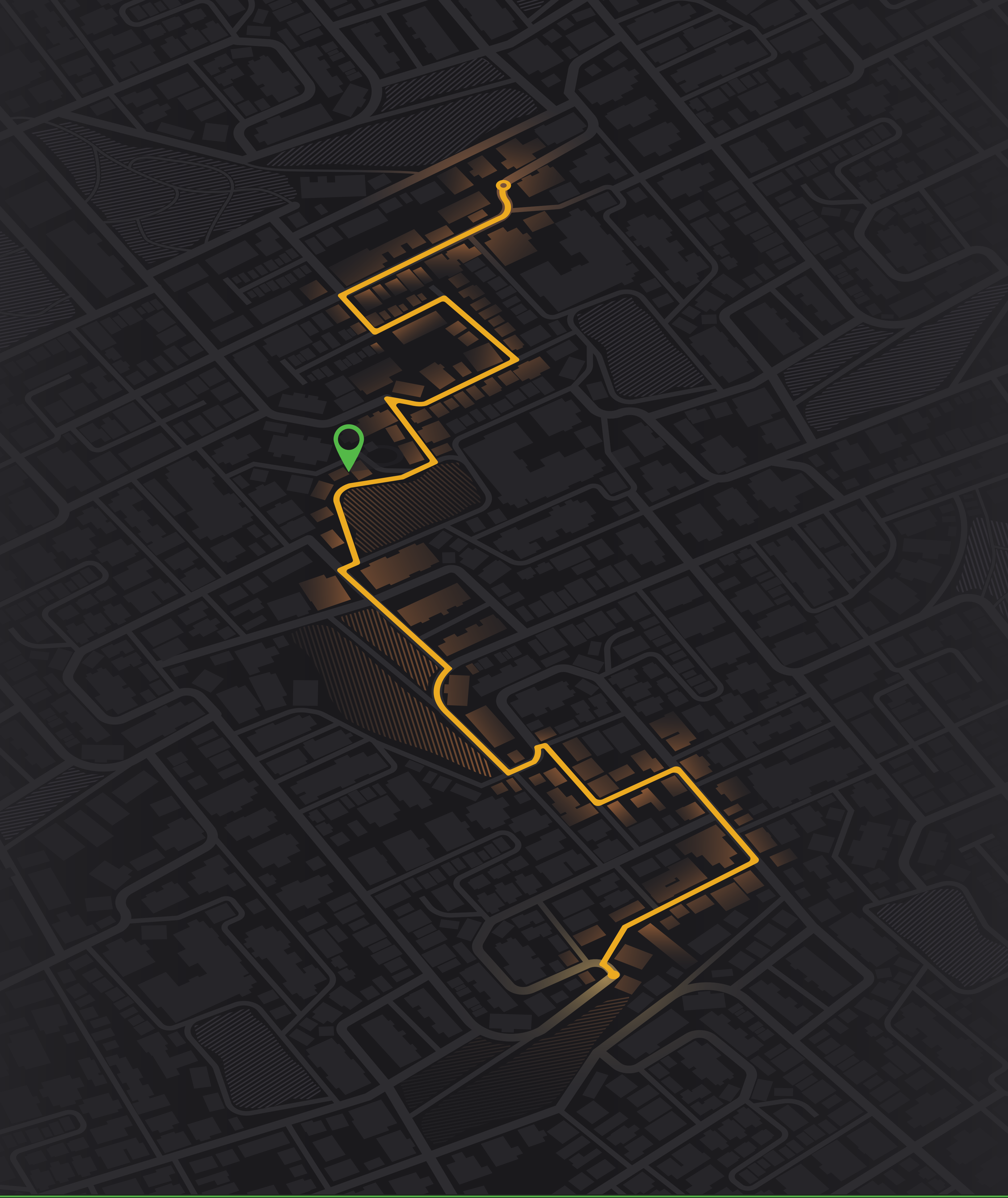
TD Wealth

Right Here. Right Now.

Portfolio Strategy Quarterly | Q1 2023

January 24, 2023



In this issue

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So much has changed in the markets since last year, you'd hardly recognize it. Twelve months ago, the S&P 500 was trading at a forward P/E of 21.4x, while the S&P/TSX was trading at 15.1x and the MSCI World at 19.4x. Today, after a significant correction in the third quarter, those numbers stand, respectively, at 17.6x, 12.8x and 15.7x. Clearly, there's been a change in how investors value earnings.

A year ago, valuation was irrelevant. Growth was slow, deflation was hiding behind every corner, and tech stocks were the only game in town. The FAAMG constituents comprised almost 25% of the S&P 500. Today, those companies are down 36% year-over-year and comprise around 17% of the S&P. Fixed income markets had a major correction as well. (Yes, it's true, stocks and bonds can go down at the same time.) U.S. government bonds fell 12.5% in 2022, investment-grade corporate bonds fell 20.4% and high-yield bonds fell 15.4%. This is what the end of a 40-year bull market in bonds looks like.

Now, as inflation comes off 40-year highs, the golden age of market returns appears to be behind us. Central banks have slammed the brakes and hit reverse on their stimulative campaigns, and investors are facing strong headwinds. Tactical positioning remains a marginal activity, but that margin has grown. To be clear, what's happening out there is not just noise. Volatility is being simultaneously stoked by all three components of the "uncertainty trinity" — economic, policy and political uncertainty — and that's something that hasn't happened in a generation. But, it's also worth noting that, over the long term, there's very little that can derail a well-managed wealth plan. Over the span of decades, even the loudest disruptions – painful recession, financial crisis, even the devastation of war – are barely evident. That's why tactical positioning remains a marginal activity and strategic allocation remains a core activity.

With all these negatives, it's really easy to get discouraged and it's really hard to know where you stand. That's our aim with this edition of PSQ. Let's find out how we got to this place. Right here, right now.

Stay safe and be well,

Chief Wealth Strategist, TD Wealth

Cracking Complexity

Complexity

Banks bifurcated

Central banks have diverged in terms of where they are in the hiking cycle. While markets in the U.S. are expecting a near-term pause, higher inflation in Europe will demand more hawkishness. This should pull the U.S. dollar back from overbought levels.

18x > 15x

A correction becomes increasingly likely if estimates are downgraded as earnings estimates come in. The S&P is currently trading around 18x forward P/E, above its 16x historical average. In the event of a "hard landing" recession scenario, where estimates are cut by 10%, the S&P could fall 15% to around 3,300.

China = 12x

Chinese markets are looking particularly attractive, with forward earnings expectations very depressed. The Chinese reopening could translate to double-digit EPS growth, at a time when Chinese stocks are trading at only 11.6x forward earnings.

Bonds as insurance

Bonds are also looking attractive, especially as a hedge against equity risk. If 10-year yields fell from 3.8% to pre-Covid levels, that would represent a 20% return. In credit markets, meanwhile, almost 90% of the investment-grade universe is trading at a discount.

Excess expended ...

Defiant consumer spending may have met its match as excess savings (built up during the pandemic) begins to dry up. In December, sentiment for service-oriented businesses (ISM Services PMI) fell into contractionary territory — the first time since May 2020.

... but wages still rising

Overall inflation may be slipping, but wage inflation remains above a 5% annualized rate. If wages continue to inflate labour costs, the Fed will have no choice but to keep hiking in order to reach its 2% target.

30-year low = 20% drop

Higher mortgage rates have dragged housing affordability to 30-year lows. Average home prices are expected to fall 10.7% in 2023, bottoming sometime in early 2023. Overall, we see a peak-to-trough decline of around 20%.

Real Challenges

Global investments in real assets tumbled 22% in Q3 as interest rates, valuations and demand shifted the economics that underpin deals, rendering many unfeasible.

Adaptation

7 Years Bad Luck

Markets are awful at predicting 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%.

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.

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.

Stage-based Tactics

We use an "economic cycle framework" that tactically under- or overweight asset classes, sectors and risk factors that are likely to under- or outperform during various stages of the economic recovery.

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.

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.

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.

PSQ1.2023 | Executive Summary

House Views | Fixed income, maximum overweight: Yields across fixed income sectors are at multi-year highs and offer attractive potential returns. Government bonds remain appealing due to their potential to generate positive nominal returns over the longer term. Among credit vehicles, we prefer investing in higher-quality corporate bonds. • **Equities, modest underweight (from neutral):** We continue to expect global equity markets to experience headwinds as economic data deteriorates into 2023. Forward earnings estimates have been reduced broadly, but further deterioration is expected. Volatility will likely remain high through mid-2023. We expect relative outperformance for Chinese equities over the next 12 to 18 months, provided the economy is successfully reopened. • **Real assets / Alternatives, modest overweight:** Commercial mortgages continue to provide accretive income while insulating investor returns from increased volatility in interest rates. We also believe infrastructure is well positioned to outperform through this interest rate cycle, as increases in cash flow from higher-than-expected inflation is buffering the rising the rising rates. At the same time, aggressive interest rates through the second half of 2022 will remain a challenge for domestic real estate, as such, we have downgraded domestic real estate to modest underweight from neutral. • **Sub-classes:** We maintain a modest overweight view for gold, which typically acts as a defensive measure against extreme events and high inflation. With signs that inflation is cooling, the Fed may pivot toward more accommodative policy, which could contribute to USD weakening. This remains true despite recent declines.

Factor Analysis | China's about-face on zero-covid relieved markets in Q4, leading equities and corporate credit to rally across the board. • **Rising-growth, falling-inflation assets:** U.S. and Canadian inflation fell faster than anticipated. Earnings estimates have been downwardly revised, but only slightly, with no sign yet of any collapse. With growth and employment holding up well, the default risk was lower. • **Falling-growth, falling-inflation assets**: In the quarter, we saw a bifurcation between government bonds in America and other developed markets. In the U.S. and Canada, cooling inflation led yields to rise more slowly, whereas in Europe and Japan, hot inflation led yields to continue to rise significantly. • **Rising-inflation assets:** A weaker USD generated a tailwind for commodities, while China's decision to pursue reopening also boosted industrial metals. Copper and gold returned 11.3% and 9.8%. A cyclical rally combined with dollar weakness also benefited emerging-market debt.

Economy | There's little question that the global economy will slow in 2023, the only question that remains is by how much? Recent data has revealed more resilience than many expected, even within Europe as it contends with an energy crisis. And now China has returned to the forefront in a surprise move to relax its strict zero-COVID strategy. Recession talk is reaching a feverish pitch in Canada and the U.S. despite little evidence (yet) to support that direction. However, here too there's no question that there's only one way to re-introduce the necessary economic slack that takes pressure off inflation. Demand in both countries must stagnate for a lengthy period or contract sharply over a shorter haul.

Fixed Income | Looking forward, the income on offer from bonds is far more enticing than it has been in over a decade. A healthy yield cushion also implies that bonds will be able to deliver positive returns and offset losses during volatile equity markets. We are maximum overweight fixed income in general and maximum overweight domestic government bonds. We remain modestly overweight investment-grade credit largely because of the resilience offered by robust balance sheets. We maintain our modest underweight view on high-yield credit as high rates and a deteriorating economic backdrop are likely to lead to higher default rates and wider spreads.

Continued on next page

■ **Equities** | The bearish case for risk assets is straightforward: (1) consumer demand and business investment will likely continue to soften in the first half of 2023; (2) the Fed is not yet finished tightening monetary policy. Fundamentals have yet to fully reflect the growing risk. The S&P 500 is currently trading at 18x forward P/E, above its 16x historical average, based on an elevated forward earnings estimate. S&P 500 trailing earnings growth should turn negative in the coming months. • **International and Chinese Equities:** The relative performance of international to U.S stocks is driven by the dollar cycle, which is entering a bearish trend. A weaker dollar is a tailwind for global growth, which could happen as soon as the second half of the year. From an earnings perspective, EM, especially Chinese stocks are looking particularly attractive. The Chinese economic reopening and the potential for acceleration in global growth in the second half of the year could translate to a double-digit EPS growth at a time when EM stocks are currently trading at only 11.7x forward earnings. • **Bottom-up:** Taking macro and fundamental data into account, along with these quantitative and technical signals from the market's internal structure, it's reasonable to continue a defensive and tactical positioning strategy as we move into 2023.

■ **Real Assets** | Globally, real estate activity has slowed. Global investments tumbled 22% quarter-over-quarter in Q3 as interest rates, valuations and demand shifted the economics that underpinned deals, rendering some unfeasible. Retail volumes led the slump, posting a 38% q/q decline, while other sectors were knocked down between 21% and 23% q/q. That said, asset managers remain well positioned to weather the storm: over 80% of debt for the average asset manager is fixed-rate and their net operating income is keeping up with inflation. TD Wealth maintains a modest overweight stance on real assets given the strong fundamental and operational strength within the space.

■ **Currencies** | The U.S. dollar has climbed into overvalued territory, leaving it at risk once the Fed finishes its tightening monetary policy and the global growth outlook improves. We expect domestic issues to play a greater role in determining each country's currency movement relative to the dollar. Investors need to be watchful for housing vulnerabilities to start to weigh on the likes of the Canadian, Australian and Scandinavian currencies. Fundamentally, TD Securities continues to hold a cautious view of the Canadian dollar. A high debt-servicing burden should stifle consumer spending, which may prevent the Bank of Canada from tightening as much as the Fed. The decline in the U.S. dollar will likely spur capital to move from the U.S. into higher-risk assets overseas. Beaten down currencies, such as JPY, SEK, NZD, and BRL, could rally.

■ **Commodities** | We remain constructive on commodities and believe that we are in the early innings of a structural bull market. This view stems not only from our belief about where we are in the commodity investment cycle, but finds additional support from the global energy transition, geopolitics and more volatile weather patterns. That said, in the near term, we are less convinced that prices will move higher, given that global growth and recession fears remain front and centre • **Energy:** We remain constructive on crude but not without reservations on how challenged demand might be. OPEC has demonstrated a willingness and desire to manage the downside; OPEC's ability to manage the upside, however, remains a question. • **Metals:** We need to be discerning when approaching the sector. The energy transition should be a tailwind for electrification metals, but iron/steel and to a lesser extent zinc will remain highly sensitive to Chinese construction spending. • **Agriculture:** Going forward we see idiosyncratic risks in the agricultural space. It goes without saying that agriculture is the most sensitive to weather risks and the world has seen increasing occurrences of extreme weather events. In addition, there has and will continue to be growth in the demand for biofuels. • **Gold:** If rates and the USD have peaked, a material headwind through 2022 could become a tailwind in 2023. Stubborn inflation would also benefit gold. Further, central banks have been aggressively adding to their gold holdings, and purchases have been trending higher over the past year.

Right Here, Right Now

Brad Simpson, Chief Wealth Strategist, TD Wealth

Every day before the bell rings to usher in a new day of trading on North American equity markets, we here at the Wealth Investment Office publish a document called *Before the Open*. I happened to notice it before I started to write this introduction on January 11, 2023. This is the opening section titled "Highlights of the Day":

"The market's focus will be on CPI inflation data being released tomorrow, with attention on further signs of cooling inflation. Fed officials remain relentless in their higher-for-longer and pivot pushback messaging, although there was no additional pushback from Chairman Powell's speech on Tuesday. Earnings will also come into focus with the big banks starting to report this Friday. The bar for Q4 earnings has been lowered more than usual, but the market will likely scrutinize 2023 estimates given the heightened macro uncertainty. The World Bank cut its 2023 global growth forecast in half, citing elevated inflation, higher interest rates, the return of Covid and geopolitical tensions. The European Central Bank reiterated that rates still need to rise significantly to be sufficiently restrictive."

There you have it, everything you need to know about the here and now. Inflation, the Fed, higher interest rates, earnings, global growth, macro uncertainty, the return of Covid and geopolitical tension — it's what everyone is fixated on, and it seems like we've been in this state forever.

So much has changed in the markets since last year, you'd hardly recognize them. Twelve months ago, the S&P 500 was trading at a forward P/E of 21.4x, while the S&P/TSX was trading at 15.1x and the MSCI World at 19.4x. Today, after a significant correction in the third quarter, those numbers stand, respectively, at 17.6x, 12.8x and 15.7x. Clearly, there's been a change in how investors value earnings.

A year ago, valuation was irrelevant. Growth was slow (as it had seemed for nearly 40 (20) years), deflation was hiding behind every corner, and tech stocks were the only game in town. The FAAMG constituents comprised almost 25% of the S&P 500. For those of us who had to pick up the pieces after the last tech debacle in 2000, it was a time of just flat-out disbelief (concern). Today, the FAAMG companies are down 36% year-over-year and comprise around 17% of the S&P. (I could also expound on the crypto collapse, but my folks taught me that, if you didn't have anything nice to say, maybe you shouldn't say anything at all.)

Fixed income markets had a major correction as well. Yes, it's true, equities and bonds can go down at the same time. It's rare, but that's exactly what happened in 2022. A year ago, the 10-year U.S. Treasury yielded 1.55%, a five-year GIC was 1.75%, a standard 25-year mortgage was 3.5%, and the global market for negative-yielding bonds was around US$11 trillion. Today, those numbers are 3.5%, 3.45%, 6.5% and US$130 billion. U.S. government bonds fell 12.5% in 2022, investment-grade corporate bonds fell 20.4% and high-yield bonds fell 15.4%. This is what the end of a 40-year bull market in bonds looks like.

Finally, investor sentiment has changed a lot as well. A year ago, the University of Michigan Consumer Sentiment Index was at 70.6; today it's 59.7. Meanwhile, the AAII Bull Minus Bear Sentiment Index was at +7.2 a year ago versus -21.5 today.

Here at TD Wealth, Risk Priority Management is our investment philosophy. It's outlined in a document that we abide by and refer to constantly. That being said, at 16 pages in length, it's not exactly an elevator pitch. (We investment folks like to be thorough). The other day, however, I read something that was penned by our resident editor, David Dias:

"Ignore the noise and follow the plan; but also stay nimble and adaptive."

Sixteen pages into 13 words. I am humbled by the brilliant people I get to work with every day. These 13 words appear to be contradictory statements, but they're really not. Sound portfolio management requires us to do both. We have to peer back across many decades to review the noteworthy episodes of financial history that appear to be rhyming with the present, while also paying heed to how evolving trends in our civilization and financial markets may colour those historical lessons. And yes, we also have to pay attention to the geopolitics and monetary policy of the day, which have a habit of turning short-term expectations on their head. To be clear, long-term strategy is paramount and remains at the core of what we do, but short-term tactical positioning — not days or weeks, but the next couple of quarters — this is also important, and it has become increasingly so.

I often refer to the "grand distortions" that have skewed the perceptions of investors over the past 20 years or so. Rapid advancements in technology and logistics brought about the rise of globalization, which had the effect of lowering prices and spurring yet more innovation as factory jobs in the West were increasingly being done by lower-priced labour and machinery.

This led to economic and financial challenges in the developed world, which were treated with round after round of economic stimulus in the form of lower and lower interest rates, and when these levers reached the limit of their powers, central banks reached for new, experimental levers in the form of quantitative easing and private-market interventions. The result was an unprecedented golden age of market returns, during which time performance was driven by riding the wave of stimulus.

Now, as inflation sits at 40-year highs, those days appear to be behind us. Central banks have slammed the brakes and hit reverse on their stimulative campaigns, and investors are facing strong headwinds. Tactical positioning remains a marginal activity, but that margin has grown. This month, for instance, happens to coincide with a number of changes to our tactical positioning from TD Wealth's asset allocation committee (WAAC). Let me share them with you right up front:

Fixed income. We're upgrading our position on developed-world bonds from "moderate underweight" to "neutral."

Equities. We're downgrading equities overall from "neutral" to "modest underweight." Within the equities asset class, we're downgrading Canadian and U.S. equities from "neutral to "modest underweight," and upgrading Chinese equities from "neutral" to "modest overweight."

Alternative assets / real assets. We're upgrading commercial mortgages from "modest overweight" to "maximum overweight." And we're downgrading domestic real estate from "neutral" to "modest underweight."

Asset sub-classes. Finally, for the sub-classes, we're downgrading the U.S. dollar (against a basket of major currencies) from "modest underweight" to "maximum underweight."

Why all the changes? "Ignore the noise and follow the plan; *but stay nimble and adaptive.*" The fact is, what's happening out there is not just noise. Volatility is being simultaneously stoked by all three components of the "Uncertainty Trinity" (economic, policy and political uncertainty), and that's something that hasn't happened in a generation. With all these negatives, it's really easy to get discouraged and it's really hard to know where you stand. That's our aim with this edition of PSQ. Let's find out how we got here.

1. Economic Uncertainty

Let's start with economic uncertainty and the biggest of the big questions: Are we headed into a recession? While we see the risk of recession as high, what we know for certain is that the global economy will slow in 2023 and that, either way, we are in a late-stage economy. Our strategy and portfolios are based on this assumption (Figure 1).

Whatever the direction — hard landing, soft landing or full speed ahead — the arbiter of where the economy is headed will likely be the consumer, real estate and the jobs market.

Figure 1: Our portfolios are positioned for where we are in the cycle

	Upside Risk		Current Positioning	Downside Risk
Macro Indicator	**Early Stage (22%)**	**Mid Stage (42%)**	**Late Stage (22%)**	**Recession (13%)**
Economic Growth	High	Moderate	Low	Negative
Inflation	Low	Moderate	High	Low to Negative
Monetary Policy	Loose	Neutral	Tight	Loose
Term Premium	High	Moderate	Low	Low to Negative
Credit Conditions	Loose	Loose but Tightening	Tight	Enter: Tight; Exit: Loose
Equity Portfolio Considerations	**Early Stage**	**Mid Stage**	**Late Stage**	**Recession**
Style	Growth	Growth	Value	Value & Income
Business Cycle Positioning	Cyclical	Cyclical	Defensive	Defensive
Sectors	Financials, Technology, Discretionary	Technology, Comm. Services, Industrials, Discretionary	Energy, Materials, Staples, Health Care, Utilities	Health Care, Utilities, Real Estate

Source: TD Wealth as of December 31, 2022

The Consumer

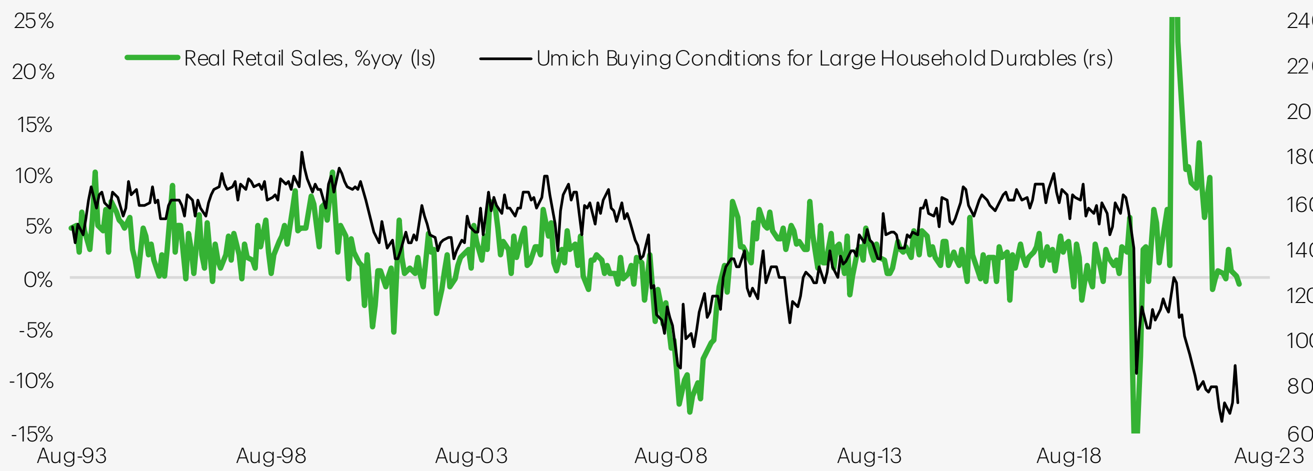
Last year around this time, consumer spending was being buoyed by pent-up demand from shoppers, flush with savings accumulated during the pandemic. Sure, inflation was a problem, but companies had little difficulty passing the higher costs on to consumers, who were thrilled to no longer be cooped up and seemed willing to pay any price to have a little fun.

A year later, the tone among households has turned decidedly more cautious. The most obvious example of this was the ISM Services PMI, which fell 6.9 percentage points to 49.6 in December, from 56.5 in November. This marked the first time the index fell into contractionary territory (below the 50-point threshold) since May 2020. Now, many would caution that this is a one-month aberration, but we think there's ample evidence that this is part of a longer-term trend. Consumers have run down their excess savings and are now feeling the impact of inflation. We believe there are a number of reasons that consumer spending will be lower in 2023.

First, consumer demand is on the decline. While headline retail sales seem strong, they mask the slowing of consumer demand. Figure 2 shows that, after adjusting for inflation, consumers have been spending less. This is not surprising. While nominal wage growth has risen to a two-decade high, inflation-adjusted income growth for the average worker has actually been negative. Little wonder that most consumers have slowed their purchases of durable goods, with the sentiment index at a level lower than it was during the global financial crisis. It seems reasonable to consider that spending on services will be next as the December ISM services index suggests.

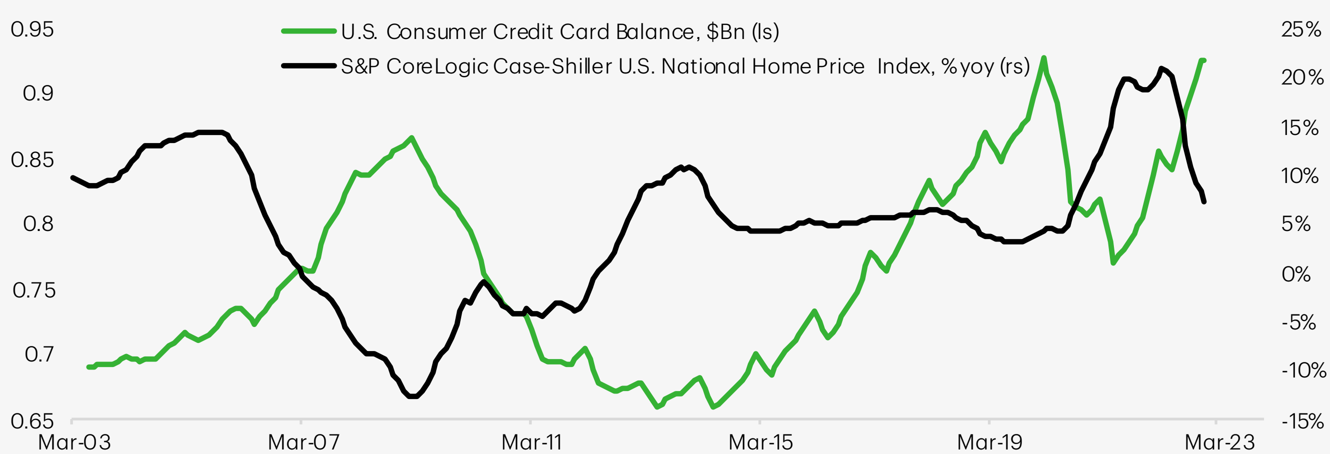
Second, consumers' personal wealth is declining. Not only are consumers running through their savings, but their credit-card balances are rising and at the same time the value of their homes are falling (Figure 3). This negative wealth effect has the potential to really slow spending in 2023.

Figure 2 Consumer demand slowing



Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

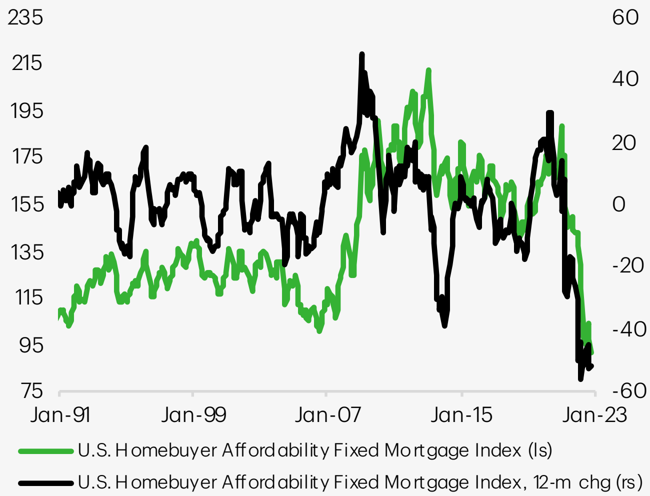
Figure 3: Double Trouble: Rising credit card debt and lower house prices



Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

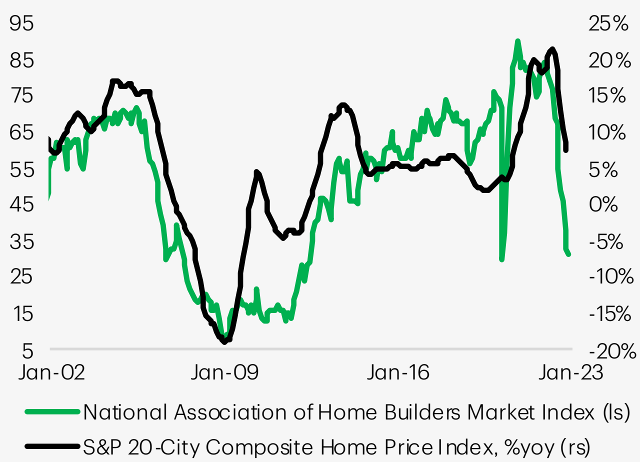
On the subject of real estate, nothing lifts spending confidence more than an increase in the value of one's home, which in the current environment is another warning sign. Residential construction has been weak, and the inventory of unsold homes has started to grow. Although long-term yields and mortgage costs have come down from recent highs, (given that the bond market is pricing in a growth slowdown), housing affordability continues to worsen, sitting at a 30-year low. In fact, the deterioration in housing affordability in the U.S. is the sharpest it's been over the past three decades, and is unlikely to improve much this year, especially if the labour market starts to weaken (Figure 4). With fewer buyers in the market, the deterioration in home builders' sentiment could reach the lows of the financial crisis and translate to much lower housing starts (Figure 5). Residential property prices (or mortgage costs) will likely have to fall further before property-market activity can provide a boost to economic growth.

Figure 4 Housing less affordable



Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

Figure 5: Lower prices, lower starts

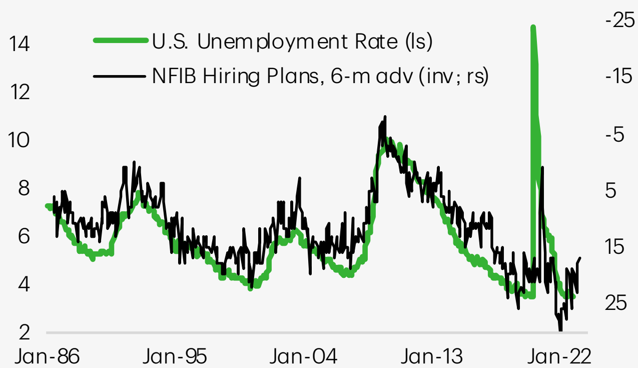


Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

In Canada it's a similar story. Home sales fell 25.3% in 2022, and TD Economics (TDE) expects another drop of 17.5% this year. Average home prices, which came in barely positive at 0.6% in 2022, are expected to fall 10.7% in 2023, bottoming sometime in early 2023. Overall, TDE sees a peak-to-trough decline of around 20%, though it varies from province to province.

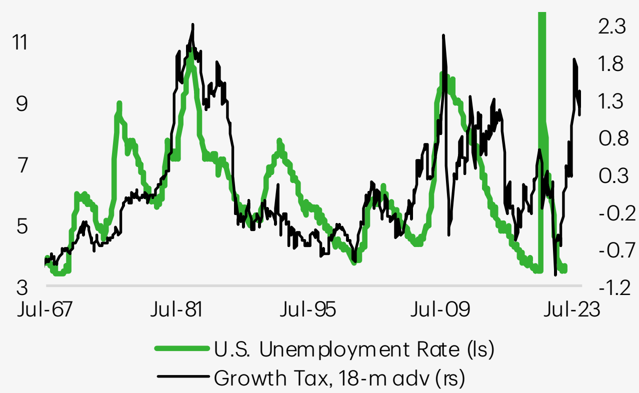
Third, concerns about future employment status could grow. In 2022, consumers could be thankful for the fact that, despite inflation eating into their purchasing power, finding work was easy and a tight labour market empowered workers to gain the upper hand when negotiating salary with their employer. As growth and consumer demand slows this year, however, companies will likely reduce their hiring to protect margins. NFIB surveys show that small businesses have been scaling down their hiring plans, and this historically has led to a higher unemployment rate in the subsequent six months (Figure 6). Slowing consumer demand should limit pricing power and top-line growth, which combined with rising labour, material and interest cost, could force managers to shrink their workforce. If not managed carefully, a negative loop of lower demand and higher unemployment could become a self-fulfilling prophecy (Figure 7).

Figure 6 Less hiring leads to higher unemployment



Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

Figure 7 Growth tax leading to higher unemployment



Source: Bloomberg Finance L.P., TD Wealth as of January 8, 2023

In the equity section of this quarter's PSQ, our portfolio managers and analysts do a deep dive on what all this means for businesses (and particularly the public ones we call "equities"), but there's one thing that bears repeating: there is a gap between the current level of consumer confidence and the steepening yield curves that have historically marked the beginning of a recession (Figure 8). Further, the New York Fed Weekly Economic Index, a coincident indicator of U.S. economic growth, has been falling quickly and is now below "trend growth" level (Figure 9). We expect the greatest impact of tighter monetary policy to fall between the first and second quarter of this year, which should push growth even lower in the coming quarters.

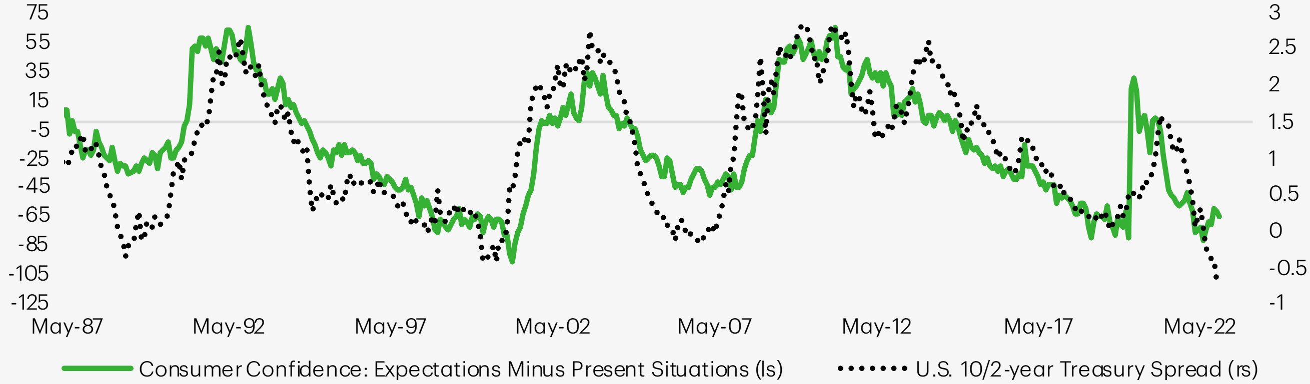
The good news is that the big rate hikes seem to be behind us. While we've seen some outsized rate hikes this year — including a "jumbo" percentage-point hike from the Bank of Canada in July — financial conditions are now exhibiting signs of tightness, and inflation is coming in lower than expected. As such, we expect rate hikes to settle down to smaller 25-bps increments.

So far, during this tightening phase, the Fed has raised its policy rate 425 bps, and it's very likely that there will still be a few more increases over the next few months. The Fed has been clear that it will "stay the course" until inflation is clearly lower, knowing that means some economic pain, which we are seeing around the globe. However, the current tightness we're seeing, and the signs of a deteriorating consumer, have not deterred the Fed amid the falling but still well above-target inflation. This raises the risk of a policy mistake, given that the U.S. and global economy have yet to see the full impact of last year's interest-rate hikes and quantitative tightening. Just as the Fed appeared to be late when it began tightening policy in 2021, it could also be late in easing the policy.

As growth continues to slow in the months ahead, inflation should also fall at a faster pace, especially if we end up with a recession. Figure 10 shows that the gap between retail sales growth (a proxy for demand) and industrial production growth (a proxy for supply) is now back to historical averages, after spiking during the pandemic. That should help bring inflation lower in the coming quarters.

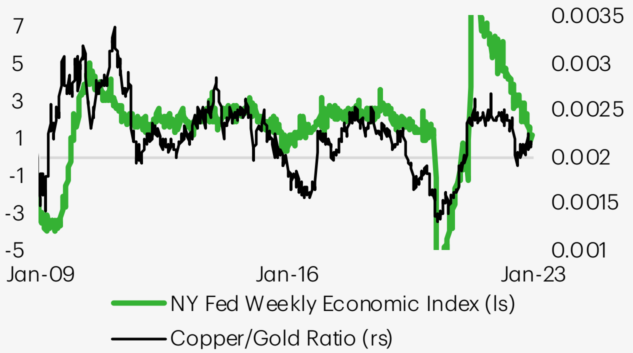
The forecasted environment — weaker consumer spending, softer real estate activity, softening labour market — all point to the threat of a policy mistake. Now, an optimist could argue that lower consumer demand, softer real estate and looser labour conditions would help the Fed bring inflation back to its 2% target. That's no doubt true, but getting there has the potential to be quite painful.

Figure 8: Expectations beginning to diverge from reality



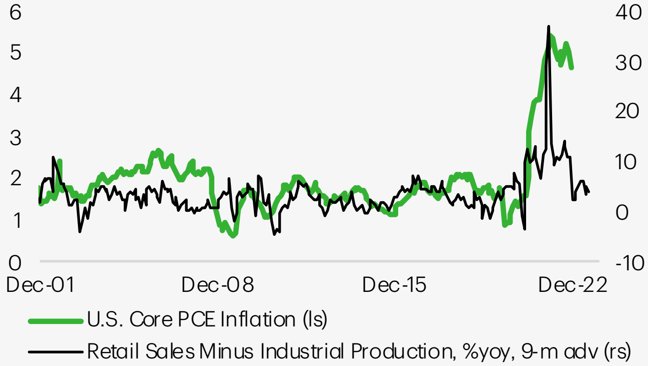
Source: Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 9: Increased likelihood of recession



Source: Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 10 Baseline demand and production out of sync



Source: Bloomberg Finance L.P., TD Wealth as of December 27, 2022

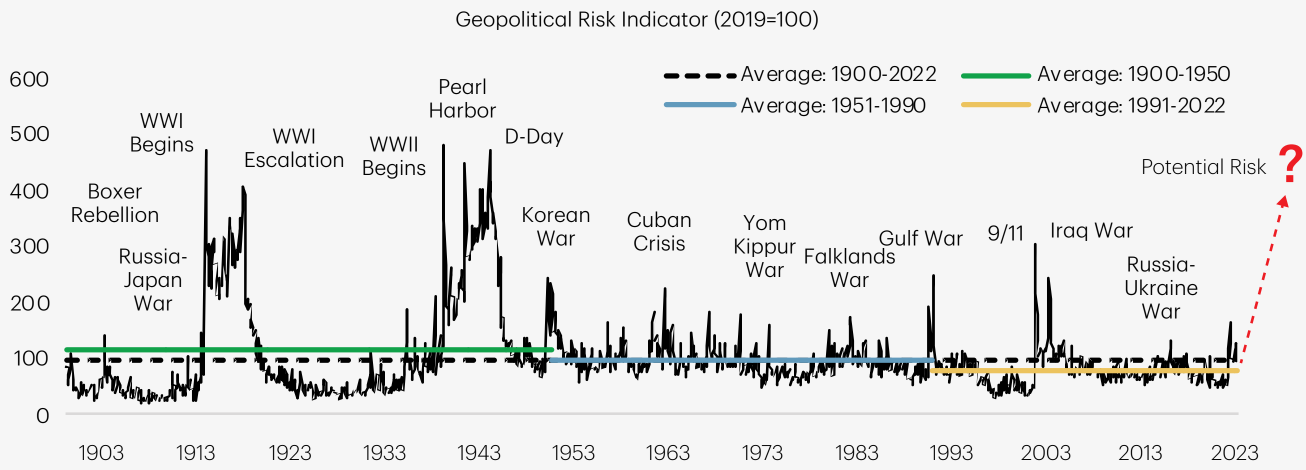
Geopolitical Uncertainty

Another potential headwind is geopolitical uncertainty. As we said in the Q2 edition of PSQ, geopolitical risk is hard to quantify, and its impact is usually short-lived. However, it appears the tide towards a more peaceful world may be shifting as we enter a new period of heightened geopolitical risks. Figure 11 updates the geopolitical risk indicator we looked at then.

The good news is that overall risk is down. However, when you dig a little deeper, a somewhat different perspective emerges. In creating this chart, geopolitical risk was divided into eight categories: (1) threats at the outset of war; (2) threats during war; (3) threats related to the escalation of war; (4) threats during peacetime; (5) military buildups; (6) nuclear threats; (7) threats related to terrorism; and (8) the threat of a terrorist act. In the current environment — where there is an active war that involves a nuclear power (Russia) and growing tension on a number of fronts between the United States and China (both nuclear powers) — war threats and nuclear threats come into play. (Figure 12)

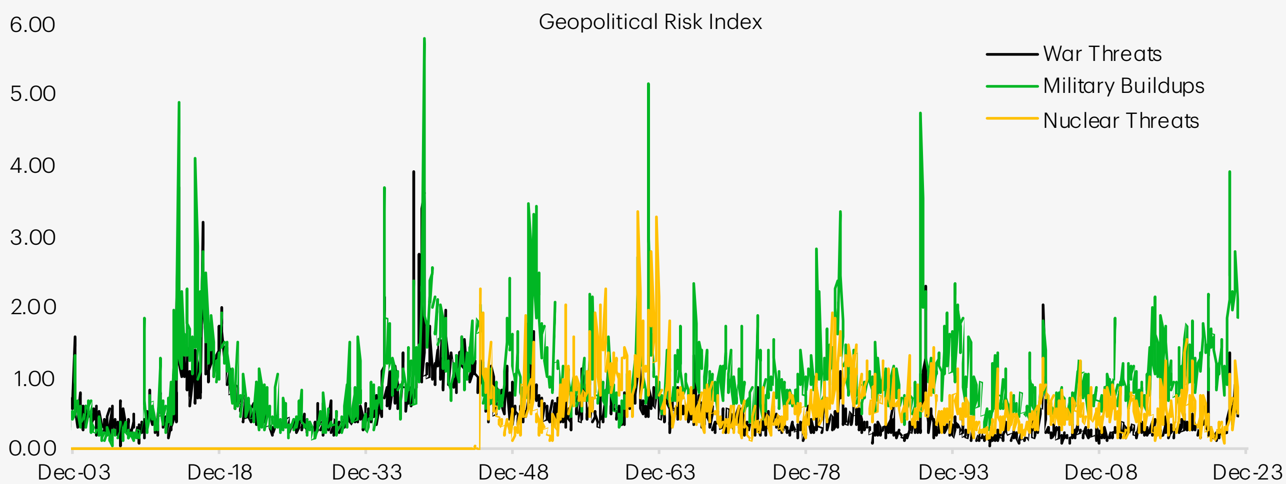
To be very clear, a nuclear war between these powers is highly unlikely. Although the index readings are trending higher, they are still a long way from the historical breaking point. Having said that, if concerns in either of these two areas increases in 2023 — say, in the form of increased defence budgets, major defence purchases or a threat of the potential use of tactical nuclear weapons — the forward-looking financial market could price in a higher geopolitical risk, even without any actual escalation of the current conflict. The higher risk premium could bring higher volatility and reprice all assets. Fear could have a profound impact on the market even before the onset of the event, even if the event never actually happens.

Figure 11: Geopolitical risk increasing?



Source: Caldara and Iacoviello. Measuring Geopolitical Risk. American Economic Review 2022, 112(4): 1194–1225.
As of January 5, 2023.

Figure 12: Risks under the surface



Source: Caldara and Iacoviello. Measuring Geeoplotical Risk. American Economic Review 2022. As of January 5, 2023

What does this mean for portfolios?

Bonds Will Come Back

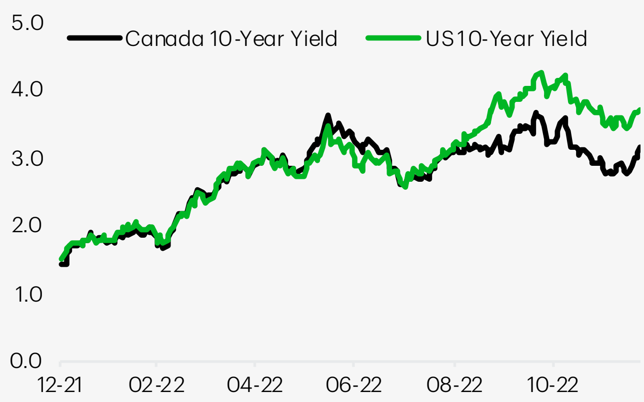
When we think about portfolio management, one theme comes to my mind: there have to be reversals from the extremes we saw in 2022. So let's start with fixed income.

If we were to use the FTSE Canada Universe Index as the benchmark, last year would go down as the worst for fixed income investors in the modern era. For those who might have asked, what happens when central-bank policy suddenly shifts from 40 years of deflation and rate cuts, to inflation and rate hikes, last year provided the answer.

The good news is that the extreme change we've witnessed over the past year has completely altered the bond math going forward. Figure 13 highlights the fact that yields have doubled in the U.S. and Canada. Right now, 10-year bonds are offering a real yield around 1.5% — the highest level since the global financial crisis. Again, using broad bond indices in the U.S. and Canada as the benchmark, there is a strong correlation between a bond index's starting yield and subsequent long-term returns (Figure 14).

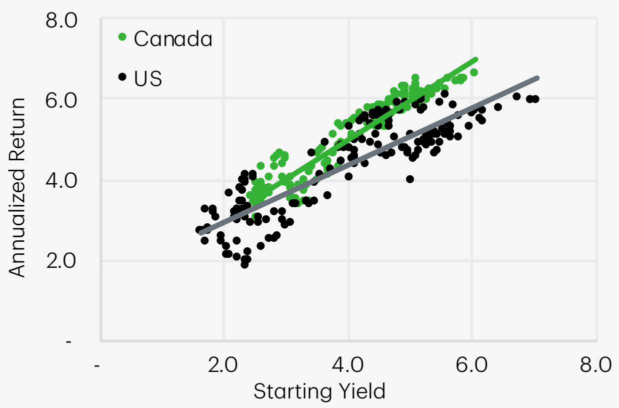
Each year, we publish our capital market assumptions (CMA), which provides our long-term thinking in terms of risk and returns for a broad set of asset classes. These projections are based on our long-term forecast on inflation, growth, yields and the reward for risk embedded in each asset class. In our most recent edition of the CMA, published at the end of 2022, we raised the return expectation for many fixed income assets, shown in (Figure 15). We think that fixed income is likely to enjoy a strong performance in 2023.

Figure 13: Yield over 2022



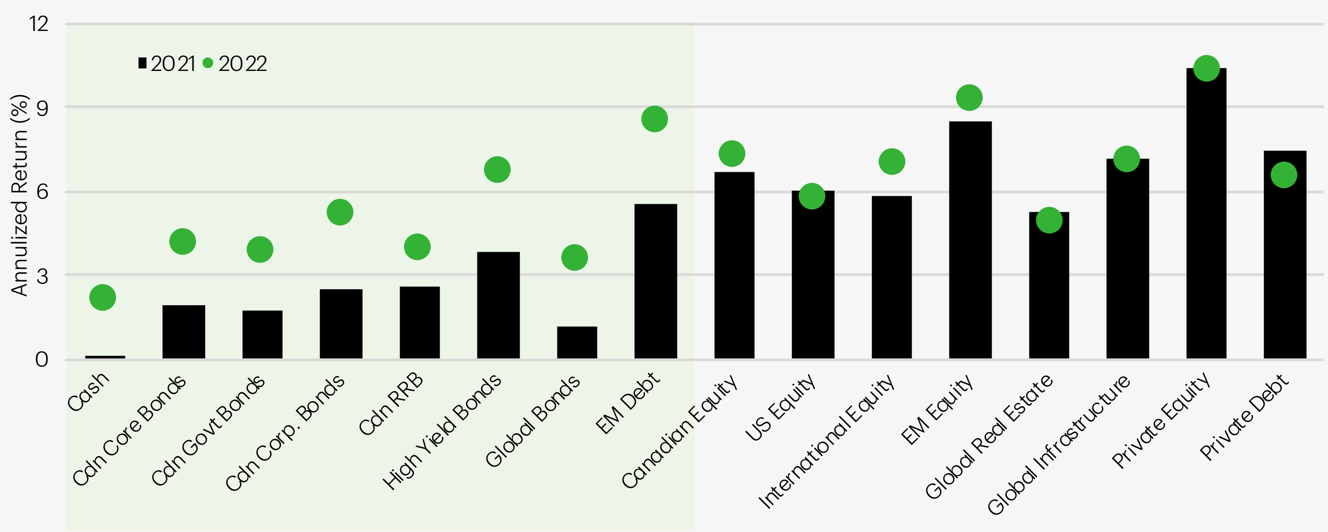
Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023.

Figure 14: Starting Yield vs 7-Year Bond Returns



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023.

Figure 15: Capital Market Assumptions 2022 vs 2021



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023.

As you move down the risk spectrum in fixed income, the more risk-oriented parts of the asset class also look much more attractive, from a valuation standpoint, when compared to equities. High-yield, for instance, is frequently compared to equities due to its higher credit risk, volatility and higher drawdown during risk-off periods when compared to the rest of the fixed income complex. High-yield credit normally has a beta of 0.6 to equities. As shown in Figure 16, both high-yield and investment-grade credit are offering about 50% more reward, in term of credit spread, for taking on credit risk, compared to the end of 2021. The risk premium on U.S. equities, meanwhile, is lower, despite the selloff this year. This bifurcation, again, underscores the attractive valuation in fixed income and the potential reversal in performance.

Diversification Back in Favour

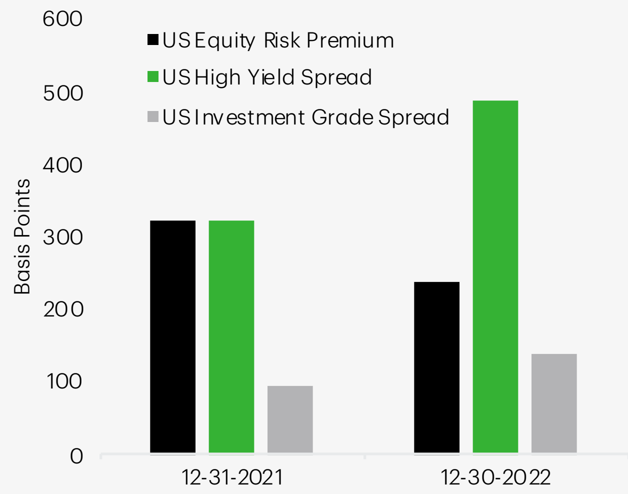
In 2022 we experienced a “white whale,” which we defined as an extreme period during which equites and fixed income fell simultaneously, due to a policy mistake by central banks — namely, keeping interest rates too low for too long. No doubt the policy mistake that the central banks made by delaying the rate normalization process resulted in a catastrophic outcome that punished all investors, regardless of their risk tolerance or asset allocation decision. Figure 17 provides a telling picture of just how unusual the correlation between equities and bonds was in the depths of 2022. With a correlation of 0.27, compared to the long-term average of -0.24, this was a rare sighting indeed.

Day-to-day activity in the markets last year felt like a rerun of the past 40 years, but played in reverse and amplified. The performance of equities and fixed income was driven by the yield change, which in turn was driven by the Fed’s words along with economic data, especially the ones related to inflation. Good news was interpreted as bad by the market, since good economic news meant that the Fed would likely have to hike more aggressively, sending shockwaves across all assets.

This peculiar dynamic also played out within each asset class. By looking at the volatility of an index as well as its individual constituents, we can determine whether stocks were more likely to be influenced by the same external factor (like a macro event) instead of idiosyncratic internal factors (like a business event). For the S&P 500, this correlation measure averaged 0.24 from 2000 to 2021, and was negative every year except two, but increased to 0.44 in 2022. The implication is simple: for a stock picker to have done well in 2022, they might have had to be on the right side of a macro call.

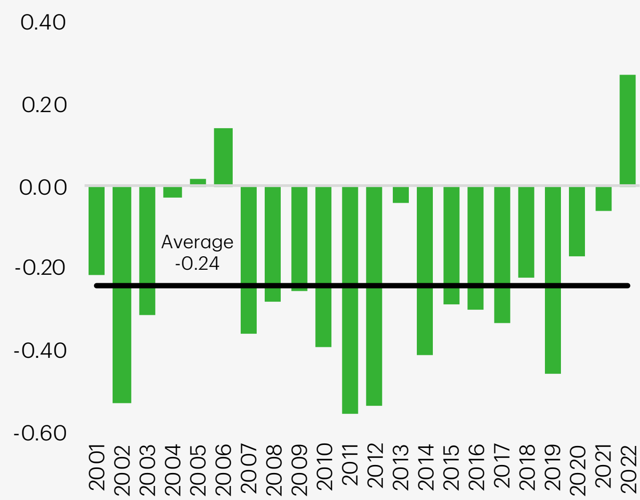
Going forward, we think that this extreme macro headwind will slow to a breeze, which could lead to a normalization of both inter-asset class correlation and intra-asset class correlation. This is good news for both top-down and bottom-up investors.

Figure 16: Equities Risk Premium vs Credit Spread



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023.

Figure 17: Correlations at extreme high in 2022



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023.

Inflation and Monetary Tightening to Slow Further

There are two reasons we think diversification is back in favour. First, inflation is going to normalize, which will bring us closer to the end of one of the most aggressive monetary tightening phases in history. Although certain areas could be stubborn — especially service-related inflation — we are expecting that the Fed’s sharp rate hikes will work themselves through the economy and eventually bring inflation down.

When a path to lower inflation does materialize, that would lead the Federal Reserve to first slow rate hikes and eventually pivot to a halt/easing cycle. The timing is still fluid and will be based on incoming data, but the market has started to price in this scenario.

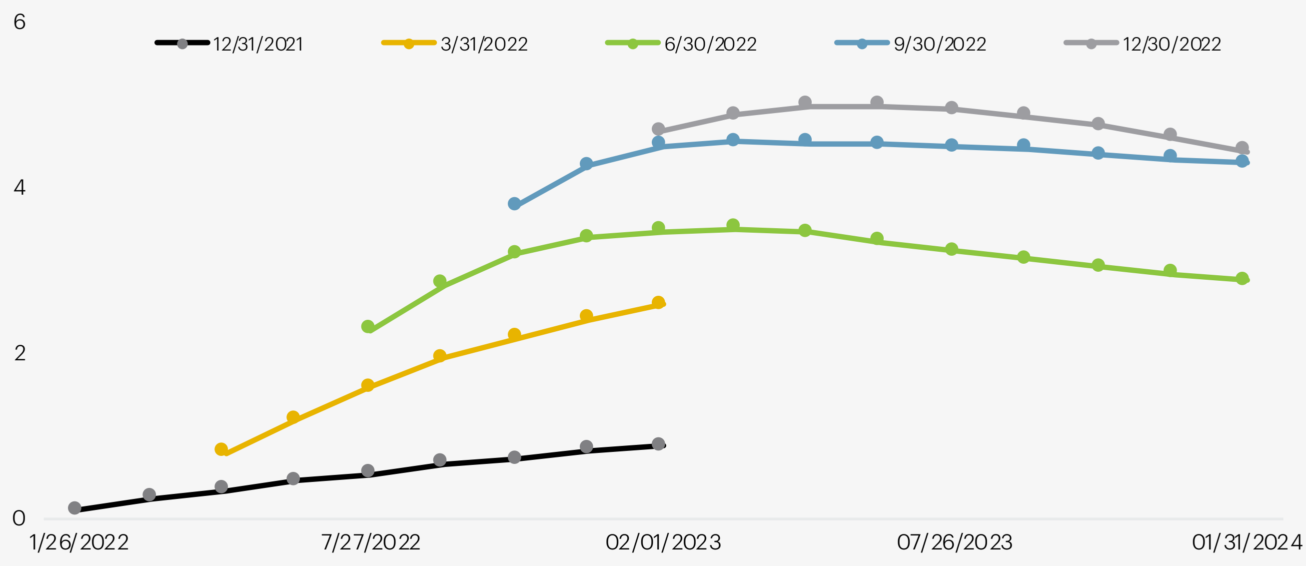
Figure 18 shows the quarterly market implied fed funds rate path. There are two takeaways from the latest reading. First, compared to the previous quarter, the curve shifted only slightly up, indicating fewer future hikes. (To provide some context, currently, the market is expecting a total of 50 bps hike in 2023 to reach the terminal rate between 4.75% and 5%. Back in the June, the market was expecting a total of 200 bps of future hikes to reach the terminal rate). Second, the slope of the fed funds rate path is much flatter, which means the speed of future hikes will be slower. Since the federal funds rate is the foundation on which all assets are priced, finer adjustments to it will likely lead to milder reactions to Fed movements.

Revival of the Long-termism

Figure 19 tells you everything you want to know about returns in 2022. The two best performing liquid strategies were CTA/Managed Futures and Global Macro — both of which tend to perform well during extreme macro environments.

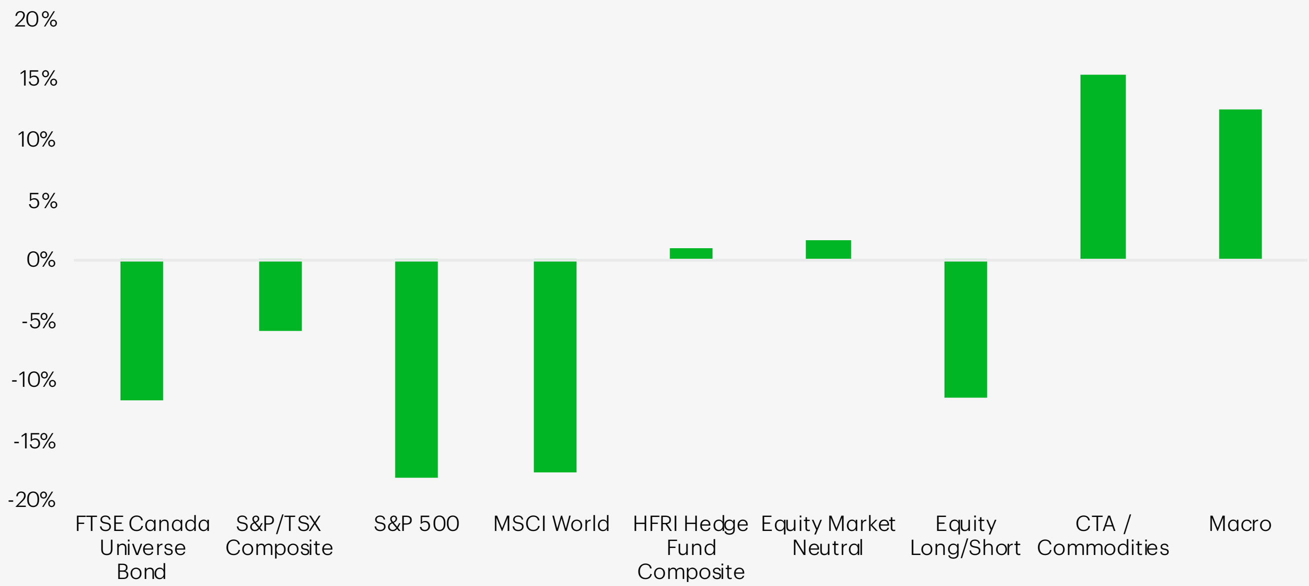
Heightened volatility in 2022 was driven primarily by macro events. As a result, investors naturally became very focused on the short term. Outsized moves were clustered around highly anticipated economic data releases. We also saw a higher concentration of options activity on contracts with short expiries, adding to the market's uncertainty.

Figure 18: Market Implied Policy Rate – U.S.



Source: Bloomberg Finance L.P. ; TD Wealth as at January 8, 2023

Figure 19: The year of the short term



Source: Morningstar, HFRI, TD Wealth as at January 8, 2023, all returns in local currency

Building long-term positions in this noisy environment is very hard. For instance, we saw in 2022 increased hedging activities for long-only investors, indicating their hesitancy to take on risk. Figure 20 shows the S&P 500's return one hour after the CPI data release for 2021 and 2022. Interestingly, in 2021, pre-market trading on the release day was directionless. In 2022, meanwhile, the market's response was positive when CPI surprised on the downside and negative when CPI surprised on the upside. This type of volatility attracts higher-frequency active strategies in the hedge-fund space, where trades are designed to take advantage of short-term market moves. That's why these types of short-term momentum or global macro strategies added value in 2022.

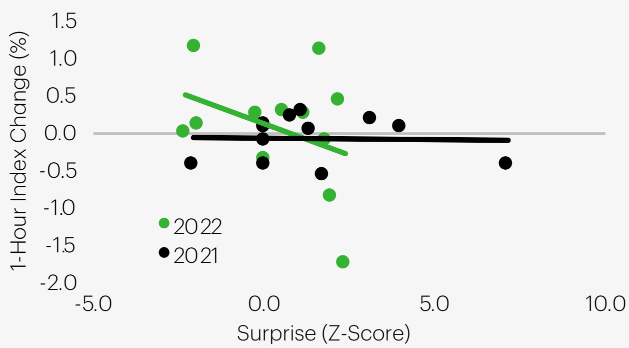
Here's another example, again derived by exploring the increased use of derivatives. Figure 21 uses the SPDR S&P 500 ETF, the largest exchange traded fund, as an example. Since 2021, the ETF's options volume has more than doubled, while the relative size of options notionally traded to the underlying ETF has also increased about 80%. The increased options trading tells us that investors were increasingly comfortable with speculating or hedging using leverage. This uncommon behaviour is likely to reverse going forward, as the Fed wraps up the tightening phase and inflation is no longer the sole focus.

Other Green Shoots from a Historical Reversal

Often investment markets are compared to a pendulum; after it swings in one direction far enough, it's natural to anticipate a reversal. We think this is a good analogy here, at least for some asset classes. The first that comes to mind is the U.S. dollar. Riding the unprecedented rate-hiking phase, the dollar had a truly phenomenal year. Both cyclical and defensive currencies depreciated against the USD in 2022. The euro and the pound sterling broke parity in 2022 against the dollar, and Japan had to intervene in the market to support the yen for the first time in 24 years as the yen fell to a level not seen in more than 30 years.

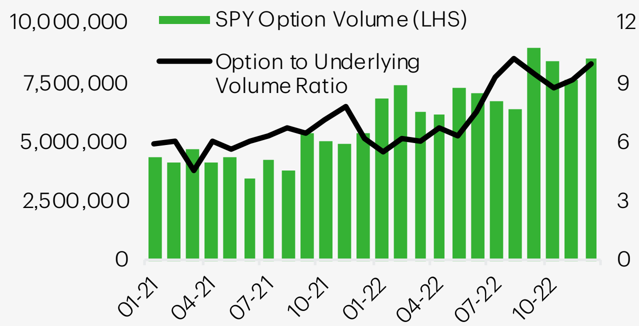
The ascendancy of the U.S. dollar was driven by Fed's leading schedule of rate hikes, compared to the European Central Bank and Bank of Japan. However, this dynamic is due for a change. As the Fed slows down while others catch up, it's hard to see broad-based strength for the dollar going forward. Figure 22 shows how the dollar is currently at one of its most stretched levels historically, and due for a reversal. Figure 23 shows how the euro and yen started the reversal from their respective multi-decade bottom.

Figure 20: S&P 500 1-Hour Return Post CPI Data Release (8:30am)



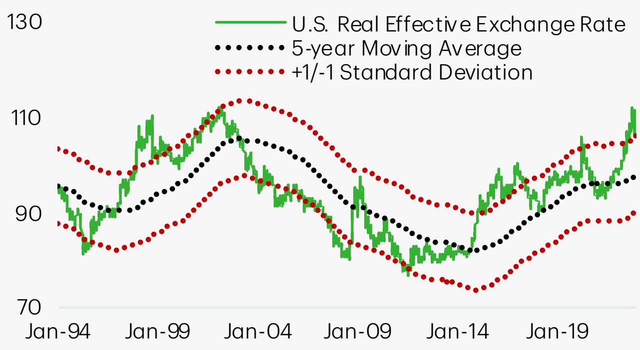
Source: Morningstar, HFRI, TD Wealth as at January 8, 2023, all returns in local currency

Figure 21: Increased Option Activities on SPDR S&P 500 ETF



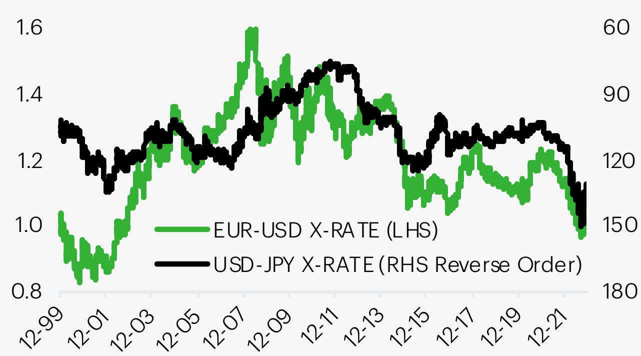
Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023

Figure 22: US Dollar Currently at Stretched Level



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023

Figure 23: Euro and yen at extreme levels



Source: Bloomberg Finance L.P. and TD Wealth as at January 8, 2023

Another reason for the euro's recent slump was the extremely negative sentiment towards the region due to the ongoing war in Ukraine and the associated threat of an energy crisis. This negative sentiment also weighed on European equities, but the current valuation has priced in enough bad news and makes one wonder how much worse it could go from here.

Risk management goes both ways. Sometimes, being overconservative and leaving the upside risk unattended could be just as bad. Figure 24 shows the valuation metrics for the Stoxx 50 Index, composed of blue-chip eurozone equities. The index stands at its worst level since the global financial crisis and the eurozone debt crisis. The war in Ukraine is not over yet, but the escalation risk has receded. The natural gas supply situation in Europe has also improved dramatically, with the European natural gas price already back to the pre-war level.

Having said that, we do not see this as a call to fully embrace European equities. The road forward will not be easy. Now it's the ECB's turn to walk the thin line of fighting inflation by hiking rates while maintaining a controlled and palatable economic slowdown, as well as sufficient liquidity. The outcome is still to be seen, but given that the worst seems to have passed, it makes sense to start adding to the region and easing into the reversal theme. In this fast-moving market, gradualism should be appreciated.

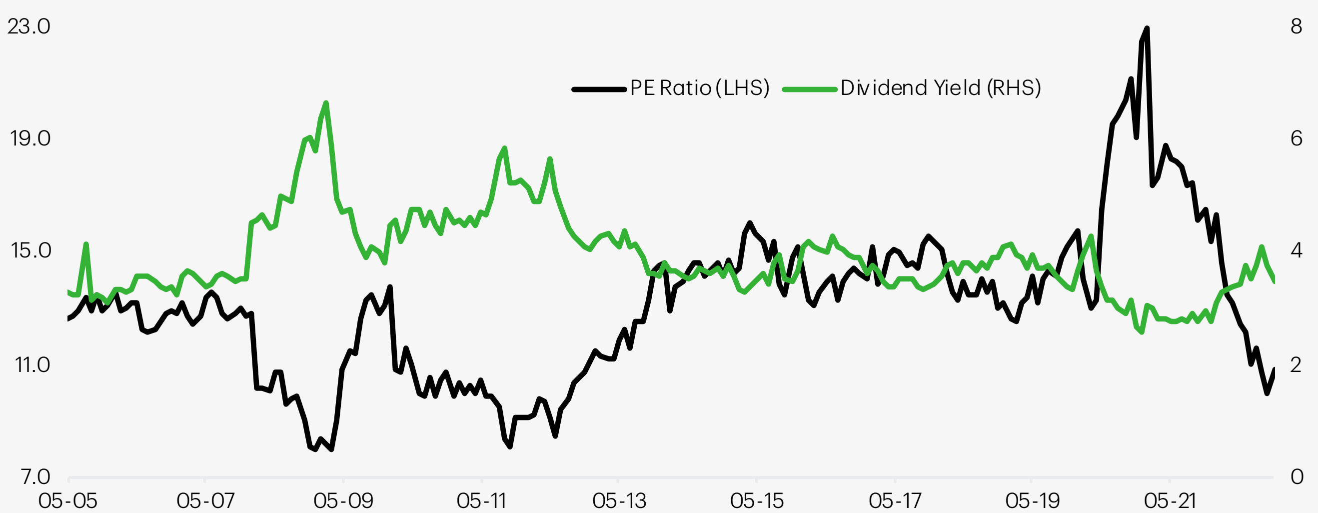
Another region that could go through a dramatic change is China, although the situation is highly fluid and the reversal dynamic is much more complex. For the past three years, China has abided by a Covid strategy that stood diametrically opposite of the rest of the world, and now it's racing to catch up and leave the pandemic behind.

China's economy suffered significant slowdowns after implementing draconian lockdown measures, which shut down megacities like Shanghai and Shenzhen. The Caixin Manufacturing PMI stayed below 50 whenever any lockdown measure gained momentum. The service PMI fell to 36 at the peak of the outbreak in Shanghai earlier this year. Even to this day, the economy is struggling with the on-and-off Covid control measures, which devastated the global supply chain in 2020 by shutting down factories if even a few cases were found.

These measures, it should be noted, won broad support during the initial outbreak in Wuhan because it saved many lives. Now, however, facing the high-transmission but low-mortality Omicron variant, the "zero-Covid" policy has become unsustainable and unpopular. In December, China completely abandoned its policy and quickly pivoted to economic reopening. Harsh testing and quarantine requirements were quickly removed. The government mandated public facilities to stay open to everyone.

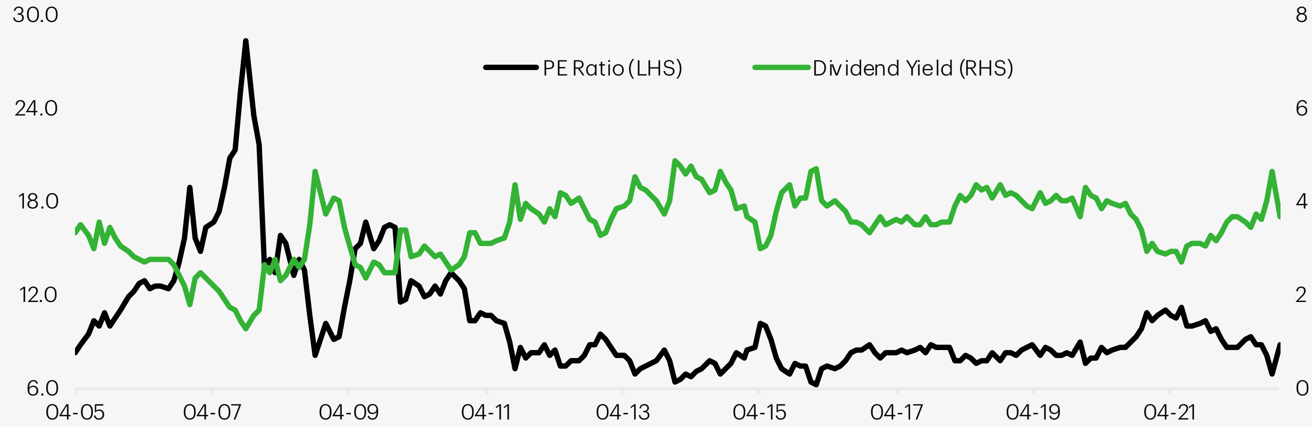
It appears the government is trying to achieve herd immunity through infection. Although many had expected a slow and methodical policy pivot, it's fair to say that almost every emerging-markets analyst was caught off guard by the timing and urgency of the current policy pivot. In the very short run — as in, the next three months — this sudden and broad outbreak could further weigh on economic activities as hospitals are overrun and the majority of the population is forced to fight through the infection. Infection of this scale could also be a breeding ground for new and more dangerous variants, which has the potential to render the global vaccine-based herd immunity obsolete. This concern has been shared by the World Health Organization and a number of governments.

Figure 24: Euro STOXX 50 Valuation



Source: Bloomberg Finance L.P. ; TD Wealth as at January 8, 2023

Figure 25: Hang Seng China Enterprise Index Valuation



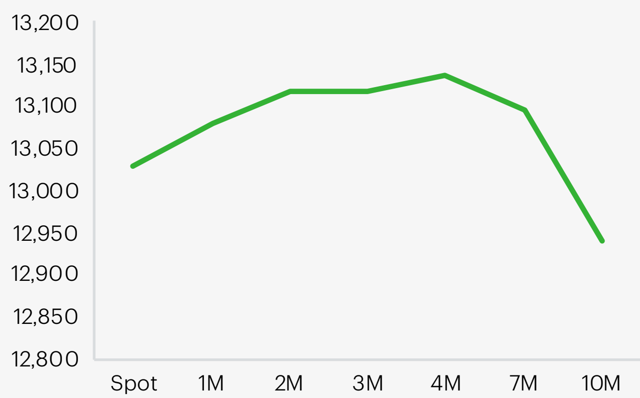
Source: Bloomberg Finance L.P. ; TD Wealth as at January 8, 2023

After the first wave abates, however — assuming our mRNA vaccines are still effective — China's reopening effort could yield a strong economic recovery. China's reopening could be a driver for a global economic recovery, with a positive impact on commodities, global trade and consumer products. It could also help to repair the damaged global supply chain.

The big question is whether this reopening could bring Chinese economic growth back to high single digits, which really depends on top-down policy decisions. If the government reverses some of the policies intended to crack down on sectors that have run afoul of party doctrine — including tech, online tutoring and real estate development — we could see China continue to grow as a vibrant market economy. At this point, however, while we want to be hopeful, caution still rules the day.

The aforementioned policies have brought Chinese equities to very attractive levels. Thus, the risk, similar to European equities, is to the upside. If herd immunity and reopening are both achieved, risky assets could rebound strongly, including Chinese equities. Figure 25 highlights the low prices on offer for Chinese equities traded in Hong Kong.

Figure 26: China A50 Index Futures Curve



Source: Bloomberg Finance L.P. ;TD Wealth as at January 8, 2023

Figure 26, meanwhile, shows the futures curve of China A50 contracts. It's interesting that, although most of the curve is trading above current prices, the 10-month contract for A50 index is currently traded at a discount. This is likely due to the overwhelming hedging demand for that time horizon. This is a gauge we're watching to get a sense of the sentiment reversal on Chinese equities.

Conclusion: But don't forget ...

I return to those 13 words: "*Ignore the noise and follow the plan; but also stay nimble and adaptive*." We've spent a lot of time in these pages discussing all the things we're thinking about in order to stay nimble and adaptive, but I want to leave with just a brief note on the first half of that message.

It's true that the momentous shifts we've seen in the macro and geopolitical environment are more than just "market noise," but it's also worth noting that, over the long term, there's very little that can derail a well-managed wealth plan. Over the span of decades, even the loudest disruptions — painful recession, financial crisis, even the devastation of war — are barely evident. That's why tactical positioning remains a marginal activity and strategic allocation remains a core activity.

As we move forward, our approach will be to follow our principles, which are based on the conviction that markets are adaptive. Financial markets are always evolving as its participants learn and innovate. At TD Wealth, we have the advantage of being able to rely on the institution's breadth of skills to deliver sound investment strategy and nimble positioning. To navigate the opportunities and the challenges, ultimately, it's our philosophy, people and process that make the difference.

Leading Macro Indicators

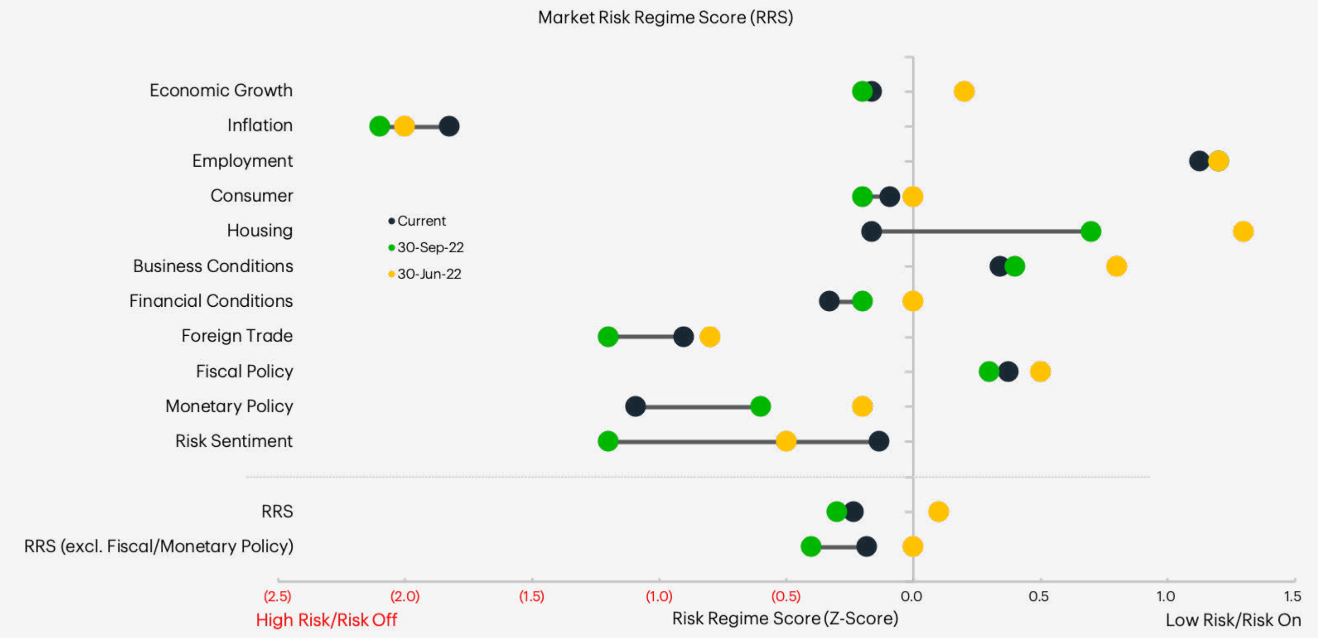
The overall risk regime score remains weak and macroeconomic conditions are deteriorating.

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

Figure 1: Market risk regime scores

Indicator	Overall Condition	Current	Sept-22	Jun-22	Mar-22
Economic Growth	Weak	(0.2)	(0.2)	0.2	0.4
Inflation	Weak	(1.8)	(2.1)	(2.0)	(1.6)
Employment	Strong	1.1	1.2	1.2	1.4
Consumer	Weak	(0.1)	(0.2)	0.0	(0.1)
Housing	Weak	(0.2)	0.7	1.3	1.4
Business Conditions	Neutral	0.3	0.4	0.8	1.0
Financial Conditions	Weak	(0.3)	(0.2)	0.0	0.3
Foreign Trade	Weak	(0.9)	(1.2)	(0.8)	(0.6)
Fiscal Policy	Neutral	0.4	0.3	0.5	0.7
Monetary Policy	Weak	(1.1)	(0.6)	(0.2)	0.3
Risk Sentiment	Neutral	(0.1)	(1.2)	(0.5)	(0.2)
Risk Regime Score (RRS)	**Weak**	**(0.2)**	**(0.3)**	**0.1**	**0.3**
RRS (excl. Fiscal/Monetary Policy)	**Weak**	**(0.2)**	**(0.4)**	**0.0**	**0.2**

Figure 2: Movement in market risk regime scores



Scores represent number of standard deviations away from long-term average
Source: TD Wealth, Bloomberg Finance L.P. as of December 30, 2022.

Risk conditions stopped deteriorating in Q4, although our risk regime score remained weak as the downturn in the U.S. business cycle progressed. Overall, the market risk regime score rose to -0.2 at the end of Q4, up slightly from -0.3 at the end of Q3. Equities and fixed income markets rallied amid expectations that the monetary-policy tightening cycle was near its end, although the macro conditions remain unsupportive for risk assets.

Monetary policy, financial conditions and housing were the biggest drags on the overall risk score as the Fed continued to raise policy rates aggressively and accelerated its quantitative-tightening program. Meanwhile, inflation, foreign trade and risk sentiment improved, allowing the overall score to stabilize. Below are some notable changes compared to Q3:

• Monetary policy and financial conditions slipped further into negative territory in Q4. The Fed raised the policy rate by another 200 bps in Q4, and growth in monetary supply continued to decelerate, draining liquidity from the market. The deterioration in financial conditions were driven primarily by further inversion of the yield curve, which reached a four-decade low. Meanwhile, the housing score slid from +0.7 to -0.2 standard deviations below the long-term norm as high mortgage rates and elevated housing prices took a toll on housing affordability. Housing sector activity and sentiment both deteriorated in Q4.

• Risk sentiment, foreign trade and inflation bounced higher but remain in negative territory in Q4. CPI inflation cooled more than expected in October and November, and the inflation breakeven rate continue to drift lower. As a result, the inflation score rose to -1.8 from -2.1 in Q3. Foreign trade also rebounded to -0.9 from -1.2 as the U.S. current account improved slightly and the dollar weakened. The largest improvement in Q4, however, was driven by the risk sentiment score, which rose to -0.1 from -1.2. Both equity and bond volatility declined during the quarter, and retail investors were less bearish compared to Q3.

• Consumer and economic growth were weak but did not deteriorate in Q4. Household consumption remained strong and the debt-servicing ratio was unchanged despite the deceleration in growth, which could be partially attributed to the excess saving balance of high-income earners. The risk regime score for consumers ticked higher from -0.2 to -0.1. The estimate for economic growth remain unchanged during the quarter.

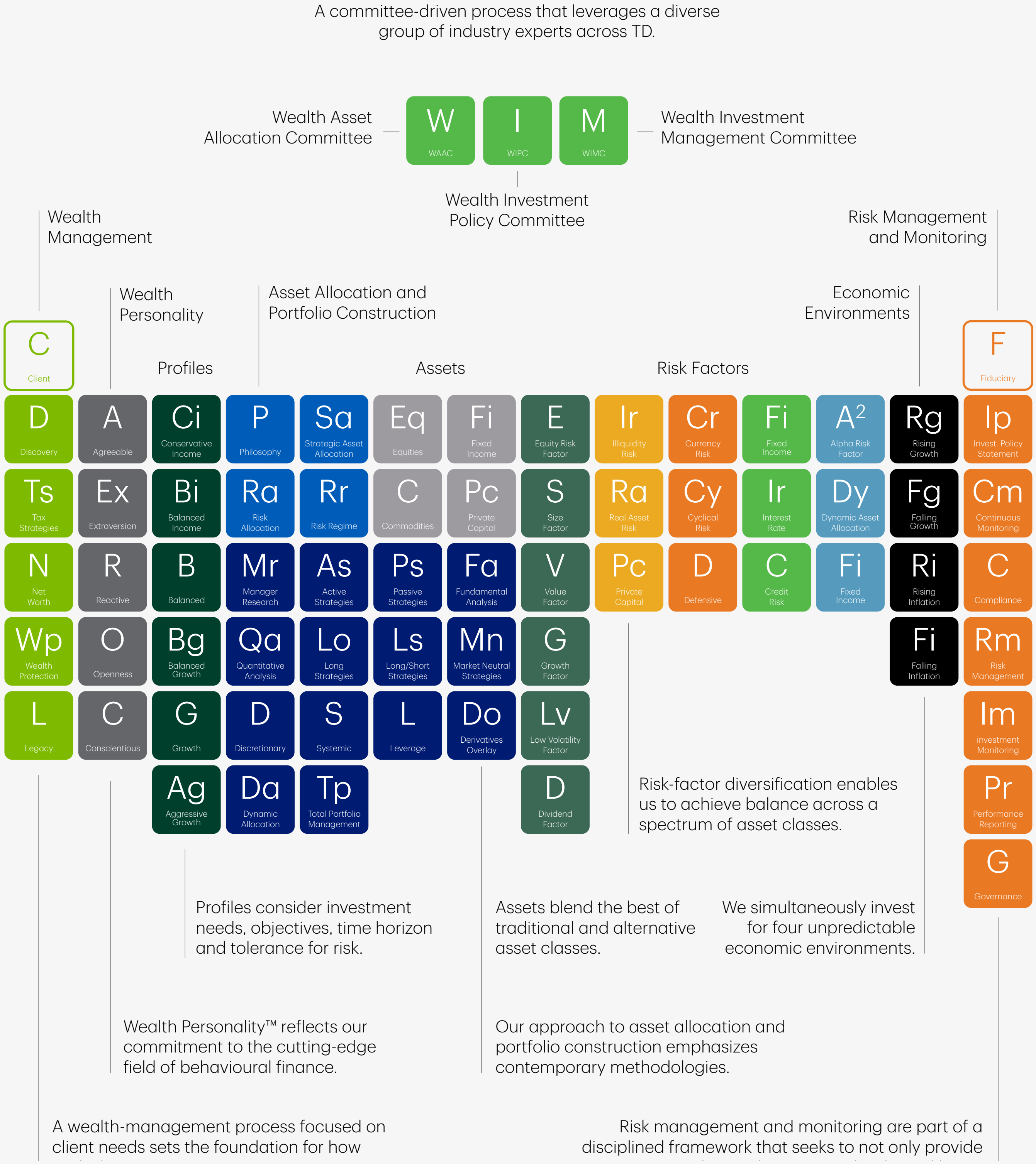
• Employment, business conditions and fiscal policy remained in positive territory, although the first two slightly worsened in Q4. Compared to the previous quarter, initial jobless claims are higher and wage growth is moderating. Meanwhile, the score for business conditions fell to +0.3 from +0.4, driven primarily by a falling U.S. manufacturing PMI and lower expected profit for U.S. corporations. Fiscal policy is largely unchanged compared to the prior quarter.

Overall conditions for risk assets stabilized at a weak level in Q4 as worsening monetary policy, financial conditions and housing were offset by improvement in risk sentiment, foreign trade and inflation. Economic growth will likely continue to decelerate in the first quarter of 2023, and the market will focus on further signs of weakness in employment and business conditions given that inflation is expected to continue to fall.

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:

David Sykes, CFA -- Chief Investment Officer, TD Asset Management Inc(Chair)

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.

Direction from WAAC

Strategic Positioning

WAAC Positioning – Changes

Asset Class	From	To	Rationale
Equities Overall	Neutral	Modest Underweight	The deteriorating earnings outlook, combined with more restrictive financial conditions in 2023 may suggest that global equities will remain choppy until negative earnings revisions are more reflective of the current environment.
Canadian Equities	Neutral	Modest Underweight	Following a year of relative outperformance, economic headwinds and a more challenging environment for the Financials and Energy sectors, could lead to increased volatility and muted 2023 returns.
U.S. Equities	Neutral	Modest Underweight	We believe S&P 500 Index earnings estimates for 2023 are still elevated and that earnings will decline modestly this year in the range of 5-10%.
Chinese Equities	Neutral	Modest Overweight	We anticipate a strong recovery for Chinese stocks as the economy reopens from stringent lockdowns, driving increased consumer spending and overall economic activity.
Global Bonds Developed Markets	Modest Underweight	Neutral	As bond yields have risen considerably, some markets now offer attractive incremental yields, net of currency hedges. Non-U.S. dollar (USD) denominated bonds may also benefit from a potentially weakening U.S. currency.
Commercial Mortgages	Modest Overweight	Maximum Overweight	Commercial mortgages continue to provide accretive income while insulating investor returns from the increased volatility in interest rates.
Domestic Real Estate	Neutral	Modest Underweight	Aggressive interest rate hikes over the second half of 2022 are driving upward pressure on capitalization rates across property types.
U.S. Dollar versus basket of currencies	Modest Underweight	Maximum Underweight	Following a strong year for the USD we believe that its fundamental valuation, whether looking at historical averages, interest rate differentials, or U.S. growth versus global growth, is currently overvalued.

WAAC Positioning – Current Monitoring

		Fixed Income: Maximum Overweight
Domestic Government Bonds	**Maximum Overweight**	North American central banks are beginning to slow the pace of policy rate hikes as inflation pressures show signs of easing at the margins. As a result, yields have stabilized at multi-year highs and government bonds remain appealing due to their potential to generate positive nominal returns over the longer term.
Investment Grade Corporate Bonds	**Modest Overweight**	With a slowing global economic outlook, we prefer investing in higher quality corporate bonds. Credit fundamentals are robust and all-in yields are attractive, although there is limited upside from any further spread tightening in the near term. Corporate bond valuations are more compelling in Canada than the U.S. despite a more challenging economic outlook in Canada.
Inflation-Linked Bonds	**Neutral**	With the expectation that high inflation levels may be starting to peak and beginning to normalize, inflation insurance is moderately attractive for investors.
High Yield Bonds	**Modest Underweight**	Higher interest rates and a deteriorating economic backdrop will likely cause default rates for high yield bonds to rise from currently low levels. Corporate earnings will likely continue to be under pressure in the near term, eroding credit fundamentals. This could result in further volatility and downside risk for credit spreads, despite the high potential return in the sector. We expect strong credit quality to prevent high yield bonds from experiencing the extreme dislocations seen in some prior recessionary periods.
Global Bonds-Developed Markets	**Neutral**	Investors are increasingly paying attention to the global economic slowdown narrative, and we are starting to see some reversal of the extreme bearish sentiment and positioning in the global bond market. As bond yields have risen considerably year-to-date, some markets now offer attractive incremental yields, net of currency hedges. Non-USD- denominated bonds may also benefit from a potentially weakening U.S. currency.
Global Bonds-Emerging Markets	**Neutral**	The dispersion of returns within emerging markets has presented some opportunities. We are comfortable maintaining a neutral outlook as yields are attractive in some regions where central banks have proactively hiked interest rates, while bond returns will likely decline in other regions where central banks are still early in normalizing monetary policy.

		Equities: Modest Underweight
Canadian Equities	Modest Underweight	Following relative outperformance in 2022, potential headwinds could hinder 2023 returns. For the Canadian Financials sector, while net interest margins may still have room to grow, we do not expect the magnitude of this tailwind to persist. Additionally, provisions for credit losses may need to be higher across banks' balance sheets, which could act as a modest earnings headwind. Further, following significant outperformance by the Energy sector in 2022, we expect a more balanced energy market and moderate performance for the sector going forward.
U.S. Equities	Modest Underweight	In 2023 we expect earnings to be a key market driver of valuations. We estimate corporate profits for S&P 500 Index companies will decline modestly this year as companies are challenged by the slowing economy and the lagging impact of tightening monetary policy. At this point valuations have not sufficiently captured this risk. We remain focused on quality in the market, specifically on companies with robust fundamentals, access to growth and sustainable free cash flow generation.
International Equities	Neutral	While inflationary pressures and geopolitical risks continue to cloud the outlook for global equities, we see some opportunity within international markets, particularly in Europe, as equities appear inexpensive on a forward price-to-earnings basis relative to their history and in comparison to U.S. equities. A weakening U.S. dollar (USD) may also provide a tailwind for international stocks over the next 12-18 months.
Chinese Equities	Modest Overweight	A successful reopening of the Chinese economy, with consumption and earnings reverting to trend, raises the possibility of strong equity market performance over the next several quarters. We expect relative outperformance for Chinese equities over the next 12-18 months. However, the reopening is unlikely to proceed in a straight line, so investors should expect some choppiness along the way.
Emerging Market Equities (excluding China)	Neutral	Emerging markets equities, similar to many global counterparts, are being challenged by persistently high inflation, concerns over global central bank monetary tightening, and the prospect of recession in many western economies. Our outlook for emerging markets remains cautious while recognizing that low relative valuations may provide a good entry point in the coming months.

		Alternatives: Modest Overweight
Commercial Mortgages	Maximum Overweight	Commercial mortgages continue to provide accretive income while insulating investor returns from the increased volatility in interest rates. Income collection via scheduled principal and interest payments remains resilient while demonstrating less volatility than observed in other corners of the fixed income markets.
Domestic Real Estate	Modest Underweight	Aggressive interest rate hikes over the second half of 2022 are driving upward pressure on capitalization rates across property types. However, property fundamentals remain sound with supply/demand imbalances persisting within industrial and multi-family assets. Additionally, investors that are able to generate income growth and/or enhance value through repositioning or development strategies will be better positioned to navigate the current environment.
Global Real Estate	Neutral	We maintain a neutral weight to global real estate. Rising inflation and interest rates remain the primary risks globally. Markets with strong institutional sponsorship, positive real estate fundamentals (i.e., low vacancy rates, rental rate growth), moderate development activity and conservative leverage ratios are long-term structural elements that may help support the broader real estate sector. We believe that being globally diversified within major cities and in high quality assets should help navigate through economic turbulence.
Infrastructure	Modest Overweight	We maintain a modest overweight to infrastructure. We believe infrastructure is well positioned to outperform relative to other asset classes through this interest rate cycle, even though rising interest rates will increase risk-free rates used to price private asset classes. Increases in cash flow from higher-than-expected inflation is buffering the rising rates and we anticipate core-plus portfolios may be best positioned given the embedded growth in revenue from value-add and opportunistic assets.

		Sub-classes
Gold	Modest Overweight	The precious metal had been hurt by the U.S. Federal Reserve's aggressive rate hikes in 2022, but has since surged above the $1,900 level amid signs the Fed might be less hawkish in 2023. We maintain a modest overweight view for gold, which typically acts as a defensive measure against extreme events and high inflation.
Canadian vs. U.S. Dollar	Neutral	Over 2022, the Canadian dollar (CAD) had been the third-best-performing G-10 currency, buoyed by rising commodity prices and aggressive central bank tightening. Going forward the CAD's performance will be largely dependent on the path of rate hikes by the Bank of Canada, the strength of the Canadian economy and commodity prices.
U.S. Dollar vs. basket of currencies	Maximum Underweight	With signs that inflation is cooling, the Fed may pivot toward more accommodative policy, which could contribute to USD weakening. Following a strong year for the USD we believe that its fundamental valuation, whether looking at historical averages, interest rate differentials, or U.S. growth versus global growth, is currently overvalued. This remains true despite recent declines.
Cash	Neutral	Maintaining neutral cash positioning allows for strategic deployment to other asset classes as opportunities arise. Cash can also provide flexibility to navigate the short-term outlook and uncertainties.

Figure 1: Direction from WAAC: strategic positioning

	Asset Class	Underweight		Neutral		Overweight
Fixed Income Maximum Overweight	Domestic Gov't Bonds					●
	Investment Grade Corp Bonds				●	
	Inflation Linked Bonds			●		
	High Yield Bonds		●			
	Global Bonds - Developed			●		
	Global Bonds - Emerging			●		
Equities Modest Underweight	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 13, 2023.

Current Investment Themes

Our Wealth Asset Allocation Committee keeps a running watch list of themes that guide our decision-making. Current themes include:

1. We continue to expect global equity markets to experience headwinds as economic data deteriorates into 2023. We feel that market expectations are still not sufficiently pricing in slowing economic growth. Forward earnings estimates have been reduced broadly, but further deterioration in forecasts is expected. Volatility will likely remain heightened for global equity markets through to mid-2023.

2. The historically unprecedented pace of central banks' rate hiking cycle, amid the backdrop of high global debt, may have unintended consequences for various asset classes. Additionally, the rapid rise in rates to combat persistently high inflation and wage pressures continues to drive concerns around a global recession. The war in Ukraine, among other ongoing geopolitical turbulence, also remains a risk to the market outlook.

3. For investors looking beyond near-term volatility, yields across fixed income sectors are well above the lows of the past decade and now offer higher potential returns. We believe fixed income may outperform equities over the next 12-month period. Fixed income can also help to provide diversification benefits, reduce overall portfolio volatility and preserve capital over the longer term.

4. Given that high equity volatility is likely to persist for risk assets, investors may benefit from an allocation to alternative assets to help manage portfolio volatility. Assets like commercial mortgages and infrastructure may also provide some long-term inflation protection and attractive absolute returns. Alternatives could also help portfolios through either transitory or more structural inflation outcomes.

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

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

Mansi Desai, CFA ....Senior Equity Analyst, Managed Investments, 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	
	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic
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%	66.0%	48.0%	51.0%	33.0%	36.0%	23.0%	26.0%	0.0%	2.0%
Government	32.0%	35.0%	24.0%	27.0%	17.0%	20.0%	11.0%	14.0%	0.0%	2.0%
Corporate	31.0%	31.0%	24.0%	24.0%	16.0%	16.0%	12.0%	12.0%	0.0%	0.0%
Equity	35.0%	32.0%	50.0%	47.0%	65.0%	62.0%	75.0%	72.0%	98.0%	96.0%
Canadian	11.0%	9.0%	15.0%	13.0%	20.0%	18.0%	23.0%	21.0%	29.0%	27.0%
U.S.	14.0%	12.0%	20.0%	18.0%	26.0%	24.0%	30.0%	28.0%	40.0%	38.0%
International	7.0%	7.0%	10.0%	10.0%	13.0%	13.0%	15.0%	15.0%	19.0%	19.0%
Emerging Markets	3.0%	4.0%	5.0%	6.0%	6.0%	7.0%	7.0%	8.0%	10.0%	12.0%

Source: Wealth Investment Policy Committee, as of January 13, 2023.

Expanded Strategic and dynamic asset-class weights by investor profile

Asset Class	Balanced Income		Balanced		Balanced Growth		Growth		Aggressive Growth	
	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic	Strategic	Dynamic
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%	59.0%	41.0%	44.0%	26.0%	29.0%	16.0%	19.0%	0.0%	2.0%
Domestic Gov't Bonds	20.0%	24.0%	14.0%	18.0%	9.0%	13.0%	5.0%	9.0%	0.0%	2.0%
Invest. Grade Corp Bonds	19.0%	20.0%	14.0%	15.0%	9.0%	9.0%	6.0%	6.0%	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%	2.0%	3.0%	1.0%	2.0%	1.0%	1.0%	0.0%	0.0%	0.0%
Global Bonds - Developed	6.0%	6.0%	5.0%	5.0%	3.0%	3.0%	2.0%	2.0%	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%	10.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	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%	2.0%	8.0%	7.0%	8.0%	7.0%	8.0%	7.0%	13.0%	13.0%
Equity	32.0%	29.0%	42.0%	39.0%	57.0%	54.0%	67.0%	64.0%	85.0%	83.0%
Canadian	10.0%	8.0%	12.0%	10.0%	17.0%	15.0%	20.0%	18.0%	25.0%	23.0%
U.S.	13.0%	11.0%	17.0%	15.0%	23.0%	21.0%	27.0%	25.0%	35.0%	33.0%
International	6.0%	6.0%	8.0%	8.0%	11.0%	11.0%	13.0%	13.0%	15.0%	15.0%
Emerging Markets	3.0%	4.0%	5.0%	6.0%	6.0%	7.0%	7.0%	8.0%	10.0%	12.0%
Fixed Income	65.0%	69.0%	50.0%	54.0%	35.0%	39.0%	25.0%	29.0%	2.0%	4.0%
Equity	35.0%	31.0%	50.0%	46.0%	65.0%	61.0%	75.0%	71.0%	98.0%	96.0%

Source: Wealth Investment Policy Committee, as of January 13, 2023.

Dynamic positioning by risk factor weights

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

Source: Wealth Investment Policy Committee, as of January 13, 2023.

Economic Outlook

It Tastes Awful, But It Works

TD Economics

There's little question that the global economy will slow in 2023, the only question that remains is by how much? Recent data has revealed more resilience than many expected, even within Europe as it contends with an energy crisis. And now China has returned to the forefront in a surprise move to relax its strict zero-COVID strategy. The timing is earlier than previously conveyed by authorities and has led to a slight upgrade to our global outlook, specific to the mid-to-second half of 2023 as the remnants of their health crisis begins to fade into the past.

Recession talk is reaching a feverish pitch in Canada and the U.S. despite no evidence (yet) to support that direction. However, here too there's no question that there's only one way to re-introduce the necessary economic slack that takes pressure off inflation. Demand in both countries must stagnate for a lengthy period or contract sharply over a shorter haul. In both, the unemployment rate will rise, and it's only a question of how much and how fast. Given the resilience in employer demand and job vacancies, our forecast has opted for the low-and-slow economic growth framework that produces a one-and-half percentage point rise in the unemployment rate through 2023 and 2024. This outlook risks imparting deeper economic scars to the landscape, particularly investment, given its longevity. Should a more intense downturn materialize, it's possible for the central bank to engineer a shorter duration than our two-year timeframe by throttling back more quickly on interest rates from its current highly restrictive territory. However, any way you cut it, the medicine of higher interest rates will take time to be fully absorbed. While it tastes awful, we expect it will work to bring the inflation fever down.

This publication focuses on the numbers, but if you'd like a deeper dive into underlying issues please see our Question & Answer piece published, November 23rd.

Global

- Global GDP growth is expected to register 3.3% in 2022, 2.3% in 2023 and 2.9% in 2024, broadly as expected in our September forecast. Although growth momentum continues to fade in advanced economies as central banks tighten financial conditions, there were upside surprises in the third quarter, particularly in Europe.

- Europe is heading into the winter months in a much better position than expected a few months ago. It has built ample natural gas stocks and significantly reduced consumption. These actions now offer thicker insulation should the remaining winter months prove colder than expected. However, that insulation can only take them so far. The outlook remains fraught as inflation erodes disposable incomes, industrial activity declines, and the European Central Bank raises interest rates to fight inflation.

- Chinese authorities also provided some surprise news with the easing of its zero-COVID strategy. This will lighten the downdraft on the global outlook. If China's health and infection experience follows the pattern of countries that have already gone before it, the first quarter is likely to test China's political resolve and medical system. However, once that intensity of infections resolves, the easing in restrictions should open the door for a sustainable increase in consumer mobility, production and investment, rather than the fits-and-starts pattern that has come to define the past three years. Policymakers also recently moved to support the troubled housing market, and this too should help to restore consumer confidence. On the flip side, it's important to bear in mind that an earlier and more robust revival also risks fueling another burst of global inflation if Chinese demand pressures commodity supply.

United States

- Real GDP growth has been revised higher for 2022 from 1.6% to 1.9%. For an economy that needs to slow below its potential pace, a third quarter print of 2.9% failed to provide comfort that the U.S. is on that trajectory. And even though we are forecasting a sub-trend gain in Q4, this masks the details that reveal an acceleration in domestic demand to its fastest pace of the year. The consumer spending and business investment profiles are expected to end the year absent any signal of an economy on the precipice of downfall. That hand off has improved the annual growth prospects for 2023 slightly to 0.9%.

- The weight of high interest rates and inflation is evident in the run-down of household savings, but there are several layers of cushion currently in place that seems to be preventing an abrupt or jarring adjustment. These layers all reside on the household side.

• Despite a sharp erosion in the savings rate, excess savings remain on the balance sheets of many households. This too should steadily erode, but in the meantime, it's mitigating a sudden recalibration of spending patterns. Second, American households are more desensitized in this cycle to higher interest rates due to the massive deleveraging cycle following the Global Financial Crisis. This has left debt service costs as a share of disposable income much lower, even amidst one of the fastest rate hike cycles in history.

• And lastly, the labor market (and wages) is shoring up income nationwide. Job growth has moderated over the course of the year but remains remarkedly stable in the 260k-280k range. That's more than two times the number of jobs that would be consistent with U.S. demographics on a sustainable basis. Job openings have also fallen from their early-2022 highs but are also too historically elevated. Meanwhile, labor supply has continued to disappoint, with no improvement in the participation rate this year.

• This mitigates the risk of a sudden drop off in job demand in the coming quarter but won't likely prevent it all together as businesses continue to be pressured. We anticipate that by mid-2023, employers will start to thin out their workforces as economic growth slips well below trend. The unemployment rate is expected to increase by 1.5 percentage points (pp) and reach a peak of 5.1% by mid-2024. This remains unchanged from our forecast in September. The rise in the unemployment rate is consistent with a job loss tally of 1.35 million.

• Never has the U.S. economy experienced a 1.5 pp increase in the unemployment rate without it being characterized as a recession. This gets to the point that focusing on the word "recession" doesn't address its wide interpretation for depth and duration.

• This magnitude of shift in the unemployment rate and job losses would be shallow by historical standards, reflecting a bifurcated job market. Several sectors are still a long way from recovering to pre-crisis levels – like leisure & hospitality – while others display historically high vacancy rates – like manufacturing. Both are examples of sectors that would normally lead job losses during a downturn but are unlikely to do so this time around. In contrast, sectors like information and professional/technical are at risk of leading the job losses, where hiring activity was exuberant throughout the pandemic. The bottom line is that all boats may not be rowing in the same direction in this cycle given unique past-pandemic legacies.

• On the inflation front, the outlook has been revised higher due to an upward revision to our oil price forecast and more persistence in the shelter inflation, which is not expected to peak until mid-2023. Core inflation is now forecasted to average 6.2% in 2022 and 4.7% in 2023. This will keep the Fed in tightening mode over the near-term, with the central bank expected to hike to a peak of 5% in early-2023.

Canada

• The Canadian economy had a similar experience to its American counterpart in the third quarter, also recording roughly 3% growth. This caught many, including us and the Bank of Canada, off-guard and extends an impressive streak of above-trend economic growth.

• The narrative to Canada is similar to the economic backdrop to the south. Near-term spending is likely to be boosted following another jump in employment. However high inflation and rising interest rates will increasingly take their natural course of action on cooling demand into 2023.

• One significant departure from the U.S. narrative, was the Canadian consumer spending was weak in the third quarter of 2022. Although spending on services continued to expand, the drop in goods spending was more than offsetting. However, the third-quarter lull followed two prior blow-out quarters on consumer spending, and the early indicators suggest some revival is on deck for the final quarter of the year.

• This may reflect only a temporary reprieve. As 2023 unfolds, the consumer forecast has been downgraded to reflect a Bank of Canada that has pushed interest rates higher than expected relative to the prior September forecast. This presses harder on a household that displays far higher sensitivity to interest rates due to asymmetric household leverage risks relative to the American household counterpart.

• Relative to last quarter's forecast, consumer spending growth for 2023 has been downgraded by 0.7 percentage points marking a larger decline in goods spending and a more pronounced slowing in services.

• The unemployment rate outlook reflects a peak of 6.5% that corresponds to 110 thousand job losses. There is a risk that Canadian employers may go further. Although the job market reflects tightness based on vacancy rates and low unemployment rates, the degree of tightness is not as pronounced as its U.S. counterpart. Canadian firms were quick to hire exiting the pandemic, with employment 2.7% above pre-crisis peak compared to a U.S. equivalent metric of only 0.7%. If a deeper household deleverage cycle plays out, the job market recalibration would reflect that asymmetric risk.

• In contrast, non-residential investment fares better in the 2023 outlook, as elevated commodity prices, the energy transition, and a robust pipeline of infrastructure projects supports spending on structures and equipment. Recent quarters have already surprised to the upside on this front.

• As for the Canadian housing market, much of past forecast is playing out as expected, leading to only minor adjustments with average prices falling 22% from their peak, unchanged from our September outlook.

• Inflation is more cooperative in Canada than its U.S. counterpart, trending roughly one percentage point lower. This, in combination with higher interest rate sensitivity should provide a lower stopping level for the Bank of Canada on its rate hike cycle. We deem the peak rate to be 4.5% in the first quarter of 2023. Both short-term and long-term bond yields are likely to decline over 2023 as the weak economic backdrop causes increasing expectation for policy rate cuts.

Figure 1: Economic and financial baseline forecasts

Economic Indicators: G7 & Europe				
		Forecast		
	2021	2022F	2023F	2024F
Real GDP (annual per cent change)				
G7 (30.1%)*	**5.2**	**2.2**	**0.4**	**0.9**
U.S.	5.9	1.9	0.9	0.9
Japan	1.7	1.4	1.2	1.2
Euro Area	5.3	3.2	-0.2	0.9
Germany	2.6	1.7	-0.8	0.9
France	6.8	2.5	0.1	0.9
Italy	6.7	3.7	-0.1	0.7
United Kingdom	7.5	4.5	-0.9	0.8
Canada	5.0	3.5	0.7	0.4
Consumer Price Index (annual per cent change)				
G7	**3.2**	**7.3**	**4.9**	**2.1**
U.S.	4.7	8.1	4.7	2.3
Japan	-0.2	2.4	2.4	1.3
Euro Area	2.6	8.5	7.0	2.3
Germany	3.2	8.9	6.9	2.5
France	2.1	6.0	5.5	2.1
Italy	1.9	8.7	5.9	2.3
United Kingdom	2.6	9.1	8.0	2.7
Canada	3.4	6.8	3.8	2.1
Unemployment Rate (per cent annual averages)				
U.S.	5.4	3.7	4.3	5.0
Japan	2.8	2.6	2.5	2.4
Euro Area	7.7	6.7	7.2	8.0
Germany	5.7	5.3	6.4	6.8
France	7.9	7.3	7.9	8.5
Italy	9.5	8.1	8.9	9.5
United Kingdom	4.5	3.7	4.6	5.1
Canada	7.4	5.3	5.9	6.5

*Share of 2019 world gross domestic product (GDP) at PPP. Forecast as at December 13, 2022. Source: National statistics agencies, TD Economics.

Asset Class Analysis

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Quarter in Review

Taking a Breather

Fred Wang, Senior Portfolio Manager, Asset Allocation | TD Wealth

Besides the sensational World Cup, the quarter was filled with interesting developments on the policy and geopolitical front. Inflation in North America started to surprise to the downside. The market finally started to price in the possibility that a couple of major central banks could start to slow the pace of rate hikes, and what the end could look like for this hiking phase of the cycle. On December 7, after gradually loosening the stringent zero-Covid policy, China suddenly pivoted to abolish most domestic quarantine measures in order to build herd immunity quickly. The market definitely took a breather from the short-term relief. In this risk-on environment, equities and credit rallied across the board. Ten-year yields in the U.S. and Canada stabilized. The U.S. dollar index also had its first quarterly decline this year.

Looking around global central banks, the Fed delivered a 75-basis-point (bp) hike in November and another 50-bp hike in December. Currently, the federal funds rate stands between 4.25% and 4.5%. In the most recent projection, the majority of Federal Open Market Committee members expect the Fed policy rate to settle between 5% and 5.25% by the end of 2023, which is about 50 bps higher than the previous projection in September. The market expects the terminal rate will be between 4.75% and 5%, to be reached during the second quarter next year — which, it should be noted, is more than the Fed's highest projected rate of inflation, at 4.1%. All of this to say, the Fed is getting closer to completing its hiking cycle. The Bank of Canada, meanwhile, delivered two 50-bp hikes in October and December, bringing the policy rate up to 4.25%. However, the Bank softened its tone regarding future rate hikes, stating it would evaluate whether the policy rate needed to rise further by taking into account how another hike might impact demand. The market has only priced in another 25-bp hike in 2023 for Bank of Canada.

As the Fed and Bank of Canada slow rate hikes, the baton of tightening is passed on to other central banks. The European Central Bank (ECB), which just started hiking in July of 2022, continued to raise its policy rate by 125 bps to 2% last quarter. The market is still expecting about 150 bps more to go in 2023. On December 20, the Bank of Japan (BoJ) surprised the market by loosening its yield curve control policy, allowing the 10-year government yield to move 50 bps around its 0% target, compared to the previous band of 25 bps. While this does not seem to be a huge change, it was interpreted as a signal that the steadfast BoJ, which has maintained a negative policy rate since 2016, could start to reverse its decades-long ultra-dovish stance and join the ranks of other major developed-market central banks in normalizing monetary policy.

This means that global tightening is not over yet. It is still going strong and spreading to regions that historically have had to resort to unconventional monetary policy. The real outlier is China. If anything, China's central bank (People's Bank of China, or PBoC) is still cautiously trying to balance the implications of stimulating the ailing economy against the knock-on effect on its currency depreciation, coupled with the risk of capital outflow. While most of the developed world is going through its most aggressive hiking phase in decades, China seems to be on a slow but calculated easing path. In stark contrast to the rest of the world, as of November, China's CPI inflation was running at 1.6%, indicating the risk of deflation. With negative retail sales growth and an official PMI running below 50, the economy is struggling with weak demand. An economic revival will be highly dependent on monetary and fiscal policies, both of which have been more or less absent over the past three years.

Performance through a macroeconomic lens

Sticking to our established investment philosophy, we look at Q4 from a broad macroeconomic regime perspective. While headline year-over-year CPI inflation in the U.S. and Canada was still high, the month-over-month reading slowed significantly. On the growth side, tightening central-bank policies still overshadow the stable and robust labour market. High-frequency data are pointing towards a continued slowdown in economic activity. However, GDP coincidence gauges are still indicating strong growth. We are standing at this crossroad: on one side, we are faced with an economic slowdown whose magnitude and speed remain uncertain; on the other, inflation normalization is under way, but again, the speed and end point are unclear. The worst combination of this double uncertainty is surely a stagflation scenario. Incoming data will provide more clarity, but the quarter ended with easing inflation and rising GDP estimates.

The macro backdrop has set the stage for a strong rebound of risky assets in general. Equities in most regions delivered high-single-digit returns. Corporate credit also contributed, especially for high-yield credit. Certain cyclical and real assets performed well, given the optimism generated by China's abandonment of its zero-Covid policy. This benefited industrial metals and the broad commodities complex. Emerging-market debt also benefited from the risk-on sentiment, fuelled by the hopes of slower Fed hiking as well as the accompanied retreat from the dollar. Government bonds in North America were flat. The negative returns for the eurozone and Japan bode well, given that these two regions are still in the early stages of their respective hiking program, and the losses were driven mainly by higher real yields. Moreover, the inflationary trajectory in Japan and Europe is also not clear yet, since their policy manoeuvres are still underway.

Inflation-linkers saw bifurcated performance. Canadian and U.S. linkers posted positive returns on the back of lower real yields, albeit with stable, long-term inflation expectations. However, the UK linkers had a roller coaster ride during the quarter, caused by an abrupt change of government. This was reflected in the performance of UK inflation-linked bonds. During the most uncertain and volatile period from late September to late October, the 10-year UK real rate was 450 bps over the trough at the end of 2021. The pound sterling recorded its all-time low against the dollar, falling below parity. At one point, UK inflation-linked bonds lost half their value from the peak in local terms. After significant recovery from the trough, the fourth quarter loss on UK inflation-linked bonds was moderate.

The following sections summarize market performance during Q4 through an approach that breaks economic conditions into four macroeconomic environments: deflationary growth, inflationary growth, deflationary contraction (recession) and inflationary contraction (stagflation).

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	-2.6%	6.4%	-16.1%	Commodities	GSCI	0.7%	2.1%	24.5%
		US	-2.8%	5.9%	-18.3%		Energy	-0.8%	0.1%	39.6%
		Canada	-4.1%	6.0%	-6.1%		Oil	2.6%	-1.2%	4.2%
		EAFE	-2.5%	8.9%	-7.2%		Natural Gas	-42.1%	-46.7%	-4.7%
		EM ex. China	-2.6%	8.5%	-19.1%		Copper	4.5%	11.7%	-11.0%
		China	0.8%	1.4%	-19.5%		Agriculture	2.4%	-1.0%	11.4%
		US Small Cap.	-3.9%	5.6%	-20.6%		Industrial Metals	3.7%	12.8%	-7.6%
		Global REIT	-2.0%	8.7%	-23.5%					
		Global Infra.	-0.8%	9.5%	0.3%					
	Corporate Bonds	Global IG	-0.2%	3.2%	-14.0%	Emerging Market Debt	Hard	0.7%	7.6%	-16.4%
		Global HY	0.5%	6.5%	-11.0%		Local	2.3%	8.4%	-10.1%
		Private Debt	0.4%	2.6%	-0.6%					
Falling Growth	Nominal Gov't Bonds	Global	-1.5%	0.1%	-10.7%	Inflation-Linked Gov't Bonds	Global	-2.1%	1.9%	-17.0%
		US	0.0%	0.4%	-12.3%		US	0.3%	1.5%	-11.9%
		Eurozone	-4.8%	-1.6%	-18.4%		UK	-5.9%	2.7%	-34.3%
		Japan	-1.5%	-2.4%	-7.1%		Canada	-0.3%	2.8%	-13.9%
		Canada	-1.6%	-0.2%	-12.1%	Commodities	GSCI	0.7%	2.1%	24.5%
							Energy	-0.8%	0.1%	39.6%
							Gold	3.1%	9.8%	-0.28%

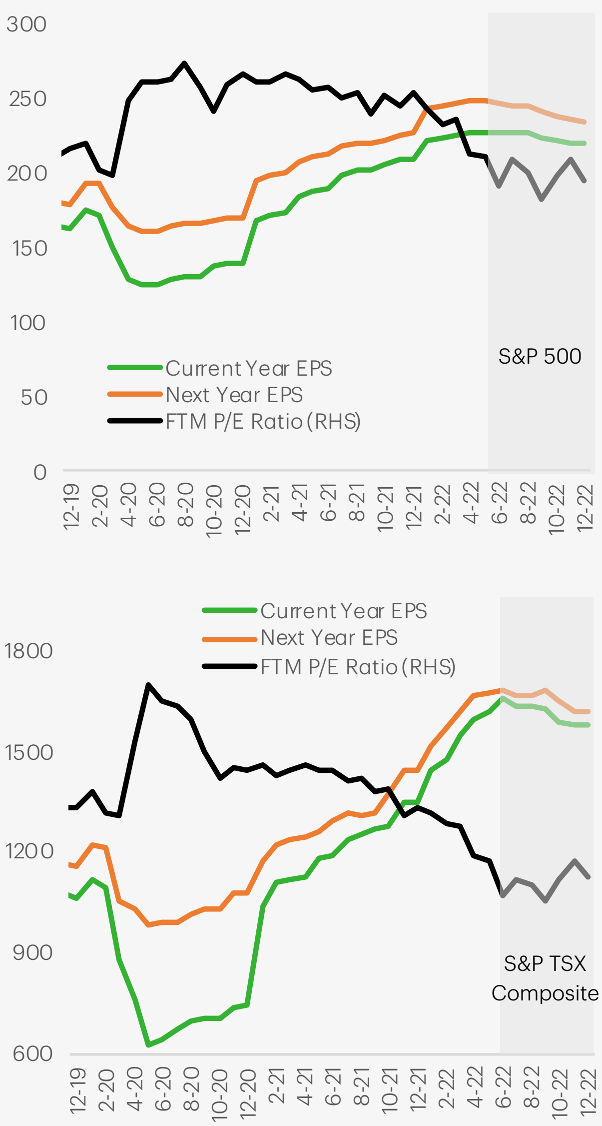
Source: Bloomberg Finance L.P. as of December 31, 2022. Note: All returns are in local currency unless indicated otherwise.

Deflationary Growth: Rising Growth and Falling Inflation Assets

During the quarter, equity markets enjoyed a relief rally, aligned with the performance expectations for the regime narrative for the fourth quarter. This quarter, both U.S. and Canadian inflation trended lower, at a pace faster than the market had anticipated. This created a sense of stability. Although the policy rate continued to climb, the Fed did not catch the market off guard by taking a more hawkish stance. As shown in figure 2, the price-to-earnings ratio, based on the 12-month forward earnings estimate for both countries, went up from the September trough, reversing the year-to-date trend of falling valuations. On the earnings-estimate front, we have seen falling earnings estimates for 2022 and 2023 since the middle of last year. The earnings estimate has been downwardly revised by only low single digits, but the adjustment so far is not on par with a typical recession experience yet. The momentum of actual earnings also indicated a slowdown, without any sign of a collapse yet. Figure 3 is a Q4 "report card" comparing earnings to the same period last year. Compared to 2021, this year's earning season saw fewer companies deliver positive surprises compared to the street estimate. Also, only half of the companies had positive EPS growth from a year ago.

Credit exposure also performed well. With growth and employment holding up well, the default risk was lower. Shown in figure 4, both high-yield and investment-grade credit spreads contracted during the quarter. Also, the expectation that central banks were nearing an end of their hiking programs, with moderation in future inflation, contributed to the attractiveness of fixed income, which made investors more comfortable.

Figure 2: Valuation up while earnings down for U.S. and Canadian equities



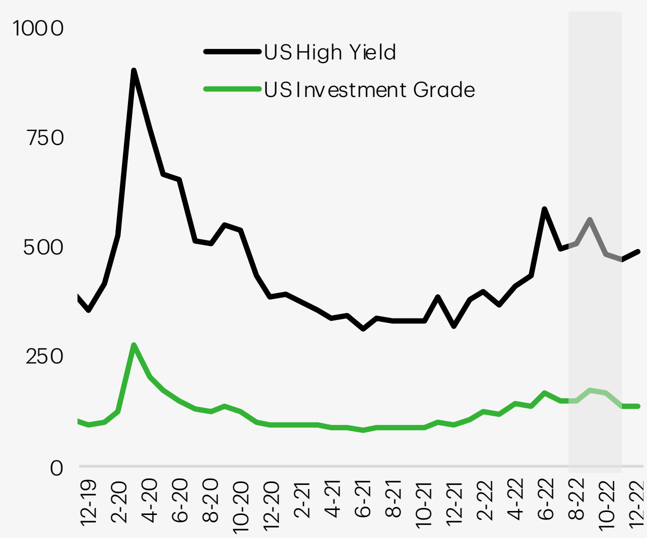
Source: Bloomberg Finance L.P. as of December 30, 2022

Figure 3: Earning Surprise and Y/Y EPS Growth Breakdown for S&P 500 Companies

	2022 Q3 EPS Surprises	2021 Q3 EPS Surprises	EPS Growth 2022 Q3 vs 2021 Q3
Positive	55%	69%	53%
Negative	45%	31%	46%
Flat	0%	0%	1%

Source: Bloomberg Finance L.P. as of December 30, 2022

Figure 4: U.S. Corporate Spreads



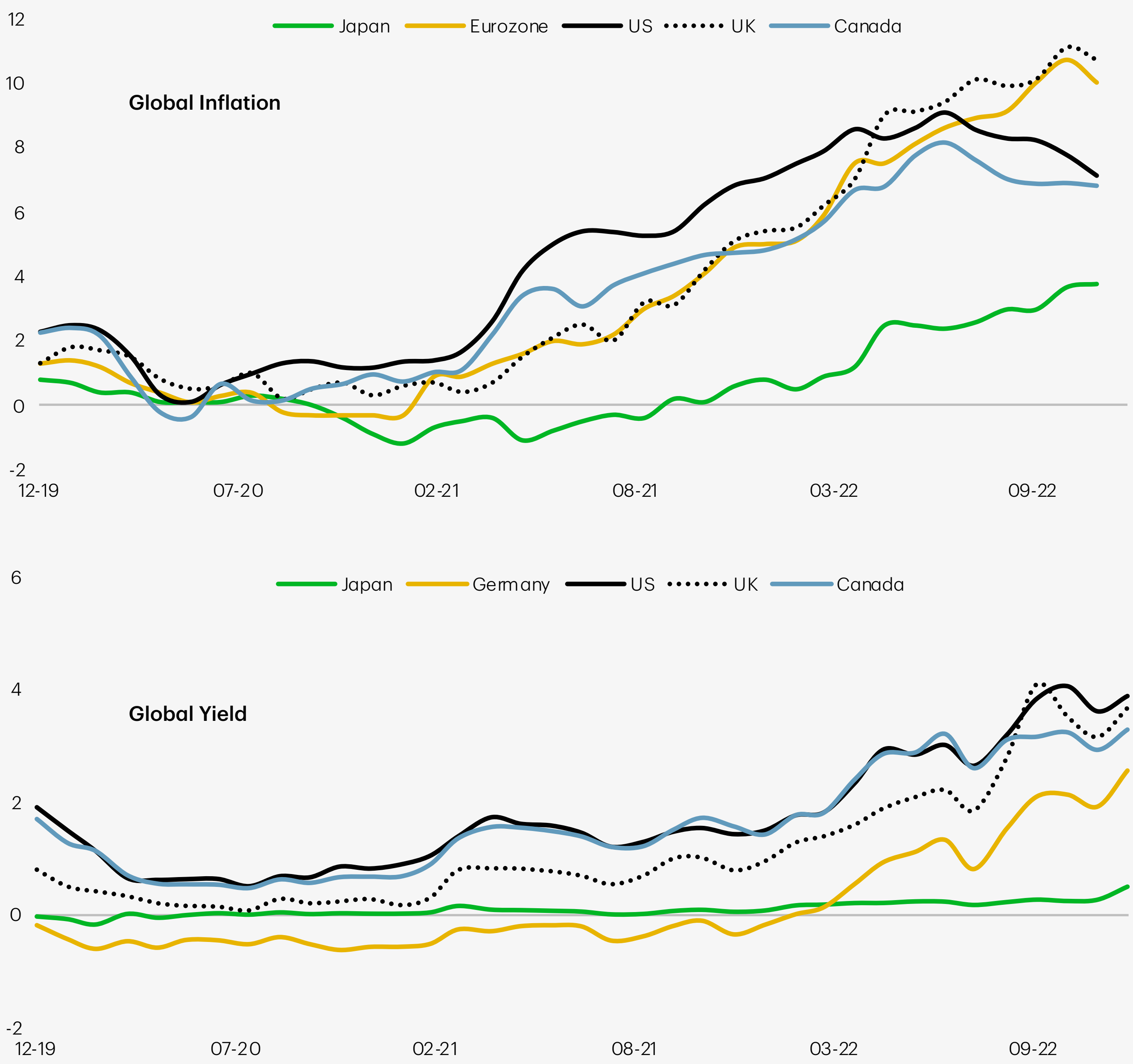
Source: Bloomberg Finance L.P. as of December 30, 2022

Deflationary Contraction: Falling Growth and Falling Inflation Assets

Nominal government bonds and other rate-sensitive assets tend to perform well when economic expectations are weak. Although the global government bond index was flat, there was a bifurcation between asset classes during the fourth quarter. This is because central banks have diverged in terms of where they are in the hiking cycle.

In the U.S. and Canada, as inflation cooled, market expectations of further hikes and terminal rates were priced lower. Yields did move higher, mainly for shorter-maturity bonds, but the pace slowed. High carry helped offset losses from slightly higher yields, keeping the government bonds flat. At the same time, inflation in Europe and Japan was still going strong. The ECB continued to hike, while there were signs that the BoJ would have to lift its policy rate from -0.1% to deal with inflation. This weighed on eurozone and Japanese government bonds. Government bond yields in these two regions moved higher, driven primarily by higher real yields, which led to losses in their government bonds.

Figure 5: Government bond yield curves



Source: Bloomberg Finance L.P. as of December 30, 2022

Inflationary Growth and Contraction: Rising Inflation Assets

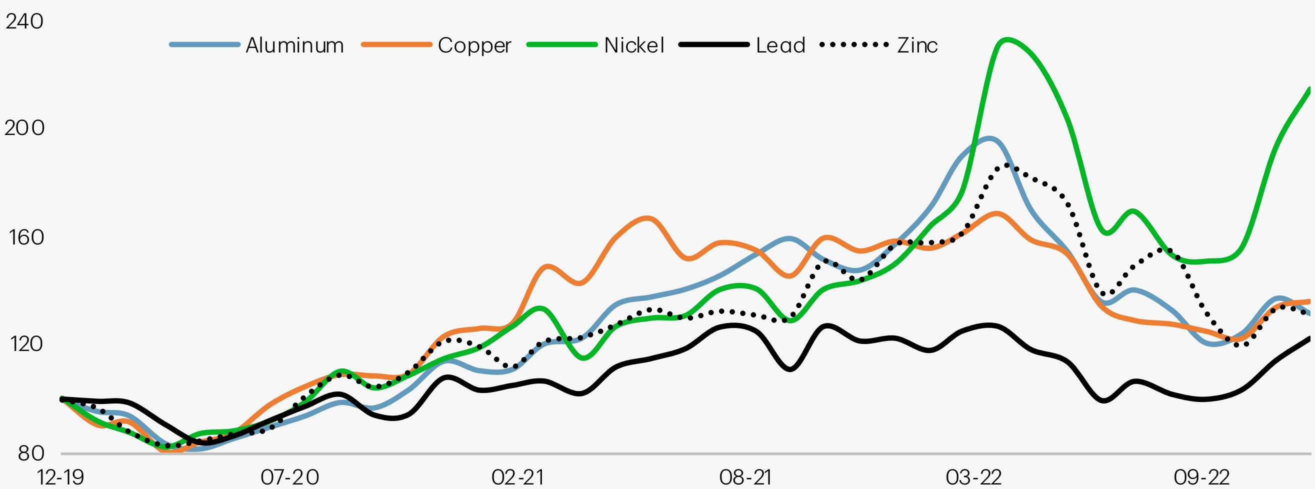
Due to the bifurcation between inflation and economic growth around the world, the performance of various inflationary assets, including commodities, inflation-linked bonds and emerging-market debt, more or less reflects the macro backdrop.

Within commodities, copper and gold returned 11.3% and 9.8% respectively, although leading indicators showed signs of slowdown, especially in North America. This is particularly interesting given that the cyclical and defensive parts of the metals complex both did well. We believe the reasons are two-fold. First, a weaker USD during the quarter was a tailwind for commodities in general. Over the quarter, the Bloomberg dollar index lost about 6.8% against a basket of global currencies. China's decision to pursue reopening and support the property market provided a strong bid for cyclicality. The consensus view is that the policy pivot will lift demand for industrial metals, which rallied as shown in Figure 6.

A cyclical rally combined with dollar weakness also benefited emerging-market debt. On one hand, the Chinese demand story fit in well with the risk-on, inflationary-growth narrative for emerging markets. It could significantly benefit many of the commodity-exporting economies. On the other hand, a weaker dollar will likely translate into better risk sentiment, capital and portfolio flow backdrop, and easing import inflation pressure. As a result, both hard-currency- and local-currency-denominated emerging-market bonds did well.

In a stagflation regime, inflation-linked bonds tend to outperform due to their inflation protection as well as defensive characteristics. As shown in Figure 7, using the Canadian real return bonds as an example, we define the quarterly regime based on GDP growth and CPI inflation. The regime-specific performance shows that the Canadian linkers performed best during stagflationary environments. The narrative of a slowdown caused by overly tight monetary policy (i.e., policy error) in North America was gaining momentum in the fourth quarter. As a result, Canadian and U.S. linkers both outperformed their UK and European counterparts.

Figure 6: Industrial metals taking their cue from China (scaled to 100)



Source: Bloomberg Finance L.P. as of December 30, 2022

Figure 7: FTSE Canada Real Return Bond Index Growth/Inflation Quarterly Regime Performance

Growth \ Inflation	Inflationary	Disinflationary	Growth Regime Overall
Above Trend	0.44	0.15	0.31
Below Trend	2.67	1.01	1.66
Inflation Regime Overall	1.21	0.58	0.88

Source: Bloomberg Finance L.P. during the period between March 31, 2006, and September 30, 2022

Geopolitical Risk Developments

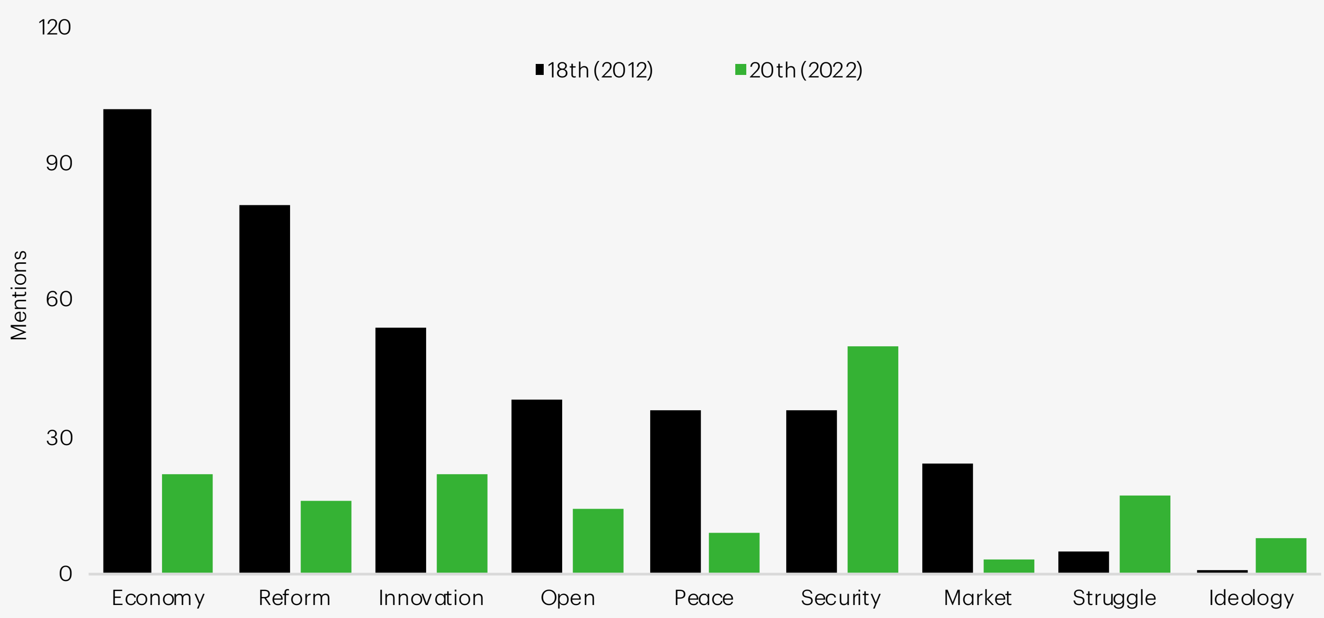
Aside from central-bank policy, geopolitical risk has been the most important force behind market volatility this year, and last quarter was no exception. Developments over the quarter could be put into two buckets: the "known unknowns," which were expected to happen, although the time was unpredictable; and "unknown unknowns," where the events themselves are a surprise. This quarter, the UK and China contributed to the latter bucket, while the U.S. and China contributed to the former.

In October, the Chinese Communist Party (CCP) held its 20th National Party Congress (NPC), a highly watched political event. As the only ruling party in China, the CCP elected the country's leaders for the next five years at the event. Xi Jinping successfully secured another five-year term as the General Secretary of the Central Committee. As the highest body of collective decision-making, the seven-person Standing Committee of the Politburo was filled with Xi and his closest allies, indicating a landslide for Xi. He became the most powerful leader in China since Mao Zedong.

The NPC is also where the party sets the policy tone for the next five years. As such, the General Secretary's speech is often scrutinized for hints. Figure 8 shows a keyword count comparison between the 20th and the 18th (Xi's first) NPC speech. We can see significant shift from market economy and reform to national security and ideology. Over Xi's term, his vision is likely to trickle down through various government policy and legislation efforts. In the long run, this new focus could become a destabilizing factor for China's economic growth and even regional stability. That being said, the NPC marks the end of all speculation on what China's next generation of leadership will look like. The consolidated power of Xi is a double-edged sword. On one hand, decision-making could be highly effective without opposition, and the alignment within leadership could remove uncertainty. On the other hand, without some measure of compromise, governance can happen without thorough review, which adds to the risk of policy error.

The unknown unknown surprise from China is the nation's blunt and sudden Covid policy reversal. After the NPC, there was a gradual loosening of policy. However, on December 7, after widespread protests, China abolished all testing and quarantine measures and pivoted to pursue herd immunity through population-wide infection. The goal is to end the detrimental lockdowns and reopen the economy. On the flip side, it is likely to create the largest wave of Covid-19 infections to date. Although the currently dominant Omicron variant is mild, China's less immune population could still result in a serious disruption to the economy in the short term.

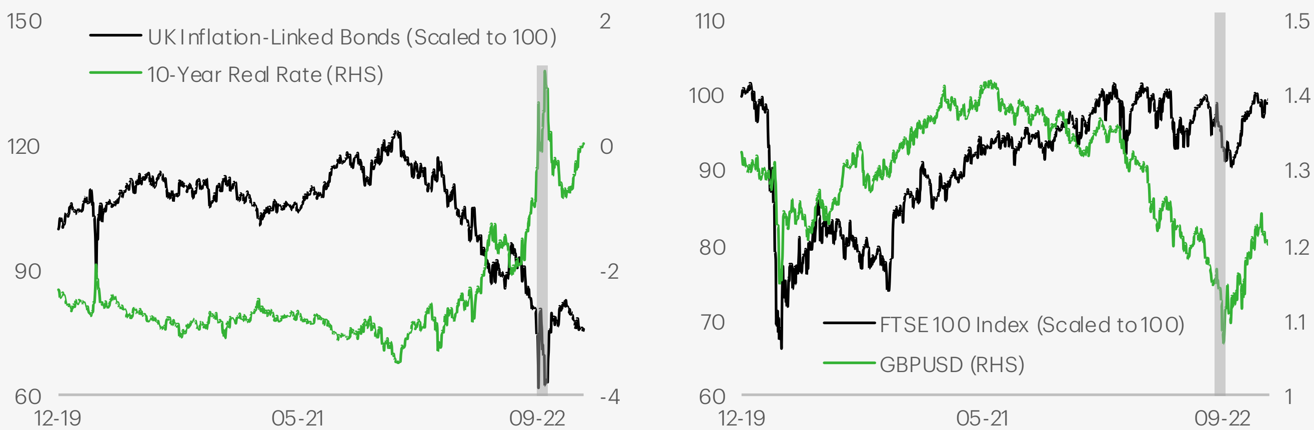
Figure 8: Xi Jinping's NPC Keynote Speech Keyword Count Comparison



Source: TD Wealth, as of January 3, 2023, In the UK, meanwhile, we've seen total political upheaval. In September, conservative party leader Liz Truss became prime minister. The government unveiled a series of controversial policies, including a two-year cap on household energy costs, and a mini-budget that would cut personal and corporate taxes, along with social-security contributions and stamp duties — all of which would be financed by additional borrowing. This proposal rocked the UK markets, triggering a sell-off in UK-related assets. The fiscal package was widely perceived to be financially irresponsible, attracting widespread criticism and market pushback, as shown in Figure 9. This eventually led to Truss's resignation, on October 25, making her the shortest-tenured prime minister in UK history. Since then, the policy has been quashed and a new PM has been appointed, stabilizing markets. This unexpected event reminds us that government bond yield and currency volatility is still well and alive.

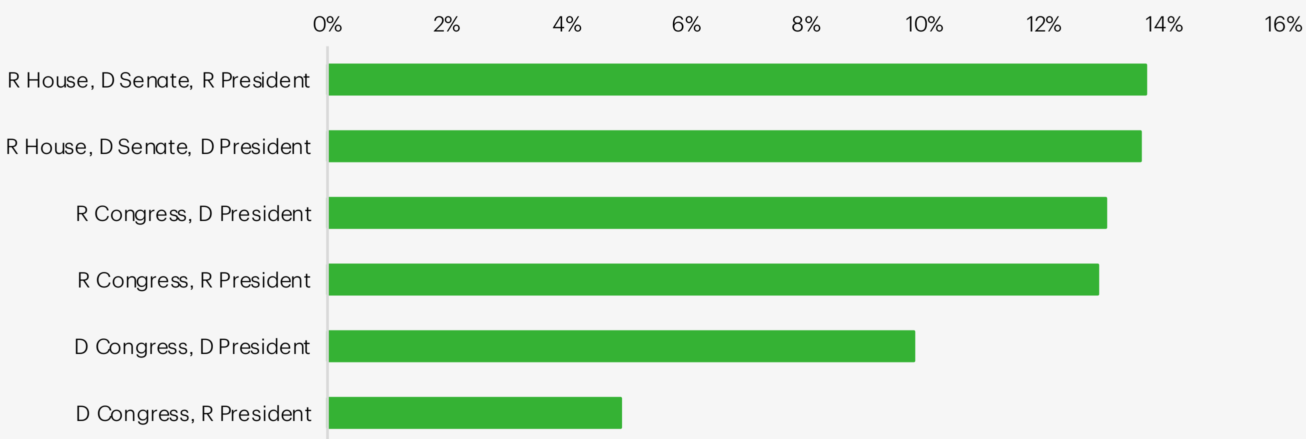
Finally, we move on to American politics. On November 8, the U.S. held its midterm election. Based on historical observation, when incumbent presidents have control of the congress, they typically push through their unpopular agendas, which leads the party to lose seats in the midterm, leading to political gridlock until the next presidential election. In the lead-up to the midterms, the market consensus was that the Democrats would lose control of Congress. In the end, although the Democrats' majority in the House of Representatives did flip to the Republicans, the margin was much smaller than expected. In the Senate, meanwhile, the Democrats actually managed to gain a seat and maintain control. In the end, the U.S., as expected, was left with a split Congress, although the Republican wave was smaller than anticipated. Now, with a Republican-controlled House and inflation front and centre in the minds of voters, large fiscal-spending packages are less likely to go through. On balance, however, the current situation has been a positive for stocks, as shown in Figure 10, given a more stable policy environment.

Figure 9: UK Market Reaction to Political and Policy Uncertainty



Source: Bloomberg Finance L.P. as of December 30, 2022

Figure 10: S&P 500 Annualized Return Based on Government Control



Source: TD Wealth as of December 2022

Outlook on Fixed Income

Maximum Overweight

Fixed Income Reset Offers Opportunities

Aurav Ghai, Senior Fixed Income Analyst | TD Wealth

Many G10 central banks are approaching the end of the fastest rate hikes in decades and when they pause, they'll be searching for the sweet spot between curbing inflation and averting a lengthy recession.

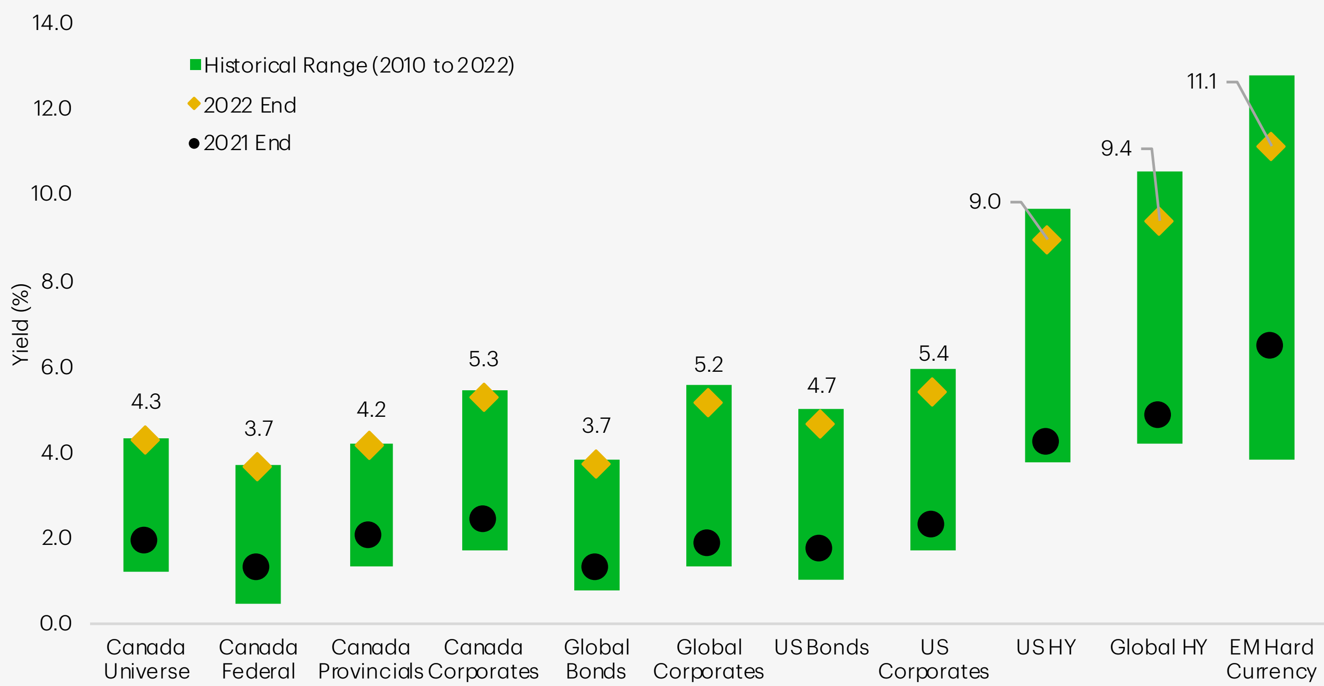
Geopolitical tensions, market volatility, the so-called unsettled growth bill (the fact that we don't yet know the full effects of cumulative monetary tightening on economies), and that anxious desire to predict when recession will strike, has buffeted investors so much that some haven't even noticed a few markets are already in deep contraction. Most regions are starting to feel the effects of tighter monetary policy and these will become more pronounced as they eat into 2023 economic growth before eventually chomping away at inflation. In short, avoiding even a modest recession under present circumstances would be challenging. While the central bank's policy toolkit is broad, its instruments are blunt and the mission complex. Difficult trade-offs lie ahead.

Allocating to fixed income has been challenging for multi-asset investors and last year's record-breaking drawdowns didn't help. We believe, however, that the correction in global bond markets is nearing an end. Looking forward, the income on offer from bonds is far more enticing. Today's starting yields provide attractive entry points and yields across fixed income sectors are at levels not seen in over a decade offering real potential for future returns (Figure 1). This healthy yield cushion also implies bonds will be able to deliver positive returns and offset losses during bear equity markets.

While investors still need to be cautious and ready to update their positions, we believe the investment outlook and conviction has vastly improved for bonds:

- We are maximum overweight fixed income investments in general and maximum overweight domestic government bonds. Canadian and U.S. government bonds are more attractive at current yields and offer opportunities for income generation and downside protection if we go into recession this year. Yields shot up over 2022 and historically starting yields have been associated with higher total returns. We expect price/yield volatility to decline in coming months as central banks pause rate hikes and growth concerns become more apparent. We anticipate inflation to slow considerably: central banks will probably have to lift rates more than the amounts priced into markets and they're unlikely to cut as aggressively as investors anticipate.

Figure 1: Yields, the Most Crucial Valuation Metric for Fixed Income, Near 12-yr Highs



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022

• We remain modestly overweight investment grade (IG) credit largely because of the resilience offered by robust balance sheets. We expect the challenging economic conditions to widen spreads though they should remain far from past recessionary levels. We expect technicals to remain supportive and the healthy yield cushion to offset losses. We continue to focus on fundamentals and valuations have clearly become more attractive with most of the IG universe trading at a discount.

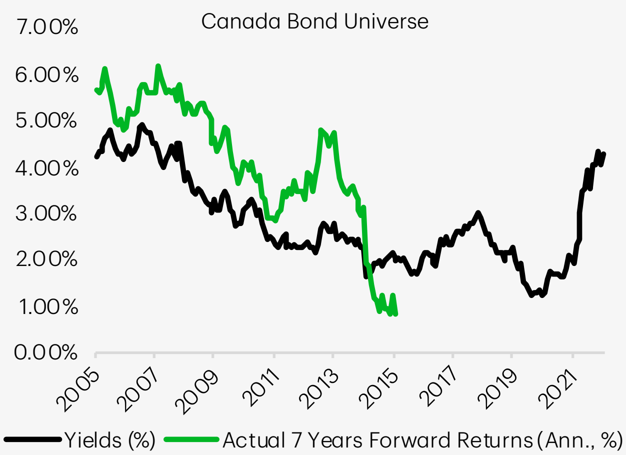
• We maintain our modest underweight view on high yield (HY) credit. The HY credit market is still in a unique cycle with changing characteristics that have improved overall quality and tightened spreads. This should keep spreads from returning to previous recessionary levels, but they will widen if the growth outlook keeps deteriorating.

Government bonds

Last year will be remembered as one of the quickest and largest tightening cycles for major central banks in decades (Figure 2). Rate increases by the Fed, Bank of Canada (BoC) and the Reserve Bank of New Zealand (RBNZ) exceeded 350 basis points (bps) and most central banks in the G10 hiked policy rates by at least 225 bps in 2022, or far more than they had anticipated. At the start of the year, Christine Lagarde, President of the European Central Bank (ECB), said talk of ECB rate hikes was premature and Philip Lowe, Governor of the Reserve Bank of Australia (RBA), suggested the RBA wouldn't raise rates until 2024. Both hiked rates more than 250 bps last year. While central bank policy converged in 2022, we believe 2023 will be the opposite: a few central banks will pause rate hikes early, many will rest at terminal rate for varying lengths of time, and some might cut rates before the end of the year.

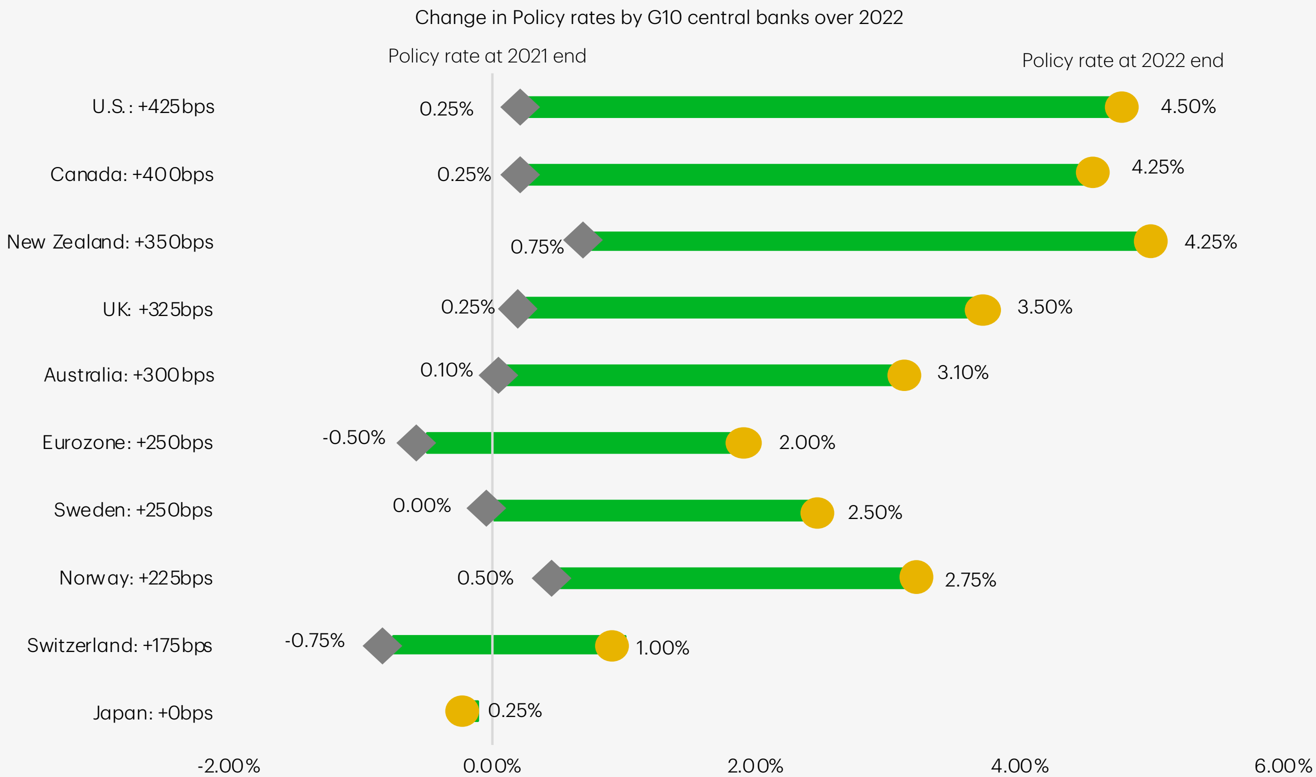
We maintain our maximum overweight view on government bonds: yields have risen sharply over the past year and, historically, starting yields have had a powerful correlation with bond returns (Figure 3).

Figure 3: Yield is a Good Indicator of Future Returns



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022

Figure 2: Rate Hike Race



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022

Today's yields offer investors both improved opportunities for income generation as well as more downside protection. On top of that, if we do slip into recession in 2023, we know we can count on government bonds to perform well (Figure 4).

While we may be close to, or have exceeded peak government bond yields, the data-dependent bouts of volatility will likely persist, keeping yields range bound in coming months. Therefore, it would be quite a stretch to call for plummeting yields at least in the first half of 2023. We anticipate inflation to slow considerably: central banks will probably have to lift rates more than the amounts priced into markets and they're unlikely to cut as aggressively as investors anticipate.

Our view supporting higher peak or terminal policy rates, stems from a few underlying assumptions:

- The economy may be more resilient than expected, able to withstand tightening and avoid a deep recession.
- We expect a material decline in price pressures. The "easy" decline in inflation will come from core goods disinflation; the "hard" part (linked to tightness in the labour market) will require restrictive policy rates for longer.

Key Themes for Government Bonds in 2023

With this backdrop in mind, our key themes for the coming year are:

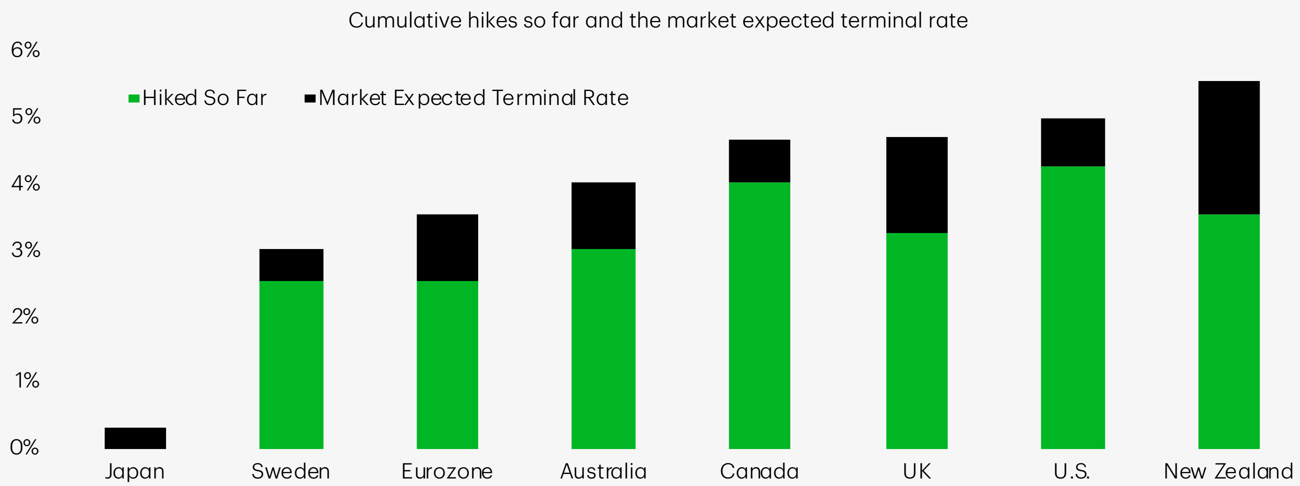
1. A pause is not a pivot. Investment narratives must focus on higher-for-longer rates. Yes, central banks are closer to peak rates but what matters more is that policy rates will remain high even if advanced economies are in recession. The cumulative tightening of monetary policy so far should create some slack in the labour market, and while inflation might fall, it won't be quick enough to allow officials to cut rates. Given the speedy pace of tightening in this cycle, policymakers appear to be looking for a transition to a more measured approach. Indeed, the BoC, RBA, and the Central Bank of Norway (Norges Bank) have already slowed the pace, and we expect the Fed, ECB and BoE to follow suit mainly because current rates have already surpassed policymakers "neutral" levels. Given the lag between monetary policy changes and the economic effect, a more measured approach will reduce the odds of substantial overtightening and a deeper recession, while pushing the terminal policy rate higher so the progress on inflation and labour markets that central bankers are looking for may not be immediately apparent (Figure 5).

Figure 4: Performance of Core Fixed Income during Recessions

Assets	US Government Bonds	US Bonds Universe	US 10-Year Bond	Canada 10-Year Bond
Feb to Apr 2020	6.29%	3.00%	6.51%	5.45%
Dec 2007 to Jun 2009	8.93%	7.54%	3.04%	4.64%
Mar to Sep 2001	5.65%	6.45%	1.08%	0.85%
Jul 1990 to Mar 1991	8.58%	8.93%	2.63%	8.69%
Jul 1981 to Nov 1982	34.40%	37.92%	23.03%	-

Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022. Performance data for Canadian bonds is unavailable for 1981-82.

Figure 5: Market Terminal Rate Pricing and Hikes



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022

While the hiking cycle may be extended, we still expect most G10 central banks to have paused, if not ended, their hiking campaigns by the end of the first half of 2023. For all G10 central banks except the Fed, considerations other than managing inflation risk are likely to exert some influence over these policy rate decisions. We expect any pause for the ECB to be driven by concerns about debt sustainability while in Canada and the U.K., decisions will be linked to the larger policy rate pass-through via mortgage rate resets. In the U.S., the Fed may decide its policy stance is already restrictive enough to bring inflation down and it's ready to shift to more balanced risk management.

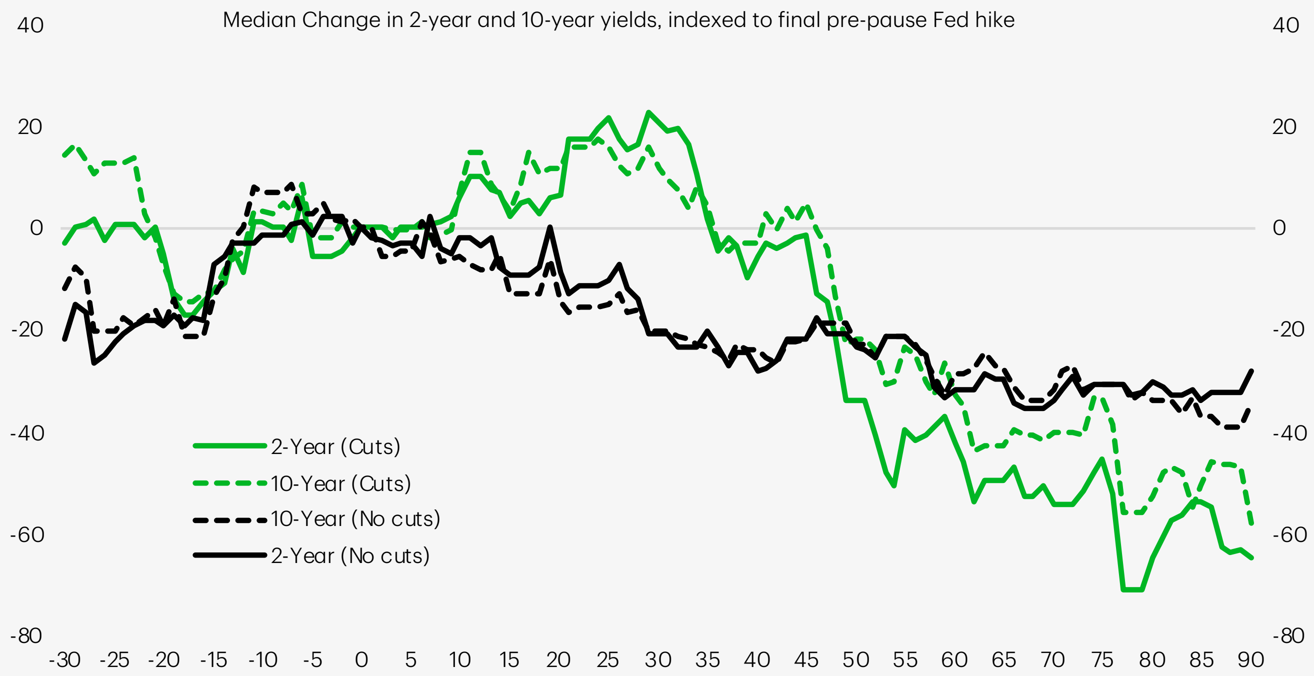
2. Government bond yields are likely to remain range bound. Historically, interest rates have tended to hit their cycle (or local) highs when central banks have paused or ended tightening campaigns. Figure 6 shows the behaviour of 10-year U.S. government yields around Fed pauses, which we define as a peak policy rate that is not followed by a subsequent hike in six months afterward. For most of the rate pauses since the 1990s, the median decline in 10-year government bond yields in the following 3-month window was 30 bps to 40 bps. The median decline was closer to 60 bps when pauses were followed quickly by Fed easing. This difference is even greater for shorter maturities: 2-yr government bond yields declined by roughly the same amount as 10-yr yields when a pause lasted at least six months, and by 60 bps to 70 bps when an easing occurred quickly after the pause.

These observations can be understood by looking at government bond yields through the lens of expectations and term premium. Typically, term premium declines in the late stages of an economic cycle. We therefore would expect nominal yields to be biased lower following a central bank pause. However, if central banks are forced to pause rate hikes before inflation is under control, term premia may remain elevated. This will be driven by investors anticipating a resumption of rate hikes or because they want more compensation for inflation risk. Of course, if the pause is the result of a clear decline in inflation we could see the more typical reaction (i.e., a decline in government bond nominal yields).

There are two sources of upside risk to yields. First, if energy and other commodity prices reaccelerate, they could force central banks to extend the cycle, or encourage investors to price in more inflation risk, adding pressure to long maturity yields. Second, a disorderly bank of Japan (BoJ) exit from yield curve control (YCC) could, at least in the short run, lead to a readjustment higher in global government bond yields.

The main downside risk to our projections is a broader and potentially deeper recessionary outlook.

Figure 6: Yields Decline More When Rate Cuts Come Quickly After Peak



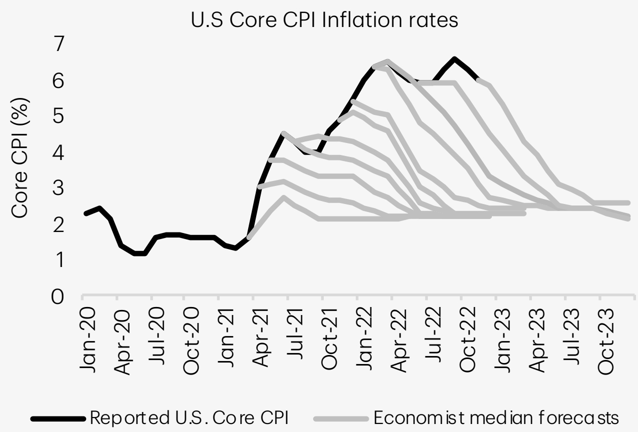
Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022. Pause is defined as peak policy rate not followed by a subsequent hike in the 6 months afterward. This includes periods when peak rates were quickly followed by rate cuts as it happened in 1984, 1985, 1987, 1989 and 1995. The hiking cycles of 1997, 2000,2006 and 2018 had peak policy rate for at least 6 months and are referenced as "No cuts".

3. Government yield curve inversions are likely to become sticky. Government yield curves flattened throughout 2022 as global policymakers front-loaded hikes. In many cases the difference between longer and shorter maturity bond yields are near, or at, multi-decade lows. Inversion (when shorter maturity bonds yield more than longer maturity bonds) is more pronounced in some regions, like the U.S. and Canada, though this doesn't indicate recession is imminent. Indeed, the euro area and the U.K. may already be in recession but yield curves have not inverted to the same extent. If the hiking cycle isn't extended, we believe the flattening of the yield curve in many regions has run its course. Looking ahead, we anticipate yield curves in various regions to behave differently.

In the U.S. and Canada, policy rate hikes in the early part of 2023 should push yield curves up in a relatively parallel fashion (i.e., yield curves are likely to become sticky even as the level of policy rates increases). A slower hiking cycle should give investors time to observe the impact of tightening and adjust their expectations on the short-run neutral rate, which should persist until the Fed pauses. Beyond that, we believe yield curves will begin to steepen (or become less inverted) on a more sustained basis. However, the extent of steepening will depend on the outlook for the economy and Fed policy. If the economy shows signs of sharp deceleration, we expect shorter maturity government bond yields to fall and drive a more rapid but moderate steepening of the yield curve. This is because the Fed, given its recent experience with inflation, may not be willing to cut as aggressively in the face of slowing growth as it has been in the past few decades. If the economy holds after a Fed pause, markets may begin to price out (or push out) policy rate cuts, which would reduce the likelihood of material yield curve steepening and yield curves might remain inverted. Indeed, the 2yr-10yr yield curve (the difference between 2-year government and 10-year government bond yields) has historically traded sideways in the months following a Fed pause when economic conditions didn't lead investors to anticipate imminent cuts (Figure 7).

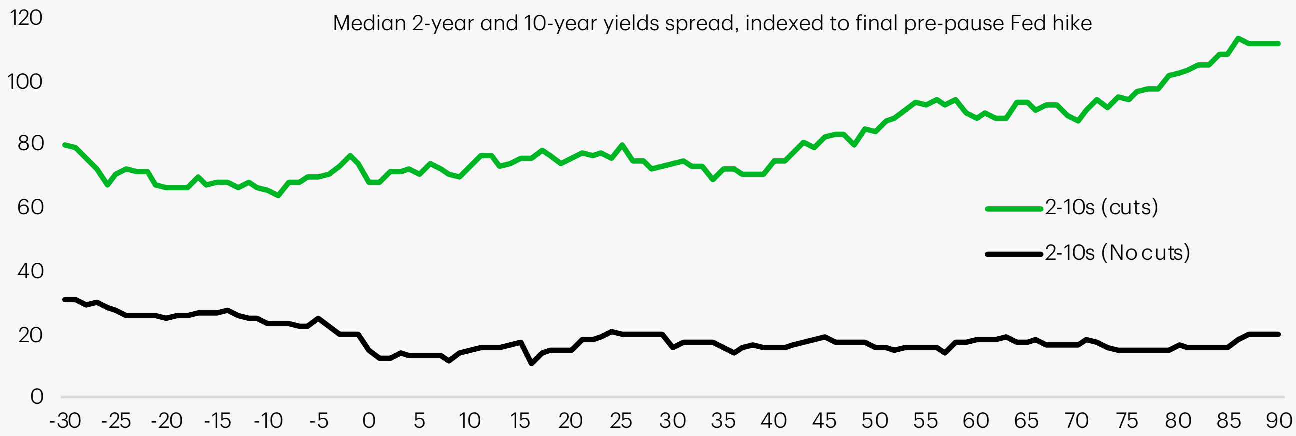
4. The inflation slowdown may be overpriced. At first glance the November Consumer Price Index (CPI) looks good because monthly core CPI slipped to the slowest pace in over a year. However, core goods price deflation (led by declining used vehicle prices), was the main driver behind the drop and core service inflation, while a tad lower, remained high. It's clear now that core inflation is no longer accelerating and is settling into a moderate, but still elevated, monthly pace. While we expect to see inflation slip over the coming months, we suspect that the broad-based nature of inflationary pressures will mean that the decline will be slow. Importantly, we believe markets haven't completely priced in the more volatile and persistent inflation (Figure 8).

Figure 8: Inflation Mispricing Since January 2020



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022.

Figure 7: Spreads Widen When Rate Cuts Quickly Follow Peak



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022. Pause is defined as peak policy rate not followed by subsequent hike in the 6 months afterward. This includes periods when peak rates were quickly followed by rate cuts as it happened in 1984, 1985, 1987, 1989 and 1995. The hiking cycles of 1997, 2000, 2006 and 2018 had peak policy rate for at least 6 months and are referenced as "No cuts".

United States

December's Federal Open Market Committee (FOMC) meeting delivered an expected 50 bp increase in the Fed funds target range, taking policy rates to 4.25%-4.50%. The cumulative 425 bp increase in the Fed funds rate over nine months is the most aggressive hiking cycle in more than 40 years, and, along with quantitative tightening (QT) and the committee's forward guidance on policy rates, have squeezed financial conditions. The most recent summary of economic projections (SEP) indicates the Fed funds rate could top out at 5.25% this year. Whether or not this is enough to restore price stability depends largely on two factors.

• Actual financial conditions don't always reflect the Fed's forward guidance. Several times last year, even though the Fed was indicating higher future rates, financial conditions eased, possibly because investors thought the Fed would act conservatively to prevent over-tightening or if it did lift the policy rate into restrictive territory, it wouldn't keep it there for long. So if financial conditions ease because markets price in premature rate cuts, a 5.25% peak rate won't be enough to send inflation down towards 2%.

• U.S. labour market is the second factor that determines the peak of this hiking cycle. Unemployment will have to increase to ease pressures in a labour market where wage inflation is much higher than the Fed's 2% long-term objective. U.S. CPI inflation is slipping but wage inflation remains above a 5% annualized rate and given current estimates for underlying productivity this means wage inflation needs to decelerate substantially for the Fed to believe it will reach its 2% inflation objective.

Canada

The BoC delivered another 50 bp rate hike in December lifting the overnight rate to 4.25%. This was slightly more than expected, but not as surprising as the BoC's signal that 4.25% may well be the terminal rate. The BoC cited evidence that interest rates are slowing demand and inflation momentum is softening.

While the 50 bp hike is understandable given inflation and wage pressures, it adds to the sense that BoC communications don't shed much light on future policy. We believe the current 4.25% is close to the terminal rate but that's not to suggest the door is firmly closed to further rate hikes. The next two inflation prints could prove crucial in determining the precise path for policy rates; overall we expect a stable overnight rate for much of 2023 which will reduce domestically driven volatility in yields as the BoC settles into its pause phase. Never forget, however, that Canada will always be swept up in the fluctuations of U.S. yields.

Europe

As expected, the ECB hiked its key interest rates by 50 bps, taking the deposit rate to 2.00% in December. It also said—surprisingly—that Quantitative Tightening (QT) will start in March at a pace of 15 billion euros a month and inflation forecasts were revised from 2.3% up to 3.4% for 2024 while 2025 inflation was forecast to be 2.3%.

At the ECB press conference, President Lagarde said it was "obvious" to expect 50 bp rate hikes for a period of time and signalled a 50 bp rate hike in February and possibly in March and April, for an overall 150 bps of additional tightening (despite expectations for a shallow and short-lived recession). She also implied the ECB expects the deposit rate to rise above 3.00% in coming months, after pointing to ECB projections that included market pricing of a terminal rate just below 3% and 2.3% inflation in 2025.

The ECB's decision was very hawkish and the press conference signaled the deposit rate will need to rise more than markets were expecting. We believe the ECB's regime change is driven by the following factors:

• Underlying inflation pressures continue to build and labour markets continue to tighten.

• The ECB seems more confident in its ability to cap spreads between the yields of peripheral and core economies with the transmission protection instrument (TPI).

• The EU energy market is in better shape than many feared only a few months ago. Gas inventories entered the Northern Hemisphere winter nearly full and prices have fallen from summer peaks. This likely means fewer downside risks to growth over coming months.

As the ECB frees itself from some of the factors that held it back, we believe it will keep lifting rates and tightening policy. This combined with QT running in the background should push European government nominal yields higher.

Credit: investment grade and sub-investment grade

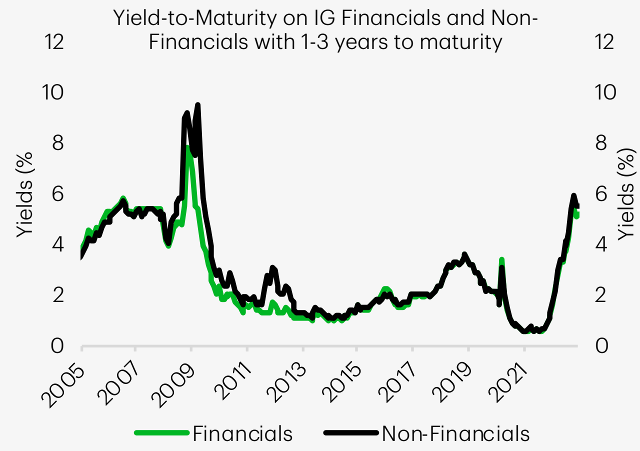
Drawdowns of about 16% in U.S. Investment grade (IG) and 11% in sub-investment grade or high yield (HY) were comparable to, or greater than, the most difficult 12 months of the Global Financial Crisis (GFC). Aggressive Fed hikes and rate volatility caused much of the damage in 2022. Within credit, spreads didn't widen materially and therefore their performance was more respectable despite steady fund outflows throughout the year and earnings headwinds. The relatively orderly spread widening amid the lengthening laundry list of concerns could largely be attributed to healthy corporate fundamentals going into this hiking cycle.

We believe spreads will keep building premium and drifting wider in coming months unless valuations are reset in a material way or there are convincing signs of improvement in the interaction between inflation and policy. We expect spreads to exceed 2022 peaks if the U.S. economy enters a recession in 2023. However, technicals are likely to remain positive and spread peaks for the first half of the year shouldn't be as high as previously anticipated or even similar to past distress levels.

Overall, we are modestly constructive on IG credit and maintain our defensive stance on HY credit. We believe the value proposition of owning short-dated IG bonds as a total return product is attractive; that segment now offers the highest all-in yield since the late 1990s, excluding the 2008/2009 recession (Figure 9). Higher yield offers more of a cushion or protection if spreads widen, but higher quality credit will widen less than others across the spectrum (Figure 10).

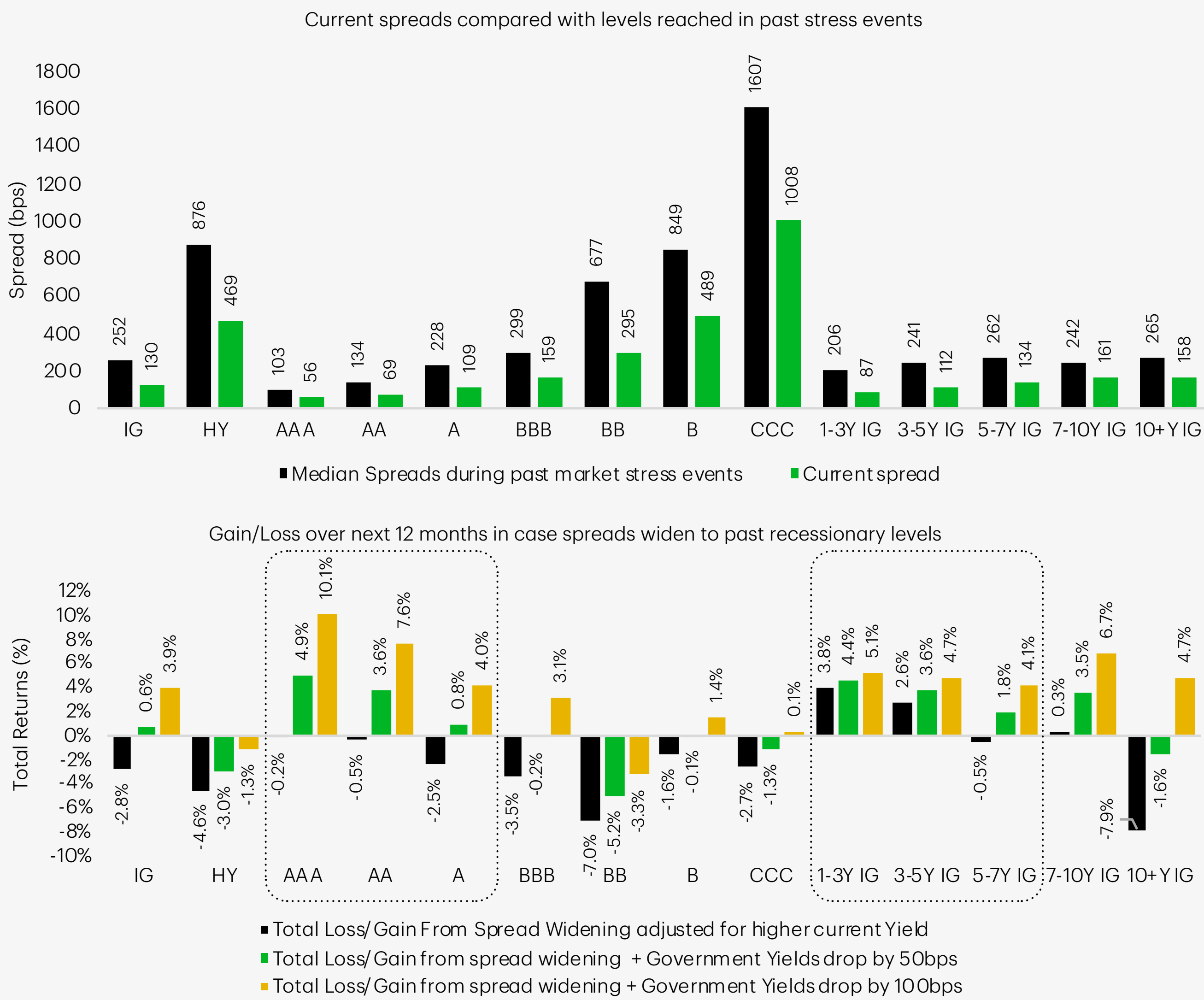
IG's yield cushion coupled with balance sheet strength make us more comfortable owning IG over HY in spite of prospective spread widening.

Figure 9: Shorter Maturity IG Offers Yields Not Seen in Decades



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022.

Figure 10: Scenario Analysis of U.S. Credit



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022. *Past credit stress periods for 2001-02, 2008-09, 2011-12, 2015-16 and 2020 were considered for calculation of median spreads during recessionary periods.

Overall, we remain cautious on credit spreads in the near term due to their strong correlation with government bond yield volatility. With yield volatility set to decline in coming quarters, we continue to focus on fundamentals and relative value: valuations have clearly become more attractive with almost 90% of the IG universe trading at a discount. Dramatic interest rate moves have sent IG credit prices to new lows and close to levels not seen since the darkest days of 2008 (Figure 11); underlying bonds will mature at par value and therefore, at current levels, the bonds look priced for a New Year sale.

Our key themes for IG and HY credit in 2023 are:

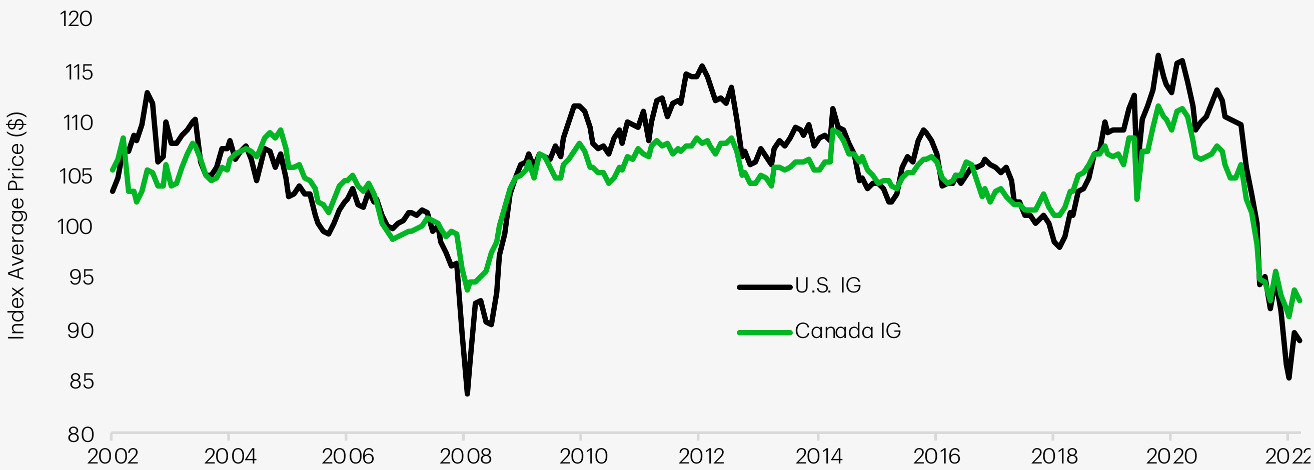
1. A policy rate pause could test credit spread resilience and hurt lower quality borrowers.

A break from hawkish central bank moves and government bond yield volatility bodes well for higher quality IG credit and bolsters the case for embracing income in IG. But we see two tension points that need to be resolved:

We still don't know the full effects of tightening on the economy. Recession is a definite risk and corporate earnings face challenges. We'll probably see growth-earnings and inflation problems resolve in Q2 or Q3 but the period before that, when peak rates are clear but not the low point for growth, could test the resiliency of credit spreads.

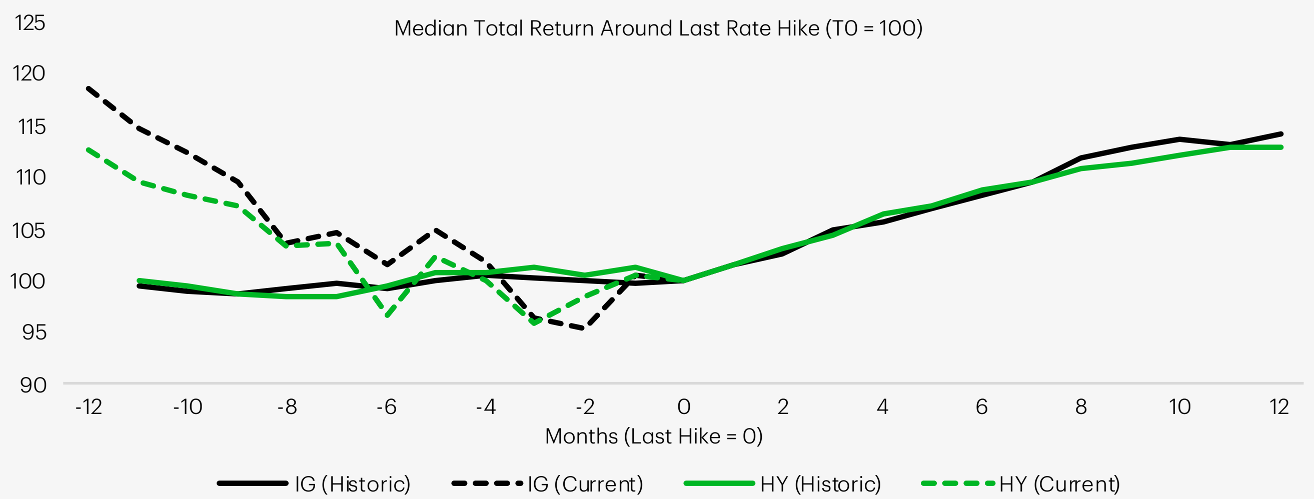
Lower quality borrowers will be hurt most by a longer period of higher rates. While IG credit tends to do well after the Fed's final hike in a cycle, floating rate bank or leveraged loans and, to a certain extent HY, underperform relative to IG bonds (Figure 12). While weaker balance sheets may have been protected somewhat by termed-out maturity walls, this buffer will recede if the pause extends beyond a year.

Figure 11: IG Credit Indices Trade at Lowest Price Since 2009



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022.

Figure 12: Historical Performance of Credit Around a Fed Pause*



Source: FactSet, TD Wealth, as of December 31, 2022. *Median returns for the two U.S. credit universes over the hiking cycles in 1995, 1997, 2000, 2006 and 2018.

Companies with leveraged loans and floating rate liabilities (think capital structures that rely on loans only or are loan-heavy) will likely be hurt the most. Other IG and HY borrowers that rely mainly on bonds, will feel what's called the affordability squeeze when they're refinancing. We favour IG over HY because higher quality companies have more options when it comes to deleveraging and finding sustainable debt solutions, whereas HY and lower quality corporations are more likely to be forced into capital destruction, distressed exchanges, and defaults.

The HY primary market can function with double-digit coupons likely for the rest of 2023. Maturities start to matter at least 12 months ahead of time for issuers and rating agencies and only 8% of the outstanding leveraged credit market is due by the end of 2024. However, refinancing plans will likely come into play for another tranche of HY bonds and leveraged loans by the end of 2023 and this group is more at risk of adverse credit events if funding rates don't improve dramatically.

2. Higher Yields Bolster Demand

We haven't seen such high fixed income yields since the GFC. However, with the yield reset of 2022, all-in yields in IG and HY can now compete with equity earnings yields (Figure 13) and higher yields in public fixed income markets are starting to win out over less transparent private credit. The longer this regime lasts, the greater the opportunity for strategic reallocation to quality income-generating assets like IG credit or even higher-quality HY bonds. As such, we believe demand from insurance, pension funds, mutual funds, and retail—the key investors in U.S. corporate credit—should, after the tumult of the first half of 2023, improve in the second half.

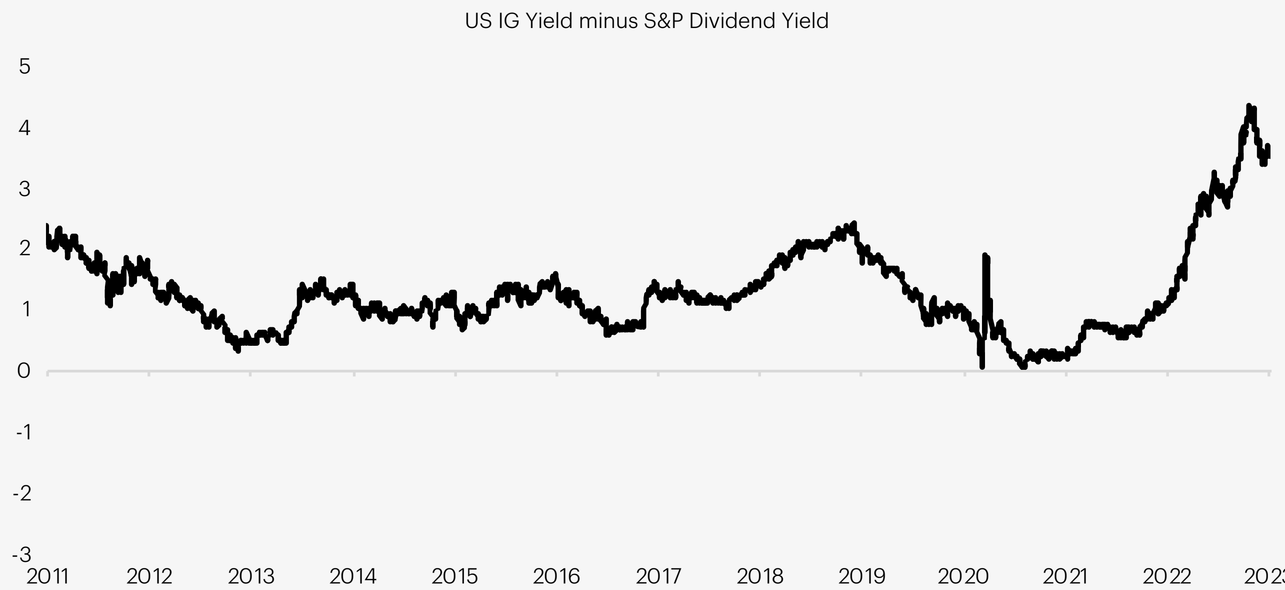
3. Downgrades Over Defaults

While we expect to see a rise in default rates this year we're still expecting downgrades to lead the way as corporate fundamentals decline. Unfortunately, we could see a more dramatic increase in defaults—if U.S. policy rates remain above the long-term neutral policy rate for another year or so and earnings growth stagnates—near the end of the year or even in early 2024. Rather than a brief spike, like we saw during the GFC, we expect this cycle to behave more like the early 2000 period, where defaults hovered above the historical average for five years.

Higher yields and the fixed income reset

Allocating to fixed income has been a challenge for multi-asset investors in recent times. After a long bull market, yields had reached the point where government bonds could no longer offer the key characteristics t typically expected of them: 1) income, and 2) diversification against risky assets. At one point, a staggering 90% of the global government bond universe was offering a yield of less than 1%, forcing investors to take on ever greater risk in extended credit sectors that had much higher correlations to equities. Low starting yields had also diminished the ability of government bonds to deliver positive returns that could offset losses during equity bear markets.

Figure 13: Relative Value Favours Credit over Equity for Income



Source: FactSet, TD Wealth, as of December 31, 2022.

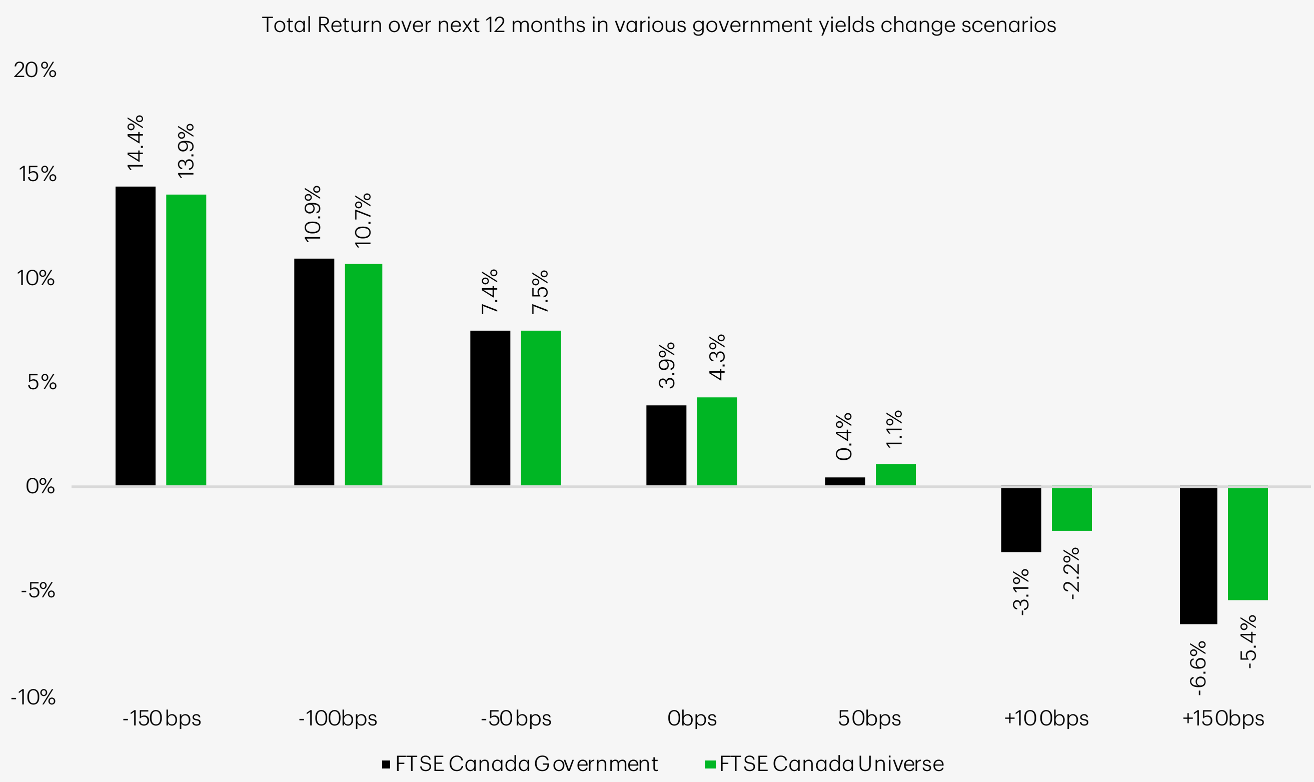
While the correction in global bond markets has been incredibly painful, we believe it's near completion. Looking forward, it's clear that the income on offer from bonds is now far more enticing. The global government bond benchmark saw yields rise by roughly 200 bps over 2022, while HY bond yields approached double digits. Valuations in inflation-adjusted terms also look more attractive – while the roughly 1% real yield on global government bonds may not sound particularly exciting, it's the highest level since the GFC and close to long-term averages.

The potential for bonds to meaningfully support a portfolio in the most extreme negative scenarios–such as a much deeper recession than we envisage or in the event of geopolitical tensions–is perhaps most important for multi-asset investors. For example, if 10-year U.S. Treasury bond yields fell from 3.8% to 2% between December 2022 and the end of 2023, that would represent a return of approximately 20% which should cushion any downside in stocks (Figure 14). Such diversification properties simply weren't available for much of the past decade when yields were so low.

We have moved to maximum overweight for the fixed income market overall. The fixed income reset in 2022 was brutal but necessary. After the pain of last year, the ability for investors to build diversified portfolios is now the strongest in over a decade and most importantly fixed income deserves its place in the multi-asset toolkit once again.

Our base case view is that government bond yields will remain largely range-bound with high but subsiding daily volatility. If central bank monetary policy stance and macro-economic data driven spikes take us by surprise, shorter maturity bond yields could jump. However, we believe the hawkish stance of central banks is adequately priced into current yields and medium to longer maturity yields should stabilize as focus eventually returns to slowing economic growth. We continue to monitor how the market prices in the expected moderation in inflation and economic growth, the two main players affecting short- to medium-term government bond yields: a growth scare will push yields lower while slower-than-expected deceleration in inflation and longer than expected policy rate pause will support yields or even push them higher.

Figure 14: Yield Reset Highlights Diversification Potential of Bonds



Source: Bloomberg Finance L.P., TD Wealth, as of December 31, 2022.

In credit markets, we expect resiliency in spreads to be tested in coming months on the back of weaker corporate earnings and growth slowdown amid unwinding of recessionary fears. We are modestly overweight IG credit and maintain our defensive view of HY credit.

A final note on fixed income

With yields finally reaching attractive levels, the income component of fixed income is back. The inherent short-term volatility in yields will likely persist as central banks reach the terminal policy rate before pausing and this will drive market participants to constantly reprice future inflation and economic growth. But the attractive income cushion should provide a buffer to these bouts of volatility. As an example, 3.9% yield for a U.S. government bond (as of end 2022) will need a 50 bps increase in yield to post 0% return over the next 12-months. Additionally, the ability of bonds to fulfill their traditional roles of a risk diversifier, will be restored once the hiking cycle pauses and policymakers and investors turn their attention to the economic downturn. We reiterate 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. 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 taken a beating in the high inflation environment but we need to remember that 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 looking beyond the current high inflation environment. With more policy rate hikes on the horizon and low convictions around the direction of government bond yields, we don't suggest investors offload all 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.

If investors move towards lower duration and riskier credit solutions in the fixed income sleeve, they must remain vigilant of the inherent drawdown risks as losses in the riskier parts of fixed income can be severe. Importantly, with higher yield on offer within high quality fixed income, the need to dive into riskier fixed income components might be unnecessary. Finally, investors must monitor potential total return losses, and they should not overlook the attractive levels of all-in yield or the income that fixed income investments can deliver from now on.

Consider the drawdown risks acceptable to clients who are investing heavily in fixed income and evaluate probable income versus probable drawdowns instead of probable returns versus probable volatility.

Outlook on Equities

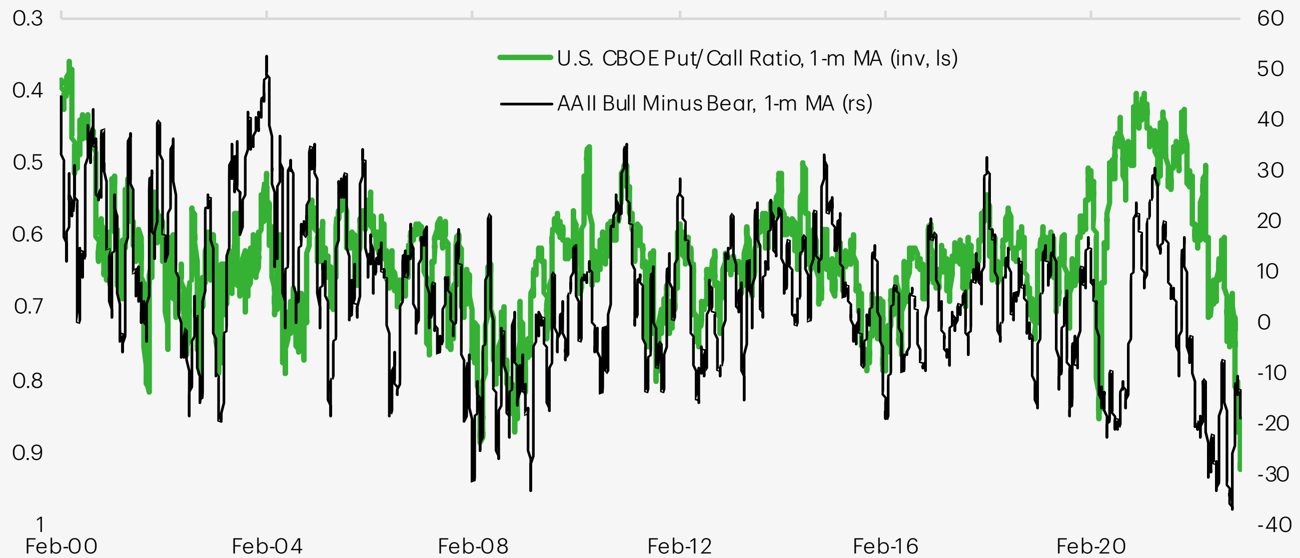
Modest Underweight

Difficult First Half, Better Second Half

David Beasley, Senior Portfolio Manager; Chris Blake, Senior Portfolio Manager; and Kevin Yulianto, Portfolio Manager | TD Wealth

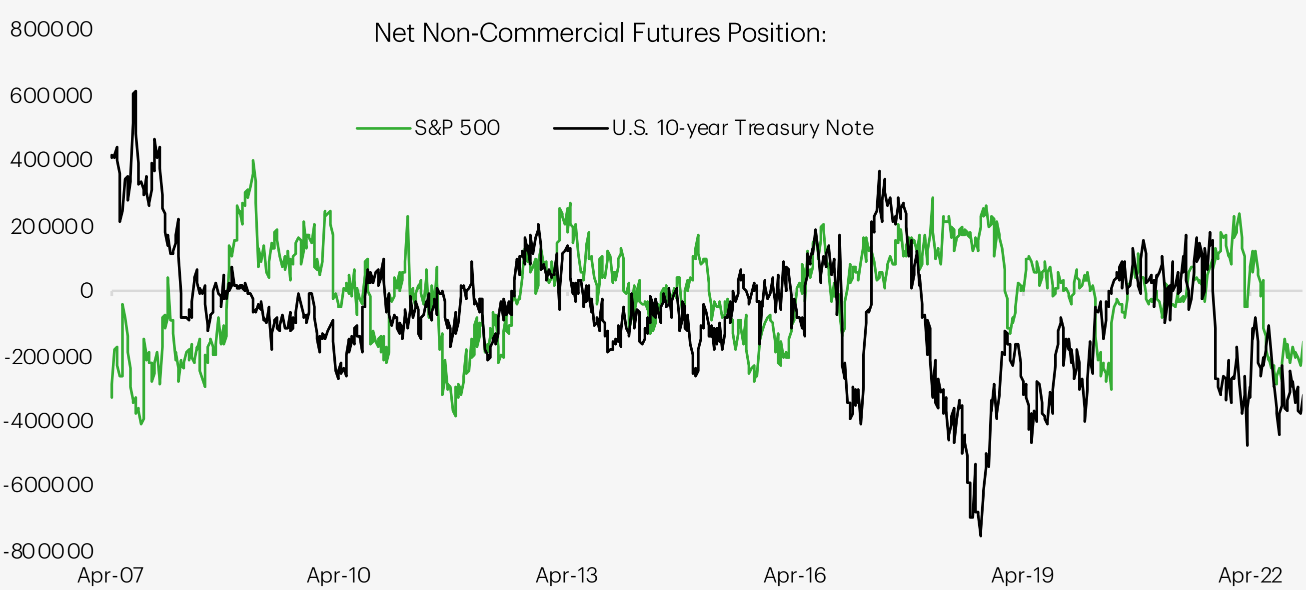
Following a difficult year for both equities and bonds, investors are now bearish and have bought protection in droves, expecting elevated equity volatility ahead. Investors are buying put options at a record pace to protect their portfolio from a drop in equity prices, and the CBOE put/call ratio now sits at a two-decade high. At the same time, the ratio of bulls to bears is at a level consistent with previous bear markets despite rebounding slightly from its recent low. Among more sophisticated investors, the tone is similar, with futures positions net short for both U.S. equities and Treasury bonds (Figure 1).

Figure 1: Investors turn bearish



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 2: Traders also bearish

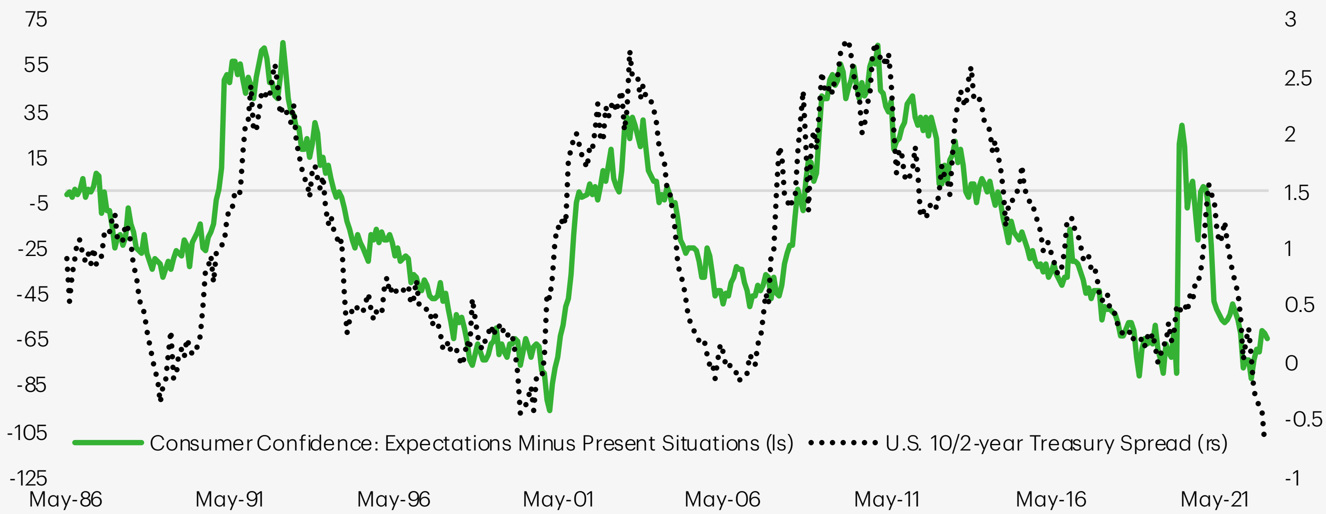


Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

The bearish case for the U.S. economy and risk assets is straightforward. First, consumer demand and business investment will likely continue to soften in the first half of 2023, which should weigh on growth and drive corporate earnings lower. Second, the Fed is not yet finished tightening monetary policy, despite growth starting to look wobbly and inflation easing a little more than expected in recent readings. Lastly, various leading indicators are flashing red and indicate a high probability of recession:

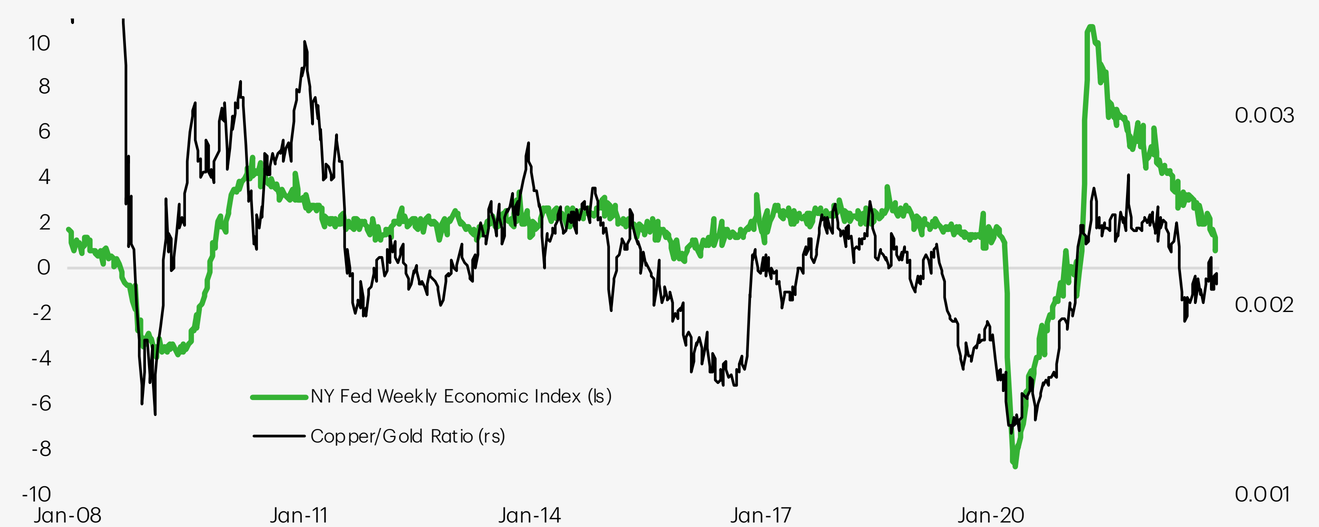
- The yield curve, a decent predictor of recession, has inverted to levels not seen in the past two decades. With the Fed expected to deliver a further 50 bps of tightening even as growth is faltering, the risk of a deeper downturn is rising.
- The gap between expectations and the current situation within the consumer confidence survey (Figure 3) has started to rise — a factor that, together with steepening yield curves, historically marked the beginning of a recession.
- The New York Fed Weekly Economic Index, a coincident indicator of U.S. economic growth, has been falling quickly and is now below "trend growth" level (Figure 4). We expect the greatest impact of tighter monetary policy to fall between Q1 and Q2 this year, which should push growth even lower in the coming quarters.

Figure 3: Expectations beginning to diverge from reality



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

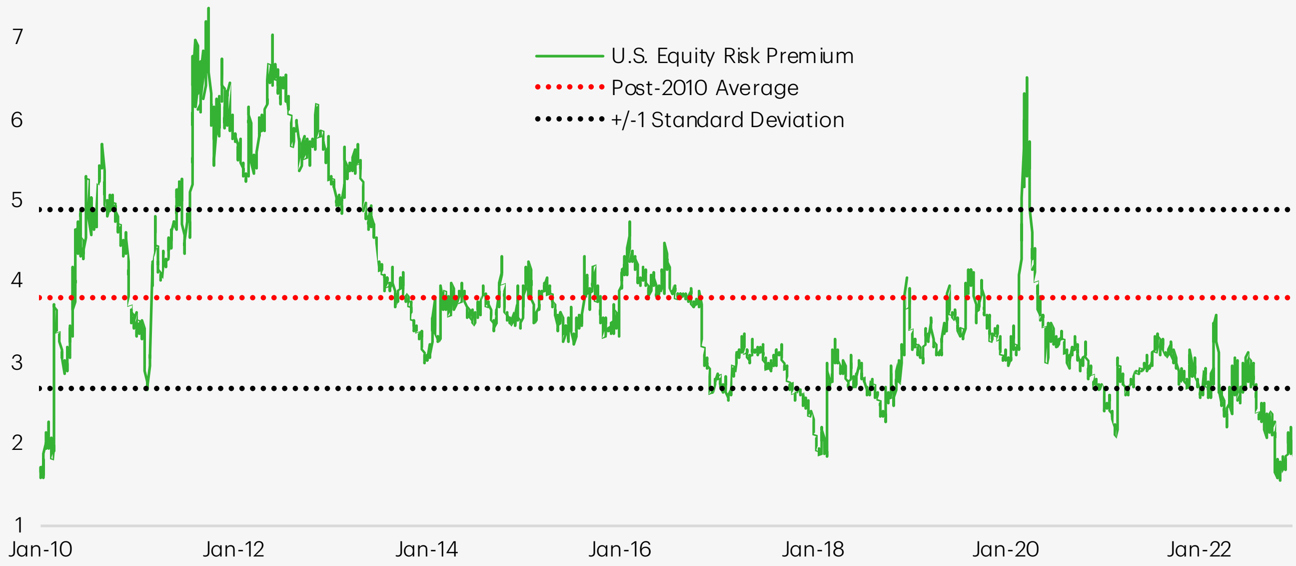
Figure 4: Increased likelihood of recession

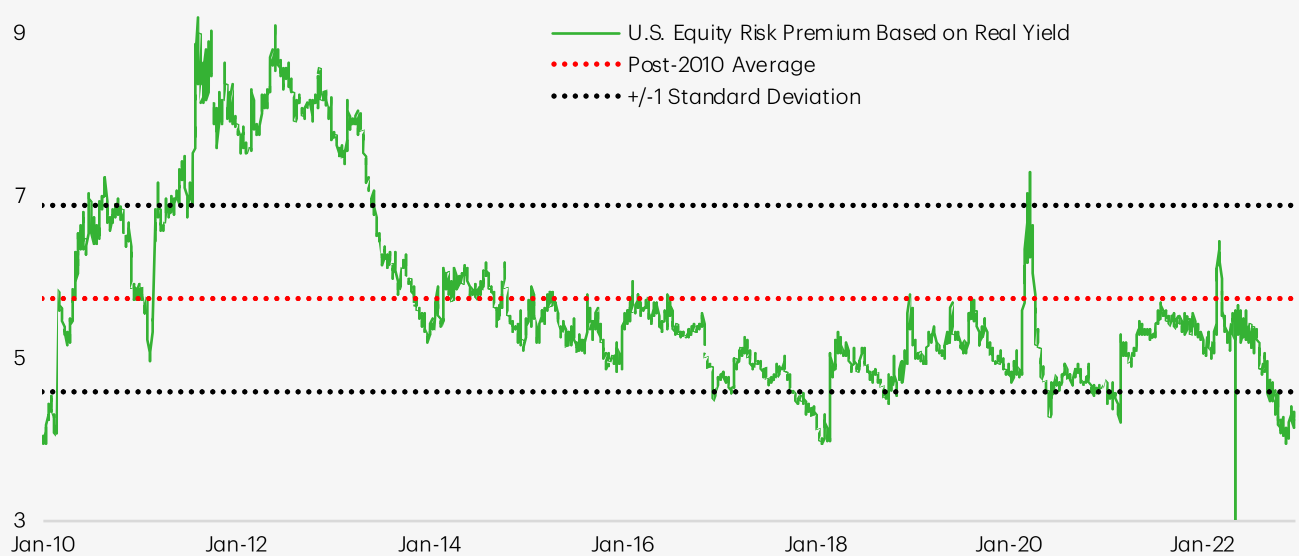


Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Despite investors' downbeat assessment of the U.S. economic outlook and equity market, fundamentals have yet to fully reflect the growing risk. Valuation and earnings estimates have further to go before equity becomes a "screaming buy." The S&P 500 is currently trading at 18x forward P/E, above its 16x historical average, based on an elevated forward earnings estimate. Given where the 10-year Treasury yield is trading currently, the equity risk premium (ERP) for U.S. stocks is one standard deviation below the post-2010 average, whether measured by nominal or real 10-year yields (Figure 5). The elevated valuation multiple and reduced risk premium for U.S. stocks provide investors a smaller buffer in the event of negative news, especially as earnings estimates continue to be revised lower, and tightening liquidity makes it difficult for equity multiples to expand from their current level. Although a correction in stock prices may be painful in the short term, long-term investors should cheer the opportunity to buy quality companies at better valuations compared to the past two years.

Figure 5: U.S. Technical Scenario Analysis



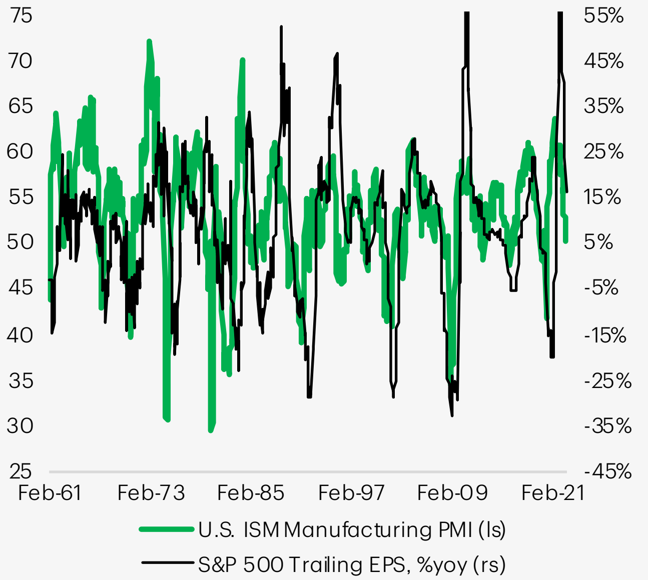


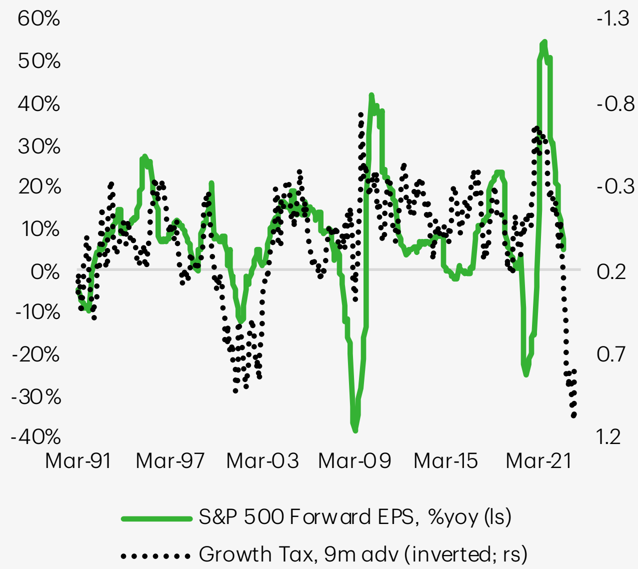
Source: Bloomberg Finance L.P., TD Wealth as of December 31, 2022

In the short term, the fluctuation in stock prices could be explained mainly by the changes in the market's risk sentiment and how it affects multiples. But in the long run, the price of an equity reflects its earnings potential, and the change in earnings tends to coincide with the ebb and flow of the business cycle. With the ISM manufacturing index and the PMI falling into contractionary level in November, S&P 500 trailing earnings growth should turn negative in the coming months. This is something we don't believe is currently priced in the market. Furthermore, our growth tax indicator — an average of oil price, the dollar and 10-year yield, all standardized — continues to point to lower economic and earnings growth until around mid-2023 (Figure 6).

Despite all the headwinds for equity earnings, current analyst estimates show an expectation for S&P 500 earnings to grow by 6% in the next 12 months, which stands in stark contrast to the historic norm for earnings to contract during a recession — which is increasingly becoming a consensus call among portfolio managers. It is important to note that the historical record for the consensus on earnings is rather poor. In three of the past four recessions, forward earnings growth expectations remained in positive territory going into the recession where in all cases earnings growth fell by double-digits (Figure 7).

Figure 6: Earnings growth likely to drop





Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

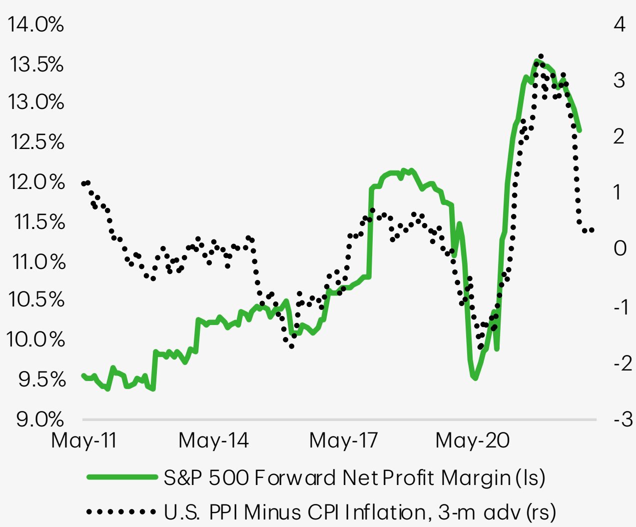
Figure 7: Earnings drop often underestimated

Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Apart from the fact that slowing consumer demand and falling inflation will likely temper revenue growth, we think company margins have further to contract given the probability of a shrinking gap between what companies could charge to customers and their input costs (Figure 8).

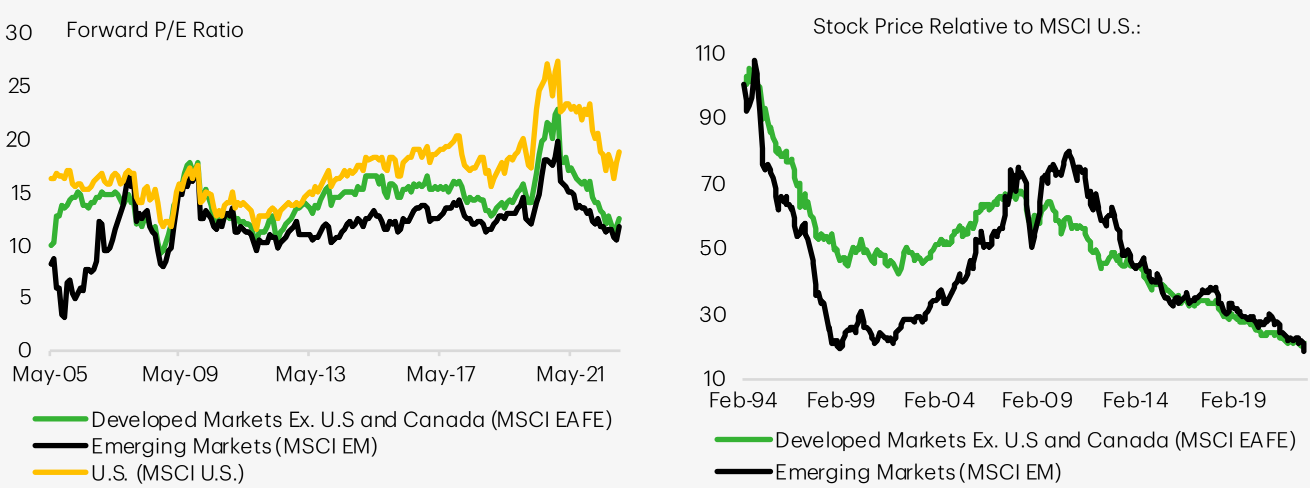
The bottom line is that the outlook for U.S. stocks is cloudy entering the first quarter of 2023 given the downside earnings risk and lack of valuation support. This may eventually present wonderful opportunities for long-term investors to accumulate quality stocks at a bargain price. Looking further to the second half of the year, there are signs that the headwinds for equities should abate as the business cycle resumes its upward trend and monetary policy potentially starts to become supportive for risk assets.

Figure 8: Profit margins are being squeezed



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 9: American equity dominance to be tested



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

International and EM Equities: Improving outlook vis-à-vis U.S. stocks

For most of the past decade, investors would have done better paying a higher price for stocks in the U.S., where earnings growth and return-on-equity are much higher than the rest of the world. In fact, investors would have more than doubled their equity return by holding U.S. stocks compared to their international and emerging-market counterparts. Given the track record, it's not surprising that very few investors are currently excited about the prospect of investing in European, Japanese or emerging-market stocks — a trend that has only accelerated following the Russian invasion of Ukraine and the associated spike in energy prices. Not only are these energy-importing nations most impacted by higher oil prices, but their benchmark indices also carry a much smaller weighting of tech stocks, and as a result weren't able to benefit much from the rise of the tech sector during the pandemic.

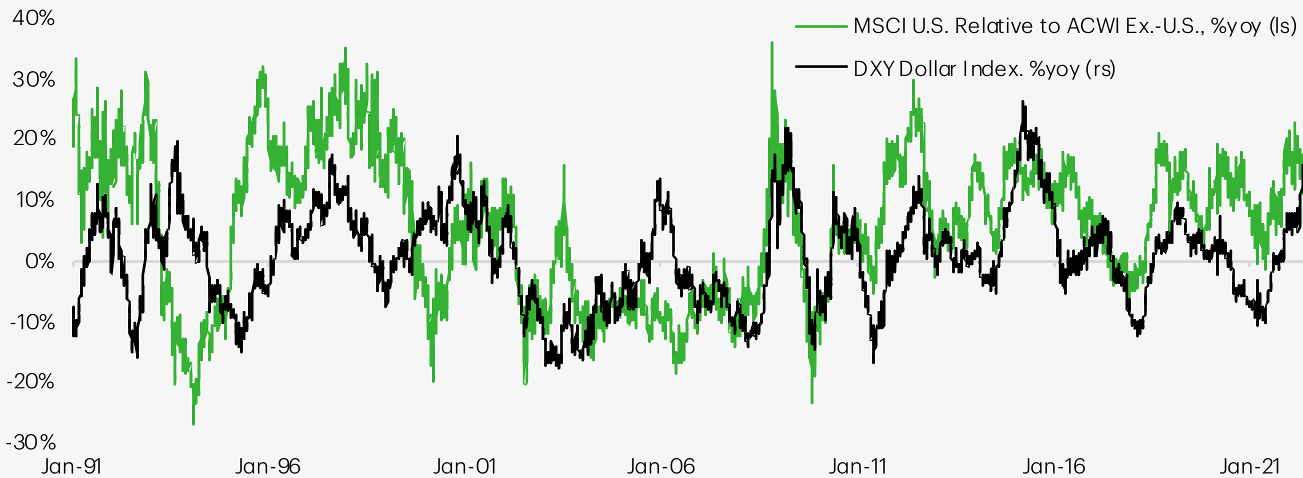
It's no secret that Japan and the European countries are facing a structural decline in their domestic growth due to falling working-age population and poor productivity growth, which should limit their earnings growth potential from domestic demand. Arguably, though, a large share of Japanese and European equity indices are now dominated by companies that cater to the global market (e.g., Toyota, Mitsubishi, Nestle, ASML and LVMH). In the case of EM countries, higher inflation vis-à-vis the U.S. means their currencies tend to depreciate against the dollar and offset part, if not all, of the local-currency price gains. However, valuation differentials between these countries' stocks and their U.S. counterparts have already reflected much of this risk (Figure 9). There are other reasons why international and EM equities could outperform the U.S. benchmark this year:

Figure 10 shows that the relative performance of international to U.S stocks is driven by the dollar cycle, which is entering its bearish trend given that the market expects the Fed to be cutting interest rates by the end of 2023, while the ECB is expected to continue with its rate hikes. The impact of a weaker dollar is two-fold. First, a weaker dollar would make it easier for companies outside the U.S. to service their dollar-denominated debt. Second, a bear market in the dollar would inflate the value of overseas investments when translated back into the common currency. More important still, a weaker dollar is a tailwind for global growth, which benefits international and EM stocks more than its U.S. counterpart and could happen as soon as the second half of the year.

Tightening global liquidity is another reason investors should consider diversifying into international and EM equities. As we have seen for much of 2022, higher real yields in the U.S. have pushed down equity multiples for U.S. indices, with high-multiple stocks suffering the most. A bigger equity valuation buffer in international and EM stocks should limit the downside risk of investments in both region, which have lower weights of a technology sector in their respective benchmarks. From this perspective, the case for investing in EM stocks is even stronger, as xmany countries' central banks have raised their policy rates in advance of developed-market central banks and will likely ease monetary conditions earlier — a boon for both their bonds and equities.

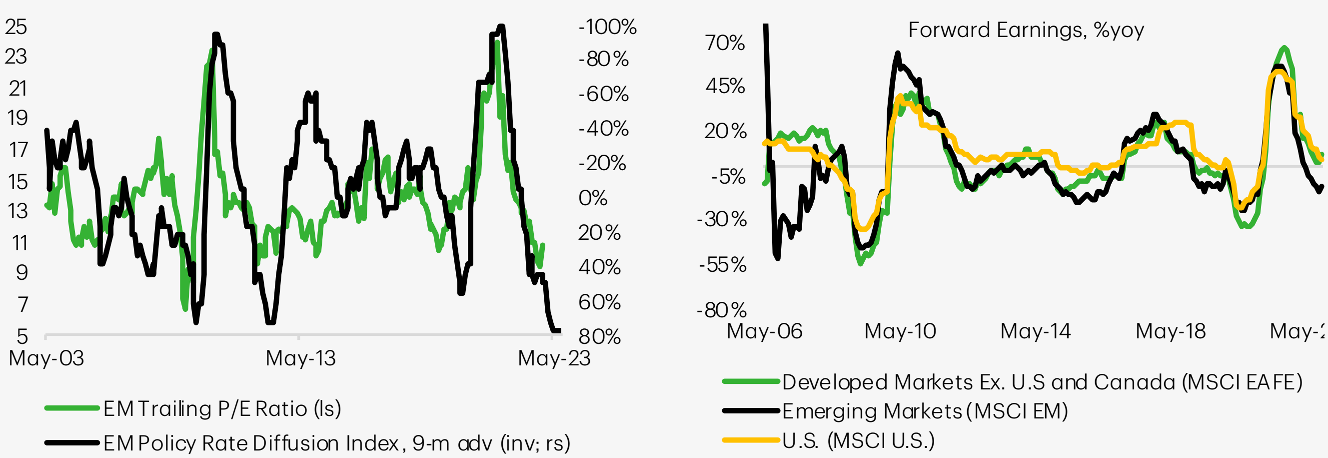
From an earnings perspective, EM stocks are looking particularly attractive, given that earnings growth is probably past its trough and forward earnings expectations remain very depressed, making it easier for actual earnings to surprise to the upside (Figure 11). The Chinese economic reopening and the potential for acceleration in global growth in the second half of the year could translate to a double-digit EPS growth ahead, at a time when EM stocks are currently trading at only 11.7x forward earnings.

Figure 10: U.S. dollar entering bearish phase



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 11: Emerging market rate hikes offer protection



Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Taken together, the potential for a softer dollar cycle, thick valuation buffer and depressed earnings expectations point to a stronger case for investing in EM and international stocks vis-à-vis U.S. stocks this year. Within the EM universe, the relative outperformance of Indian stocks should reverse as its equity index is trading at an elevated level, while commodity heavy Latin American countries and Chinese stocks are currently offering more compelling value (Figure 12).

Quantitative and Technical Perspectives on Equities

In addition to the insights provided by macroeconomic and fundamental data, applying a quantitative and technical filter to market-price structure can provide useful signals of where equity markets stand and where they might be going.

Top-down: Index Trends

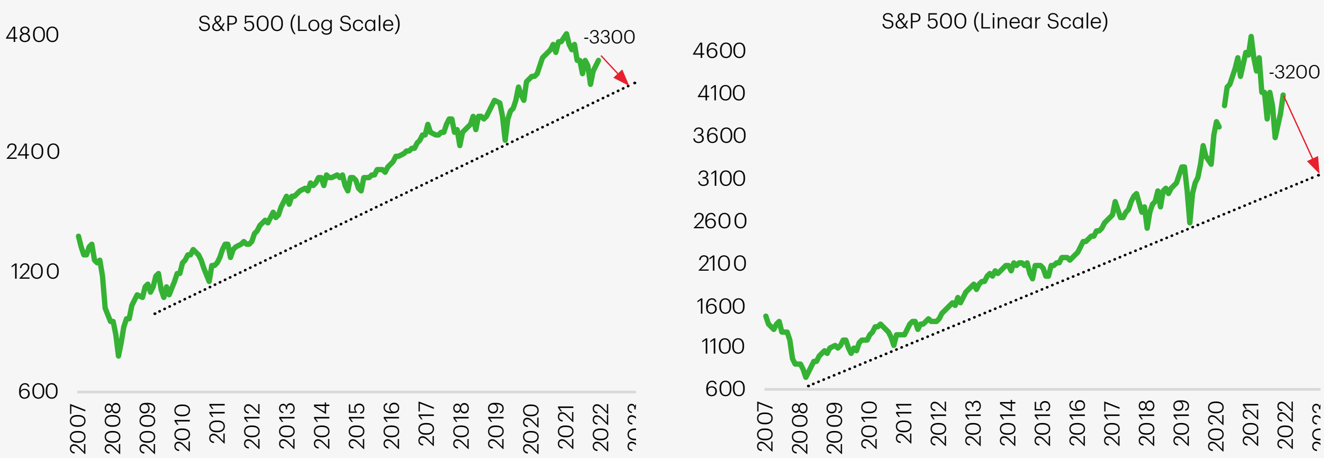
We use the S&P 500 as a broad gauge for the market's directional momentum. Although Canadian and other developed-economy equity indices differ in their construction, they tend to follow U.S. equity leadership. Zooming out and looking at the price trend of the S&P 500 since the 2009 lows (Figure 13), we can see where the price accelerated during the bull market and peaked at the end of 2021, beginning what turned into a bear market for most of 2022. The long-term trendline support along both linear and logarithmic scales suggest a potential downside trend target of 3,200 to 3,300, about 15% below the current level and around the pre-Covid high, which should be a technical support level. This would be in line with a fundamental scenario of a "hard landing" recession, where S&P 500 earnings fall by about 10% from their current 6% growth forecast, ultimately trading around the historical average price-earnings ratio of 16x.

Figure 12: Latin America, China offer compelling value

	Trailing P/E	Percentile	Forward P/E	Percentile	P/B Ratio	Percentile	Average Percentile
India	25.4	87%	24.6	91%	3.6	86%	88%
U.S.	20.1	58%	18.8	71%	4.1	85%	72%
Developed World	16.4	25%	15.6	53%	2.6	81%	53%
Europe	15.4	28%	12.2	27%	1.8	42%	32%
Emerging Markets	10.8	10%	11.7	41%	1.5	36%	29%
Taiwan	11.2	2%	11.3	3%	2.2	71%	25%
South Korea	9.7	14%	10.2	43%	0.9	16%	24%
China	10.5	22%	11.6	39%	1.1	10%	24%
Developed Markets Ex. U.S and Canada	13.7	5%	12.5	21%	1.7	41%	22%
Brazil	5.2	3%	5.5	10%	1.6	53%	22%
Japan	14.3	9%	12.8	10%	1.3	26%	15%
Chile	6.0	1%	7.0	2%	1.4	22%	8%

Source: FactSet, Bloomberg Finance L.P., TD Wealth as of December 27, 2022

Figure 13: S&P 500 Trendline

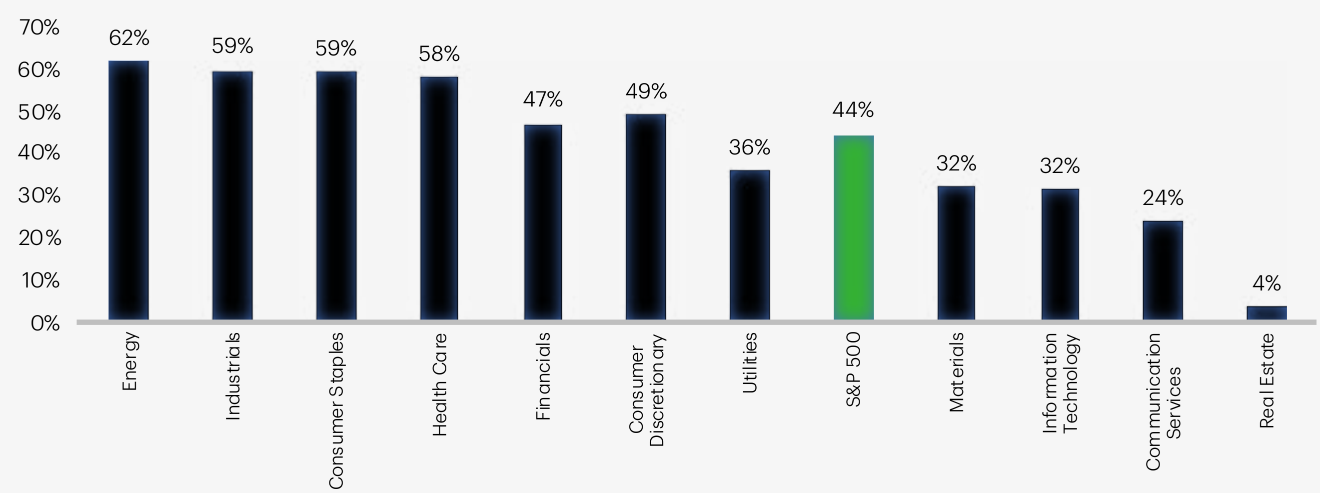


Source: FactSet, TD Wealth as of December 23, 2022

These charts show that the long-term trend remains intact, while the secondary trend of the bear-market cycle suggests we have some further downside ahead of us. Under the surface, we see in figure 14 the percentage of stocks that are trading above their 200-day moving average, which is a proxy for internal market strength. The index itself is at under 50%, which supports the scenario of weaker momentum and continued retracement. Also note that cyclical sectors such as energy and industrials still have the strongest breadth. As we get closer to a potential recession, the cyclicals typically lose internal strength and defensives gain market leadership.

The implication of this chart is that the market is in a holding pattern but showing signs of continued deterioration. Such patterns are usually resolved by a macro catalyst such as changes in employment, inflation or interest-rate policy decisions.

Figure 14: Stocks above 200-day moving average by sector



Source: FactSet, TD Wealth as of December 27, 2022

Bottom-up: Identifying relative strength for shelter in the storm

While the bear market may continue to push to lower levels into a potential recession in 2023, from a long-term perspective staying invested through downturns has historically been a superior strategy. We can, however, use quantitative tools to identify which industry sectors may provide more shelter than others during these periods.

One of these tools is to model behaviour of stock prices to determine relative strength of trends and momentum across sectors. The ranking tables in figures 15 and 16 summarize the outcomes of a stock scoring model applied to each of the S&P 500 and S&P/TSX index constituents. Each stock price is broken down into quantifiable indicator variables describing its trend and momentum characteristics. They are then grouped in relative strength categories and each sector receives a weighted average score and rank based on its constituents' scores.

Figure 15: S&P 500 Sector Model Results

Sector Rank by Average Equity Quant Score	S&P 500 Index Sector	Ranking Change vs. Prior Month	Average Change in in Momentum Rank	Average Change in in Trend Rank
1	Energy	0		
2	Consumer Staples	1		
3	Industrials	-1		
4	Health Care	1		
5	Utilities	4		
6	Materials	0		
7	Financials	-3		
8	Consumer Discretionary	-1		
9	Information Technology	-1		
10	Real Estate	0		
11	Communication Services	0		

Overweight	Modest Overweight	Neutral	Modest Underweight	Underweight

Source: FactSet, TD Wealth as of December 27, 2022

Figure 16: S&P/TSX Sector Model Results

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	Consumer Staples	2		
2	Gold	5		
3	Energy	-2		
4	Industrials	1		
5	Financials	-1		
6	Consumer Discretionary	0		
7	Materials Ex-Gold	-5		
8	Communication Services	0		
9	Real Estate	0		
10	Information Technology	0		
11	Utilities	0		
12	Health Care	-1		

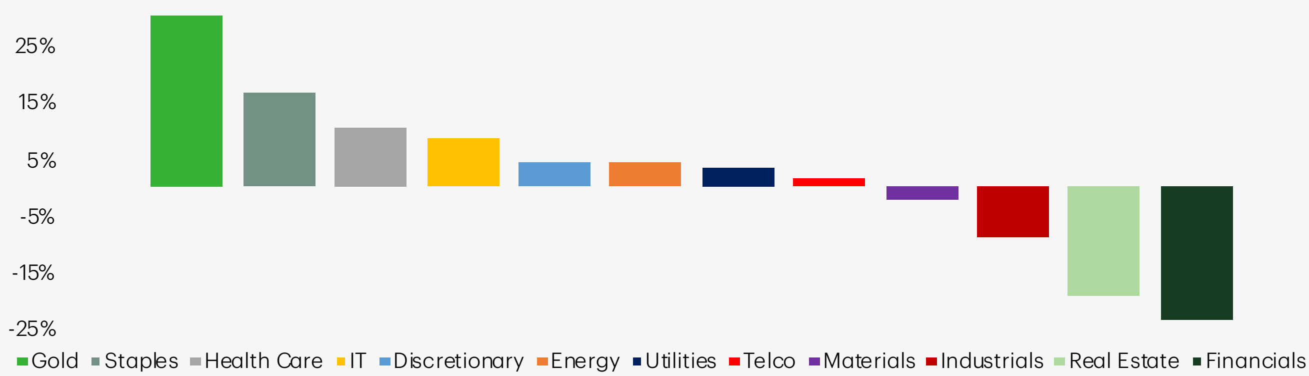
Overweight	Modest Overweight	Neutral	Modest Underweight	Underweight

Source: FactSet, TD Wealth as of December 27, 2022

Both the U.S. and Canadian models suggest the flow of trading rotation has been towards a positioning for the later stages of an economic cycle, with defensive sectors consumer staples, gold (Canada model) and health care (U.S. model) among the highest-ranked according to the model. Energy, which has been the strongest performer of 2022 despite showing signs of weakening in the second half of the year, remains a top-three sector, which is in line with a late-cycle market seeking value and income. Industrials also tend to peak towards the end of an economic expansion.

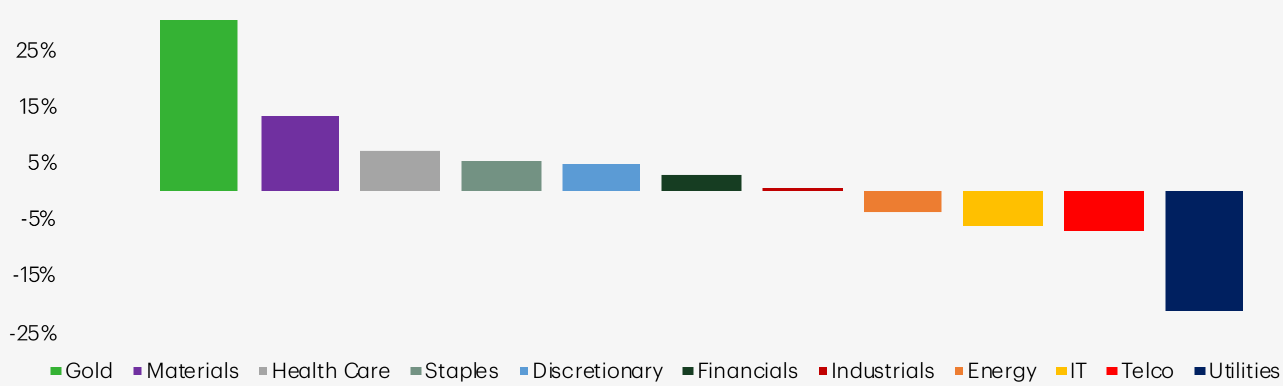
These quantitative ranking tables provide real-time insight into relative sector strength and the market's adaptive positioning. The market as a "voting mechanism" appears to be leaning towards a late-stage economy with an increasing risk of recession. Considering this risk, we looked back to sector returns in the 2001 and 2008 to 2009 bear-market cycles to compare relative performance versus the market during those recessions for potential insight into where the best shelter may be in the next one (Figures 17 and 18).

Figure 17: Relative sector performance versus S&P 500 index during 2008-2009 recession



Source: FactSet, TD Wealth as of June 30, 2009

Figure 18: Relative sector performance versus S&P 500 index during 2001 recession



Source: FactSet, TD Wealth as of November 30, 2001 (Real Estate sector data for 2001 N/A)

These recessions had different characteristics: the 2001 recession was the aftermath of a technology bubble, while 2008 was the result of a real estate bubble. Regardless, in both cases we see outperformance from gold, consumer staples and health care.

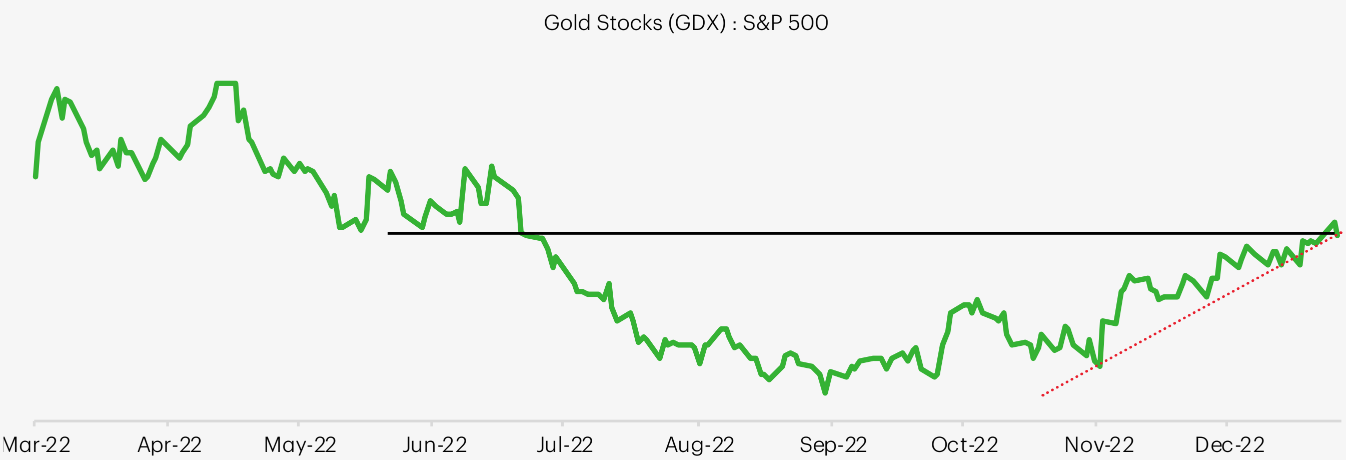
Given that gold outperformed by such a significant margin during these recessions, we decided to take a closer look at what gold stocks are doing currently for a signal the market may be increasingly rotating towards a recession scenario. In both the Canadian and U.S. markets, the leading gold stock ETFs have been demonstrating relative outperformance since mid-Q4 2022 and are beginning to break out to a new uptrend (Figures 19 and 20).

To summarize, taking macro and fundamental data into account, along with these quantitative and technical signals from the market's internal structure, it's reasonable to continue a defensive and tactical positioning strategy as we move into 2023.

Figure 19: iShares S&P/TSX Global Gold Index ETF versus S&P/TSX Composite Index

Source: FactSet, TD Wealth as of December 23, 2022

Figure 20: VanEck Vectors Gold Miners (GDX) ETF versus the S&P 500 Index



Source: FactSet, TD Wealth as of December 23, 2022

Outlook on Real Assets

Modest Overweight

Activity Slowing, But Real Assets Still Well Positioned

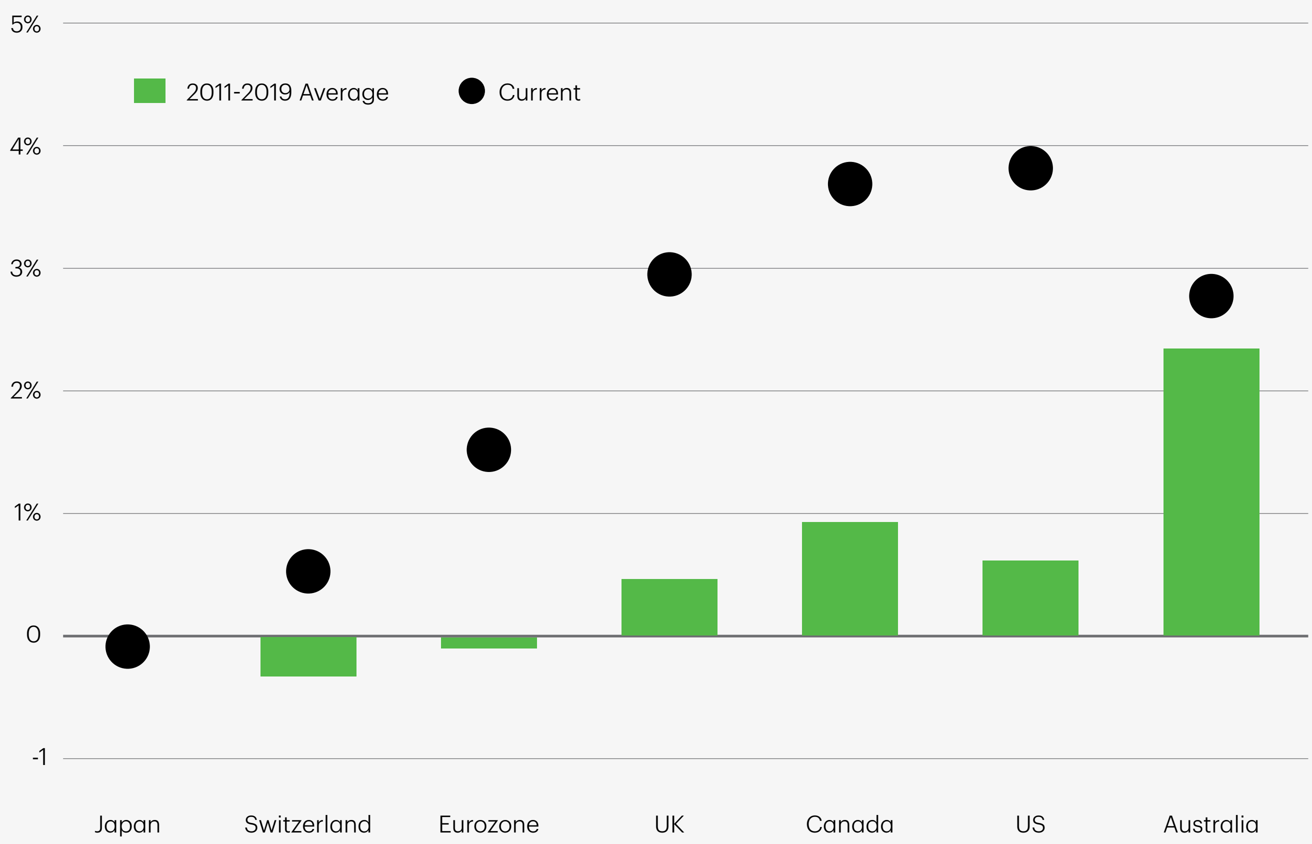
Kenneth Sue, Senior Alternative Investments Analyst | TD Wealth

In many respects the year ended the same way it began: geopolitical instability, stubbornly high inflation, a tight labour market, and add to that the fastest hiking cycle in decades from central banks. Indeed, many market participants expect these trends will continue and hopefully peak in 2023. As discussed in previous editions of this section, monetary policy decisions take several quarters to fully feed into the economy, meaning central banks continue to run the risk of increasing rates too high and too quickly. It remains to be seen whether central banks will steer economies towards a soft landing or a hard one, but either way the surge in interest rates has had a predictably more immediate effect on real estate.

Globally, real estate activity has slowed. Global investments tumbled 22% quarter over quarter (q/q) in Q3 as interest rates, valuations and demand shifted the economics that underpinned deals, rendering some unviable. Retail volumes led the slump, posting a 38% q/q decline, while other sectors were knocked down between 21% and 23% q/q. For the first time since the Global Financial Crisis (GFC), most major markets have seen an increase in yields, or capitalization rates (a cap rate is the yield or income received on property relative to the property's value), as market participants adjusted valuations relative to financing costs and bond yields.

Interest rates remain central to the discussion as central banks globally have reversed almost a decade's worth of policy in relatively quick fashion with central banks of most major economies hiking rates well above their averages over the past decade to combat inflation (Figure 1).

Figure 1: Policy Rates Well Above 2011-2019 Averages



Source: Oxford Economics , Refinitiv Datastream, as of November 2022.

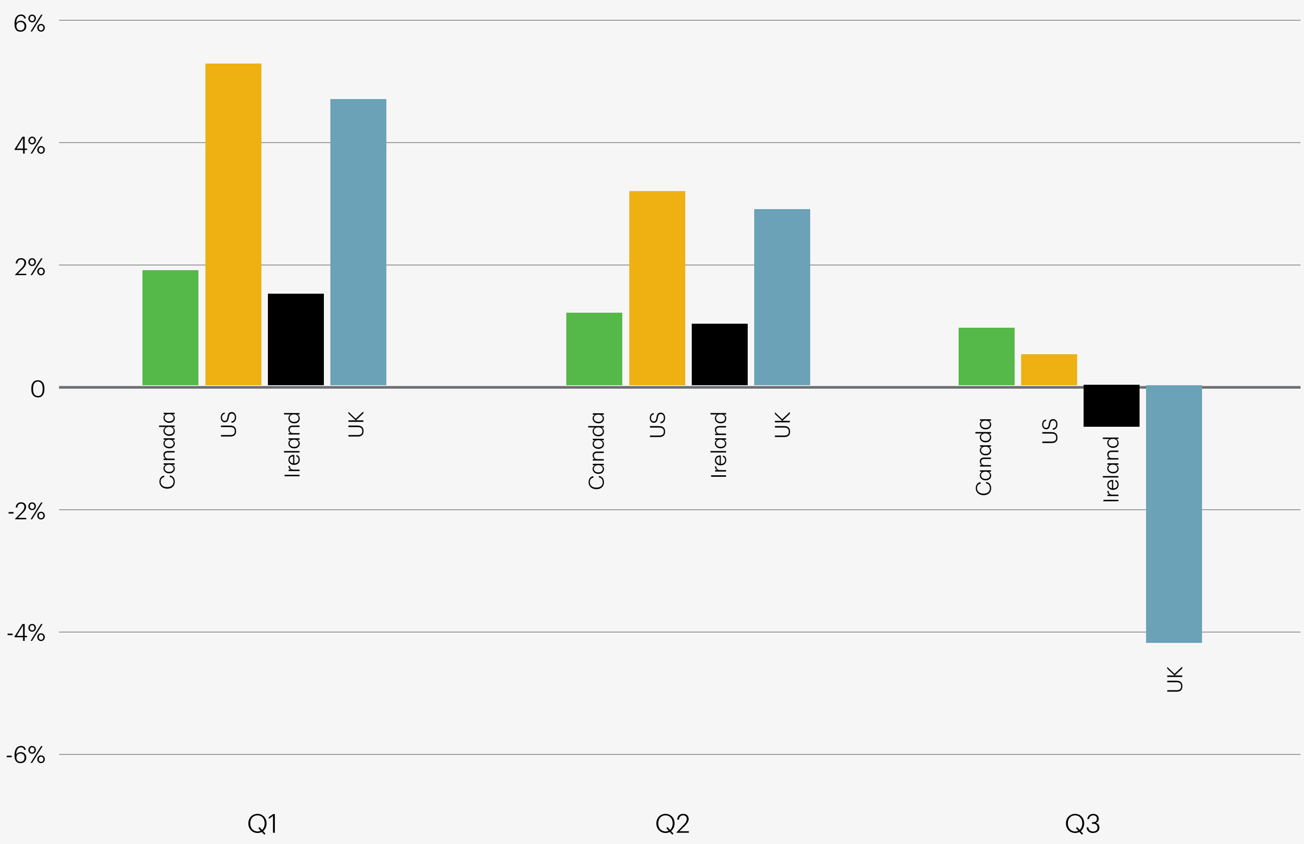
While it is difficult to predict where rates will settle, we do expect each G10 central bank to keep them above the post-GFC average. For the Federal Reserve, for example, this would be above the 0.7% averaged between 2011 to 2019. Of course, the timing of any moves will depend on how much inflation subsides and the relative strength of the economy.

Globally, real estate returns have remained under pressure as cap rates adjust upwards to the Fed's hiking cycle. North America remains positive, buoyed by strong rent growth, but the U.K. in particular has experienced a double whammy and confidence has been shaken by high inflation stemming from the conflict in the Ukraine and a devalued currency as market participants question the path charted out by the U.K. government. We expect further declines in global returns as well as those in the U.K., as valuations continue to adjust.

All in all, the global all-sector cap rate stands at 4.9% according to MSCI Inc. As discussed in the previous quarter, we expect this upward trend to continue as rent hikes moderate, and are unable to continually compensate for valuation declines and rising interest rates. That said, asset managers remain well positioned to weather the storm: over 80% of debt for the average asset manager is fixed rate and their net operating income is keeping up with inflation, rising 8.1% year over year, according to NAREIT.

TD Wealth maintains a modest overweight stance on real assets given the strong fundamental and operational strength within the space. Real assets offer protection against inflation and provide real returns to investors and as such remain a key allocation in portfolios.

Figure 2: Total Returns Decline in 2022



Source: NCREIF, November 2022.

Outlook on Currencies

Has the U.S. dollar peaked?

Aurav Ghai, Senior Fixed Income Analyst and Kevin Yulianto, Portfolio Manager | TD Wealth
TD Securities FX Strategy

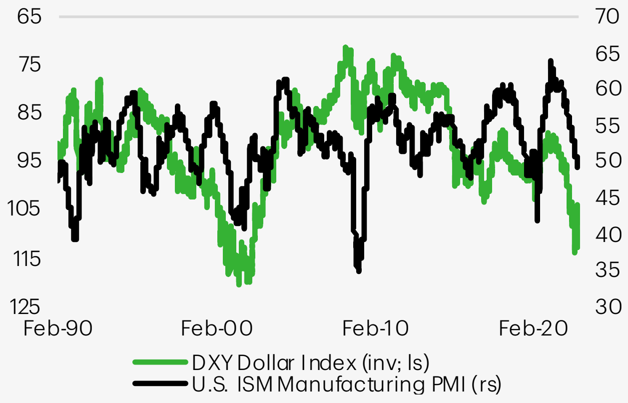
A big part of the U.S. dollar rally reflects the changing dynamics around U.S. and international yield curves. The U.S. dollar normally rallies when the U.S. yield curve bear-flattens, revealing the impact of looming Fed hikes and weaker growth prospects. In our Q4/22 Portfolio Strategy Quarterly, we outlined three main factors that drove the U.S. dollar sharply higher in 2022 and highlighted that a peak in the U.S. dollar requires: (1) a trough of global growth; (2) a peak in Fed terminal exploration; and (3) a reversal of the global terms-of-trade shock. Although we think global growth will continue to weaken in the first half of 2023, there is a lack of consensus among economists and strategists on how deep the business-cycle downturn will be. There is, however, more clarity today with regards to Nos. 2 and 3 given that inflation appears to have peaked, with three months of data showing declining trends and the commodity price shock from the Russia-Ukraine war abating. As a result, the U.S. dollar has dropped 5% to 10%, relative to a basket of major currencies, from the recent peak in October (Figure 1).

Although the U.S. dollar, having lost its tailwind, remains overvalued, we don't expect to see significant headwinds for the dollar until Q2. Historically, a U.S. or global economic slowdown coincides with U.S. dollar strength as capital flows into safe-haven assets and currencies (Figure 2). Leading indicators are pointing to further deterioration in growth, suggesting a deeper-than-average downturn in 2023.

While we see a positive environment for the U.S. dollar in the near term, we believe it reached its peak in October, given that the Fed was likely at its most hawkish stance — prior to the lower-than-expected CPI inflation print — and U.S. growth was still outperforming the rest of the world. Should inflation continue to undershoot consensus expectations in the coming months while growth in the U.S. decelerates quickly, monetary policy may start to ease and boost investors' appetite to diversify into other currencies.

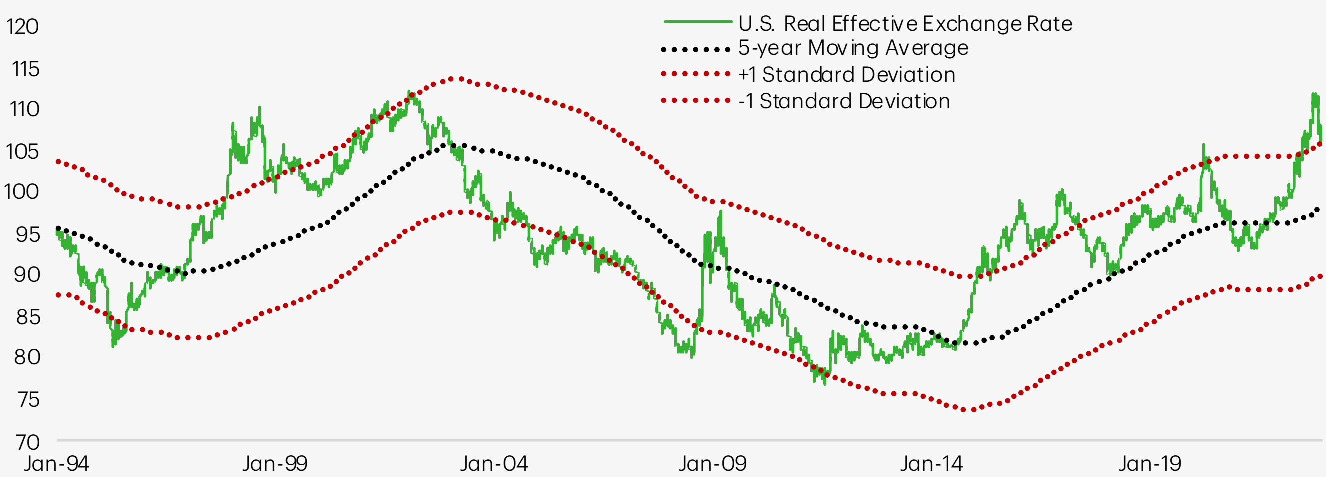
The U.S. dollar will see additional headwinds due to a rebound in Chinese growth (as that country abandons its zero-covid policy) and stronger growth in Europe, Japan and emerging-market countries (as the energy price shock seen earlier in 2022 moderates).

Figure 2. The dollar has historically strengthened in a business-cycle downturn



Source: Bloomberg Finance L.P as of December 30, 2022

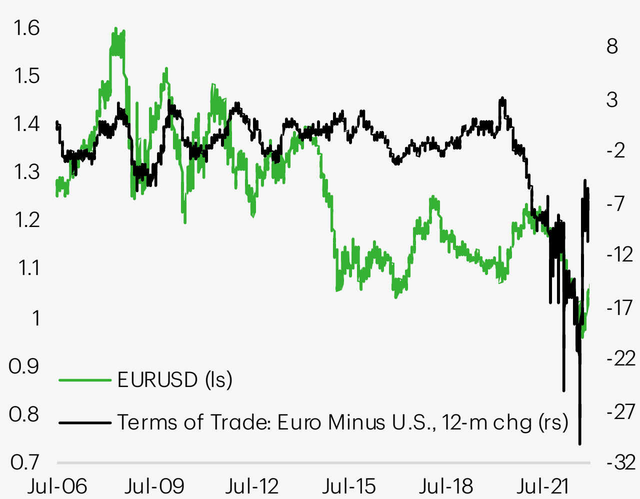
Figure 1. The Dollar is Expensive and Overbought



Source: Bloomberg Finance L.P., as of January 5, 2023.

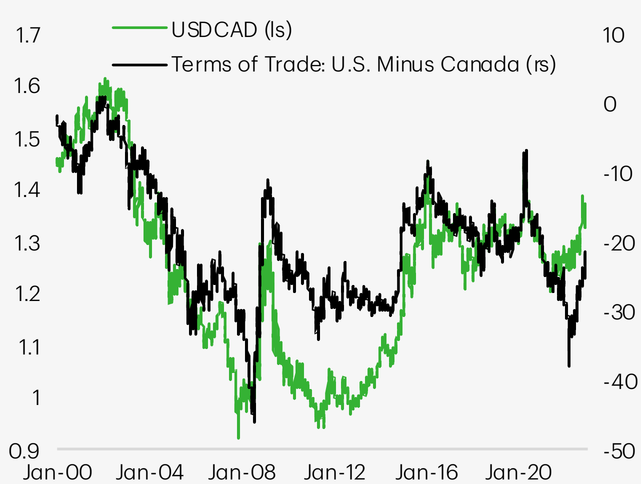
The spike in oil prices in the first half of 2022 improved the terms of trade for energy-exporting countries, such as Canada and the U.S., but negatively impacted energy-importing countries, such as Japan and those in Europe. After peaking at around US$120 per barrel in March and June 2022, oil prices have reversed by over 35% to US$75 per barrel. This translated to a sharp reversal in the relative terms of trade for the euro area and Canada, which should become a tailwind for EUR/CAD (Figure 3 and 4). The outlook for the euro is also improving given that the continent has avoided a major energy crisis this winter, with very warm temperatures so far. Over the long term, the region is adapting to the reduced supply from Russia by building liquified natural gas (LNG) facilities, and is accelerating the construction of renewables infrastructure, which will help to alleviate the stagflation impact from high oil and natural gas prices.

Figure 3. Falling energy prices are a boon for the euro ...



Source: Bloomberg Finance L.P., as of January 5, 2023.

Figure 4. ... but will weigh on the Canadian dollar

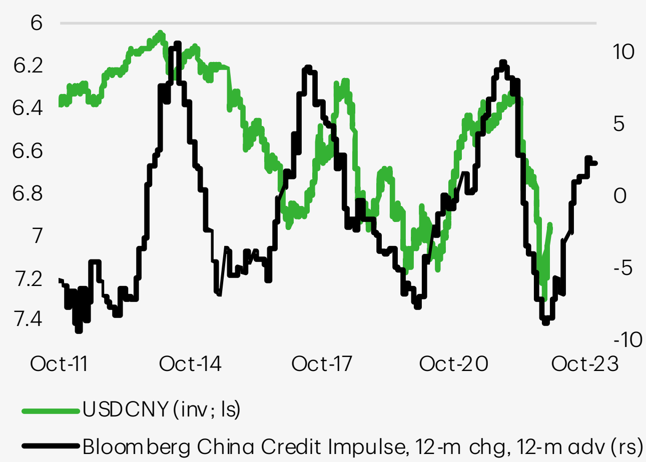


Source: Bloomberg Finance L.P., as of January 5, 2023.

The weaker dollar over the past two months has also translated to green shoots for emerging-market currencies, with the yuan strengthening from 7.3 per U.S. dollar to 6.9, while a Bloomberg basket of eight EM currencies has appreciated by over 5% (Figure 5 and 6). Chinese credit data bottomed in late 2021 and rebounded sharply in 2022, which has historically led to stronger growth and EM performance in the subsequent 12 months.

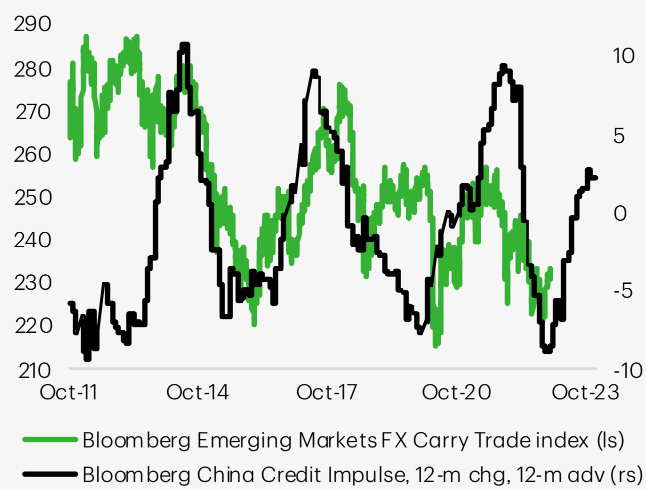
The bottom line is that there are tailwinds and headwinds for the U.S. dollar in the near term. We could see the start of a bear market for the U.S. dollar beginning in Q2, as the Fed's tightening cycle nears an end, whereas at the same time, recession risk could spark a USD rally in the first quarter of 2023. However, we believe there will be selling into any U.S. dollar strength as traders use the strength as an opportunity to reduce exposure and diversify into international and EM assets, which could outperform once the global business cycle bottoms.

Figure 5. Stronger Chinese credit bodes well for the yuan ...



Source: Bloomberg Finance L.P., as of January 5, 2023.

Figure 6. ... and other EM currencies



Source: Bloomberg Finance L.P., as of January 5, 2023.

Outlook on Commodities

Early Innings

Hussein Allidina, Managing Director and Head of Commodities | TD Asset Management

We remain constructive on commodities and believe that we are in the early innings of a structural bull market. This view stems not only from our belief about where we are in the commodity investment cycle, but finds additional support from the global energy transition, geopolitics and more volatile weather patterns. That said, in the near term, we are less convinced that prices will move higher, given that global growth and recession fears remain front and centre.

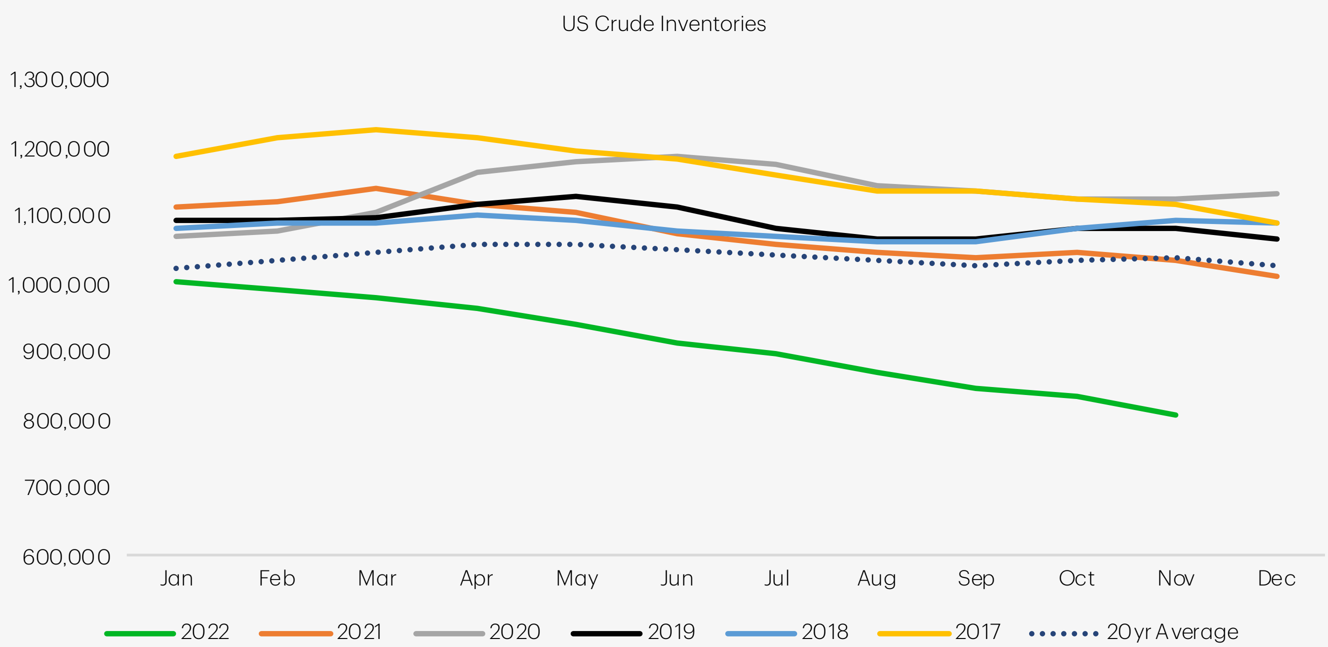
With fundamentals softening due to slowing growth, commodity prices traded lower into year-end 2022, down meaningfully from last summer's highs. Backwardation (near term prices remain higher than forward prices), though still positive, is also well off the highs seen in the first half of the year. Weaker and more volatile prices will only delay much needed investment on the supply side, possibly portending an aggressive move higher when growth does eventually stabilize and improve. Overall, we think the environment will be challenging in the first half of 2023, as prices grapple with slowing growth, but beyond that we are constructive, given that commodity supply remains broadly constrained and underinvested.

Energy: Volatility as balance tightens

We remain constructive on crude. Last year saw tremendous volatility. The continued reopening of many economies around the world proved supportive for demand, although China's zero-covid policy did not. Russia's invasion of Ukraine early in the year sent prices over US$120 per barrel, but they have since retreated, given that Russian supply disruptions have yet to materialize. Meaningful inventory releases from government reserves, as well as the mild autumn in the northern hemisphere, also proved to be a headwind. As we head into 2023, we are constructive but not without reservations on how challenged demand might be.

OPEC has demonstrated a willingness and desire to manage the downside, with an apparent target of US$70 per barrel; OPEC's ability to manage the upside remains a question given relatively limited spare capacity. Russian production and exports, though largely unimpacted thus far, will likely average at lower levels in 2023 and beyond, owing to both sanctions and an exodus of Western capital and technology. Although we are concerned about demand in the near term, we contend that balances will tighten over the coming years as a challenged energy transition keeps demand tied to economic activity while supplies remain challenged on inadequate capital expenditures.

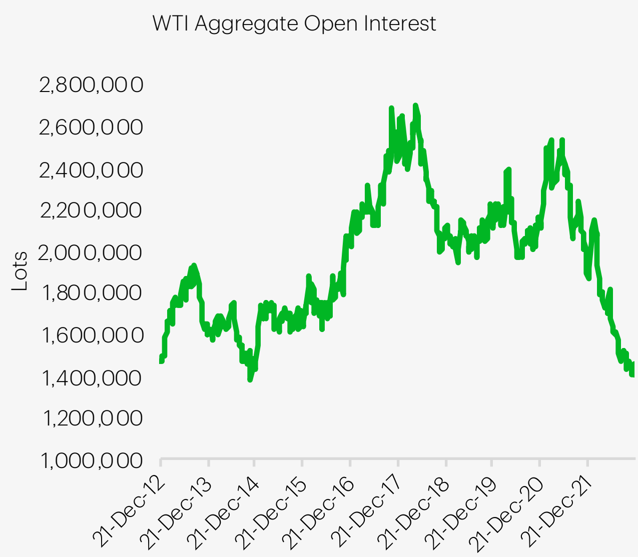
Figure 1: Inventories have tightened meaningfully



Source: Bloomberg Finance L.P. as of December 15, 2022.

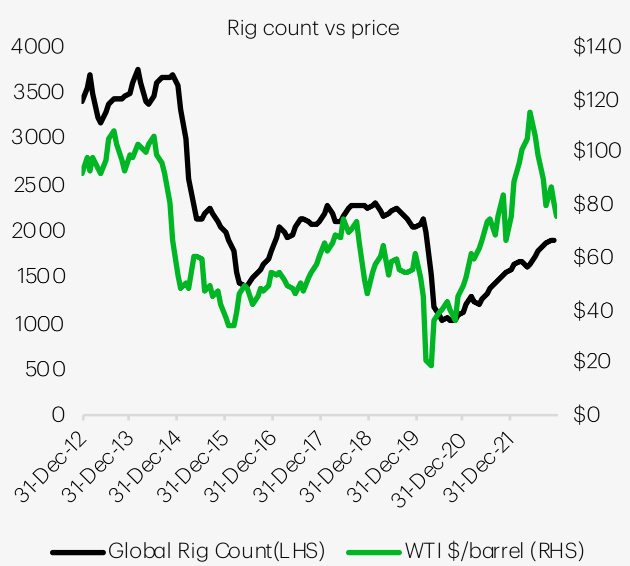
Turning to natural gas, we believe European prices will remain elevated as import and storage capacity struggle to deal with the loss of Russian gas, requiring higher-priced LNG imports and some demand destruction in order to find equilibrium. In the U.S., prices should stay much more contained, with production expected to grow and demand relatively insulated from the global market until additional LNG export capacity is brought to market the middle of the decade.

Figure 2: Positioning is scant



Source: Bloomberg Finance L.P. as of December 15, 2022.

Figure 3: Strategic reserve releases are likely done and the production response has been tepid



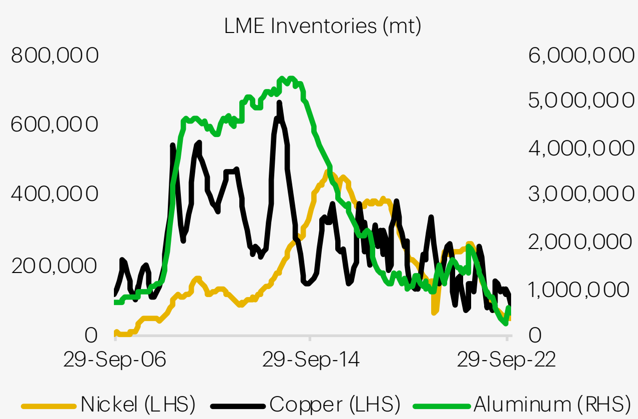
Source: Bloomberg Finance L.P. as of December 15, 2022.

Metals: Watch China

The sensitivity of metals demand to growth, particularly growth in China, which spent 2022 in lockdown, proved challenging last year. As the U.S. economy reopened, consumption tended to favour service spending, which weakened demand for manufacturing and metals. This was also a headwind, as was the energy-induced manufacturing recession in Europe.

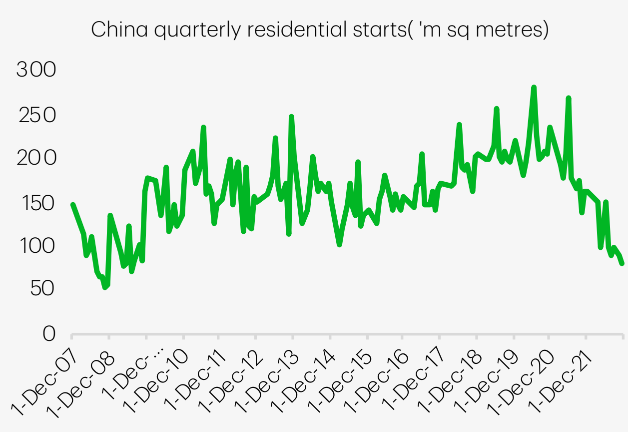
The fortune of metals has historically been dependent on China's construction activity. But looking forward, we think the growth drivers will change given that demand will be more distributed globally. However, not all metals are created equally and we need to be discerning when approaching the sector. The energy transition should be a tailwind for electrification metals including aluminum, copper and nickel, but iron/steel and to a lesser extent zinc will remain highly sensitive to Chinese construction spending. Again, we remain constructive but are concerned about how challenged demand might be in the near term.

Figure 4: Underinvestment has led to low inventories



Source: Bloomberg Finance L.P. as of December 15, 2022.

Figure 5: China's real estate slowdown hurt demand



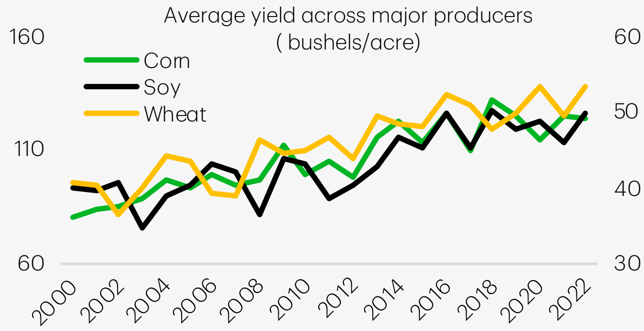
Source: Bloomberg Finance L.P. as of December 15, 2022.

Agriculture: Idiosyncratic risks

Much of the risk that was priced in following Russia's invasion of Ukraine has been given back. It has become clear that it is in Russia's interest to not disrupt the trade of food, since the largest food importers are countries that have remained relatively neutral, such as China, Egypt and Middle Eastern nations. Historically, it has been difficult to be structurally bullish on agriculture for the long term given that the supply response to near-term tightness is more immediate versus the longer capex cycles needed in energy and metals. Further hurting the case has been tremendous technological progress by the world's largest producers, which have seen yields improve steadily over the last 20 years (Figure 6).

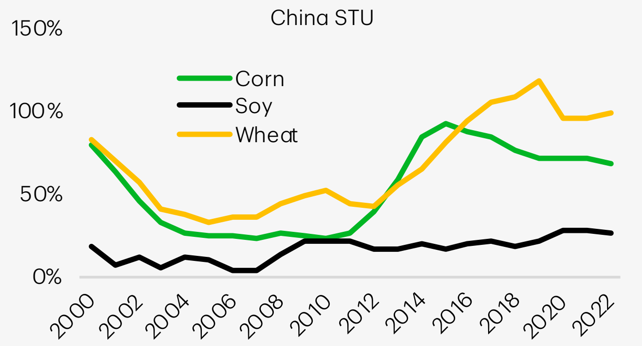
However, going forward we do see more idiosyncratic risks in the agricultural space. It goes without saying that agriculture is the most sensitive to weather risks and the world has seen increasing occurrences of extreme weather events. In addition, as the world strives to move away from carbon fuels and becomes more focused on energy security, there has and will continue to be growth in the demand for biofuels.

Figure 6: Yields have improved steadily



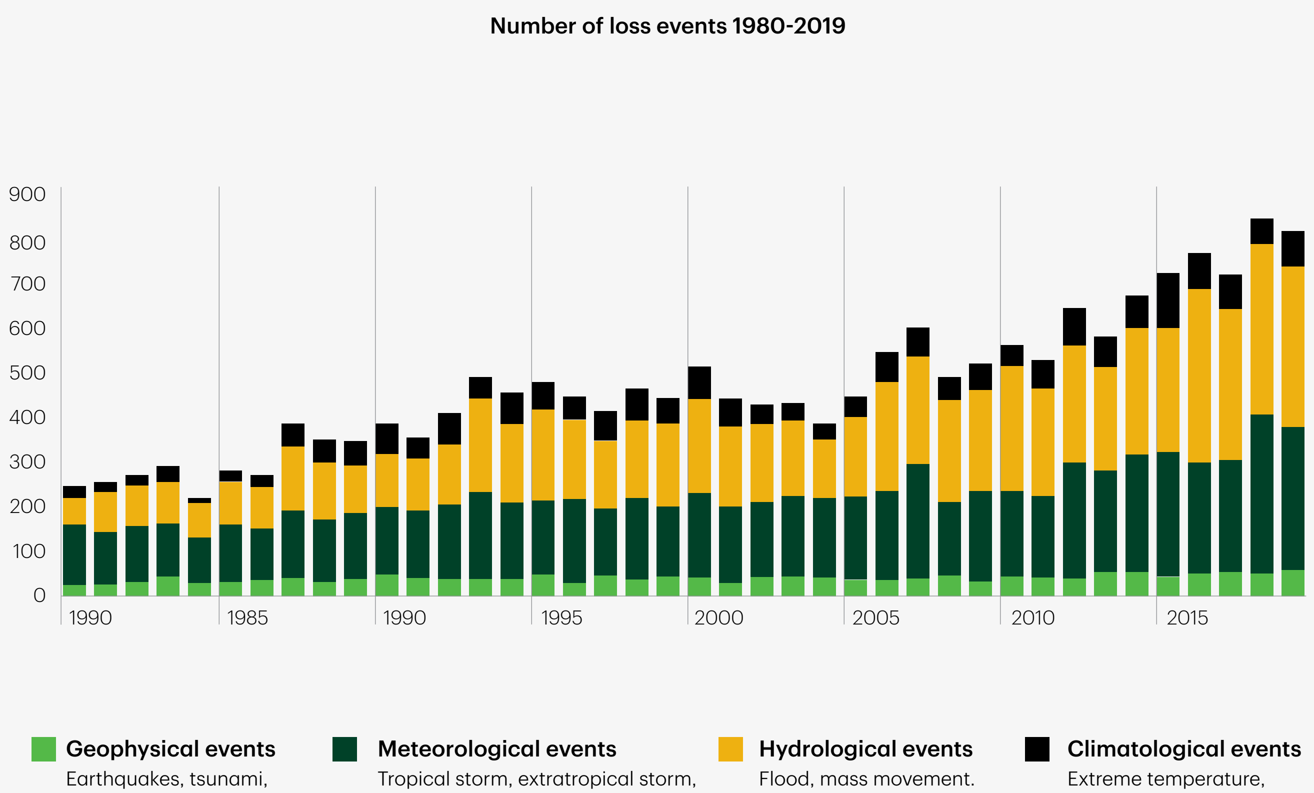
Source: Bloomberg Finance L.P. as of December 15, 2022.

Figure 7: China holds high level of food stocks



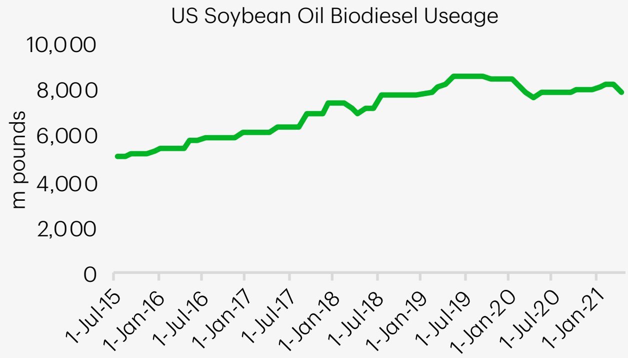
Source: Bloomberg Finance L.P. as of December 15, 2022.

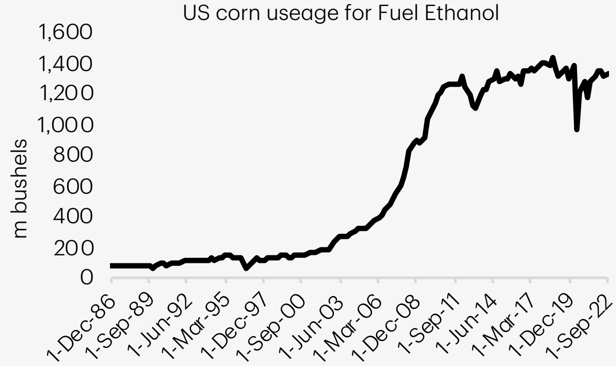
Figure 8: Are weather extremes more frequent?



Source: NatCatSERVICE MunichRE, 2019

Figure 9: Biodiesel and ethanol usage on the rise





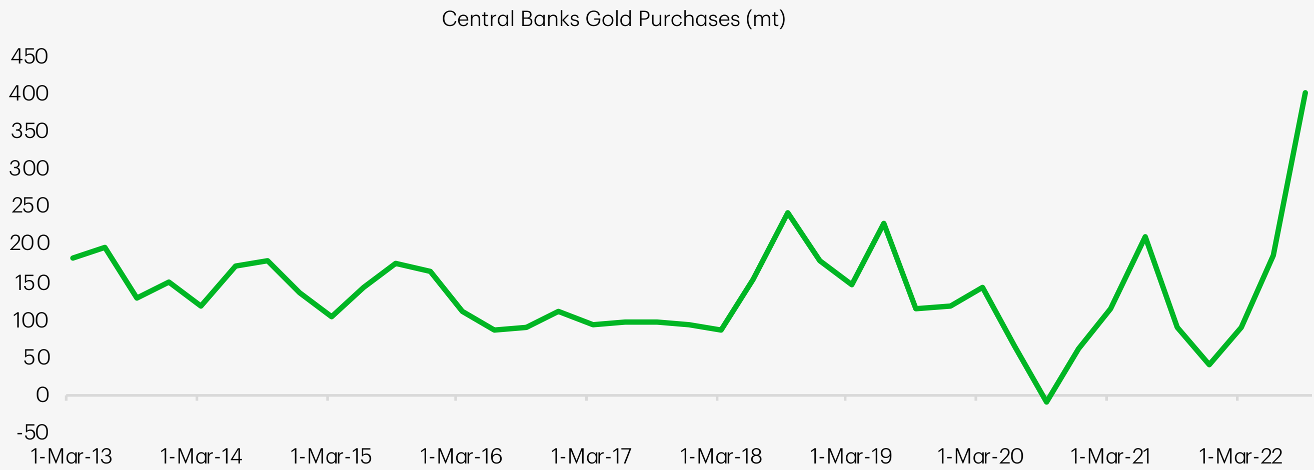
Source: Bloomberg Finance L.P. as of December 15, 2022.

Gold: Beginning to find favour

We continue to believe that gold belongs in a well diversified portfolio, owing to its safe-haven and inflation-hedging properties. The yellow metal performed well to start 2022 as equities struggled on higher inflation but weakened through the year as central banks tightened policy and the U.S. dollar surged. Given that the macro environment is likely to remain uncertain, gold should find favour given its low correlation and value in portfolio construction. From a tactical perspective, gold is at an interesting juncture. If rates and the USD have peaked, a material headwind through 2022 could become a tailwind in 2023. Stubborn inflation would also benefit gold, given that historically gold has traded inversely with real rates. Further, and noteworthy, central banks have been aggressively adding to their gold holdings, and purchases have been trending higher over the past year. Still, length held by both non-commercial participants and in gold ETFs is well off its highs. Bitcoin's recent challenges may also prove helpful, since the "digital gold" likely competed for market share.

Commodity prices are not immune to slowing growth and demand; however, we anticipate that prices will move higher in the years ahead as growth expectations stabilize and the supply side starts to bite. A decade of underinvestment has left inventories across the space at tight levels and investment is slow to respond to higher prices. The energy transition will limit demand growth for conventional energy, but not enough in the near term to contend with sparser supply. Metals will benefit from the energy transition as well. Shifting monetary-policy targets, greater weather and geopolitical volatility, and the rising urgency to combat climate change will keep markets volatile. What this uncertainty and transition will mean for inflation is unclear. What's more clear is that we are moving into an era where inflation volatility is likely to be higher. Commodities are well positioned for this era. They do well in inflationary environments and should increasingly find a home in portfolios, most of which are still short inflation.

Figure 10: Central banks snapping up yellow metal



Source: Bloomberg Finance L.P. as of December 15, 2022.

Market Performance

Canadian Indices ($CA) Return	Index	(%) 1 Month	(%) 3 Months	(%) YTD	(%) 1 Year	(%) 3 Years	(%) 5 Years	(%) 10 Years	(%) 20 Years
S&P/TSX Composite (TR)	75,200	-4.90	5.96	-5.84	-5.84	7.54	6.85	7.74	8.47
S&P/TSX Composite (PR)	19,385	-5.22	5.10	-8.66	-8.66	4.34	3.64	4.54	5.52
S&P/TSX 60 (TR)	3,693	-5.39	5.56	-6.24	-6.24	8.22	7.39	8.36	8.82
S&P/TSX SmallCap (TR)	1,209	-1.84	8.37	-9.29	-9.29	7.19	3.14	4.23	0.05
U.S. Indices ($US) Return									
S&P 500 (TR)	8,178	-5.76	7.56	-18.11	-18.11	7.66	9.42	12.56	9.80
S&P 500 (PR)	3,840	-5.90	7.08	-19.44	-19.44	5.92	7.51	10.41	7.65
Dow Jones Industrial (PR)	33,147	-4.17	15.39	-8.78	-8.78	5.12	6.04	9.72	7.14
NASDAQ Composite (PR)	10,466	-8.73	-1.03	-33.10	-33.10	5.27	8.68	13.24	10.84
Russell 2000 (TR)	9,247	-6.49	6.23	-20.44	-20.44	3.10	4.13	9.01	9.36
U.S. Indices ($CA) Return									
S&P 500 (TR)	11,077	-5.51	6.29	-12.51	-12.51	9.18	11.11	16.09	8.96
S&P 500 (PR)	5,200	-5.64	5.82	-13.93	-13.93	7.41	9.17	13.87	6.82
Dow Jones Industrial (PR)	44,897	-3.91	14.03	-2.54	-2.54	6.60	7.68	13.16	6.32
NASDAQ Composite (PR)	14,176	-8.49	-2.20	-28.52	-28.52	6.75	10.36	16.78	9.99
Russell 2000 (TR)	12,525	-6.24	4.98	-14.99	-14.99	4.55	5.74	12.43	8.53
MSCI Indices ($US) Total Return									
World	11,701	-4.21	9.89	-17.73	-17.73	5.45	6.69	9.44	8.76
EAFE (Europe, Australasia, Far East)	8,997	0.11	17.40	-14.01	-14.01	1.34	2.03	5.16	6.92
EM (Emerging Markets)	2,395	-1.35	9.79	-19.74	-19.74	-2.34	-1.03	1.81	9.09
MSCI Indices ($CA) Total Return									
World	15,849	-3.95	8.59	-12.11	-12.11	6.93	8.33	12.87	7.93
EAFE (Europe, Australasia, Far East)	12,186	0.38	16.02	-8.13	-8.13	2.76	3.61	8.46	6.10
EM (Emerging Markets)	3,244	-1.08	8.50	-14.25	-14.25	-0.97	0.50	5.00	8.25

Currency									
Canadian Dollar ($US/$CA)	73.83	-0.27	1.19	-6.40	-6.40	-1.39	-1.52	-3.04	0.77
Regional Indices (Native Currency, PR)									
London FTSE 100 (UK)	7,452	-1.60	8.09	0.91	0.91	-0.40	-0.62	2.37	3.24
Hang Seng (Hong Kong)	19,781	6.37	14.86	-15.46	-15.46	-11.14	-7.94	-1.35	3.83
Nikkei 225 (Japan)	26,095	-6.70	0.61	-9.37	-9.37	3.32	2.77	9.64	5.72

Benchmark Bond Yields	3 Months	5 Yrs	10 Yrs	30 Yrs
Government of Canada Yields	4.26	3.41	3.30	3.28
U.S. Treasury Yields	4.41	4.01	3.88	3.97

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	1,051	-1.65	0.10	-11.69	-11.69	-2.20	0.27	1.63
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	733	-0.15	0.67	-4.04	-4.04	0.03	1.01	1.35
FTSE TMX Canadian Mid Term Bond Index (5-10)	1,160	-1.88	0.34	-10.29	-10.29	-1.32	0.70	1.91
FTSE TMX Long Term Bond Index (10+ Years)	1,610	-3.63	-1.01	-21.76	-21.76	-5.80	-1.12	1.72

HFRI Indices ($US) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	17,450	-0.40	2.20	-4.25	-4.25	5.66	4.41	4.67
HFRI Fund of Funds Composite Index	7,163	0.93	2.43	-4.65	-4.65	3.93	3.15	3.58
HFRI Event-Driven (Total) Index	19,800	-0.54	2.92	-5.04	-5.04	5.26	4.18	4.82
HFRI Equity Hedge Index	26,492	-0.93	3.99	-10.37	-10.37	5.67	4.50	5.54
HFRI Equity Market Neutral Index	6,121	0.94	1.17	1.59	1.59	2.80	1.94	3.05
HFRI Macro (Total) Index	18,968	0.46	-1.04	9.31	9.31	7.46	4.86	3.11
HFRI Relative Value (Total) Index	13,979	-0.05	1.25	-0.90	-0.90	3.30	3.35	4.01
HFRI Indices ($CA) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	23,610	-0.43	0.31	2.42	2.42	7.14	6.03	7.94
HFRI Fund of Funds Composite Index	9,692	0.90	0.53	1.99	1.99	5.38	4.75	6.81
HFRI Event-Driven (Total) Index	26,789	-0.57	1.01	1.58	1.58	6.73	5.79	8.09
HFRI Equity Hedge Index	35,844	-0.96	2.06	-4.13	-4.13	7.15	6.12	8.84
HFRI Equity Market Neutral Index	8,281	0.91	-0.71	8.67	8.67	4.24	3.52	6.27
HFRI Macro (Total) Index	25,664	0.43	-2.87	16.93	16.93	8.96	6.48	6.33
HFRI Relative Value (Total) Index	18,913	-0.08	-0.62	6.01	6.01	4.75	4.95	7.26

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return, as of December 31, 2022.

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