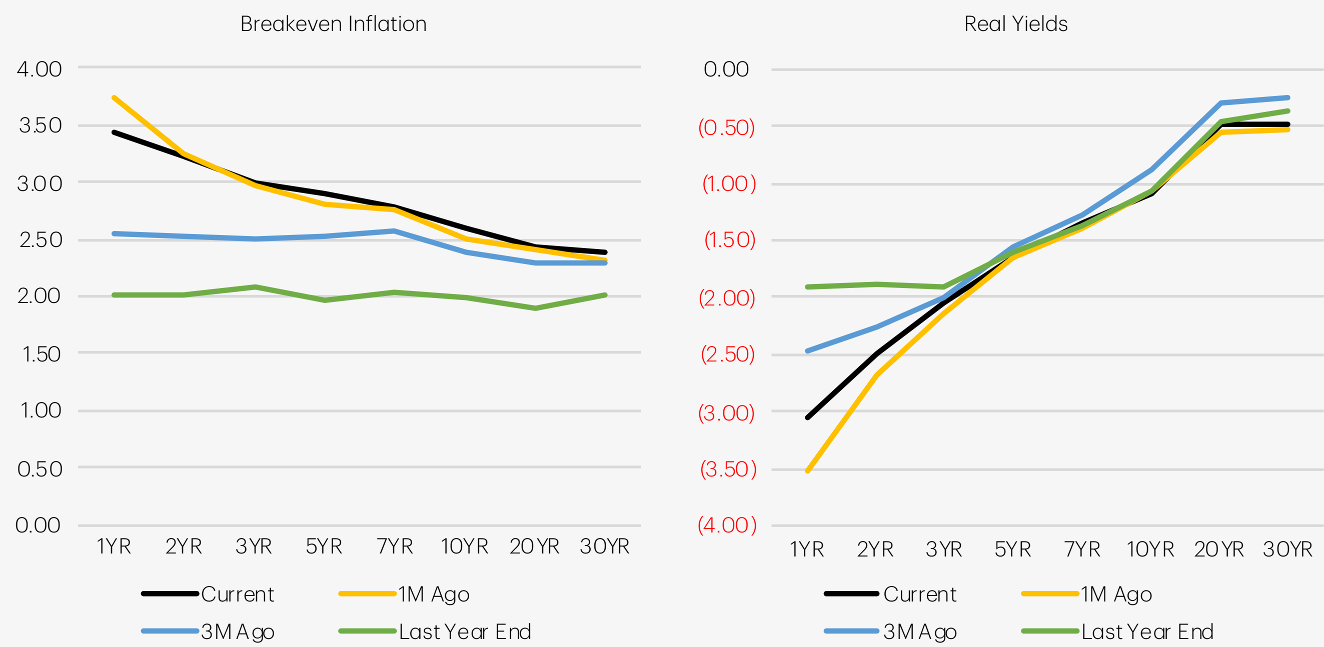
Rising Inflation Assets

Despite high and rising realized inflation, long-term inflation expectations remained muted in Q4, helped by the aggressive policy actions taken by major central banks. U.S. long-term inflation expectations, based on 10-year breakeven inflation rates, ended the quarter at 2.6%, compared with 2.4% at the end of Q3 and equal to the peak of almost 2.6% in May 2021, the highest since 2013 (Figure 6). Breakeven levels indicate investors remain confident in the ability of central banks to tackle inflation over the short-to-medium term (at the expense of economic growth) and thus are not concerned about rising inflation in the longer term.

Inflation-linked bonds benefited from modest increases in breakevens alongside modest declines in real yields, especially toward the long-end of the yield curve. U.S. IL bonds gained 2.4% in Q4, outperforming the 0.2% return of their nominal counterparts. Real yields for 10-year U.S. government bonds fell from -0.9% to -1.1% in Q4 which is almost equal to the historical lows reached during the pandemic. The yield curve for U.S. Treasury Inflation-Protected Securities (TIPS) flattened slightly during the quarter, with the entire real yield curve up to the 30-year mark now at least 50 bps below zero. Global inflation-linked bonds gained 3.1%, and outperformed nominal bonds, as eurozone and U.K. breakevens remained near record highs. Canadian real-return bonds outperformed with a 6.4% gain on the back of greater government bond yield sensitivities and falling long-term yields.

Commodities generally provide strong inflation protection but soaring Covid-19 cases and the uncertain outlook for demand kept prices flat in Q4 despite tight supply conditions. Within commodities, energy fell 1.3% in Q4, even after its end-of-year rally, as concerns about Omicron receded, while industrial metals gained 6.7%. Natural gas posted the biggest loss, tumbling 36% in the quarter amid easing supply constraints while oil remained at almost US$80 per barrel. Similar to last quarter, oil prices were buoyed by tight supply and OPEC's (the Organization of the Petroleum Exporting Countries) decision to stick with existing plans to wind down pandemic-imposed production cuts by September 2022. Energy closed the year up 61%. Gold—often considered a partial hedge against inflation—gained 4% in Q4 on the back of higher inflation expectations and lower real yields. Gold appreciation was limited as investors anticipated the withdrawal of central bank monetary support. The appreciating U.S. dollar also capped gold performance. □

Figure 6: U.S. inflation expectations and real yields



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

Outlook on Fixed Income

Modest Underweight

Make way for normalization

Aurav Ghai, CFA

Last quarter, central banks further reduced bond buybacks, clearing the way for policy rate hikes to control rising inflation. Speaking of which, most central bankers have either deleted "transitory" from their inflation vocabulary or expanded their transitory timelines. We expect policy rate normalization to dominate 2022 as global central banks tighten rates at different speeds.

Fixed income sub-assets experienced a performance rotation in 2021; inflation-linked bonds and risk (high-yield credit and bank loans) performed well, and duration assets struggled although they've been surprisingly resilient amid historically high inflation data (Figure 1). This rotation provided opportunities for active managers to generate additional returns. As you can see from Figure 1, fixed income is more than government bonds and has multiple sources of returns.

Within fixed income markets, corporate debt still holds opportunities although it's expected to stay range-bound. We remain modestly constructive on investment grade (IG) credit while still keeping an eye on expensive valuations. IG credit continues to be resilient to interest rate volatility, has a broad investor base to digest sustained supply, and the relatively higher yield on offer compensates for underlying risks. We maintain our underweight view on government bonds. We also maintain our defensive view on high-yield credit.

Historically lower yields and tighter spreads imply modest returns in coming quarters though it's worth repeating that bonds aren't meant to capture upside risk. They provide quality income and stability through downside protection. For those clients heavily invested in fixed income, keep focusing on probable income versus probable drawdowns (or peak to trough movement).

Government bonds and inflation: Normalization amid divergence

Almost everyone has been talking about central bank policy rate hikes and with that there has been a misplaced assumption that higher policy rates will put government bonds and yield-sensitive assets under pressure. After the Federal Reserve (Fed) turned hawkish in September the market priced in sooner-than-expected rate hikes – this was clearly visible in the movement of U.S. 2-year Government Bond yields to 0.73% from 0.29% over Q4. But something interesting happened with medium- and long-maturity government bond yields: benchmark 10-year yields slipped to 1.51% from 1.53% and 30-year bond yields tumbled to 1.90% from 2.09%. Despite this, the Bloomberg U.S. Treasury Bond index posted a positive, though modest, return of 0.17%. How is it possible that expectations for higher Fed policy rates resulted in positive returns in government bonds? The answer lies in the government bond yield curve.

Figure 1: Calendar year performance of fixed income sub-assets

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
22.0%	18.3%	19.2%	8.3%	13.2%	3.8%	16.6%	10.0%	2.1%	14.9%	13.0%	6.0%
15.0%	14.0%	19.0%	8.2%	10.4%	2.8%	16.1%	8.5%	2.0%	13.6%	11.5%	5.4%
14.9%	11.7%	16.5%	6.2%	9.3%	2.7%	15.1%	7.4%	1.5%	13.2%	9.0%	5.2%
12.3%	11.0%	15.9%	5.8%	9.2%	2.0%	10.3%	7.0%	1.1%	13.2%	9.0%	5.1%
11.1%	10.2%	11.7%	0.8%	8.6%	1.5%	9.9%	5.9%	0.2%	11.6%	8.7%	4.7%
10.1%	8.9%	10.6%	0.8%	8.4%	0.9%	9.7%	5.2%	0.0%	10.4%	8.7%	3.6%
9.4%	8.3%	10.4%	0.8%	8.2%	0.3%	5.9%	3.6%	-0.4%	8.8%	8.3%	1.8%
7.6%	8.2%	7.6%	-0.9%	7.6%	0.1%	5.7%	3.4%	-0.5%	8.1%	8.1%	-0.8%
7.3%	6.5%	7.3%	-2.0%	6.0%	-0.1%	4.8%	3.3%	-1.5%	8.0%	7.5%	-1.1%
6.5%	5.4%	6.2%	-2.0%	4.4%	-0.5%	3.7%	2.8%	-1.8%	7.7%	5.7%	-1.3%
6.5%	5.1%	5.3%	-3.6%	3.7%	-1.7%	3.7%	2.2%	-2.8%	7.5%	5.2%	-1.8%
6.3%	3.2%	2.9%	-6.0%	3.2%	-2.4%	2.9%	1.8%	-3.0%	6.5%	5.0%	-2.2%
5.2%	2.4%	2.8%	-9.3%	2.5%	-2.8%	0.9%	1.7%	-3.3%	6.4%	4.2%	-2.3%
4.1%	2.1%	2.6%	-13.1%	1.2%	-4.5%	0.8%	0.7%	-6.1%	6.1%	1.8%	-3.0%

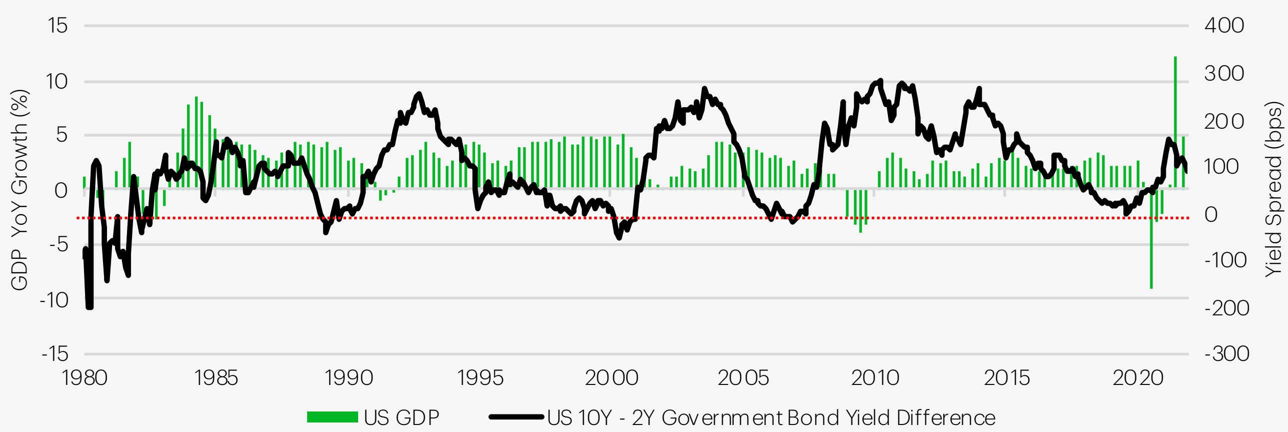
Canada Gov	Canada IG	Canada HY	Canada RRB	US Gov	US IG	US HY
US IL	US Loans	Global Gov	Global IG	Global HY	Global IL	EMD (USD)

Source: Bloomberg. As of December 31, 2021.

We tend to assume government bond yields across various maturities (or the curve) move in parallel with policy rate hikes but that hardly ever happens. Based on past tightening cycles, we can deduce that upcoming policy rate hikes will most likely lead to first, an uptick in short maturity bond yields, and second, medium- and longer-maturity yields will decline in expectation of lower long-term inflation and economic growth. Inflation and growth are the two main drivers of medium- and long-term bond yields. That's why the government bond yield curve flattened (the difference between long- and shorter-bond yields compressed) when investors were surprised by the announcement of faster policy rate hikes (Figure 2). Curve flattening can lead to positive returns for government bond indices because longer-maturity bonds have much higher duration compared to shorter-maturity bonds. Gains driven by lower yields at longer maturity offset losses from higher yields at shorter maturity. In Figure 3 we highlight how the curve has reacted in previous policy rate hike environments. Another point to clarify, a flat yield curve--where long yields aren't much higher than the short ones—is a very different beast to an inverted yield curve, where long yields are lower. An inverted yield curve is one of the most reliable indicators of recession. A flat yield curve, however, can persist for years without portending anything negative about economic growth.

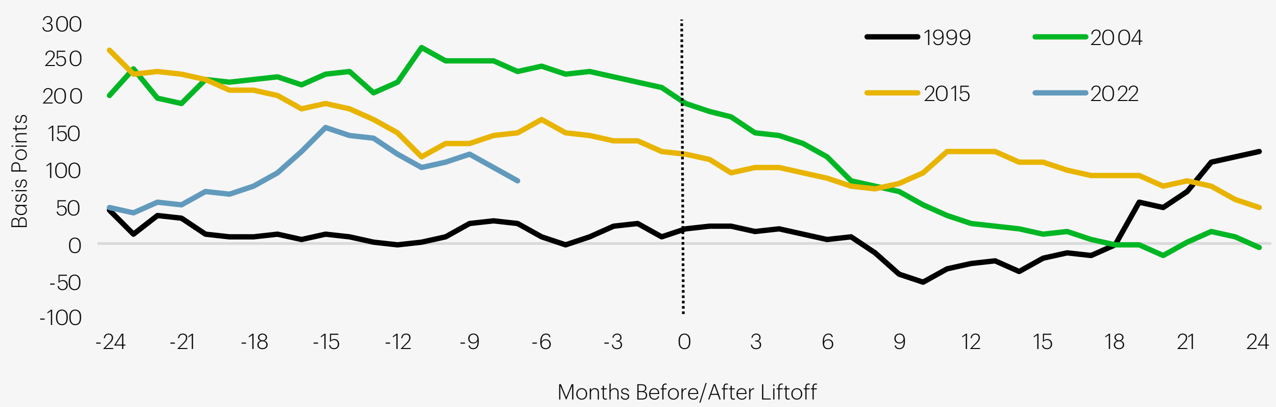
Last year was the first time in nearly a decade that bond investors experienced significant negative returns. The 2021 bond selloff was prompted by fading coronavirus risks, robust economic recovery, elevated inflation risk and the probable end to policy accommodation. Market consensus for 2022 implies government bonds will struggle, to varying extents, in most G10 economies. With the pandemic largely behind us, government bond markets in 2022 will be driven by inflation outcomes and central banks responses. These considerations need to be evaluated alongside declining labour market slack and might imply higher government bond yields.

Figure 2: Flat yield curves consistent with GDP growth



Source: FactSet, TD Wealth, as of December 23, 2021. Using U.S. chained or real GDP y/y seasonally adjusted.

Figure 3: Historical curve flattening amid rate hikes

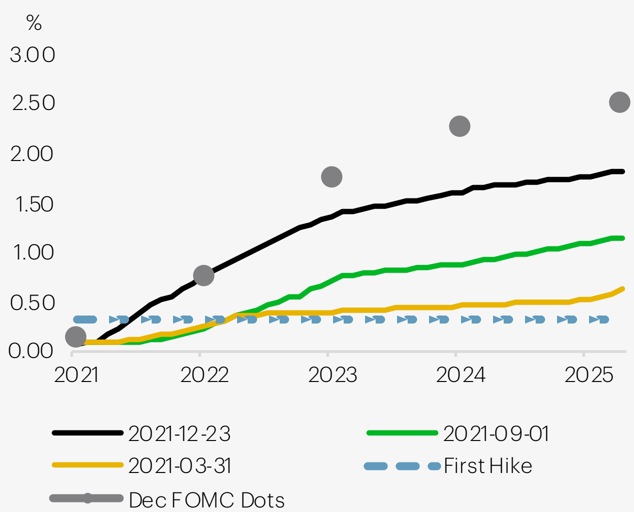


Source: Bloomberg, TD Wealth, as of December 23, 2021. 2022 hiking cycle indexed June 2022 as Fed liftoff and shows yield difference between U.S. 10Y and 2Y government bond.

Key themes for government bond markets in 2022:

- Continued strong economic recovery and elevated inflation should translate into modestly higher yields under normal circumstances. The biggest conundrum of 2022 will revolve around what drives up nominal government bond yields. We believe this can only come from an increase in real yields because expected inflation, or breakevens, should ease.
- Yield curve behaviour will vary by region. We expect government yield curves to flatten—implying shorter maturity government bond yields move higher compared to medium- and longer-maturity bonds—in economies where central banks are closer to implementing policy rate hikes or those already in the midst of a tightening cycle. In regions where liftoff is beyond next year, we think upward pressure will manifest itself as a steepening yield curve with longer-maturity bond yields moving higher.
- Inflation looks set to remain elevated at least a little longer. It's too early to judge whether there has been a regime shift.
- While medium- and longer-maturity government yields appear to imply a neutral rate of 1.5%, which is far below the Fed's targeted 2.5%, we believe the price signal here is distorted by the persistent supply/demand imbalance, meaning the challenges associated with extremely low rates could take time to resolve.
- We expect supply of government bonds (net of central bank purchases) to turn positive in 2022 for most sovereign issuers, after being negative in most G10 markets in 2021.

Figure 4: Market-implied Fed policy rates



Source: Federal Reserve, Bloomberg, TD Wealth, as of December 23, 2021.

United States

As widely expected, Fed officials doubled the pace of tapering to US$30bn a month at the December FOMC meeting. Other communications were more hawkish than those expressed in September and November. While this had been expected given the chairman's testimony two weeks before the FOMC, the magnitude of the shift was not. The dot plot now shows three policy rate hikes in 2022. The change reflects upward revisions to inflation projections, with officials seeing risk skewed to the upside (to an even greater degree than in the last set of projections). Also, Fed Chair Jerome Powell made clear that views on "maximum employment" have evolved and officials are set to raise rates before the labour market returns to its pre-Covid state.

Important themes to watch in the U.S. government bond market:

- The market is pricing in the first increase in June 2022 and 75bps of hikes over the first year of the hiking cycle (Figure 4). We believe this pace is overly aggressive given that growth is likely to slow amid fiscal drag and inflation is likely to moderate as supply chain issues are resolved.
- The Fed's recent dot plot suggests policy rates will peak at 2.5% which is often regarded as the terminal funds rate. The market is presently pricing in a Fed hiking cycle terminal rate of 1.5% suggesting any hikes beyond this will be detrimental to the economy. We believe the market's 1.5% terminal rate is too low (Figure 5). Looking back to the 2015-2018 tightening cycle, the market jacked up the implied terminal funds rate after policy rates started increasing.

Figure 5: Market pulled forward Fed liftoff similar to 2013 Taper Tantrum

Event	Date	Market Months to Liftoff	Market Terminal Rate (%)
QE3 Start	9/13/2012	30	1.9
Before Taper Tantrum	5/1/2013	28	1.9
After Taper Tantrum	9/3/2013	14	2.8
2015 Fed Liftoff	12/31/2015	6	2.2
Jun 2021 FOMC	6/16/2021	20	1.6
Sep 2021 FOMC	9/22/2021	16	1.3
Dec 2021 FOMC	12/16/2021	6	1.5

Source: Federal Reserve, FactSet, TD Wealth, as of December 23, 2021.Note: Terminal rate is assumed to be 3-year forward 1-month OIS forward rate after first hike.

- Supply of government bonds net of Fed purchases is set to decline gradually from US$1.8tn in 2021 to US$1.6tn in 2022 and will drop to US$1.3tn in 2023 as cuts in the size of U.S. Treasury auctions accumulate. While this should support government bond yields, investors need to remember supply isn't easing by much overall.
- On the demand side, the crucial question for U.S. Government bonds in 2022 is: who will buy the additional supply?
- Aside from the Fed, banks were the single largest source of demand for government bonds in 2021. We expect banks to remain strong buyers of government bonds and mortgage-backed securities in 2022, although not to the same extent as 2021. The slowdown in this trend is driven by moderating growth in banking system reserves amid quantitative easing (QE) tapering.
- Foreigners were not big buyers of government bonds post-Covid but showed significant interest in recent quarters: Treasury auction allotments to foreigners increased in the Northern Hemisphere summer of 2021.
- Mutual funds may well remain a key source of demand for government bonds in 2022. A surge in consumer savings during the pandemic helped boost mutual fund inflows to equities and U.S. government bonds. However, it's clear that equity investments have been the media darlings of 2021 to the detriment of fixed income because hardly anyone noticed mutual fund inflows to fixed income hit a record US$387bn in 2021 up from US$337bn in 2020. While fiscal drag may slow the growth of consumer savings in 2022, mutual fund inflows should continue as the employment scenario rebounds.

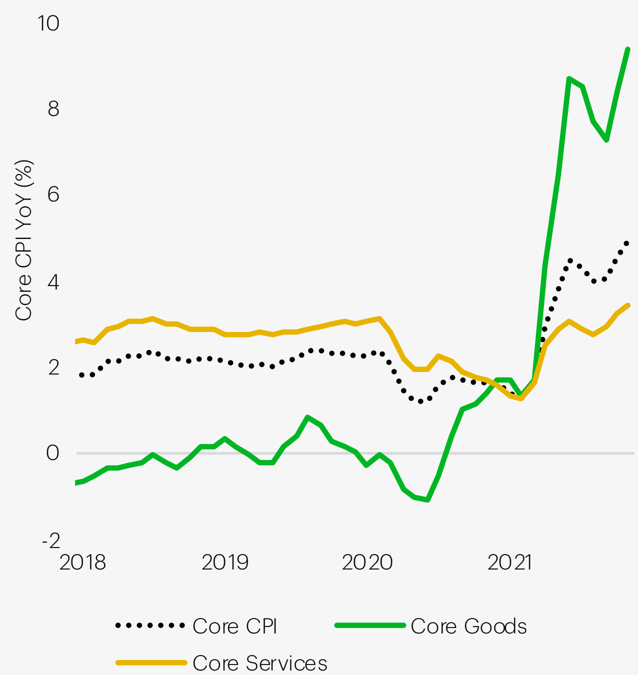
Overall, we anticipate that when the Fed starts increasing policy rates front-end government bond yields will rise more quickly and U.S. government bond yields will grind modestly higher in an orderly manner, flattening the yield curve. However, if the Fed begins a balance sheet runoff even earlier, longer-maturity government bond yields could move higher, steepen the yield curve, and hurt total returns. Keep in mind, deceleration in momentum due to Omicron or fiscal drag could slow the pace of hikes and might keep yields from moving higher.

"Vax" and "transitory" certainly were key words for 2021. The Fed may have moved away from its "inflation is transitory" thesis since the September FOMC meeting but that doesn't mean it was wrong. It just indicates that factors driving inflation are more persistent than expected. Market consensus forecasts point to above-trend headline CPI in Q1 2022 before it starts to normalize throughout the year and end at 2.40%. Core CPI, which excludes food and energy, lagged the headline measure on the way up—energy components rose by 30% over the last 12 months—but this should revert in 2022.

While it's not surprising that consumers have, since the pandemic started, replaced spending on services with spending on goods, the degree to which this substitution has persisted certainly is. Real consumer spending on goods is tracking 8.1 percentage points above the 2015-2019 trend and spending on services is lagging by 4.6 percent points. This explains the disproportionate price pressures in the goods sector. As we ease out of the pandemic, markets expect the elevated relative demand for goods to moderate, reducing supply chain pressures and easing core goods CPI down from the current run-rate of 8.5% y/y (Figure 6). As demand for services rises, we should see a hand-off from core goods to core services as the driver of CPI.

Wages, another driver of inflation, should also boost services inflation. The Employment Cost Index (ECI) increased 3.7% over the year through Q3, the strongest four-quarter growth since 2004. In the third quarter alone, compensation in service-providing industries rose by 1.3%, and 2.5% in the subcategory of leisure and hospitality, while goods-producing industries ticked up 0.9%.

Figure 6: Core goods power acceleration in core CPI



Source: Bloomberg, TD Wealth, as of December 23, 2021.

Taken together with the Job Openings and Labor Turnover Survey (JOLTS)—where a record 4.4 million workers quit their jobs in September with leisure and hospitality leading the charge—the data suggests that service inflation might rise as firms pass through higher input costs from rising wages. While we highlight this risk, market participants forecast a moderation in ECI to 2.9% year over year (y/y) in 2022, a level more consistent with peak growth during the prior expansion. We think recent gains might be overstating the real tightness in the labour market as pandemic-related concerns continue to deter workers from low-wage, high-contact jobs.

Another risk lurks which we have included in our expectations: shelter could overshoot most forecasts if structural changes in demand for housing or a tighter-than-understood labour market keep new rents rising faster than pre-pandemic trends. We note that industry measures of shelter inflation including Zillow and Costar have yet to show signs of a slowdown, introducing upside risks.

Market-implied inflation indicators, such as the breakeven inflation curve, are now at levels sufficiently above those consistent with 2% PCE. In fact, the curve has inverted, suggesting inflation may temporarily overshoot 2% before normalizing closer to the 2% target (Figure 7). Despite this gap, forward and spot measures have been tied of late, a development which reflects first, future drivers of inflation evolving from temporary to stickier segments, such as labour costs and shelter, and second, elevated investor demand for inflation protection. We believe further increases to inflation expectations will be met with more hawkish rhetoric from the Fed because professional forecasts and forward market measures—key inputs for the Fed's Index of Common Inflation Expectations—are signalling that the central bank mandate of 2% average inflation has been achieved. Moreover, the latest Summary of Economic Projections (SEC) is showing that Fed officials continue to see upside risks to core PCE inflation.

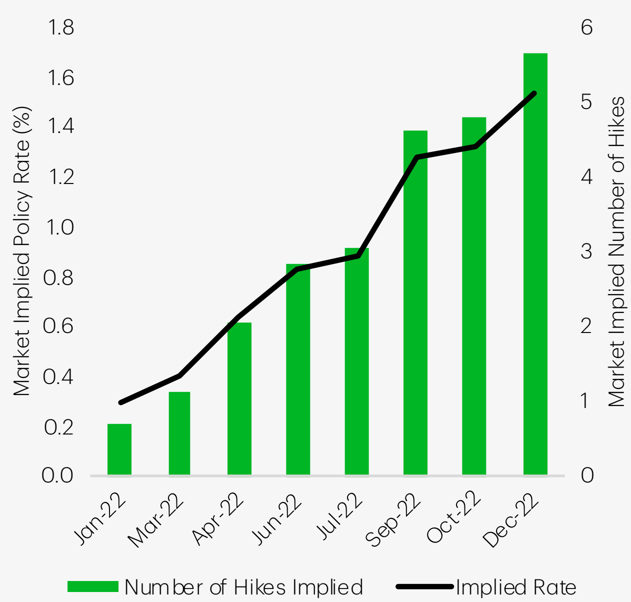
Canada

The Canadian labour market has bounced back, with employment already above its pre-pandemic level. While GDP recovery has been slower, growth in 2021 is still likely to come in line with the 4.8% market forecast of a year ago. Pandemic supply-demand imbalances drove an inflationary surge led by goods, energy, and house prices. Facing a solid labour market, strong growth and high inflation, the Bank of Canada (BoC) ended its QE and expressed little tolerance for high inflation at its October meeting. We expect the BoC to remain focused on inflation and to lift policy rates in April and beyond for a total of four hikes in 2022. After that any move by the BoC will be contingent on the Fed. This implies market expectations for policy rates and the number of hikes by end-2022 are too aggressive (Figure 8). That said, we expect front-end volatility to remain elevated and pricing to take a long time to correct. Overall, we maintain our bearish stance on Canadian government bonds given their low compensation for near-term volatility.

Figure 7: U.S. inflation breakeven curve is inverted

Source: Bloomberg, TD Wealth, as of December 23, 2021.

Figure 8: Market-implied BoC rate hikes



Source: Bloomberg, TD Wealth, as of December 23, 2021.

Canadian headline inflation was the biggest surprise of 2021, surging to 4.7% y/y at the last reading in November. Uncertainty around the outlook for 2022 inflation remains elevated. For instance, it's unclear how long supply chain disruptions will last, especially in light of Omicron, or how much prices will be hit in categories running well above trend.

The following points explain our outlook for transportation and shelter, the two categories accounting for much of the 2021 surge:

- Inflation in the transportation category has been running hot for two key reasons. First, very strong demand combined with chip shortages led to unusual auto price spikes. Second, gasoline prices have jumped by more than 40% y/y. Over the next few months, sequential price growth in these categories will likely remain elevated as supply chain disruptions take time to clear out.

- Imbalances also drove inflation in the housing market as the pandemic shifted preference towards larger houses, and lower mortgage rates boosted demand. This rise in demand alongside inelastic supply led to historically low net housing supply and year-over-year home price growth of 20%. We expect the contribution from shelter to rise slightly before moderating over the following quarters and well into 2023.

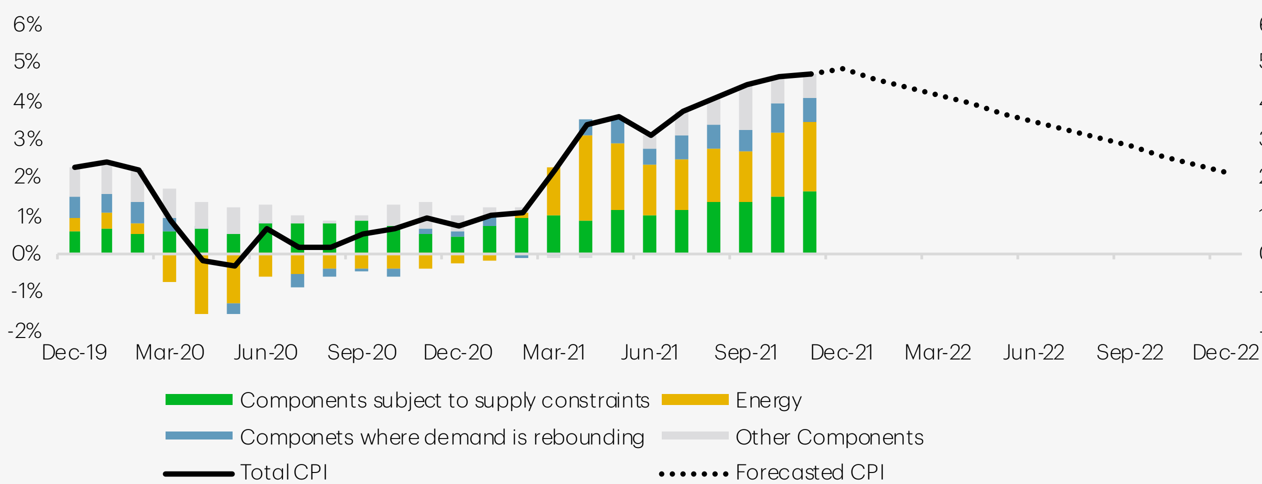
The Omicron variant has mixed implications for inflation. While reduced demand for virus-sensitive services such as travel could have a disinflationary impact, prior waves suggest such pressures would be temporary. In contrast, further supply chain disruptions and strong demand for goods could exacerbate goods inflation. While the near-term inflationary effect of Omicron is ambiguous, potential delays in supply chain normalization could heighten inflationary risks in the medium and longer term. Put together, we might be looking at headline inflation near current levels for several months. Further out, slowing price growth for transportation and homes, along with reduced excess demand, should lead to deceleration and bring inflation closer to the 2% BoC target in 2023 (Figure 9). Despite this outlook, we should remember that headline inflation will likely be pushed up by wage growth in an already tight labour market.

Europe and United Kingdom

The European Central Bank (ECB) went further than markets expected at its December meeting and nailed down the pace of its Asset Purchase Program (APP); it will temporarily raise purchases to €40bn a month in Q2, then €30bn a month in Q3 and return to its original €20bn a month pace beyond that. Other aspects of policy were largely as expected. Policy rates and targeted longer-term refinancing operations (TLTROs) remained unchanged, and the pandemic emergency purchase program (PEPP) will end in March.

In ECB staff projections there was little mention of the rising number of Covid cases. Growth was revised sharply lower for 2022 but much higher for 2023, settling around 1.6% in 2024. Inflation forecasts were even more surprising and perhaps underlie the ECB's confident tone especially when it comes to the APP. Headline inflation was revised up to 3.2% in 2022 (from 1.7%) and core inflation to 1.9% (from 1.4%). Both were above market expectations. In the medium term, and an important signal for policy in 2023 and beyond, ECB staff projections show both headline and core inflation at 1.8% in 2024, underscoring the need for further stimulus.

Figure 9: BoC inflation forecasts



Source: Bank of Canada, Bloomberg, TD Wealth, as of December 23, 2021.

We maintain our bearish stance on European government bonds and expect the APP to end in Q2 of 2023, with a 10bp rate hike following at the September 2023 ECB meeting. Overall, and given the tapering of the QE program, our expectation for European government bond yields is on the bearish side.

Across the English Channel, the Bank of England (BoE) surprised markets and economists at its December meeting by hiking the policy rate to 0.25%. It chose to favour decent macroeconomic data over the impact of Omicron. The hike underscores concern about rising inflation, above-trend wages, and worries that Omicron could be both positive or negative for inflation in the medium term. The BoE said the impact of Omicron on medium-term inflation was "unclear" and remained optimistic about growth and the labour market. The BoE has mentioned modest tightening in "coming months" which opens the door to a possible hike in February. As such, we are bearish Sterling government bond yields. With respect to incoming data, the BoE seems comfortable continuing with its hiking cycle but has communicated some discomfort at the aggressive pace and intensity of hikes implied by markets. We expect future hikes will come with a word of caution about slowing economic growth and inflation.

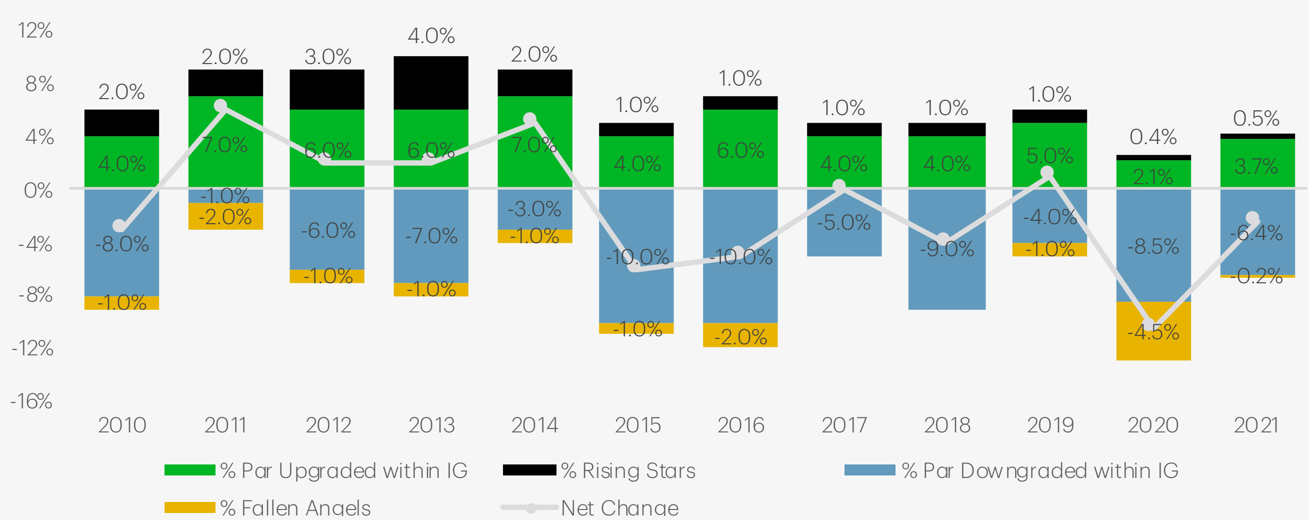
Investment grade (IG) corporates

Higher government bond yields, improving credit fundamentals and less net supply in 2022 should lead to another year of tighter spreads for IG credit. Since spreads are already tight, any further compression is expected to be modest. We believe spread volatility will increase in coming quarters, given the uncertainties around monetary policy tightening, but this will not change the supportive backdrop for IG credit.

When everything is going right and valuations reflect this, it may seem logical to home in on what can go wrong, but we don't think this should be the focus for coming quarters. Here are few positive and negative factors we have considered:

- **Positive**. Above-trend growth and inflation are expected in 2022. Both support credit metrics of IG corporate bond issuers. Corporate earnings are driven by nominal GDP, so market consensus expectations support another year of above-average revenue growth, though likely below the very strong outcome in 2021.
- **Positive**. Improving credit metrics and positive ratings momentum expected. Rating upgrades are on track to reverse the wave of downgrades in 2021. Rising stars (or corporates expected to be upgraded to investment grade from sub-investment grade) will continue to be the main theme (Figure 10).
- **Positive**. The beginning of policy rate hikes usually results in tighter spreads which bodes well for IG credit. In 1994, 2004 and 2016 when the Fed raised rates, spreads performed well. Between June 2004 and June 2007, the Fed raised rates by 425bps over three years. This coincided with the longest period of low and stable IG credit spreads in the last 20 years. From June 2017 to December 2018 the pattern was different: spreads performed well for the first 50bps of rate hikes and then widened for the next 100bps. These are two precedents from different time periods and while they may not indicate what is to come, they still show that the beginning of Fed tightening cycles isn't necessarily negative for IG credit spreads.

Figure 10: Ratings momentum on the up: upgrades may outpace downgrades for the first time since 2014



Source: FactSet, TD Wealth, as of December 23, 2021.

- **Positive**. Pension funding status should improve to well above 100% in 2022. That should drive demand for long-duration assets like IG credit.
- **Positive**. The IG credit market may benefit from the growing trend to incorporate Environmental, Social, Governance (ESG) investments.
- **Negative**. Valuations are expensive. Most of our historical analogies of similar IG credit spread levels date back to the early 2000s or 1990s and show just how expensive valuations have become.
- **Negative**. Companies used equity and cash to fund a larger share of mergers and acquisitions (M&A) than usual in 2021. This means M&A supply in IG credit markets was light even though M&A overall was active. This supply scenario will likely change in 2022.
- **Negative**. Continued high interest-rate volatility and higher equity volatility could become negative for IG credit spreads.
- **Negative**. Foreign exchange hedging costs have room to go higher if monetary policies desynchronize and that might hurt the substantial foreign demand for IG Credit.

Sub-investment grade or high yield (HY) credit

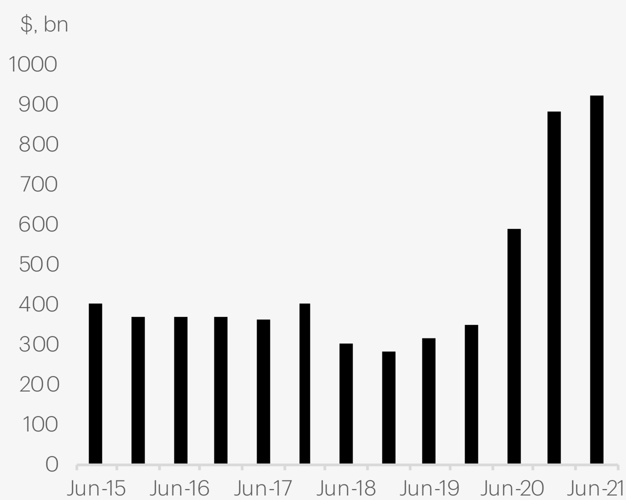
We believe valuations in the sub-investment grade credit space will be supported by improving credit metrics, low defaults, robust capital markets, and the positive technicals from rising stars (discussed in the IG credit section). Rising-star bonds, (moving from HY to the IG index) should lead to a contraction in bonds outstanding for the HY universe. Bank loans, a sub-universe within HY credit, delivered strong returns in 2021 and this performance kept pace with broader HY credit due to heightened government bond yield concerns. With government bond yields expected to remain at the forefront of decision making in 2022, bank loans is an attractive allocation within fixed income, and we expect retail and institutional demand for it to remain robust. Furthermore, market participants expect sustained demand for bank loans from collateralized loan obligation (CLO) originators. All this adds to strong support for bank loans for coming quarters.

The trajectory of corporate balance sheet fundamentals has been a textbook example of a V-shaped recovery. Going into 2021, most investors expected credit quality to recoup a large portion of the 2020 damage—caused by the abrupt cessation of economic activity—because the vaccine-led recovery and the ensuing boost to profitability would allow most companies to passively deleverage their balance sheets. The pace and magnitude of recovery have surprised us suggesting the Covid shock left little scarring on corporate bond issuers, including lower-rated ones. The combined effect of strong revenue growth and improving profitability caused a notable decline in net leverage. Some of the decline in the median HY credit leverage ratio reflects a positive survivorship bias--a byproduct of the 2020 wave of downgrades and defaults. Still, the fundamental message from 2021 was unequivocally positive.

From a capital management standpoint, 2021 was also a good year for corporate bondholders, with liquidity positions hovering around record highs (Figure 11). Balance sheet liquidity positions among HY credit issuers are still sitting at the strongest levels in two decades. This strength has contributed greatly to the downward repricing of event risk and likely explains the lack of dispersion in returns, both across and within sectors. It has also allowed investors and rating agencies to look past temporary business disruptions, especially in sectors more vulnerable to supply chain bottlenecks.

But how will companies deploy excess liquidity? In our view, there is a case for structurally higher cash balances in the near term, but we expect a large portion of the excess liquidity on corporate balance sheets will be used. Historical evidence and public commentary from the largest corporate borrowers in the U.S. suggest management is poised to transition into a new phase. In HY credit, we expect capital management to pivot towards business investment (organic and M&A) and away from refinancing and debt repayment. This shift away from balance sheet repair should fuel greater dispersion in returns across both sectors and issuers going forward.

Figure 11: Aggregate levels of cash, cash equivalents, and marketable securities on corporate balance sheets



Source: FactSet, Bloomberg, TD Wealth. As of June 30, 2021.

Overall, we maintain our defensive stance on the broader asset class. At the same time, we encourage investors towards actively managed solutions which tap into unique opportunities arising from heightened spread volatility rather than investing in passive indexed products which rely on the slim possibility of benefiting from yield compression.

Flexibility remains key

No one can see the future, and when it comes to government bond yields, there's no easy place to start. Since 2000, forecasters have generally erred on the higher side. Therefore, in our investment decisions, we tend to downplay consensus forecasts for higher government bond yields (Figure 12).

Overall, we maintain our defensive stance with our base case view that government bond yields will tick up while remaining mostly range-bound. In the event of faster-than-expected policy rate hikes, we may witness sharp upward pressure on shorter maturity bond yields. We believe the consensus view of a large selloff led by medium- to longer-maturity government bond yields is misplaced. If Omicron proves worse than Delta in terms of transmissibility, severity, and reduced vaccine effectiveness, bonds yields will likely remain range-bound in the near term. For bond yields to stabilize significantly higher, the medium-term inflation outlook needs to increase materially and there needs to be slow, or no, monetary tightening by central banks. When it comes to inflation, we believe inflation inertia might be here for a few quarters. In credit markets, we expect spreads to remain stable for the coming months. We are modestly constructive on IG credit while maintaining our defensive view of HY credit.

With interest rates at low levels in a challenging environment that will likely persist, the ability of bonds to fulfill their traditional roles of providing dependable income and return while acting as a risk diversifier, will be called into question. Therefore, we stress again the key aspects of fixed income investing:

1. Fixed income portfolios are not meant to capture upside risk.

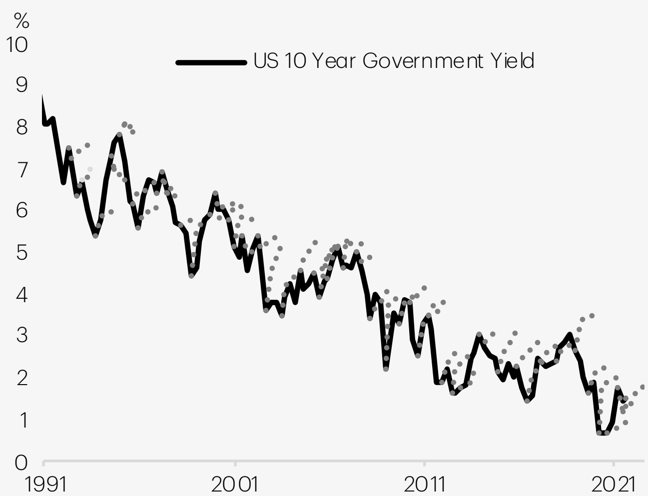
2. Fixed income is more than just government bonds. The current market environment calls for a flexible approach to building resilient fixed income portfolios, including diversifying sources of return within fixed income and emphasizing relative-value opportunities when generic beta exposures don't look compelling.

3. With the current low-yield environment, looking for 'fixed income alternative' options in equity markets (dividend yields and option-overlay equity strategies) might look relatively enticing. However, we need to consider the volatility of returns and potential drawdowns for these alternatives because in the short term they might have a higher positive correlation with equity markets. In addition, they might come with other investment risks like reduced liquidity when investors are looking for liquidity.

4. Maybe the most important aspect is that duration, or interest rate risk, still has a role to play in portfolios. Duration tends to have a negative correlation to other risk assets and the role of the duration and the fixed income asset class, as a whole, has not diminished: higher yields translate into enhanced downside protection if markets sell off. Importantly, this long-term negative correlation with risk assets tends to act as an insurance policy or a risk hedge and this is unlikely to change in the near future. With policy rate hikes on the horizon and government bond yields probably moving higher, the cost of this hedge, or insurance, has increased (particularly if you look at it from the point of view of opportunity cost). This doesn't mean we offload all the duration-heavy solutions or core bonds. Rather, we encourage tactical adjustments because we firmly believe there is an appropriate place for duration as a hedge in portfolios.

While moving towards lower duration and riskier solutions in the fixed income sleeve we need to remain vigilant of the inherent drawdown risks versus enhanced yields or the desire to capture market upside. We need to consider the kind of drawdowns acceptable to clients who are investing heavily in fixed income and evaluate probable income versus probable drawdowns, instead of probable returns versus probable volatility. □

Figure 12: Persistent upside bias in yield forecasts, especially since 2000



Source: FactSet, TD Wealth, as of December 23, 2021.

Outlook on Equities

Modest Overweight

Increased volatility and slowing growth call for vigilance

Mansi Desai, CFA, Christopher Blake, David Beasley

In the final quarter of 2021 key central banks—the Fed, the BoC and the BoE—turned hawkish and the Omicron variant of Covid-19 emerged. While these two developments aren't related, they may affect equity returns. In addition, persistent high inflation continues to cloud equity markets. Since August 2021, consumer price index (CPI) data across the globe has been much higher than historical averages, and labour supply remains tight. While many continue to believe inflation will be transitory, central banks and investors are re-evaluating their expectations around inflation trends and trying to figure out when inflation will settle closer to historical averages.

When it comes to Covid-19, the data on Omicron suggests it's more infectious but has a lower mortality rate than Delta. It remains to be seen how governments across the globe will react to the spread of Omicron, now the dominant variant, and whether they will impose additional lockdowns which could hurt economic recovery and exacerbate supply-side constraints for goods and labour.

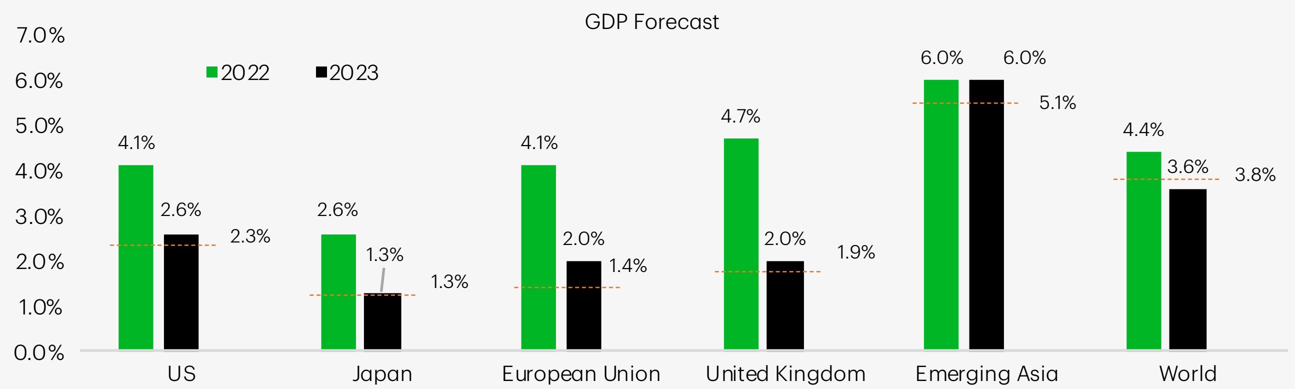
Despite the risks, we continue to be overweight equities and hold a positive outlook based on the following factors:

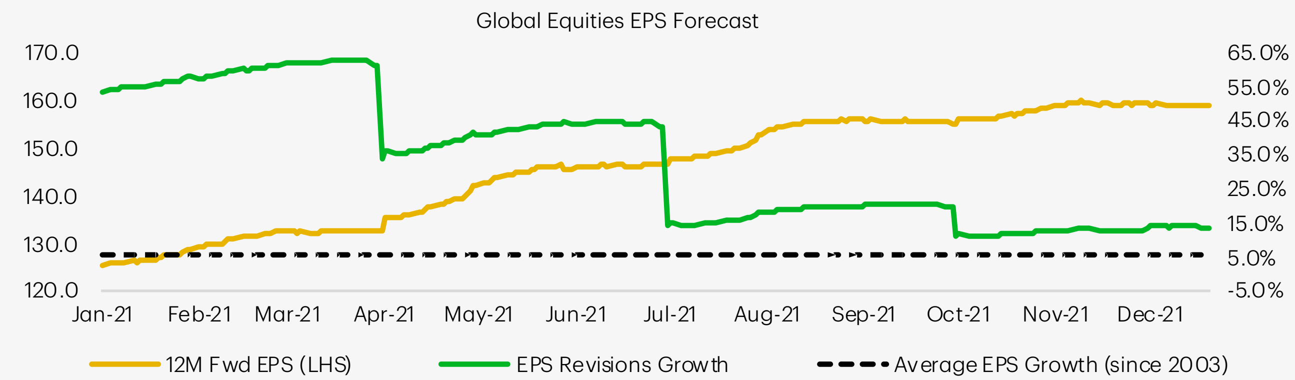
1. Although forecasted economic and earnings growth have declined from peaks, forecasts for the next 12 months remain higher than historical growth rates (Figure 1).

2. In the last decade, companies have significantly deleveraged balance sheets so they aren't as stretched as they were in 2008. Despite low interest rates and the liquidity crunch in 2020, companies avoided raising additional debt. The expansion in margins in 2021 pushed the ratio of net debt (or total debt minus cash and cash equivalents) to EBITDA to 1.4 in 2021 from 5.1 in 2008.

3. Historically, equities haven't usually corrected during periods of bond purchase tapering and policy rate hikes, especially in the initial rounds. Monetary tightening increases the underlying volatility of equities but doesn't usually send them for a tumble unless a central bank makes an unexpected or aggressive move (Figure 2).

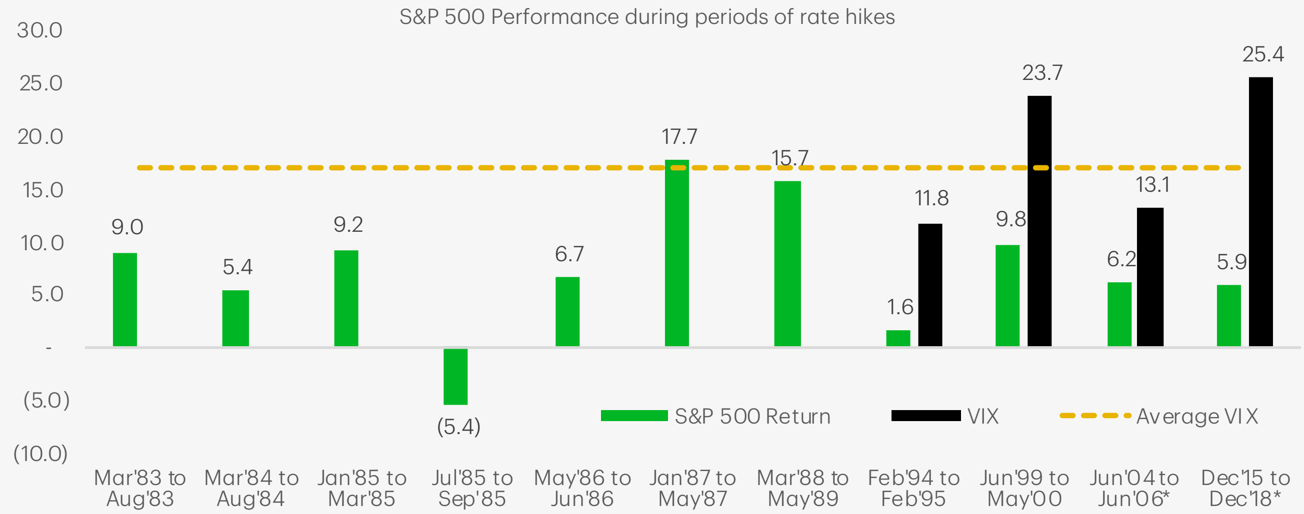
Figure 1: Forecasted economic and earnings growth still higher than historical averages





Source: Bloomberg Finance L.P. as of December 25, 2021.

Figure 2: Historically, equities don't usually correct during tightening cycles



Source: Bloomberg Finance L.P. as of December 25, 2021, *For June 2004 to June 2006 and December 2015 to December 2018, the S&P 500 return is annualized. VIX data is not available for periods prior to 1990.

Three key ways to cut through uncertainty:

1. Based on current economic indicators, we have moved towards a mid-to-late stage recovery where high-quality stocks are expected to benefit. The strong rally in low-quality and economically sensitive stocks that we saw in the first half of last year has paused and isn't expected to rebound. On top of that, given concerns about inflation and margin contraction, high-quality equities provide downside protection in periods of volatility because these companies usually generate positive free cash flow and protect their margins across economic and business cycles compared with broader equities (Figure 3).

2. For most of 2021 investors appeared to hold a bifurcated equity strategy between cyclicals versus defensives and growth versus value. The current environment—with slowing economic growth, potential risks from Omicron, and the narrowing gap in 12-month forward EPS growth between cyclicals and defensives—points towards maintaining a diversified equity strategy. The role of defensives is expected to increase in coming months and performance dispersion between cyclicals versus defensives and growth versus value is expected to decline. (Figure 4)

3. Given the risk of inflation and monetary tightening on the horizon, we also recommend maintaining exposure to inflationary trades through commodity equities or real assets and short-duration plays like value stocks.

In the following sections, we discuss the outlook for equities across several regions and explore the investment strategies required to weather such unchartered risks.

Figure 3: Historically, quality stocks weather downside risk

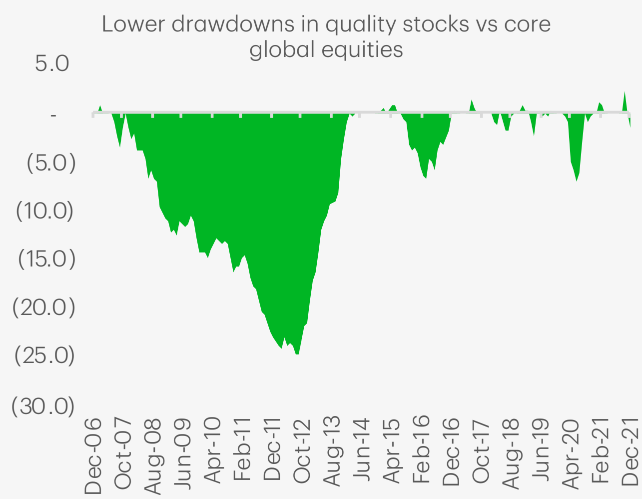
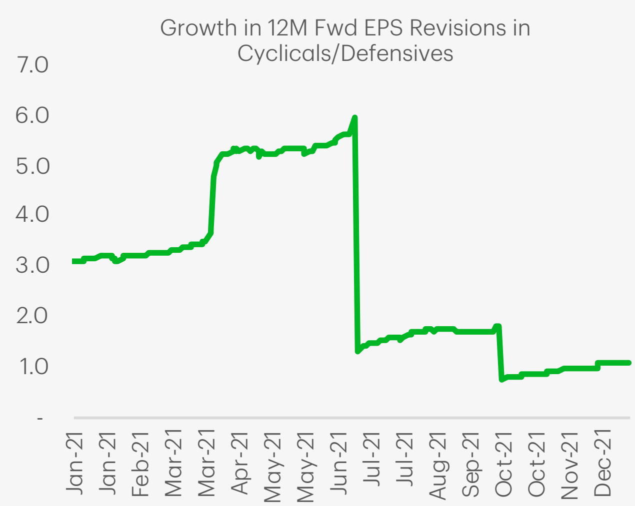


Figure 4: Normalized EPS growth expected for cyclical stocks



Source: Bloomberg Finance L.P. as of December 25, 2021

Quantitative equities outlook: Getting defensive

Our new quantitative and technical toolkit helps us assess market rotation and flow signals to rebalance and position our portfolios for 2022.

Indeed, over the last several weeks our quantitative trend/momentum model has shown a significant shift in relative strength towards defensive sectors and away from more cyclical and growth sectors. The month-over-month average change in our quantitative rankings favours consumer staples, utilities, and REITs while energy, technology and industrials posted the biggest drops (Figure 5).

This suggests investors are shifting into defensive equities in an ongoing market rotation which appears to be in line with monetary policy tightening and slowing growth (Figure 6).

We continue to favour energy sector equities in our positioning—despite their cyclical nature and the recent drop in our relative rankings—because of 1) their historical positive correlation to inflation, and 2) their current appeal as quality-value proxies (average double-digit free cash flow yields mean energy corporations can return value to shareholders through increased dividends and buyback programs).

Gold, while maintaining an underweight position in our rankings, has displayed relative strength recently, supporting our portfolio positioning which hedges against inflation (Figure 7).

Figure 5: Top advancers and decliners in our quant rankings

S&P TSX Composite Index Sector (+Gold)	Ranking Change vs. Prior Month	Average Change in in Momentum Rank	Average Change in in Trend Rank
Consumer Discretionary	4	-3%	-5%
Consumer Staples	4	9%	11%
Utilities	3	22%	16%
Real Estate	2	13%	7%
Gold	2	-15%	-1%
Financials	0	-2%	-3%
Materials ex-Gold	-1	10%	2%
Communication Services	-1	17%	10%
Health Care	-1	10%	-1%
Energy	-4	-12%	-8%
Information Technology	-4	-13%	-9%
Industrials	-5	-13%	-10%

Figure 6: Defense takes the lead in price performance into year end

Sector Index	MTD Price Change	QTD Price Change	YTD Price Change
S&P/TSX Cyclical / Growth Sectors			
S&P TSX Capped / Industrials	-0.1%	4.8%	16.1%
S&P TSX Capped / Information Tech.	-2.5%	-2.5%	17.6%
S&P/TSX Defensive Sectors			
S&P/TSX Capped REIT	4.5%	5.7%	27.8%
S&P TSX Capped / Consumer Staples	8.1%	7.0%	20.8%
S&P TSX Capped / Utilities	4.8%	3.5%	6.6%
S&P TSX	2.7%	5.7%	21.7%

Figure 7: Recent quant rankings favour value/defense over growth/cyclical and gold moves forward

Sector Rank by Average Equity Quant Score	S&P TSX Composite Index Sector (+Gold)	Ranking Change vs. Prior Month	Average Change in in Momentum Rank	Average Change in in Trend Rank
1	Real Estate	2	13%	7%
2	Financials	0	-2%	-3%
3	Consumer Discretionary	4	-3%	-5%
4	Consumer Staples	4	9%	11%
5	Energy	-4	-12%	-8%
6	Utilities	3	22%	16%
7	Materials ex-Gold	-1	10%	2%
8	Information Technology	-4	-13%	-9%
9	Industrials	-5	-13%	-10%
10	Gold	2	-15%	-1%
11	Communication Services	-1	17%	10%
12	Health Care	-1	10%	-1%

Source: FactSet, TD Wealth as of December 24, 2021.

More broadly we expect the technical structure of the market to maintain its bullish tone with both the S&P/TSX Composite and the S&P 500 indices easily holding price trends despite recent volatility (Figure 8).

Even though we're starting the year with a more defensive stance—in anticipation of monetary tightening, slowing growth, and inflationary pressures—we expect the bull market cycle to continue this year until market signals suggest otherwise.

North America: Look to higher quality and some cyclicals

It's not unusual for equities to rally when the Fed begins a tightening schedule. It is, equally, not at all unusual for equities to experience a period of heightened volatility in the six to 12 months preceding the Fed's initial hike. Markets are pushed and pulled as investors speculate about the shape of the tightening cycle–how many hikes over what time frame–and the impact of the tightening cycle on the economy. To be sure, the Fed's goal is to take some froth out of the markets without launching a substantial correction, slow down growth, and remove inflationary pressures sparked by an economy that's running too hot.

There is little doubt that North American economies have been very strong. Containment of the pandemic virus shuttered economies in an unprecedented way and governments compensated with an overwhelming level of economic stimulus and financial aid. Companies, particularly those producing consumer goods, battened the hatches, expecting consumer spending to collapse. Instead, many experienced a surge in demand as consumers, displaced from jobs but not from income thanks to government support programs, shifted spending from the service sector to durable goods, home renovations and electronics.

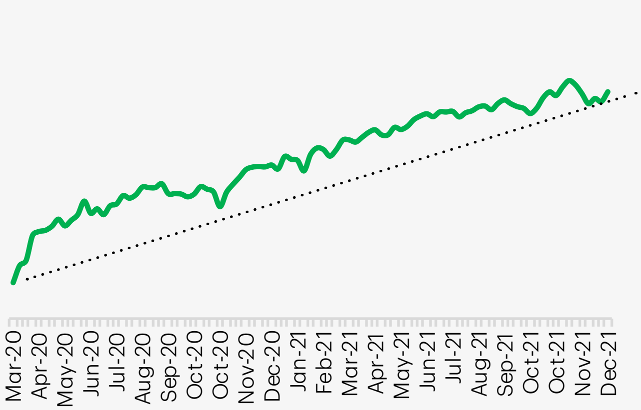
Supply chains that had been finessed to reduce inventory and were designed around "just in time" delivery could not cope with the surge – particularly since trying to cope with new safety protocols hampered efficiency. What has resulted is an economy massively distorted with demand pulled forward and undersupplied in many sectors; on top of that we have no patterns of economic outcome on which to base our models since the last major pandemic was a century ago in a world that was at a completely different stage of development.

"Transitory" inflation is beginning to feel uncomfortably long-lasting and so the Fed is preparing to act just as the economy moves out of pandemic-induced distortion and naturally begins to slow.

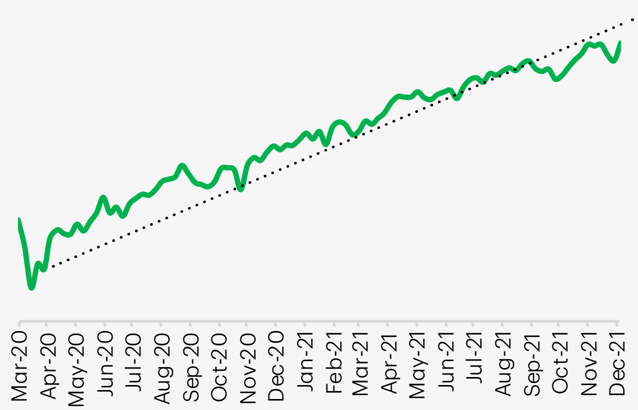
We do see the economy continuing to grow at a gradually declining rate and we believe some of the inflationary pressures will abate. At the same time, equity markets are struggling between the forces of slowing growth, reduced monetary accommodation, and increasing interest rates. Omicron only adds to the uncertainty. Given that volatility is expected to exceed levels seen in the last 18 months, we're leaning towards higher-quality equities with more certain near-term earnings streams to provide a modicum of defense to portfolios. On the other hand, this economic cycle is not over and many cyclical areas of the market (industrials, commodities and energy for example) should continue to post strong financial performance in the medium term. While we remain positive on both U.S. and Canadian equities markets, we have upgraded our view of Canadian equities to Maximum Overweight and shifted to a Neutral view for US equities. This is due to higher expected earnings growth in Canada driven by favourable conditions for financials, energy and materials, which make up a greater share of the Canadian market.

Figure 8: Uptrend in key indices intact despite volatility

S&P/ TSX Composite Price Trend Since March 2020 Low



S&P 500 Price Trend Since March 2020 Low



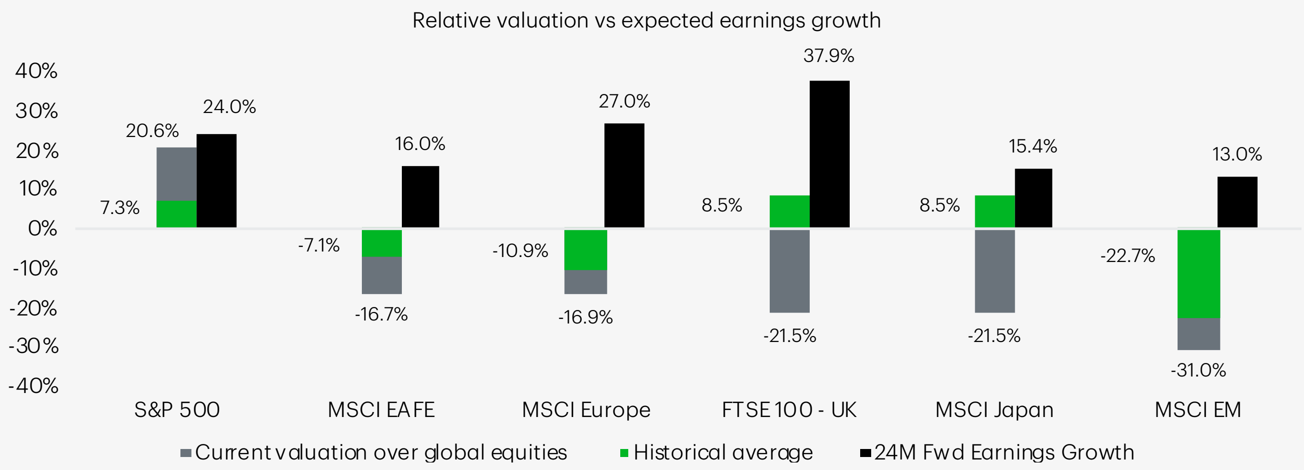
Source: FactSet, TD Wealth as of December 24, 2021.

International Equities: Potential for higher growth in 2022

International equities, lagged in performance this past quarter, primarily due to the rising number of Covid cases, additional economic lockdowns imposed in the U.K., Spain, France, and Germany and skyrocketing energy prices. However, we continue to maintain an overweight position in international equities primarily due to their attractive valuation levels and the delayed economic recovery which provides room for more earnings and economic growth in 2022. International equities—which includes all equities except Canadian, U.S., and emerging markets—are trading at a higher discount relative to global equities, with equities in Europe and the U.K. expected to record higher earnings growth than U.S. equities (Figure 9).

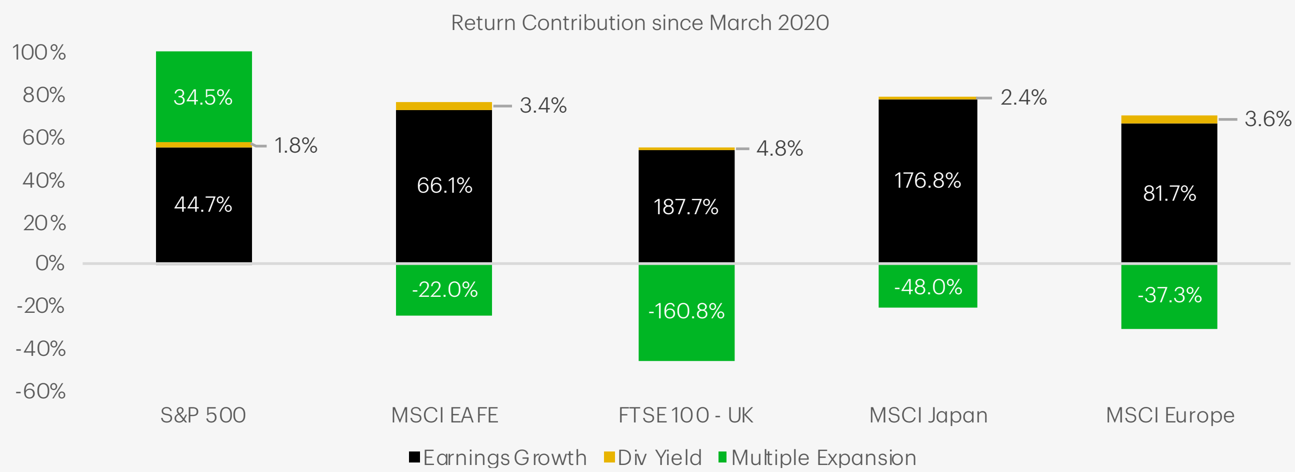
Equities in the eurozone and the U.K. are poised for higher earnings growth but continue to trade at attractive discounts relative to global equities. Delays in mass inoculation (compared with North America) and the rising number of Covid cases since October 2021, has pushed back the economic recovery in both Europe and the U.K. This opens the potential for higher economic and earnings growth in 2022 (Figure 1 and Figure 9). Delayed economic recovery has also prevented markets from allocating higher premiums to international equities (Figure 10). Hence, we believe multiple expansion combined with higher earnings growth will support further appreciation in international equities. However, the difference in stance on monetary actions between the ECB and the BoE, could vary the performance of these equities. The BoE, succumbing to inflationary pressures, has already transitioned to a hawkish stance and implemented a rate hike of 0.25% in 2021 with potentially a few more to follow this year. While the ECB has started tapering its emergency bond buying program, it's prioritizing economic recovery over inflation and remains firm on holding a dovish stance until 2023.

Figure 9: International equities continue to offer attractive risk/reward



Source: Bloomberg Finance L.P. as of December 25, 2021.

Figure 10: International multiple expansion yet to come through



Source: Bloomberg Finance L.P. as of December 25, 2021

The European Union Recovery Fund, a collective borrowing facility established during the pandemic will give a significant boost to public investment in areas such as green energy, improvements in public infrastructure, and the digitalization of businesses. This will serve as a hefty contributor to economic growth in coming years and represents a sustained commitment by European leaders to support their economies.

While we hold a positive outlook on international equities, their upside potential is threatened by the rising number of Covid cases and surging energy costs in the U.K. and Europe. Higher energy demand in winter, continued unfavourable weather conditions for wind energy, lower oil supplies from Russia and declining inventories of natural gas could lead to a precarious situation for Europe and the U.K. which are not as energy self-sufficient as the U.S. These factors could add pressure to already rising inflation, leading to a potential margin contraction if the energy situation is not rectified soon.

We hold a positive outlook on Japanese equities. Covid cases are on the wane and a broader economic opening is now being implemented. On top of that, the recently announced US$380bn stimulus will provide an additional boost to the economy. Japan also faces a period of political calm after the recent change in leadership to the new Prime Minister Fumio Kishida. Inflationary pressures tend to be much more subdued in Japan than other regions despite its ultra-loose monetary policy. The labour shortages troubling other developed markets are less of a concern in Japan because of the growing participation of women in the workforce in recent years and Japan's leading approach to automating jobs. Therefore, any risk of high inflation sparking margin contraction is not a main concern for Japanese equities.

Emerging Markets: Attractive over the long term if you can handle the volatility

We maintain our neutral view on emerging market ex China equities and an underweight position for Chinese equities. Emerging market ex China equities look attractive in the longer term, given their discounted valuations and the higher economic and earnings growth projected for 2022, however, we maintain a neutral outlook because of the increased risk in the interim (Figure 11 and Figure 12). In 2022, the majority of the population in emerging markets is expected to be inoculated which will boost economic growth and should also help tame Covid-driven inflation—Covid outbreaks led to labour shortages, especially in manufacturing hubs and ports.

Figure 11: Higher-than-average real GDP estimated for 2022

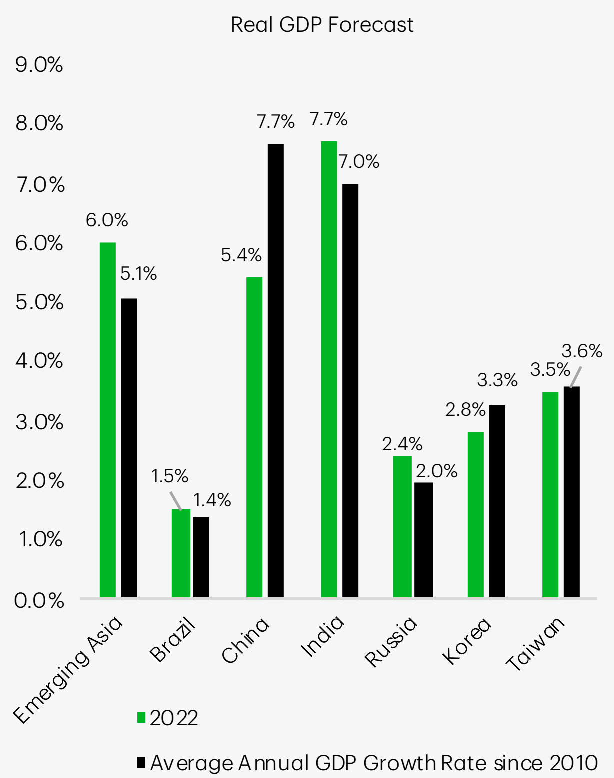


Figure 12: Steep valuation discounts in EM equities

Source: TD Economics as of Dec 25, 2021

Economic growth in China is expected to slow after the post-pandemic bounce as the base effect declines. In the interim, Chinese equities will face a declining growth scenario because of: fresh lockdowns caused by Omicron outbreaks, China's stand on "common prosperity" implemented through the regulatory crackdown in technology and education, and its renewed emphasis on deleveraging, especially in the real estate sector which accounts for more than 25% of China's GDP. Credit impulse (or the change in new credit issued as a percentage of GDP) tumbled to -8.5% in November 2021 from 9.4% in October 2020, highlighting the reduced availability of credit in China. Typically, a decline in credit impulse affects underlying economic growth six to nine months later, suggesting the Chinese economy will remain weak until the middle of 2022. However, the macroeconomic outlook in China could improve in the second half of 2022 and, by then, we expect regulatory noise will have peaked. To mitigate the slowing economic growth and the slump in the real estate sector, People's Bank of China recently cut banks reserve requirement ratios by 0.5%, releasing US$188bn in liquidity. We believe China's loose monetary policy will provide some support to Chinese equities in the coming months.

Except for China, many emerging markets, like Brazil, Russia, and South Africa, are tightening monetary and fiscal policies to stave off rising inflation which could hurt their currencies. It remains to be seen how many rounds of hikes are needed to tame inflation and whether higher rates will slow economic recovery in EM nations and reduce earnings growth for 2022. The Fed poses another key risk for EM nations: if the Fed's tighter monetary policy prompts gains in the U.S. dollar, it could accelerate inflationary pressures on EM nations.

Though these risks will heighten volatility for EM equities, emerging-market nations have become more resilient to the Fed's hiking cycle because external accounts are well positioned and recent capital inflows aren't as "hot" as 2013. The current account of a country's balance of payments includes the value of exports minus imports and international transfers of capital. It indicates whether a country is in surplus or deficit. The net financial account indicates the difference between domestic ownership of foreign assets and foreign ownership of domestic assets. A deficit positioning in the current account and a declining net financial account reflects a country's vulnerability to an appreciating U.S. dollar and rate hikes in developed markets. Since 2013, most EM nations have transitioned from a deficit to a surplus in the current account and the increase in the net financial account reflects lower risks from "hot" capital flows (Figure 13).

The economic growth forecast for emerging-market equities over the longer period remains strong. This, combined with the steep discount in the valuation of EM equities, should help generate attractive returns over the longer term, albeit with more risk in the interim. □

Figure 13: EM nations external accounts more resilient

	Current Account as % of GDP			Net Financial Account (Current US$bn)	
EM Nations	**2013**	**2020**	**Change from 2013**	**2020**	**Change from 2013**
Brazil	(3.23)	(1.79)	1.44	(18.65)	60.17
China	1.50	1.90	0.40	105.77	17.43
India	(2.60)	1.20	3.80	32.92	80.96
Korea, Rep.	5.60	4.60	(1.00)	77.12	(1.42)
Mexico	(2.50)	2.40	4.90	18.57	61.17
Malaysia	3.47	4.26	0.79	22.62	17.62
Philippines	4.01	3.07	(0.94)	8.98	1.67
Russian Federation	1.50	2.40	0.90	39.22	15.09
Thailand	(2.10)	4.04	6.14	30.34	32.91
South Africa	(5.30)	2.00	7.30	8.11	26.73

Source: World Bank as of December 25, 2021.

Outlook on Real Assets

Modest Overweight

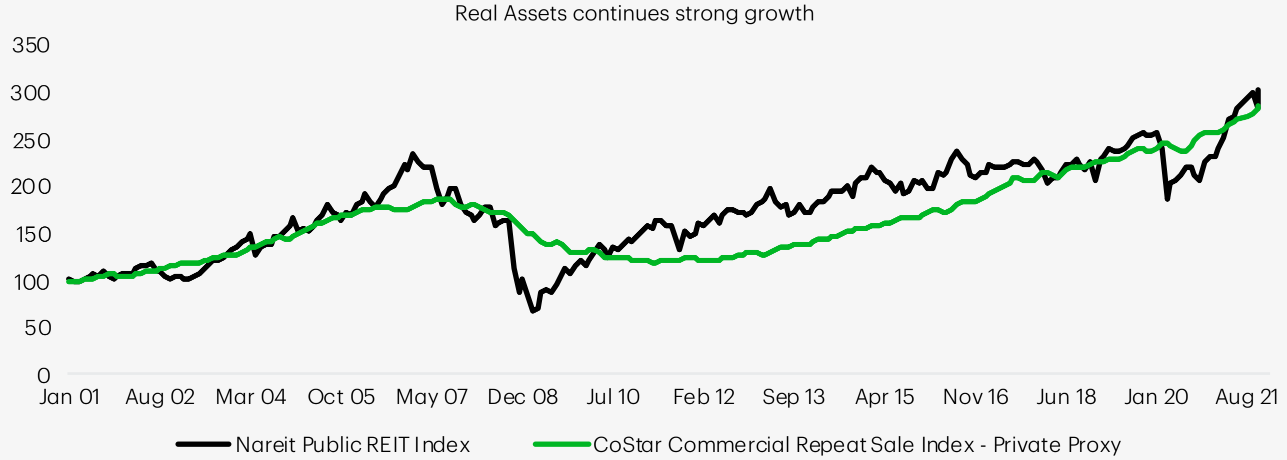
Hedge against inflation

Kenneth Sue, CFA, MBA, CAIA

The spread of the Omicron variant of Covid-19, on top of global supply shortages and the Delta wave, serves as yet another reminder of the bumpy road to recovery. Indeed, because of Omicron, TD Economics has modestly reduced its global growth forecast to 5.8% in 2021 and to 4.4% in 2022. Despite these bumps, the global economy is still trending up on optimism that Omicron is less severe than its predecessors and governments are better prepared than they were earlier in the pandemic. Similarly, strong global investment volume continues to push real assets past previous peaks (Figure 1). In fact, investment activity in Q3 of last year was more than 15% higher than pre-pandemic levels (or Q4 of 2019), with demand for industrials and multifamily assets leading the way.

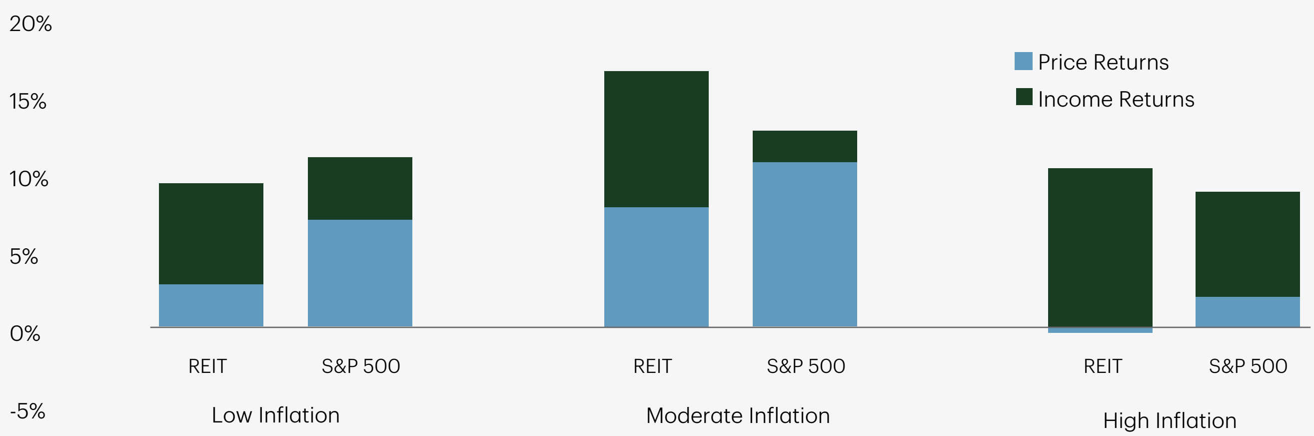
In a world starved for yield, inflation compounds the problem by further eroding the real or inflation-adjusted value of cashflow that investors receive. In fact, real U.S. Treasury yields, from 5-year maturities to 30-years, are negative. Central banks need to balance hiking rates to control historically high inflation with the risks of hurting the fragile economic recovery and undermining ongoing pandemic support. Only recently did central banks admit that current inflation rates were not as "transitory" as they had once expected. So where do investors go for return? Fortunately, real assets have performed well during inflationary periods in the past (Figure 2).

Figure 1: Real assets maintain uptrend



Source: Nareit, CoStar, TD Wealth as of December 2021.

Figure 2: Returns during inflationary periods



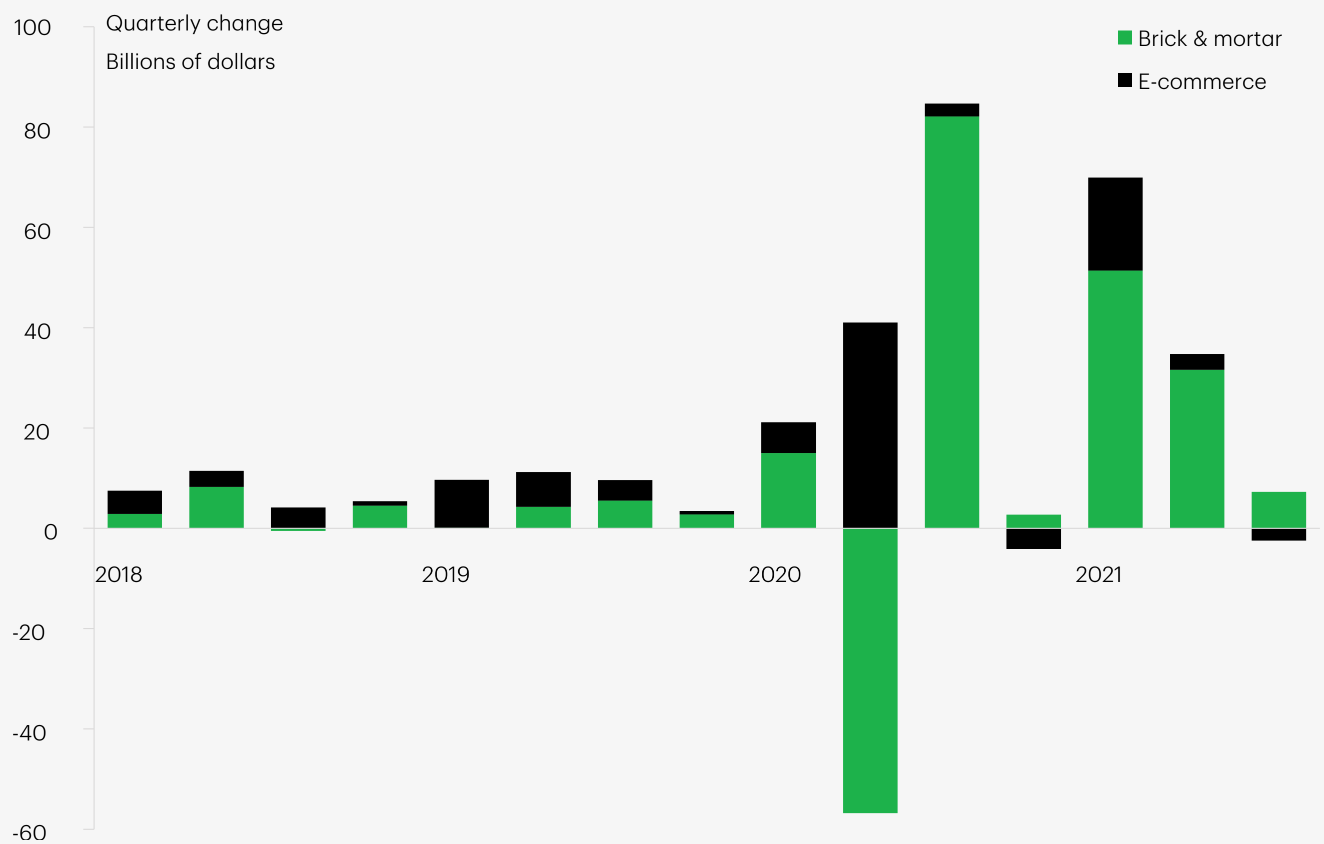
Note: Low inflation includes the years where inflation was 2.5% or lower, moderate inflation is between 2.5% and 6.9% (one standard deviation over the average), and high inflation is for years with inflation of 6.9% and higher. Source: Nareit analysis of prices for the FTSE Nareit All Equity REIT Index and S&P 500 Index; 1970-2020; inflation measured for all items, all urban consumers.
Source: Nareit, as of December 2021.

Since 1972, Real Estate Investment Trusts (REITs), a public proxy for real assets, have outperformed the S&P 500 Index for 80% of the 12-month periods when inflation was high and growing, and most of the gains came from rising yield income. Real assets typically have strong pricing power either through resetting market rates during tenant turnover or from built-in inflation clauses that adjust income to inflation. For example, when U.S. inflation paced above 5% in Q2 and Q3 of 2021, REIT same-store net operating income exceeded inflation by 23 basis points (bps) in Q2 and 187 bps in Q3, according to Nareit. For 2022, it will be important to differentiate between cyclical or temporary changes and permanent or structural changes in the economy and to invest accordingly. Just remember how in-store shopping bounced back when the U.S. economy re-opened in 2020: quarter-over-quarter sales exceeded US$81 billion in Q3 2020 (Figure 3).

While in-store shopping surged, e-commerce sales also continued to grow and build momentum over the year, showing consumer preference for more of both rather than one at the cost of the other. We believe retail will continue to recover this year and at the same time there will be growing demand for e-commerce infrastructure, such as data centres and warehouse capacity.

Given the persistent inflationary environment, TD Wealth maintains a modest overweight stance on real assets. Real assets remain a key allocation in portfolios because they offer protection against inflation and provide real returns to investors.

Figure 3: Bricks-and-mortar shopping bounces back, e-commerce still growing



Source: Census, Haver Analytics, Nareit, Q3 2021

Outlook on Currencies

Dollar, disruption and disorder

Mazen Issa, Senior FX Strategist, TD Securities; Mark McCormick, Global Head of FX Strategy, TD Securities

It's a new year, and we think the key themes are the three Ds: dollar, disruption and disorder.

- **Dollar:** The focus for policymakers has recently shifted from Covid to more macro issues like inflation. As a result, the Fed and other central banks have turned increasingly hawkish in an attempt to contain inflation expectations. The USD reflects this evolving backdrop. We expect a resilient USD ahead of Fed lift-off but are wary about how much the rally can extend in the months that follow.

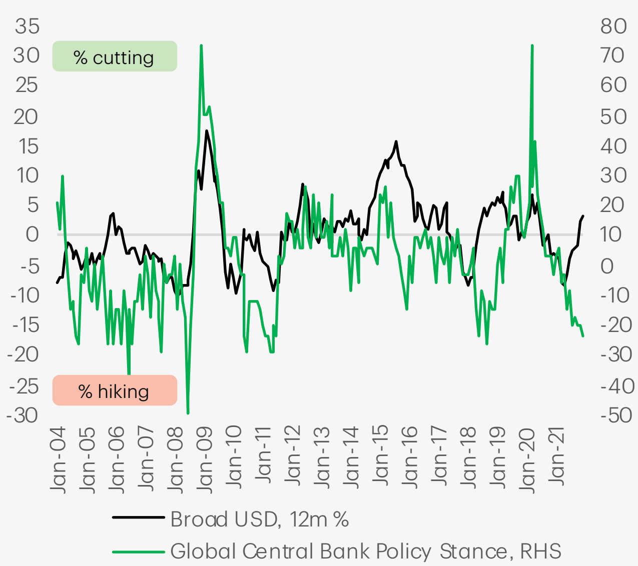
- **Disruption:** Supply chain issues will remain as Covid mitigation responses persist more in some regions than others. These disruptions, while elevated, should ease through the year. The focus now rests on how these disruptions have shifted demand (and supply) for goods and labor, increasing a vast swing in current account balances between the US and China. Easing these pressures will magnify and rebalance some of these distortions between services and manufacturing.

- **Disorder:** Fluid monetary policy and evolving cyclical risks should lead to more variation within asset markets. Higher real yields will have knock-on effects as well, likely making volatility a feature this year.

Central banks sit at the crossroads of these global forces, tasked with keeping inflation in check and supporting a varied growth outlook. Real rates should rise, albeit from extremely depressed levels, partly driven by tighter monetary policy and the Fed's determination to not only hike rates several times, but to also conduct balance sheet run-off/quantitative tightening (QT) this year. The latter implies more duration supply and higher real rates. This combination is toxic for funding currencies (like EUR and JPY, but especially the latter) and overall supportive of the U.S. dollar, which is undoubtedly a consensus 2022 trade.

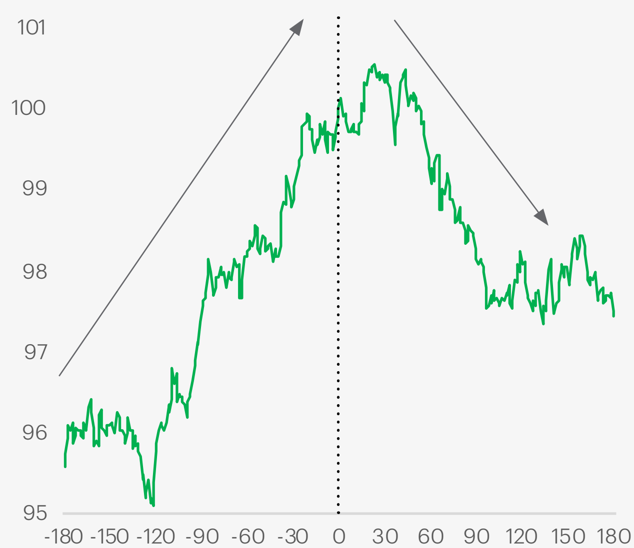
But even with that reduction in stimulus, financial conditions remain very much accommodative, in part because the absolute level of real rates are negative. That means that risk assets should still perform, though a more mature macro cycle and shift in global central banking means there should be far more selection as to what equity sectors perform and more nuance on FX. Still, not all central banks have responded to the rise in prices uniformly, creating some gaps in carry and relative monetary policy. We are wary in projecting a new USD bull market. We think the cycles are just much shorter especially with much of the shock value in global policy pivots mostly out of the way and markets priced for tightening in several markets. We have not seen a quarter of the world's major central banks raise rates recently, which may limit how much and how long the USD can rally. Moreover, in looking at the last four Fed rate hike cycles, USD rallies were strongest about 4 months ahead of lift-off.

Figure 1: Net total percentage of global central banks (34) cutting or hiking rates, 1m window



Source: Macrobond, TD Securities, as of January 10, 2022

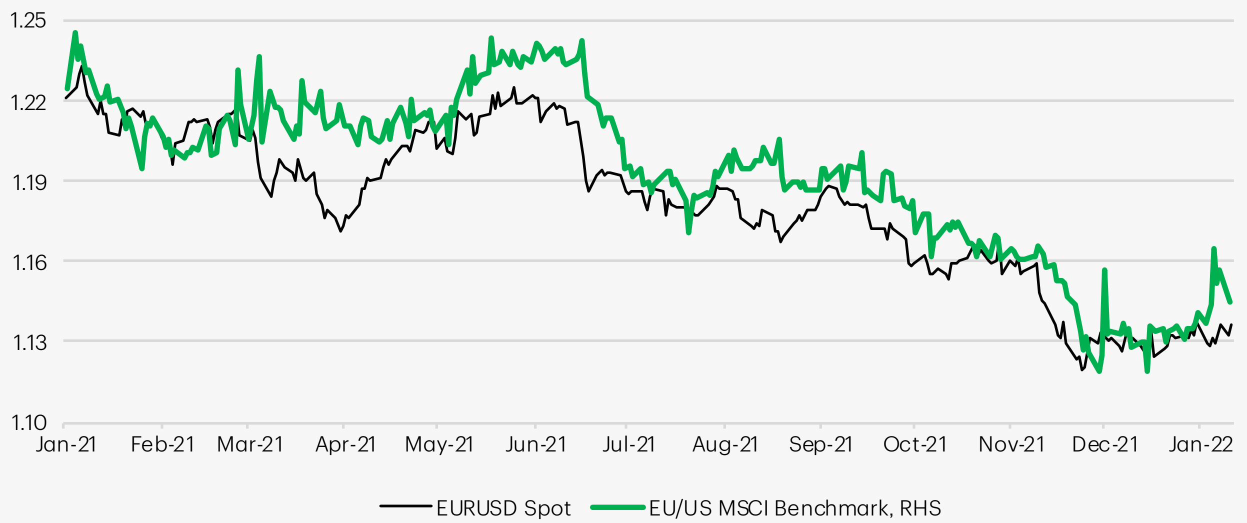
Figure 2: Broad USD index at the prior four lift-off dates rebased at 100 | chart shows days to lift-off with zero the first rate hike



Source: Macrobond, TD Securities, as of January 10, 2022

One canary in the coalmine is that the Fed's determination to introduce balance sheet-run off this year could create an interesting dynamic for equity markets and the EUR. While the overarching drivers remain a headwind for the EUR (yields, monetary policy, carry, growth), too ambitious of a move in QT could make non-US equities more appealing on the basis that tighter US policy could make a lagging European policy more accommodative for their respective regional equity markets. That could lead to European equity outperformance and pull the EUR along with it.

Figure 3: An ambitious Fed could increase the appeal of European equities & EUR



Source: Macrobond, TD Securities, Equities rebased to 1/2021 = 100, as of January 10, 2022

As for the CAD, we hold a near-term bullish stance. While our official forecast is for the Bank of Canada to begin hiking in April, we think every meeting until then is 'live'. And, given the urgency that has gripped central banks over inflation, we think many – including the Bank of Canada – may opt for an 'earlier mover advantage' to contain inflation expectations. Indeed, we think the Bank could hike as soon as January. We also expect energy prices to be supported as we enter the winter season, which should underpin CAD performance. It also has been one of the worst performing currencies last quarter, leaving scope for a retracement. We see USDCAD drifting to 1.24 in Q1. □

Figure 4: G10 Currency Forecasts

	Spot	2022			2023			
	Jan 11, 2022	Q2 F	Q3 F	Q4 F	Q1 F	Q2 F	Q3 F	Q4 F
USD/JPY	115	118	116	115	114	112	110	109
EUR/USD	1.14	1.10	1.12	1.14	1.15	1.17	1.18	1.20
GBP/USD	1.36	1.35	1.36	1.38	1.40	1.41	1.42	1.43
USD/CHF	0.92	0.94	0.94	0.94	0.93	0.93	0.93	0.93
USD/CAD	1.26	1.24	1.25	1.26	1.27	1.28	1.29	1.30
AUD/USD	0.72	0.75	0.77	0.78	0.79	0.78	0.76	0.75
NZD/USD	0.68	0.71	0.72	0.72	0.73	0.73	0.72	0.70
EUR/NOK	9.97	9.75	9.65	9.60	9.55	9.50	9.50	9.45
EUR/SEK	10.28	10.05	10.00	9.95	9.80	9.75	9.75	9.75
DXY	95.6	97.8	96.5	95.2	94.4	93.1	92.4	91.3

Source: TD Securities as of January 10, 2022.

Outlook on Commodities

Decarbonization of the global economy

Bart Melek, Global Head of Commodity Strategy, TD Securities

It has become clear that decarbonization of the global economy will be this decade's dominant theme, driving a massive increase in metals demand as the world electrifies. After all, the energy transition starts and ends with metals. Yet, we believe that the crude oil and base metals complex will face pressure from global macro forces in the near term, creating headwinds to prices in the coming year.

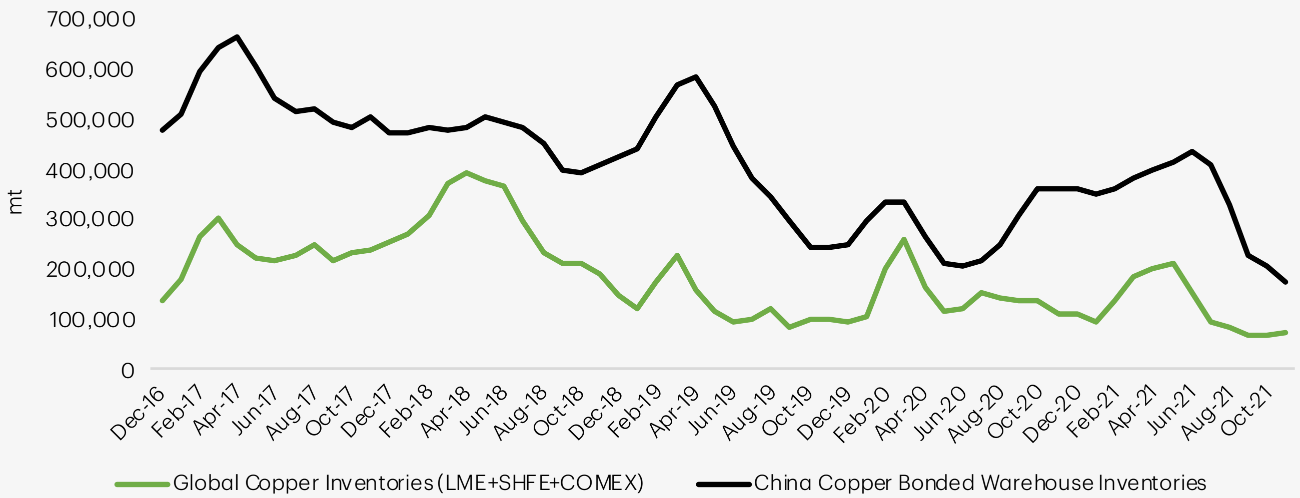
Industrial Metals: The industrial metals complex enjoyed another epic year, highlighted by the strong 30% rally in the LME index. Base metals kicked off the new year benefitting from an extreme shift in consumption patterns fueled by President Biden's stiumulus cheques, in coordination with a powerful global fiscal and monetary impulse which helped power a fierce recovery in the demand for goods. At the same time, global supply chains have also been ravaged by an unforgiving series of disruptions, ranging from skeletal mining staff and wage negotiations in Latin America, to widespread bottlenecks, container shortages and sky-high freight rates, all of which have added frictions to transportation and logistics.

However, looking forward, macro headwinds are building. As the benefits from uber stimulative fiscal and monetary policies around the globe fades, industrial metal demand is set to face tighter policy around the globe in 2022, along with a synchronized slowdown in both Chinese and U.S. growth profiles. Notwithstanding President Biden's Build Back Better plan, the Brookings Institute's decomposition of the fiscal impulse suggests that the fading of the fiscal boost is set to turn contradictory. Across the world, the lagged impact of macro deleveraging in China should increasingly weigh on global manufacturing, while increased regulatory pressures lingering from China's property crisis should keep base metals demand under wraps.

At the same time, some supply risks have also inched higher, with blockades in Peru adding some uncertainty over mining exports, while reports of a blast in an aluminum smelter in China also highlight operational risks and LME metals backwardations grow. Yet, a broader set of indicators points to a continued loosening in the global supply chain. After all, logjams at ports appear to be easing, with the number of container ships waiting to anchor at key US ports notably declining.

The combination of a looser supply-demand environment and the reversal of capital flows away from those assets likely means that the best of price environments for many commodities is set to reverse. But, while the overall correction of industrial commodity prices is very much in the cards, the declines are unlikely to be a rout due to fairly permanent structural changes, which are limiting supply-side responses to higher demand.

Figure 1: Low Inventories to Prevent Major Rout in Base Metals



Source: Bloomberg Finance L.P. TD Securities. December 2021

Crude Oil: Following a blockbuster year for energy markets driven by a significant recovery in global oil demand, a cautious OPEC+ group of producers and a constrained non-OPEC output, consensus expectations now point to a changing tide, as a global surplus emerges for the new year. Indeed, while the global oil market remains tight, expectations are firming for a period of relief from higher prices as global oil supplies rise at a faster clip than demand.

After all, a strong price environment should incentivize the return of oil production from the U.S., while OPEC will also turn on the taps, as the group of producers continues to unwind their extraordinary supply curtailment deal. Meanwhile, although oil demand continues to recover from the pandemic, the pace should slow along with a normalization in global economies as the initial boost from global vaccinations and stimulus fades.

As the global reopening unleashed a massive wave of pent-up demand for mobility, oil demand recovered substantially in 2021 and is well on its way to reclaiming the 100m bpd milestone, for the first time since 2019, by the second half of the year. As nations continue to open their borders to international travel, mobility levels should increase further as vaccination campaigns and medical advances in treatments further erode the fear factor containing mobility.

Gasoline demand in particular is posting exceptional strength across the world, and there are reasons to believe that the strength in demand has structural components that should weigh on its historical correlation to the business cycle. After all, data suggests that the use of personal vehicles has risen above pre-Covid levels across several countries, helping demand outperform seasonal trends.

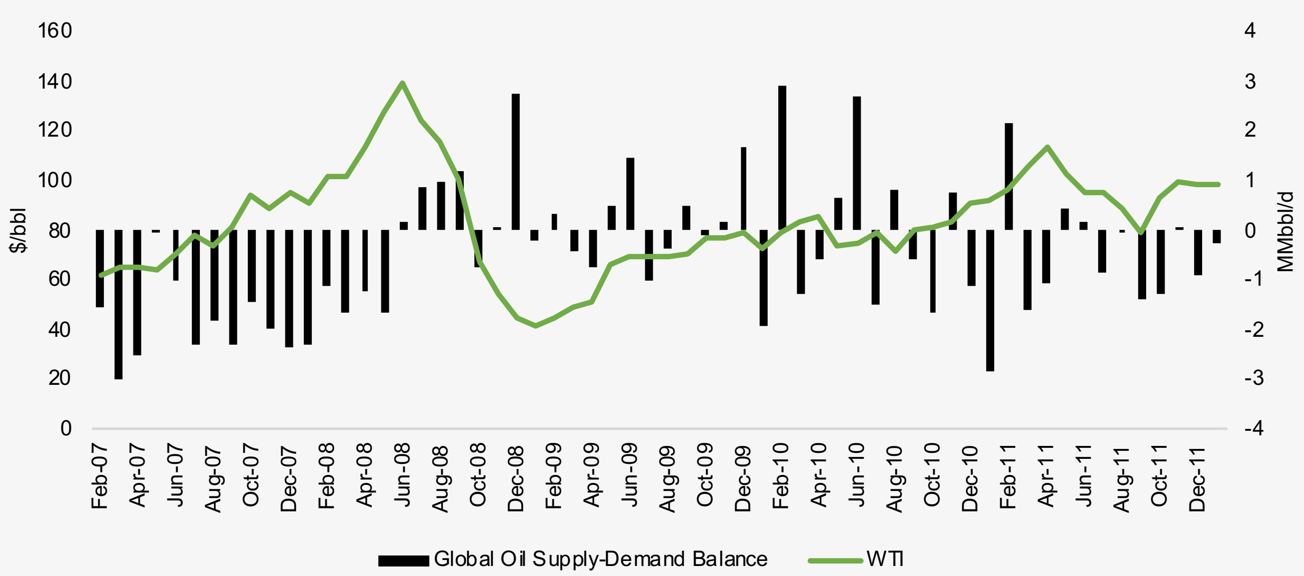
In fact, while mobility trends have continued to follow the expected seasonal declines in Europe and the U.S., gasoline demand across these geographies has outperformed the lofty levels from 2019 despite the latest waves of infections. The same experience was also observed in China and India, which suggests a decrease in the virus' ability to impact energy demand apart from the threat of wide-scale lockdowns.

On the other end of the spectrum, jet fuel consumption has disappointed expectations over the last year. While air traffic has posted a slower recovery than anticipated and will remain weak in the near term given the impact of Omicron variant, demand for travel also poses an upside risk.

Nothwithstanding renewed Covid related demand concerns, any decline in crude oil is expected to be modest by historic standards. OPEC+ supply growth could stagnate or reverse, demand is still firm and the winter could yet see a weather-driven demand spike.

Gold/Precious Metals: Gold posted a mixed and a very volatile performance this year, bouncing between a high of just under $1,960/ounce in the early days of 2021 down to a low of $1,677/ounce in late-summer, to close the year at $1829/ounce. Real interest rate trends, which were driven by inflation expectations, nominal rates and Fed policy signals, led to these gold price fluctuations.

Figure 2: Looser Fundamental Conditions Make Sky-High Crude Unsustainable Next Year



Source: Bloomberg Finance L.P., TDS Commodity Strategy Estimates, as of December 31, 2021.

Indeed, it is expected that the combination of inflation expectations, nominal rates and Federal Reserve policy signals will again be the main determinant of investment behaviour and thus price action in 2022.

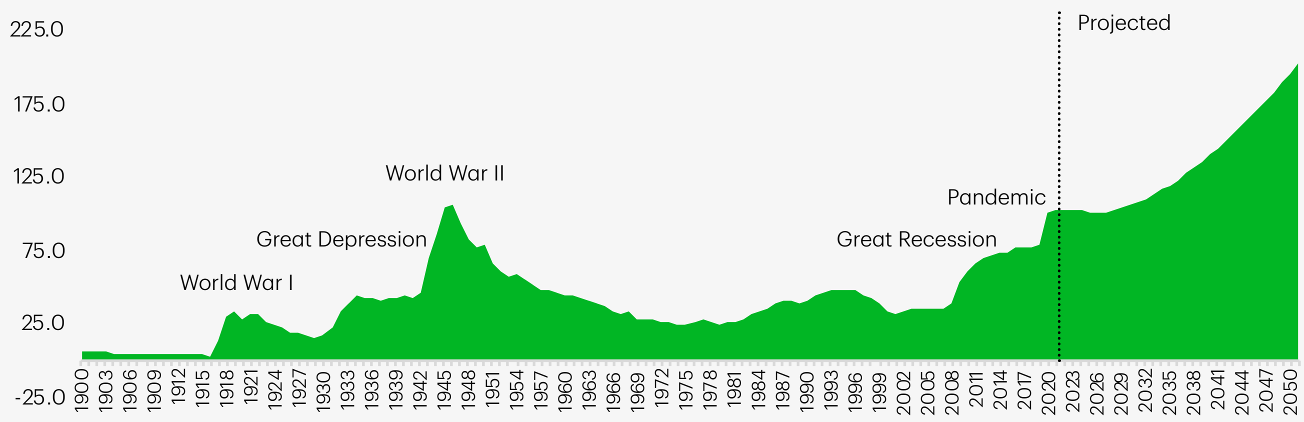
Considering this framework, and the fact that some gold market traders are pricing a Fed funds hike as early as March and the possibility of an early balance sheet runoff this year, the current investor bias led to bloated short positions, and has kept the gold price around US$1,790/oz.

While the U.S. central bank may be on track to raise rates, it will still provide an expansionary monetary policy. And, central banks will continue to buy gold, while investors are looking to diversify given a higher perceived risk of equity market volatility, suggesting that gold may strengthen in the early months of 2022, into the range of US$1,850/oz.

However, many investors find it difficult to hold long gold positions when monetary conditions are in tightening mode due to higher carry costs and rising opportunity costs, as such we believe any near-term positives may turn bearish later in 2022. While negative real rates along the curve should protect gold from a full-blown rout, we expect the yellow metal may weaken in the H2-2022, down to the range of mid US$1,600/oz for much of H2-2022.

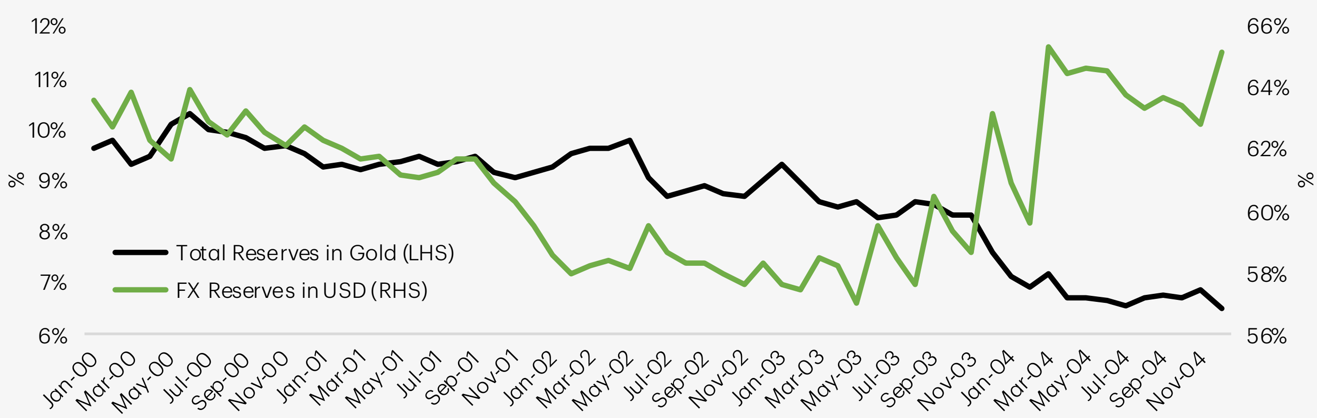
While there may be challenges in the H2-2022, overall gold is a unique asset; it is very liquid and scarce, and is a luxury good as much as it is an investment. Gold is no one's liability and carries no counterparty risk. Consequently, it can play a fundamental role in an investment portfolio. It tends to act as a diversifier and a vehicle to mitigate losses in times of market stress. It can also serve as a hedge against inflation and currency risk. □

Figure 3: Pandemic-Fueled Debt Binge Can See Gold Benefit (% of GDP)



Source: Congressiona Budget Office, TDS Commodity Strategy, as of January 10, 2022.

Figure 4: Dollar Debasement Fears Keep Central Bank Holdings Elevated



Source: Bloomberg Finance L.P., TDS Commodity Strategy, as of December 31, 2021.

Market Performance

Canadian Indices ($CA) Return	Index	1 Month (%)	3 Months (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)	20 Years (%)
S&P/TSX Composite (TR)	79,866	3.06	6.47	25.09	25.09	17.52	10.04	9.14	8.08
S&P/TSX Composite (PR)	21,223	2.72	5.74	21.74	21.74	14.01	6.78	5.91	5.21
S&P/TSX 60 (TR)	3,939	3.43	7.75	28.04	28.04	18.12	10.83	9.91	8.35
S&P/TSX SmallCap (TR)	1,332	1.21	3.03	20.27	20.27	16.29	5.75	5.01	0.05
U.S. Indices ($US) Return									
S&P 500 (TR)	9,987	4.48	11.03	28.71	28.71	26.07	18.47	16.55	9.52
S&P 500 (PR)	4,766	4.36	10.65	26.89	26.89	23.88	16.31	14.25	7.38
Dow Jones Industrial (PR)	36,338	5.38	7.37	18.73	18.73	15.92	12.95	11.52	6.65
NASDAQ Composite (PR)	15,645	0.69	8.28	21.39	21.39	33.10	23.79	19.63	10.97
Russell 2000 (TR)	11,622	2.23	2.14	14.82	14.82	20.02	12.02	13.23	9.36
U.S. Indices ($CA) Return									
S&P 500 (TR)	12,661	3.54	10.48	28.15	28.15	23.02	17.12	19.15	8.28
S&P 500 (PR)	6,042	3.42	10.10	26.35	26.35	20.89	14.99	16.80	6.16
Dow Jones Industrial (PR)	46,068	4.43	6.84	18.22	18.22	13.12	11.67	14.00	5.44
NASDAQ Composite (PR)	19,834	-0.22	7.74	20.87	20.87	29.88	22.37	22.30	9.71
Russell 2000 (TR)	14,734	1.31	1.64	14.32	14.32	17.12	10.74	15.76	8.12
MSCI Indices ($US) Total Return									
World	14,223	4.30	7.86	22.35	22.35	22.32	15.64	13.32	8.64
EAFE (Europe, Australasia, Far East)	10,463	5.13	2.74	11.78	11.78	14.08	10.07	8.53	6.81
EM (Emerging Markets)	2,984	1.92	-1.24	-2.22	-2.22	11.33	10.26	5.87	9.95
MSCI Indices ($CA) Total Return									
World	18,031	3.37	7.33	21.82	21.82	19.36	14.32	15.84	7.41
EAFE (Europe, Australasia, Far East)	13,264	4.18	2.23	11.29	11.29	11.32	8.81	10.95	5.60
EM (Emerging Markets)	3,783	1.01	-1.73	-2.64	-2.64	8.64	9.01	8.23	8.71

Currency									
Canadian Dollar ($US/$CA)	78.88	0.91	0.50	0.43	0.43	2.48	1.15	-2.18	1.15
Regional Indices (Native Currency, PR)									
London FTSE 100 (UK)	7,385	4.61	4.21	14.30	14.30	3.15	0.67	2.86	1.75
Hang Seng (Hong Kong)	23,398	-0.33	-4.79	-14.08	-14.08	-3.26	1.24	2.41	3.66
Nikkei 225 (Japan)	28,792	3.49	-2.24	4.91	4.91	12.89	8.54	13.04	5.15

Benchmark Bond Yields	3 Months	5 Yrs	10 Yrs	30 Yrs
Government of Canada Yields	0.18	1.26	1.43	1.68
U.S. Treasury Yields	0.06	1.26	1.51	1.91

Canadian Bond Indices ($CA) Total Return	Index	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
FTSE TMX Canada Universe Bond Index	1,190	1.89	1.47	-2.54	-2.54	4.22	3.33	3.27
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	764	0.32	-0.49	-0.93	-0.93	2.45	1.88	1.97
FTSE TMX Canadian Mid Term Bond Index (5-10)	1,293	1.31	0.33	-2.69	-2.69	4.24	3.13	3.49
FTSE TMX Long Term Bond Index (10+ Years)	2,058	4.22	4.76	-4.52	-4.52	6.39	5.32	4.78

HFRI Indices ($US) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	18,248	1.28	0.56	10.30	10.30	10.86	7.10	5.79
HFRI Fund of Funds Composite Index	7,538	0.76	0.77	6.53	6.53	8.59	5.78	4.59
HFRI Event-Driven (Total) Index	20,969	1.78	1.63	13.06	13.06	9.91	6.93	6.32
HFRI Equity Hedge Index	29,635	1.85	0.91	11.96	11.96	14.49	9.56	7.50
HFRI Equity Market Neutral Index	5,950	-0.11	-0.68	5.72	5.72	2.62	2.33	3.06
HFRI Macro (Total) Index	17,320	0.65	-0.53	7.52	7.52	6.46	3.41	2.17
HFRI Relative Value (Total) Index	14,112	0.34	0.23	7.65	7.65	6.13	4.59	5.17
HFRI Indices ($CA) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	23,082	-0.05	0.26	9.28	9.28	8.15	5.80	8.13
HFRI Fund of Funds Composite Index	9,535	-0.56	0.47	5.54	5.54	5.93	4.49	6.90
HFRI Event-Driven (Total) Index	26,524	0.44	1.32	12.00	12.00	7.22	5.63	8.67
HFRI Equity Hedge Index	37,485	0.51	0.61	10.92	10.92	11.69	8.23	9.87
HFRI Equity Market Neutral Index	7,526	-1.42	-0.98	4.73	4.73	0.11	1.08	5.34
HFRI Macro (Total) Index	21,908	-0.68	-0.83	6.51	6.51	3.86	2.15	4.43
HFRI Relative Value (Total) Index	17,851	-0.98	-0.07	6.64	6.64	3.54	3.31	7.49

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return, as of December 31, 2021.

The information contained herein has been provided by TD Wealth and is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax, or trading strategies should be evaluated relative to each individual's objectives and risk tolerance.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward- looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government tregulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

TD Wealth represents the products and services offered by TD Waterhouse Canada Inc., TD Waterhouse Private Investment Counsel Inc., TD Wealth Private Banking (offered by The Toronto-Dominion Bank) and TD Wealth Private Trust (offered by The Canada Trust Company).