TD Wealth

White Whales

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Wealth Investment Office

In this issue

White Whales.

Like Ahab, Herman Melville's legendary character in Moby Dick, Alan Greenspan and the central bankers who have followed him are consumed by the desire to control nature (risk), seemingly at any cost. Just think of the economic White Whales that have breached since Greenspan's time. The 1997 Asian financial crisis, the 1998 Russian crisis, the 2000 tech wreck, the global financial crisis and Covid-19 — by virtue of modern central-bank doctrine, these all must be chased and blighted, no matter the cost.

I think most of us, in our heart of hearts, wish that the world and financial markets worked in a linear way, and preferably ever improving. But the fact is, they don't. Like the four environmental seasons, there is a business cycle. Over the past three decades, we have distorted theses cycles and we seemed at times capable of creating endless summers. Today, it would be hard to find a more maligned group than central bankers, and particularly Fed policymakers for keeping monetary conditions too loose, for too long with the goal of keeping financial markets "safe". Even the Fed itself admitted its "transitory" call on inflation was wrong. In an effort to regain credibility, it has swiftly pivoted to its most aggressive policy of tightening in a generation.

Ultimately, one of the many lessons in Moby Dick is that we should never be so obsessed with one thing that we lose sight of the more important things in life. Central banks are near obsessed with risk, instead of being mindful that risk is inevitable, bad things happen and that the best way to prepare for that is to plan for it. Markets are not linear, nor are portfolio returns. There are still some rough waters ahead, but the worst is behind us.

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, adapt and innovate. The process of natural selection takes its toll on individuals, institutions and markets. This evolutionary process is what determines financial market dynamics, risk and returns.

Stay safe and be well,

Brad Simpson

Chief Wealth Strategist, TD Wealth

Cracking Complexity

Complexity

Whale of a Year

By the end of Q3, stocks and bonds were both underwater simultaneously — a phenomenon that is exceedingly rare. In fact, going back to 1929, this has only happened in three years: 1931, 1941 and 1969. This could be a once-in-a-century event.

The BPS are back ...

We've seen some outsized rate hikes this year, including a "jumbo" percentage-point hike from the Bank of Canada. But with financial conditions exhibiting signs of tightness, we expect hikes to settle down to smaller 25-bp increments.

... but a long way to go

If the Fed has to engineer a recession in order to bring down inflation, which is becoming evident, it's not nearly there yet — not with the U.S. unemployment rate hovering at 50-year lows. Markets have corrected, but households have yet to feel the pain.

Alternatives under pressure ...

Higher rates have pulled the brakes on activity in real assets. Global real estate investment activity fell 14% in Q1 and 13% in Q2. Financing new real estate deals has also become increasingly difficult as interest rates push up costs.

... but bonds on sale

The U.S. 10-year yield is around 4%, and most investment-grade corporates are offering even more. Yields on high-quality bonds are trading at prices not seen since the darkest days of the financial crisis. This represents a rare opportunity for income investors.

USD overbought ...

Having soared to meteoric heights this year, the greenback (against a basket of currencies) is looking a bit expensive. If the Fed pauses rate hikes, we should see the start of a cyclical decline in the dollar. That, however, is not likely to happen this year.

... but beware the differential

In Canada, unlike the U.S., unemployment is rising and housing prices are falling rapidly. Against this backdrop, the Bank of Canada is unlikely to match Fed hikes going forward. While a terminal rate of 4.5% is projected for the U.S., it's only 4% in Canada. This differential may generate a headwind for the loonie next year.

Household Pain Ahead

So far, the consumer has seemed invincible. That resilience is about to be put to the test, though, with mortgage payments, real estate prices and unemployment rates all moving in the wrong direction.

Adaptation

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%.

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.

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.

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.

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.

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.

PSQ4.2022 | Executive Summary

■ **House Views | Fixed income, modest overweight:** Domestic government bond yields continue to rise, and we are comfortable with a modest overweight position in investment-grade corporate bonds. High-yield credit, however, may not provide adequate risk/reward compensation. • **Equities, neutral:** We are seeing broad evidence of slowing company fundamentals. We maintain a modestly positive outlook for Canadian equities, neutral outlook for U.S. equities and a modestly underweight position in international equities, which continue to struggle due to geopolitical tensions. • **Real assets / Alternatives, modest overweight:** Commercial mortgages continue to provide accretive income, and we continue to have a strong conviction towards infrastructure. There are, however, tempered expectations for real estate. • **Sub-classes:** Despite gold's recent weakness, we maintain a modest overweight view for the metal, which typically acts as a defensive measure against extreme events and high inflation. We are neutral the Canadian dollar (vs USD) and modestly underweight the U.S. dollar vs a basket of currencies. USD may be at peak value at current levels and as interest-rate differentials narrow globally, this could put pressure on the USD over the coming months.

■ **Factor Analysis** | Misinterpreted Fed statements led to a bounce in risk assets in Q3, but the rally didn't last as the Fed reiterated price stability at all costs. • **Rising-growth, falling-inflation assets:** Global equities declined by 5%, with U.S. equities declining by 4.8% while Canadian and international equities declined 1.4% and 3.6%, respectively. Emerging-market equities underperformed, while rising government bond yields drove losses in corporate credit. • **Falling-growth, falling-inflation assets:** Nominal government bonds and other rate-sensitive assets sold off in Q3. Global bonds returned -3.0%. U.S. Treasury bonds fell 4.3%. Canadian government bonds outperformed, rising 0.6% in Q3. • **Rising-inflation assets:** Inflation-linked bonds fell 5.1% in Q3. Canadian real-return bonds posted much better performance of +0.9%. WTI crude futures declined 24.8%, while gold fell 7.9%.

■ **Economy** | Global economic conditions are deteriorating and there is no single factor behind the weakness. TD Economics current forecast embeds a two-year period of stagnation, which is what they anticipate will be needed to bring inflation down. A significant economic slowdown could shorten up the adjustment period on inflation. • **Global:** The outlook for 2023 has deteriorated substantially. The deepening energy crisis in Europe is expected to buckle the economy as the year progresses. In China, below-trend growth is set to continue through 2023. • **United States:** The slowdown in domestic demand has not been sufficient to take the heat off inflation. This has led us to expect a more aggressive path for monetary tightening through the remainder of this year. We have revised down our economic growth forecast for 2022 to 1.6% (from 2.2%) and 2023 to 0.7% (from 1.4%). • **Canada:** The Canadian economy has been a standout performer on the global stage. A strong first half will boost annual average GDP growth to around 3% in 2022, before decelerating to approximately 1% in 2023. The impact of higher mortgage rates will continue to depress residential investment through 2023. Prospects for non-residential investment are brighter, supported in part by strength in commodity industries and development of long-term resource projects.

■ **Fixed Income** | Today's starting yields are well above the lows of the past decade and offer attractive entry points for those able to look beyond near-term volatility. We are modestly overweight fixed income investments in general and modestly overweight domestic government (U.S. and Canadian) bonds. Canadian and U.S. government bonds have become more attractive at current yield levels despite higher volatility as growth concerns look set to eventually win out over inflation in the long run. 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. The HY credit market is in a unique cycle, with changing characteristics that have boosted overall quality and tightened spreads. This should keep spreads from returning to previous levels during recessions, but spreads will widen if the growth outlook keeps deteriorating.

Continued on next page

Equities | While equities have declined meaningfully in 2022, they still appear to be overvalued given that slowing growth and tightening monetary policy bode poorly for both multiples and earnings. Over the last six months the equity risk premium has fallen to 2.2%, significantly below its historical average of 3.8% as the 10-year Treasury yield has increased more than equities have declined. Unless yields start to fall, the pain for equities will likely continue as growth deteriorates into 2023. As long as monetary conditions are tightening and the growth outlook is continuing to weaken, staying defensive is key when it comes to allocating capital to equities. Defensive stocks this year have outperformed cyclicals and it's important to note that, historically, a cyclical bottom in equities coincides with a bottom in the cyclical/defensive ratio. • **International Outlook:** High inflation and the energy crisis continue to be the key threats to international equities One silver lining for international equities can be found in the discount applied to these stocks. • **Emerging Markets:** Emerging-market equities underperformed developed markets during the quarter, due in large part to the slowdown in China, where equities fell by 9.7%. Valuations in select EM equities like Brazil, South Africa and Taiwan are attractive. That being said, given the overall global index level, EM equities are not the cheapest opportunity set. Hence, we continue to be neutral.

Real Assets | Rising rates and slowing growth hurt real estate valuations; however, managers are in a better financial position now than they were before the pandemic. They've locked in ultra-low rates and are sporting record funds from operations. Higher financing costs may, however, render some new projects financially untenable and result in paper losses on valuations. Rents continue to climb in Canada, while those in the U.S. are slipping. Industrial vacancies across Canada remain near record lows. TD Wealth maintains a modest overweight stance on real assets given strong fundamental and operational strength within the space.

Currencies | The U.S. dollar has climbed into overvalued territory, leaving it at risk for weakness next year, once the Fed finishes tightening and the global growth outlook improves. In the near term, USD will remain a safe-haven asset. However, as we move into next year, we expect domestic issues to play a greater role in determining each country's currency movement relative to the dollar. Housing vulnerabilities may 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. Beaten-down currencies, such as JPY, SEK, NZD and BRL could rally strongly once it is clear that global growth is accelerating and liquidity conditions improve.

Commodities | **Energy: Structural Supply Challenges in the Oil Patach.** Energy supply risks are still rising, offering an insulating force for the petroleum index. In addition to supporting prices, the recent OPEC+ cut annoucnement should help to reinvigorate participation in the complex once there is somewhat more certainty surrounding the economy, inflation, and the timing of the eventual central bank signals that they are ready to pivot towards a dovish policy. But we expect that to be a late 2023 story. **Industrial Metals: Demand falling.** While there are near-term headwinds for the metals complex, we believe the amount of time on the bottom is likely to be short and the rate of price recovery faster. This is due to investors' focus on ESG, government regulation and the Ukraine-Russia conflict. These factors have resulted in lower capital investment, which has kept excess capacity at minimal levels. • Gold and Precious Metals: Macro challenges, ongoing strength in the U.S. dollar and rising rates continue to weigh on the precious metals complex. While we may see short-term rallies in the yellow metal, overall, we believe it will remain under pressure as the restrictive rates regime is set to last for longer. Gold prices are unlikely to rise until the Fed makes progress in the war on inflation.

White Whales

Brad Simpson, Chief Wealth Strategist, TD Wealth

"I'd strike the sun if it insulted me."
— Ahab from Moby Dick

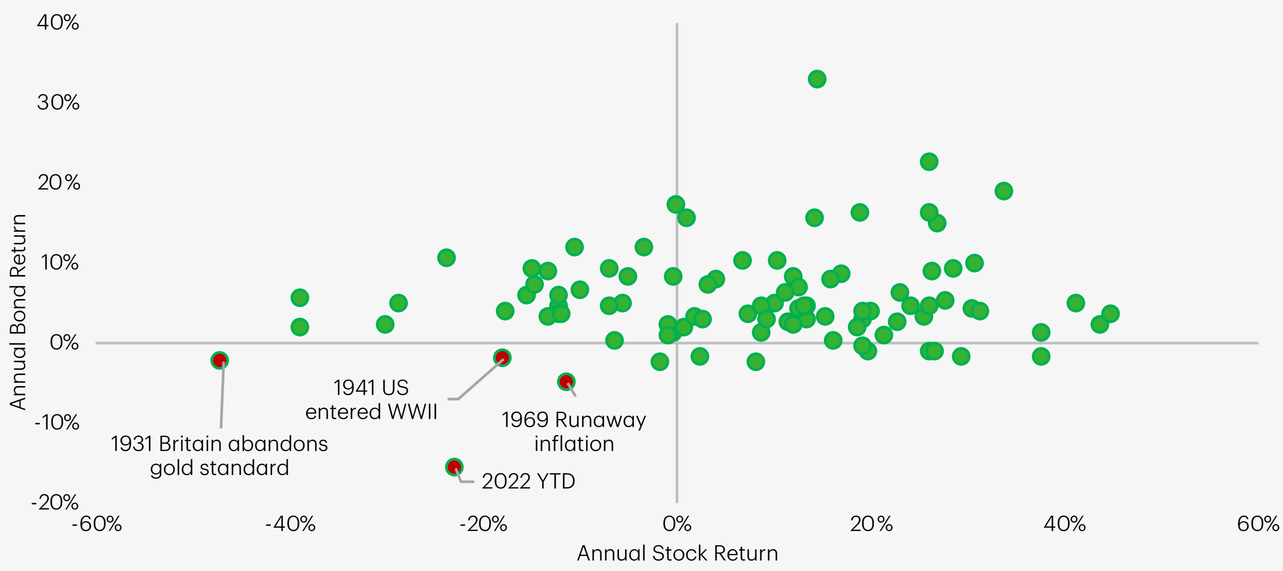
We have dedicated many pages to the significant, long-term implications of modern central-bank policy. In one of my first publications (a precursor to the *Portfolio Strategy Quarterly* you are now reading), I described the financial market as being mired in "grand distortions" due to ever increasing central-bank interventions beginning with Alan Greenspan in the late 1990s. Like Ahab, Herman Melville's legendary character in *Moby Dick*, Greenspan and those who have followed him are consumed by the desire to control nature (risk), seemingly at any cost.

I am not, of course, writing about the self-destructive obsession to avenge the loss of a limb, but Ahab's obsession to hunt down the white whale is analogous to the one that central bankers have held fast in their pursuit for a market where nothing ever goes wrong — companies never fail, countries never back out of their debt commitments and investors never have to experience losses. Just think of the economic White Whales that have breached since Greenspan's time. The 1997 Asian financial crisis, the 1998 Russian crisis, the 2000 tech wreck, the global financial crisis and Covid-19 — by virtue of modern central-bank doctrine, these all must be chased and blighted, no matter the cost.

If only things functioned based on the almighty power of monetary policy, but alas the world doesn't work that way. Risks, by their very nature, live in a world of unpredictability. Things happen that you don't see coming — often big things like mysterious viruses that replicate with haste, or small, ambitious leaders who want what they want at any cost and are willing to use armed force to get it. Simply put: the problem with modern central-bank doctrine — using interest rates to solve every risk — is that financial markets are open and complex, and whatever action you take has the potential to reverberate through the whole, often with unpredicted and unwanted consequences. Sometimes you can be so obsessed with removing risk that you can actually make it worse.

This is precisely where we are at today. What happens when central banks, in the spirit of being cautious and keeping us "safe," keep interest rates too low, for too long, overstimulating growth and stoking inflation? Both equities and bonds go down in value at the same time (Figure 1). This is something that has only happened, going back to 1929, three times: 1931, 1941 and 1969. Interestingly, two of these years (1931 and 1969) could qualify as White Whales, and don't forget that 1969 also led to high inflation, but let's keep this to the modern era. The simultaneous declines of equities and fixed income have resulted in considerable losses for traditionally diversified portfolios, leaving both conservative and aggressive investors in the same boat, Ahab's Pequod if you will.

Figure 1: This year may be the White Whale of the century

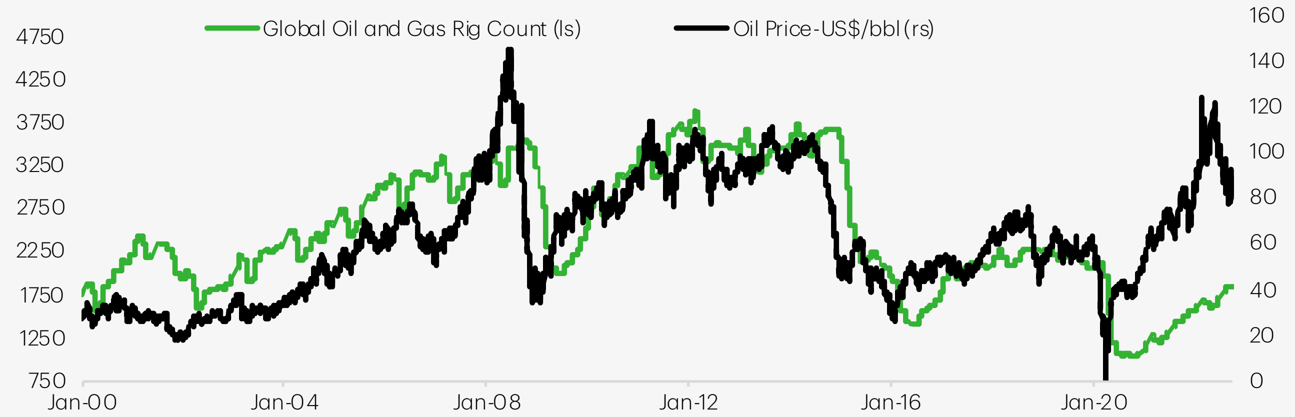


Source: Bloomberg Finance L.P. as of October 20, 2022

Unfortunately, this policy error (low interest rates causing too much liquidity) has been exacerbated by Russia's invasion of Ukraine, which has led to extreme volatility in global commodity prices (especially oil and natural gas) and even higher levels of inflation felt in the post-pandemic period (Figure 2). Not to sound repetitive, but this is why the concept of open-complex systems is critical — monetary policy isn't happening in a vacuum or a classroom.

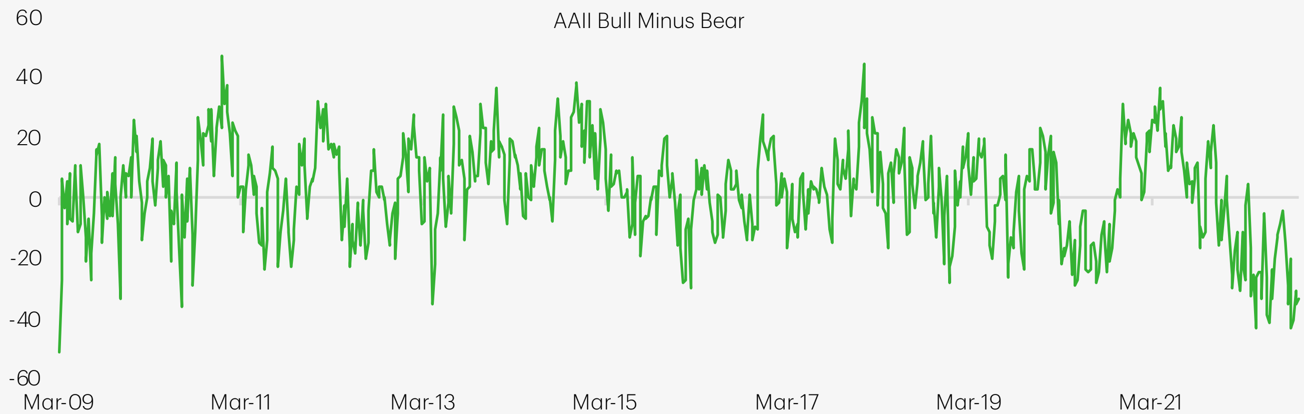
Not surprisingly, investors have really started to worry. Investor sentiment remains near its lowest point in history, even below peak-Covid levels (Figure 3). This bearishness has led to investors, with the goal of hedging, to take on large short positions on both the S&P 500 and Treasury bonds for protection (Figure 4), which helps explain why there have been these odd days when the markets seem to rally for little reason.

Figure 2. Russia's invasion exacerbated already constrained energy supply



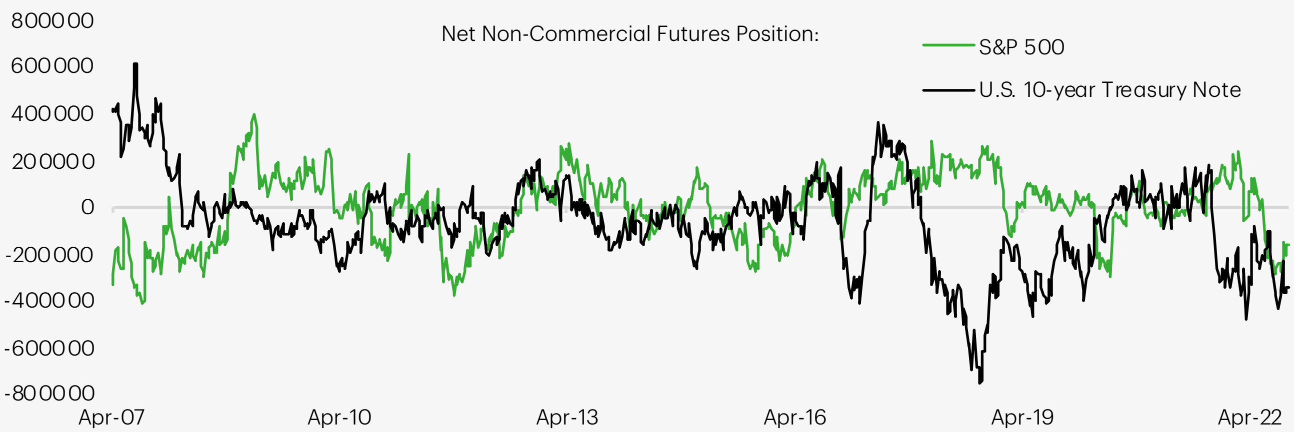
Source: Bloomberg Finance L.P., TD Wealth as of October 20, 2022.

Figure 3. Sentiment has fallen near the lows of the global financial crisis



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 4. Investors have taken large short positions in both equities and bonds



Source: Bloomberg Finance L.P. as of October 20, 2022

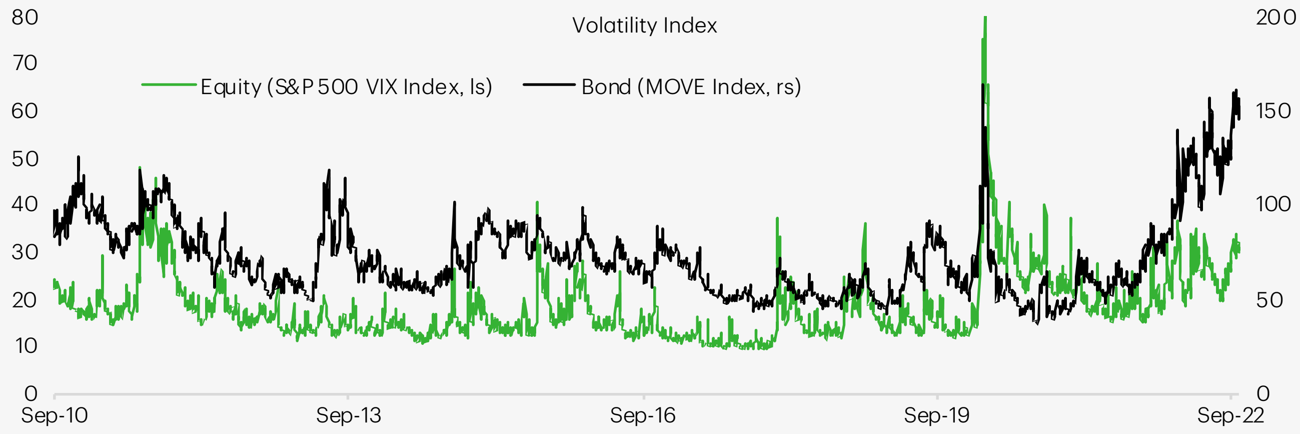
Unexpected data are released, prompting numerous trading algorithms to switch directions, effectively turning the market on its head. This is precisely what we saw on October 13 following the U.S. release of core inflation numbers. The market rallied despite a hotter inflation print, which is not what is supposed to happen from a fundamental perspective (Figure 5).

Interestingly, many cautious investment managers who specialize in hedging have reduced their market exposure and have shifted their positioning to hedge using futures and options. In fact, the amount of options shorting on the S&P 500 is at a historic high. This is a more conservative way to hedge because stock shorts have unlimited loss potential, while with options you just lose the premium if you're wrong. In times like this, these strategies are used as a hedge against spikes in the direction up and down.

Increased uncertainty and interest rates have also generated headwinds in the M&A and private-equity space, in addition to triggering changes in the way capital is being deployed (Figure 6). For example, private equity general partners became much more cautious in the third quarter: between July and September 2022, financial sponsors announced leveraged buyouts (LBOs) totaling US$55 billion worldwide, a 64% decline from the quarterly average in the first half of the year. This was the lowest volume since Q2 2020, when the pandemic began.

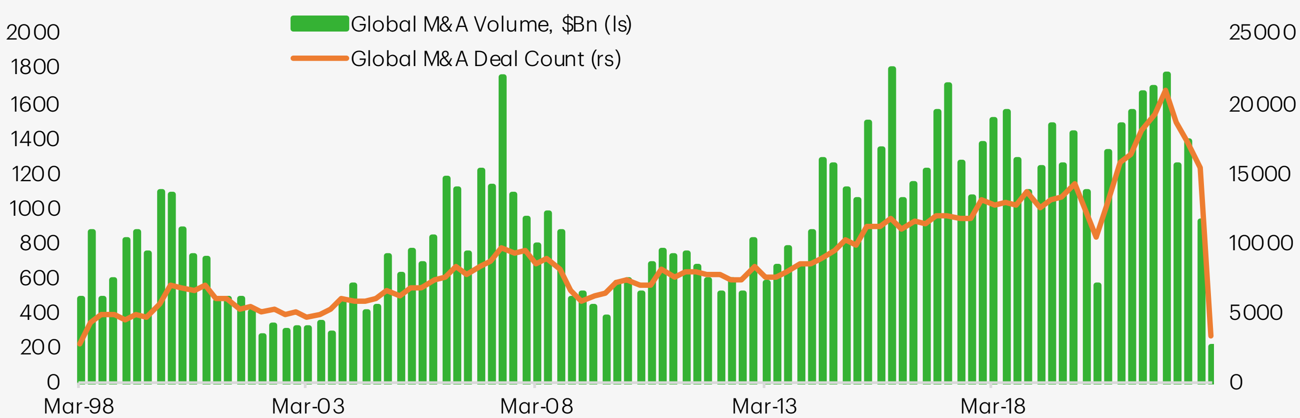
A similar reaction occurred in the first quarter of 2016, when the Fed hiked rates for the first time following the financial crisis. The dealmaking response to the rate hike was aggravated, moreover, by serious concerns about a possible hard landing in China. The sharp slowdown in buyout activity was particularly pronounced in Europe, where deal volume dropped by 90% in Q3 from the quarterly average of a very buoyant first half of the year. With LBO volume totalling less than $9 billion, Europe's share in global deal activity fell to just 16%, far below its historical share of around 35%. However, deal appetite waned in other markets as well. While deal volume nearly halved in the United States compared with the quarterly average in the first half, it declined by 25% in Asia.

Figure 5. Volatility is the only certainty



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 6. Rising rates have led to a slump in dealmaking



Source: Bloomberg Finance L.P. as of October 20, 2022

So, with all of this going on there are four big questions:

- When is inflation going to slow?
- When are rates going to stop rising?
- Is there going to be a recession, and if so, how bad?
- Is my balanced portfolio going to be mired in this downturn forever?

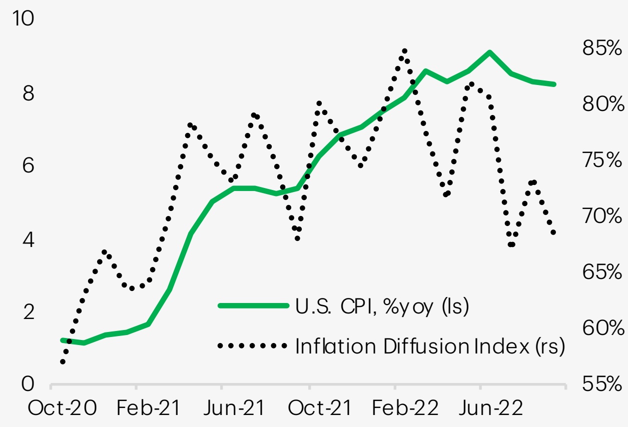
When is inflation going to slow?

The Federal Reserve initially took a patient approach to fighting inflation, given that it was difficult to separate the impact of temporary supply-chain issues caused by the pandemic from more structural drivers, such as the tight labour market. High inflation remained the dominant theme in Q3 as inflation continued to reach fresh highs, especially in Europe. In September, both core and headline inflation came in surprisingly hot both in the U.S. and the eurozone.

While we think bringing down inflation is going to take longer and be more difficult than originally thought, we do see signs that it's happening, and in the most peculiar of places. In the U.S., for instance, investors were understandably concerned by September core inflation numbers, which came in at 6.6% year-over-year — its highest level in 40 years! However, with most of the pandemic-induced inflation resolved, the current drivers revolve around shelter costs, medical services and food prices. Indeed, our inflation diffusion index shows that, while inflation is still running high, this is increasingly driven by a smaller basket of goods and services (Figure 7).

One considerable driver, for example, was the shelter component of the consumer price index (CPI). The shelter index measures costs in two ways: rent and "owners' equivalent rent," which measures the rent that homeowners would expect to charge for their dwelling. That means that the U.S. Bureau of Labor Statistics is calling homeowners and asking: "If you were going to rent your place today, would you raise the rent?" It's a methodology that's fraught with error, as you might expect. Indeed, when you plot owners' equivalent rent against the Zillow Rent Index, you find that, while rental prices have gone down recently, CPI remains high (Figure 8), which may speak to a discrepancy in the data. This is another example of our investment principle "Embrace human behaviour."

Figure 7. Inflation increasingly driven by fewer categories



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 8: Discrepancy in the shelter data?

Source: Bloomberg Finance L.P. as of October 20, 2022

When are rates going to stop rising?

Interest rates will stop rising once the Fed has confirmation that inflation is softening, and we expect that will happen within the next few months. Ultimately, we got into this mess because financial conditions were too loose. Figure 9 looks at financial conditions for money markets, investment markets and the traditional and "shadow" banking systems. What it highlights is the fact that money right now is tight — a marked departure from where we were as recently as a couple of months ago, when this measure was starting to loosen, much to the chagrin of Fed Chair Jerome Powell.

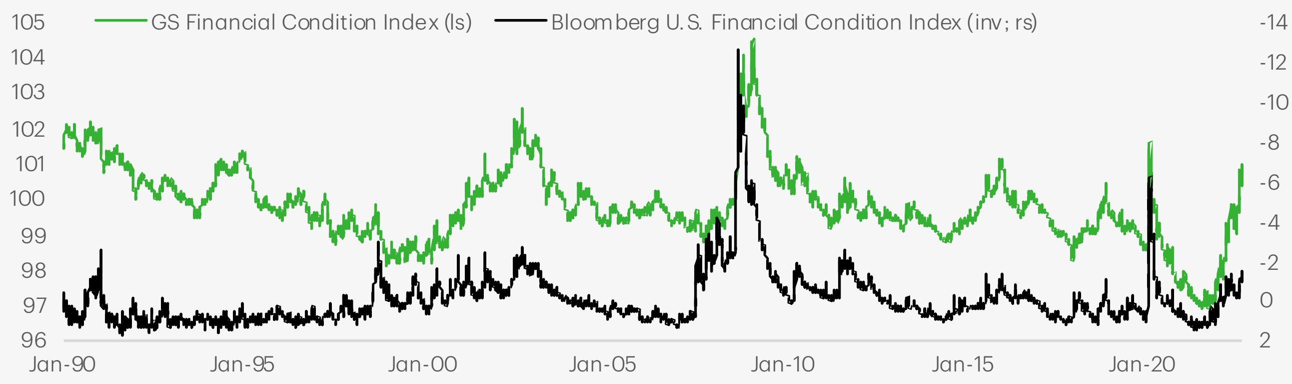
This measure, among many others, was the impetus that drove the Fed to get serious about inflation. It was not long after that the Fed Chair, in his speech at Jackson Hole, admitted that monetary policy would remain tight "for some time" and businesses and households were bound to experience "some pain." Well, mission accomplished: it's tight and getting painful. And don't forget, the Fed is in the process of doubling its quantitative tightening program to $96 billion a month. making money even harder to come by (Figure 10).

On the back of all this tightening, there will be more rate hikes on the horizon, although the majority of the rate hiking cycle is likely behind us. The fixed income market is now pricing in a 100% chance of at least a 75-bp rate hike in November and a 50-bp hike in December. More importantly, the estimate for the terminal rate has been brought up to 5% from the previous 4.75%.

Is there going to be a recession, and if so, how bad?

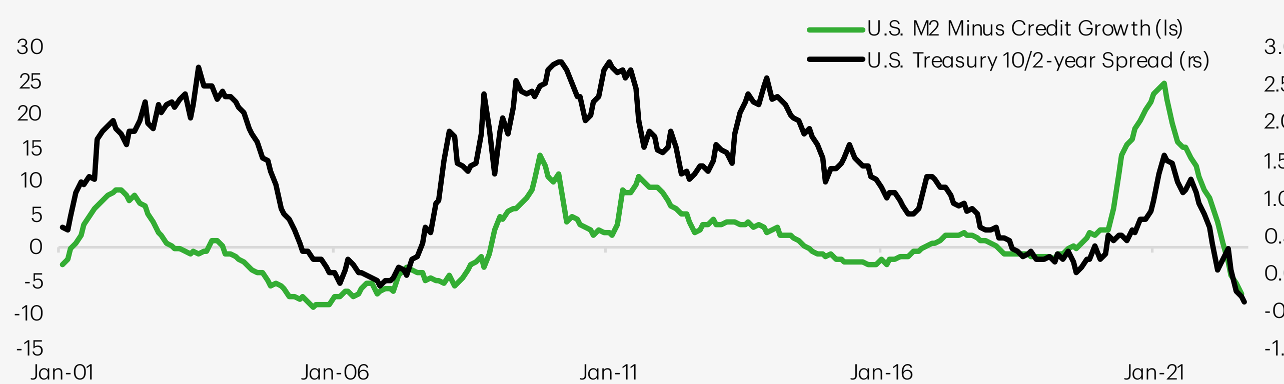
Investors had been expecting a minor recession, but the swift removal of capital in the system since Jackson Hole has changed this view considerably; a hard landing and deeper recession are now bordering on the probable. A harder landing would likely, however, cause inflation to soften, which would open the door for some policy reversal. What should not be lost in all of this is of that much of what central banks are doing is backward looking, rather than forward looking. Like Ahab, they are looking to the past for indications of what the future might hold, which raises the risk of a policy overshoot.

Figure 9. Financial conditions are in restrictive territory



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 10. Liquidity is becoming scarce

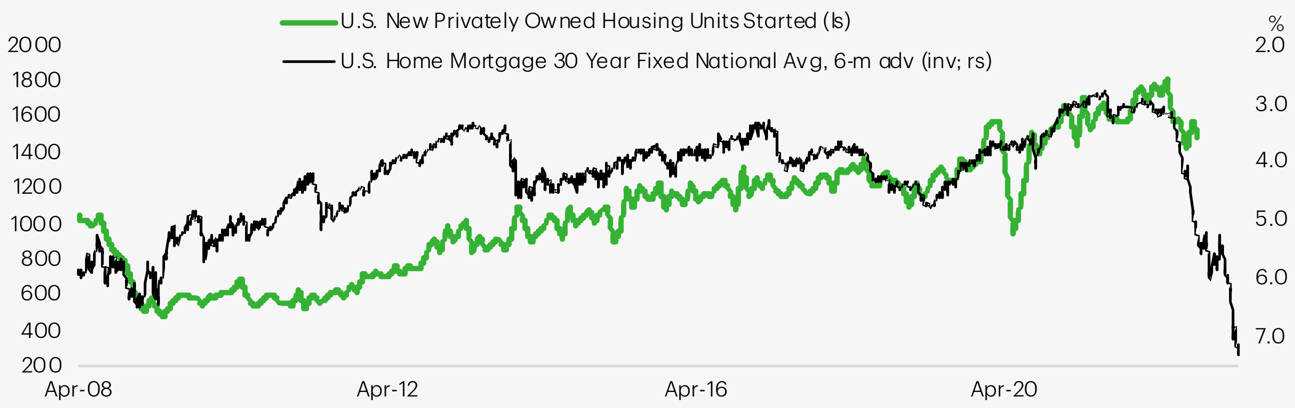


Source: Bloomberg Finance L.P as of October 20, 2022

What are the biggest determinants of an economic downturn? There are four big ones at this juncture, starting with the housing market, which is starting to slow due to the impact of higher mortgage rates (Figures 11 and 12).

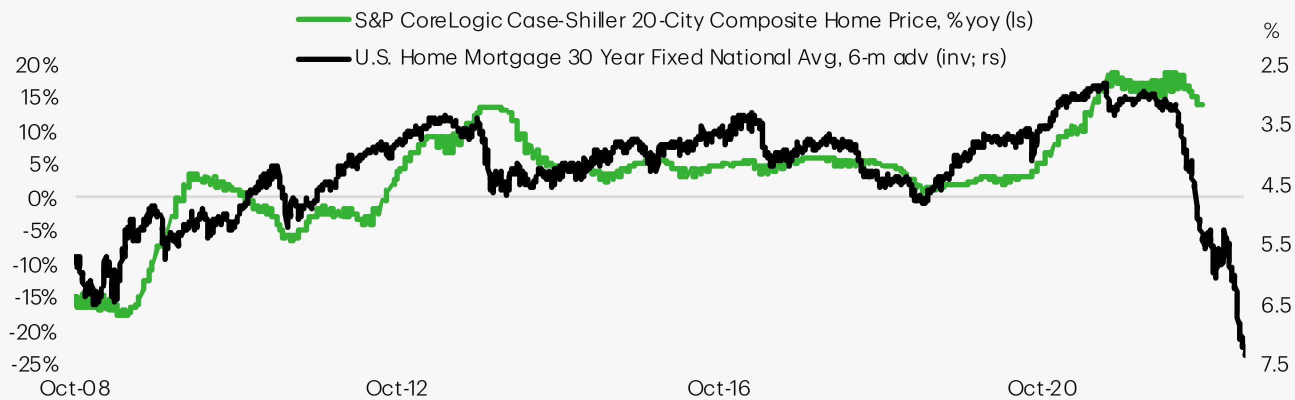
Second, the Fed wants to see more balance in the labour market. There were two job openings for every unemployed American up until August — highlighting how tight the labour market has become — which drove wage demand significantly higher. Fortunately, this ratio dropped materially in September, to 1.6, as growth slows and wage inflation seems to have peaked, which should alleviate pressure on services inflation going forward (Figure 13).

Figure 11. Homebuilding activity is set to slow materially...



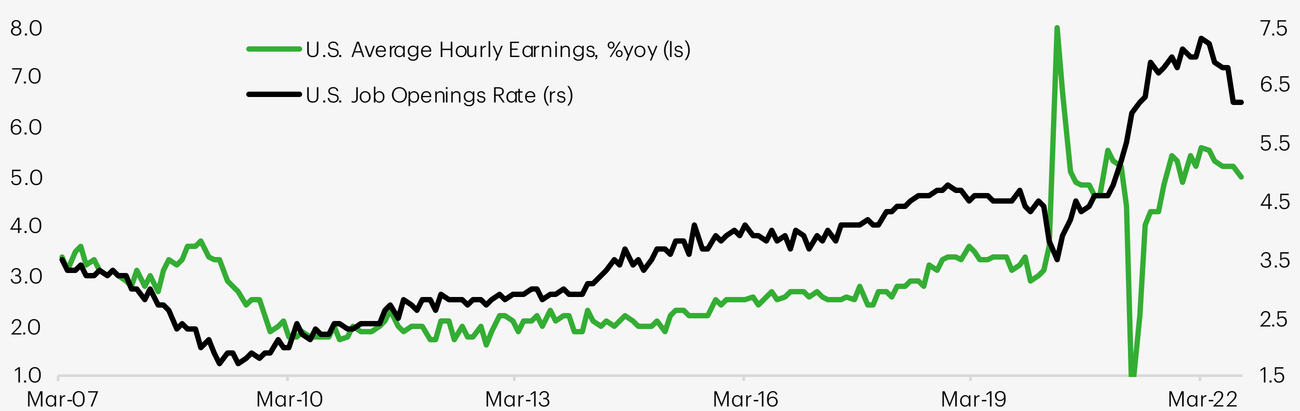
Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 12. ... and prices are under pressure



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 13. Labour market braces for a hiring slowdown



Source: Bloomberg Finance L.P. as of October 20, 2022

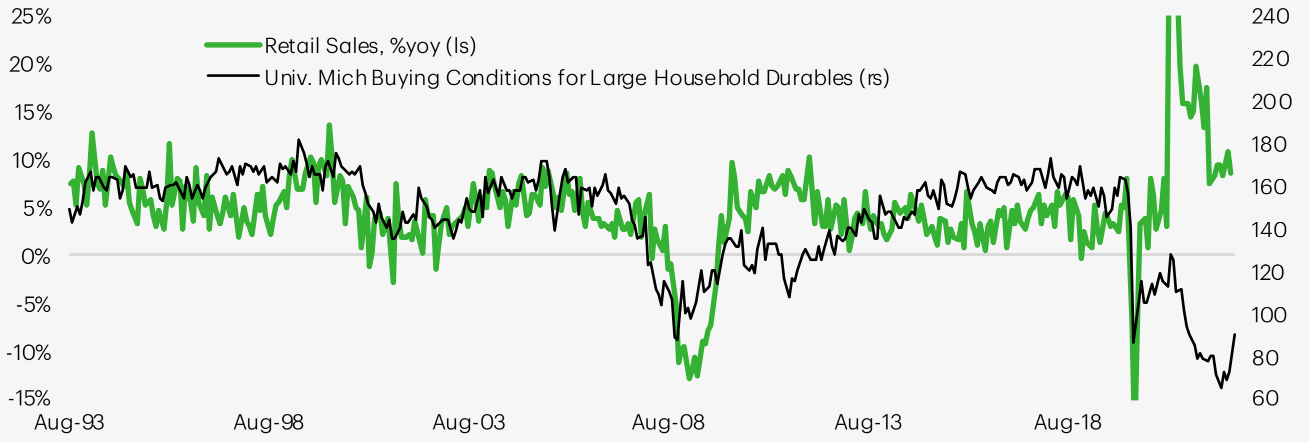
Third, a deceleration in consumer spending would be a welcome development. Consumers account for 70% of U.S. GDP and have splurged on durable goods since the pandemic began. This spending has yet to slow materially, despite the fact that consumers are taking an extremely bearish view on the economy (Figure 14). This may be attributable to the large excess savings accumulated during the pandemic. Going forward, however, negative real income growth and the drain in real excess savings should temper consumers' appetite to spend.

Finally, a slowdown in business investment could weigh on growth next year. Businesses have seen a sharp fall in new orders, especially in the manufacturing sector, given that demand outlook continues to deteriorate. Moreover, earnings are being downgraded, which historically drove capital expenditure spending lower (Figure 15).

Market declines: Could there be more downside coming?

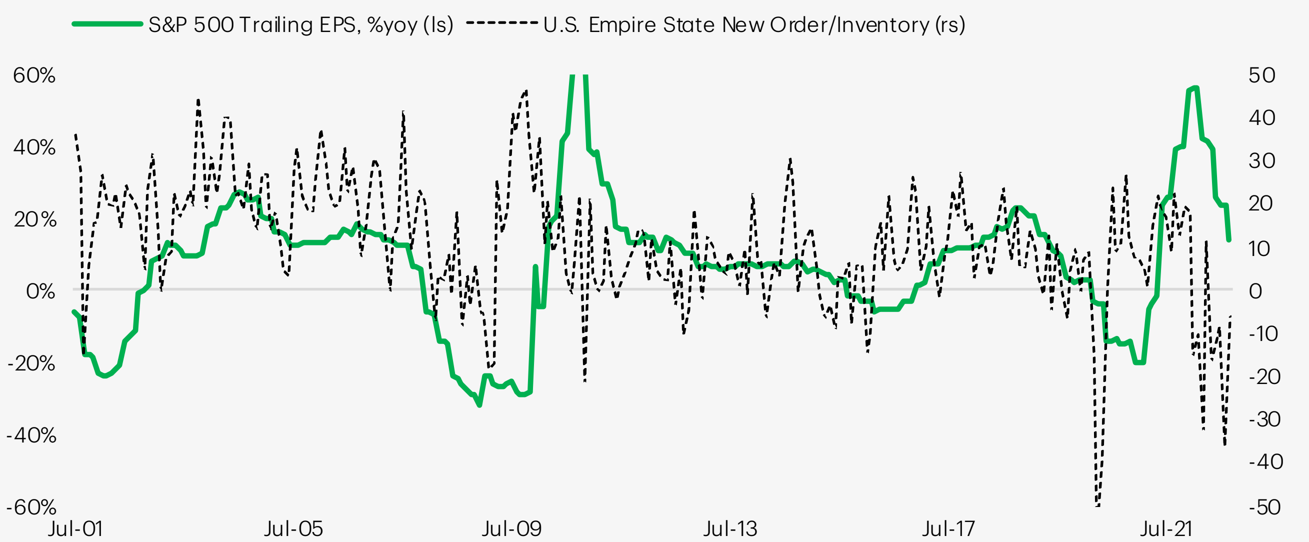
As we know, equity markets are currently in bear-market territory. When we look at historical bear market data, we know that the average decline is about 30%, and at this point, many equity indices are approaching declines of 30%. So, it's reasonable to assume that we have already seen most of the downside at this point. However, while the downside risk from current levels may be somewhat limited, we do believe that we will remain in a volatile environment for the next few quarters at least.

Figure 14. Consumers are bearish, but keep on spending



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 15. Corporate capex should start to slow



Source: Bloomberg Finance L.P. as of October 20, 2022

We will get to the other side of this. Times like this are the natural order of things, and while recessions can be painful, they are the natural mechanism for clearing out excesses in advance of the next period of economic growth. We have shown Figure 16 in every edition of PSQ, explaining how business cycles resemble the four seasons of a year. We are currently in the late stage of the cycle, teetering on recession, much like the winter this season will turn to spring. When it does, and markets trough, the typical rally for the S&P 500 is 25% to 35% (Figure 17).

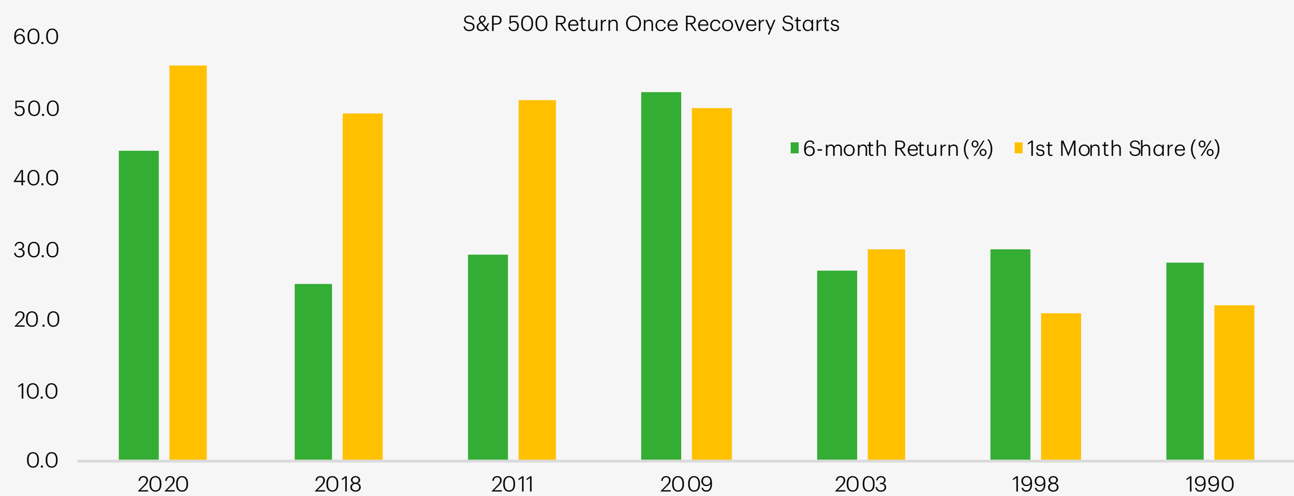
Of course, we all want to know when we will hit bottom, which with all things being equal, will be when yields top. Given the current 2022 EPS estimates, the S&P 500 is currently trading at approximately 16.5x forward earnings. If we think EPS will come in 5% lower and the multiple will contract to around 15.5x we could see a downside to 3,300 (or approximately -12%). The S&P/TSX is trading at 12.1x 2022e currently. If we see a similar miss of 5% and the multiple lower by one unit, we could expect to see downside of around 14%, to a 16,800 level.

Figure 16: 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 Wealth Investment Office. As of October 30, 2022.

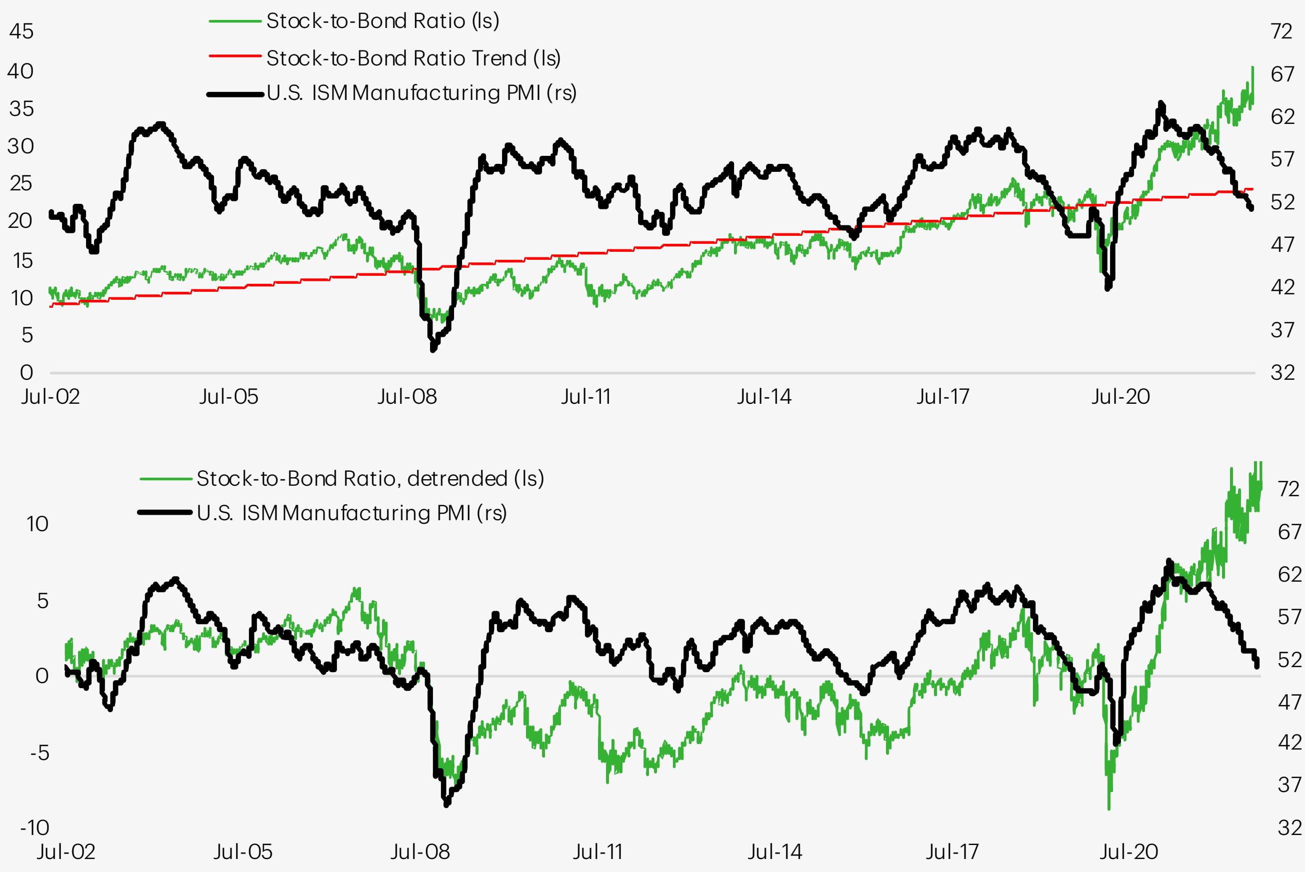
Figure 17: Rallies after the trough



Source: Bloomberg Finance L.P. as of October 20, 2022

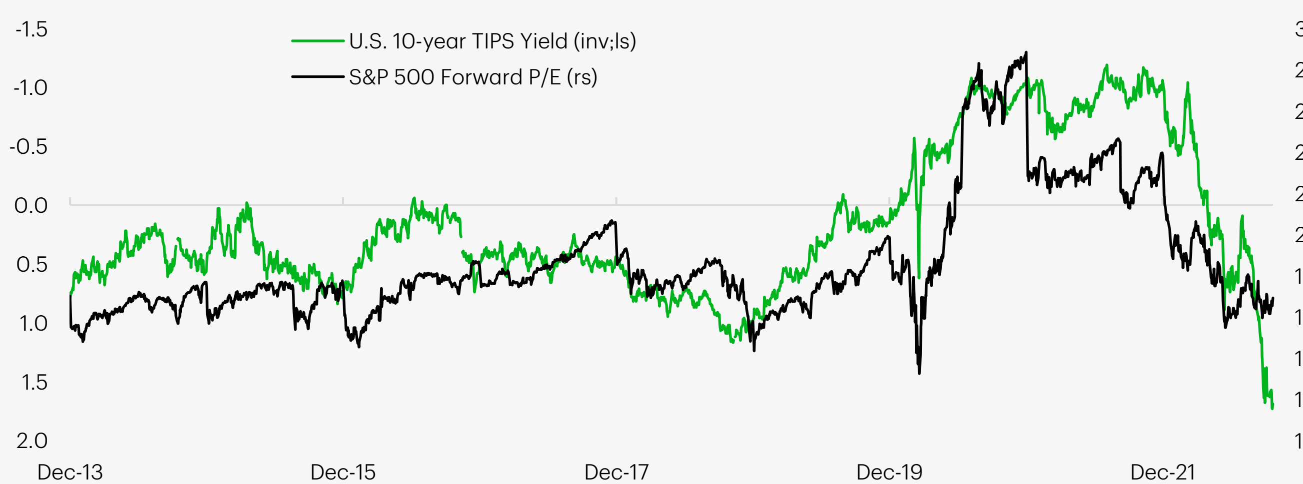
On an absolute basis, equity markets appear reasonably valued, but they still appear overvalued when compared to bond markets, with the stock-to-bond ratio still 30% above its trend (Figure 18). We expect that the ratio will move closer to historic norms as long as manufacturing PMIs continue to decline. This move back to historic levels could be achieved by equity markets declining further or bond markets moving higher, or a combination of the two. In the meantime, the S&P 500 is trading at 16.5x forward earnings and valuations are becoming attractive in absolute terms on par with historical average (Figure 19). Pockets of value can be found across most sectors.

Figure 18. Stock-to-bond ratio is elevated



Source: Bloomberg Finance L.P. as of October 20, 2022

Figure 19. S&P 500 valuation is back to historical average amid pressure from real yields



Source: Bloomberg Finance L.P. as of October 20, 2022

Fixed Income

We expect further volatility ahead, but the worst may now be over. Ultimately, we think central banks will be successful in cooling inflation, and we are closer to the high in rates than we are the bottom. Higher yields are now on offer, making certain parts of the fixed income market look more attractive than they have in over a decade (Figure 20).

Commodities

Commodity prices have fallen and there is risk that these declines will continue into 2023. Key commodities, energy and even gold all tend to decline when economic growth suffers sharp reductions. Pending cyclical corrections are likely to be intense, but in the lower end of the historic range, given the low level of inventories and the lack of excess capacity. Anemic capex, strong demand driven by the shift to a low CO2 economy and strict supply-side regulations also suggest that the declines should be short-lived and the recovery phase quite robust. But of course, much will depend on how severe the economic slowdown is, how entrenched inflation is, and how fast key central banks move from a hawkish to a dovish stance.

Conclusion: A whale's tale

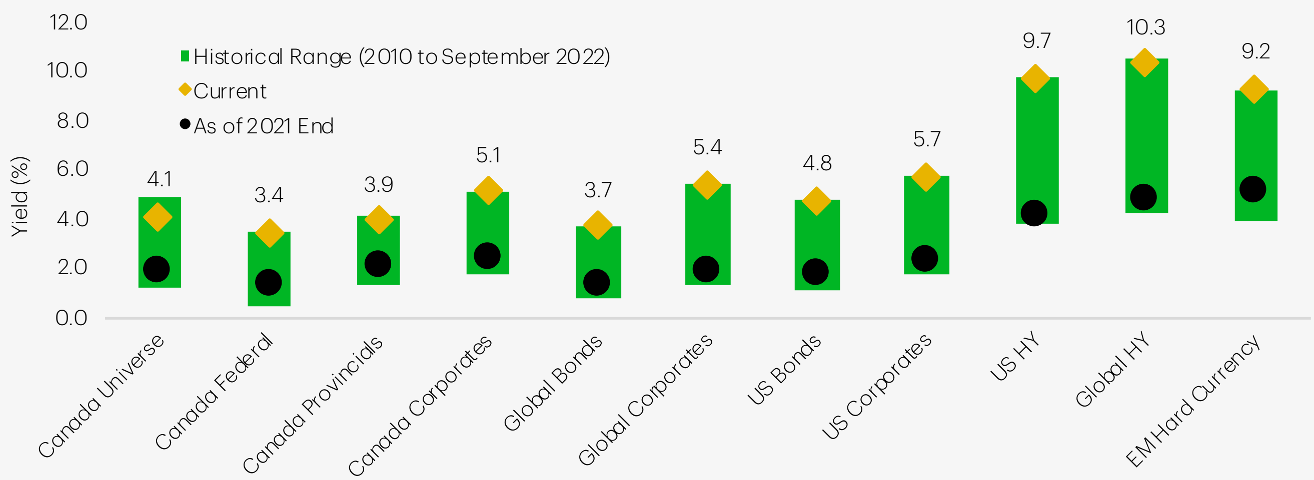
I think most of us, in our heart of hearts, wish that the world and financial markets worked in a linear way, and preferably ever improving. But the fact is, they don't. The optimist and empiricist in me would point to the fact that, over time, we are headed to a better place, but that doesn't mean that there aren't a few speed bumps along the way. Like the four environmental seasons, there is a business cycle. Over the past three decades, we have distorted theses cycles and, during much of the 1990s and into the early 2000s, we seemed at times capable of creating endless summers The Asian contagion, the tech wreck, the GFC and Coveid — these all were reminders that the transition from dark autumn to difficult winter is profound.

It would be hard to find a more maligned group than central bankers, and particularly Fed policymakers, over the past year. Even the Fed itself admitted its "transitory" call on inflation was wrong. In an effort to regain credibility, it has swiftly pivoted to its most aggressive policy of tightening in a generation.

Ultimately, one of the many lessons in *Moby Dick* is that we should never be so obsessed with one thing that we lose sight of the more important things in life. Central banks are near obsessed with risk, instead of being mindful that risk is inevitable, bad things happen and that the best way to prepare for that is to plan for it. Markets are not linear, nor are portfolio returns. There are still some rough waters ahead, but the worst is behind us.

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, adapt and innovate. The process of natural selection takes its toll on individuals, institutions and markets. This evolutionary process is what determines financial market dynamics, risk and returns.

Figure 20: Yields at decade highs across the fixed income spectrum



Source: Bloomberg Finance L.P., TD Wealth as of September 30, 2022

Leading Macro Indicators

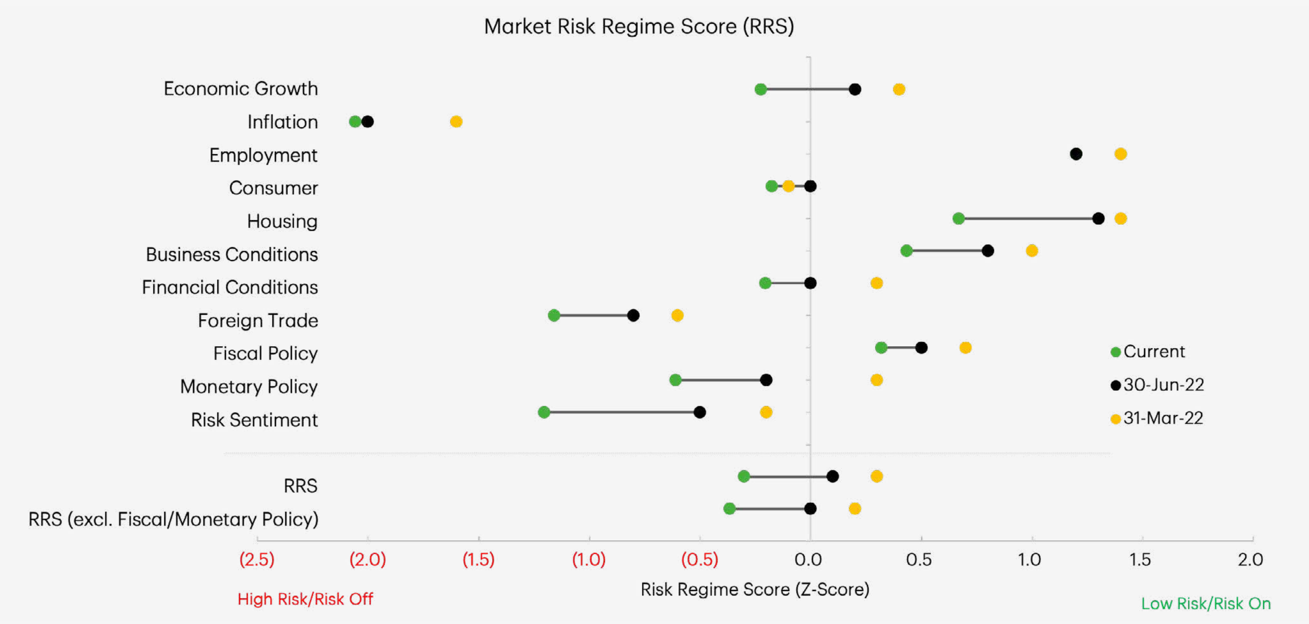
The overall risk regime score has moved to weak and the macroeconomic condition is deteriorating.

As part of our process-driven approach to investment management, we monitor key variables that inform our understanding of the macroeconomic environment and the potential risks. 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. Figure 1 and 2 summarize the overall condition and aggregate score of the indicators.

Figure 1: Market risk regime scores

Indicator	Overall Condition	Current	Jun-22	Mar-22	Dec-21
Economic Growth	Weak	(0.2)	0.2	0.4	0.8
Inflation	Weak	(2.1)	(2.0)	(1.6)	(1.2)
Employment	Strong	1.2	1.2	1.4	1.1
Consumer	Weak	(0.2)	0.0	(0.1)	0.3
Housing	Neutral	0.7	1.3	1.4	1.5
Business Conditions	Neutral	0.4	0.8	1.0	0.8
Financial Conditions	Weak	(0.2)	0.0	0.3	0.6
Foreign Trade	Weak	(1.2)	(0.8)	(0.6)	(0.4)
Fiscal Policy	Neutral	0.3	0.5	0.7	0.9
Monetary Policy	Weak	(0.6)	(0.2)	0.3	0.7
Risk Sentiment	Weak	(1.2)	(0.5)	(0.2)	0.3
Risk Regime Score (RRS)	**Weak**	**(0.3)**	**0.1**	**0.3**	**0.6**
RRS (excl. Fiscal/Monetary Policy)	**Weak**	**(0.4)**	**0.0**	**0.2**	**0.5**

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 September 30, 2022

Risk conditions weakened further in Q3, according to our risk regime indicators. Our overall market score declined to -0.3 at the end of Q3 (down from +0.1 at the end of Q2), indicating a weak risk regime. The risk-reward profile has improved with the correction in equities and fixed income markets, although macro conditions still aren't helping risk assets.

Risk sentiment, monetary policy, and inflation were the biggest contributors to the decline in the overall risk score, although foreign trade, economic growth, financial conditions, and consumer also retreated. Below are some notable changes compared with Q2:

• Risk sentiment, monetary policy, inflation, and foreign trade slipped further into negative territory in Q3. Inflation proved to be stickier than expected, which forced the Fed to tighten monetary conditions further into restrictive territory, causing continued weakness in financial markets. The risk sentiment score slid from -0.5 to -1.2 standard deviations below the long-term average as investor sentiment turned more bearish. During the quarter, the U.S. current account deficit widened compared to the year before and the dollar surged, pushing the risk regime score for foreign trade down to -1.2 from -0.8.

• Economic growth, consumer, and financial conditions each slipped from neutral in Q2 to weak. The risk regime score for financial conditions and consumer both fell from 0 to -0.2, while economic growth dropped from +0.2 to -0.2 as real GDP growth continued to weaken. Financial conditions tightened meaningfully amid the rise in Treasury yields and spreads and the further inversion of the yield curve. Consumers, who were already becoming less confident in the economic outlook, have ramped up their bearishness and started to cut spending.

• Housing, business conditions, and fiscal policy all slipped but remain in positive territory. Housing prices are correcting, putting a drag on housing-related activities which sent the risk regime score down to +0.7 from +1.3 standard deviation above the long-term average. Meanwhile, business conditions were weighed down by the decline in private investment and both manufacturing and services PMI surveys. Government spending slowed in Q3 relative to the prior year and the fiscal balance improved significantly as covid-related expenses tapered off and tax revenue surprised to the upside.

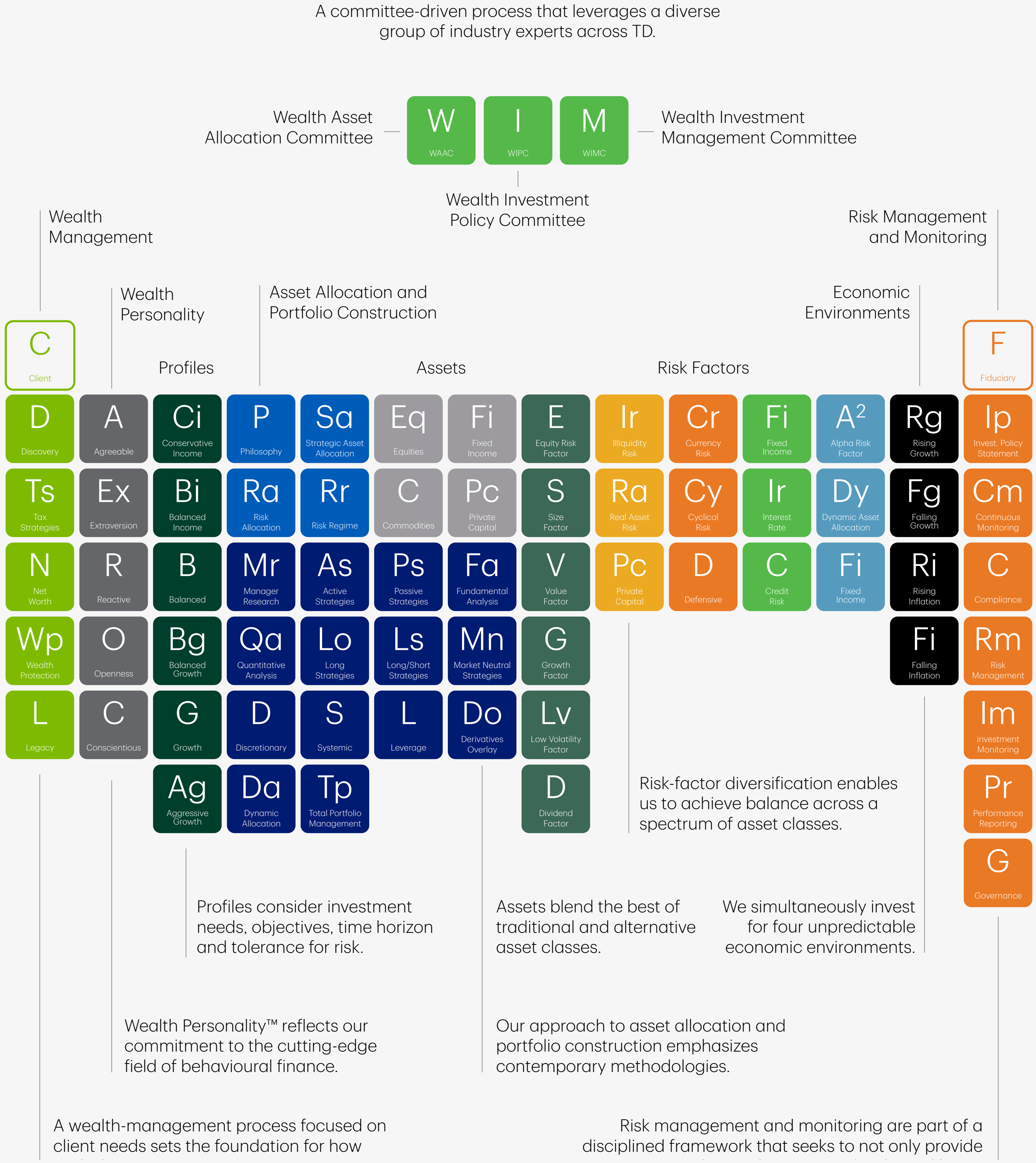
• Employment is the only category that remained robust, with the risk regime score sitting at 1.2 standard deviation above long-term norm, unchanged from Q2. The tight labour market is one of the reasons inflation has been more persistent than consensus, with wage demand growing faster than the Fed's target of 2% inflation. The Fed's determination to bring inflation down will likely weaken the labour market in coming quarters.

Broad conditions for risk assets continued to deteriorate in Q3 and risk sentiment, high inflation, and tighter monetary policy weighed on the overall score. It's clear that economic growth, and possibly even employment indicators, will be heading lower in coming months which will put even more pressure on risk assets.

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

Figure 1: Direction from WAAC: strategic positioning

	Asset Class	Underweight		Neutral		Overweight
Fixed Income Modest Overweight	Domestic Gov't Bonds				●	
	Investment Grade Corp Bonds				●	
	Inflation Linked Bonds			●		
	High Yield Bonds		●			
	Global Bonds - Developed	●				
	Global Bonds - Emerging			●		
Equities Neutral	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 October 13, 2022.

WAAC Positioning – Changes

No positioning changes for October 2022.

WAAC Positioning – Current Monitoring

		Fixed Income: Modest Overweight Overall
Domestic Government Bonds	**Modest Overweight**	Domestic government bond yields continue to rise as North American central banks hike rates to combat the impacts of persistent inflation and wage pressures in labour markets. Yields are at multi-year highs and government bond yields are more appealing from a strategic perspective due to their potential to generate positive nominal returns over the longer term.
Investment Grade Corporate Bonds	**Modest Overweight**	We remain constructive and selective toward credit and are comfortable with a strategic modest overweight to investment grade corporate bonds. We maintain a preference for high-quality investment grade credit and continue to be positioned with an emphasis on liquidity and quality. Looking forward, corporate fundamentals should remain positive but will moderate from strong levels as the economy enters a potential period of below-trend growth.
Inflation-Linked Bonds	**Neutral**	With the expectation that high inflation levels may be starting to peak and slowly normalizing, inflation insurance has become moderately attractive for those looking to protect against a market that may be underappreciating the persistence of high inflation.

		Fixed Income: Modest Overweight Overall
High Yield Bonds	Modest Underweight	Credit fundamentals for high-yield issuers remain reasonably supportive due to a prolonged period of balance sheet discipline. However, high yield spreads have become more volatile, and there has been an uptick in default at roughly 5%. We believe the high yield market is adequately priced but may not presently provide adequate risk/reward compensation amid the higher funding and more restrictive financial environment.
Global Bonds-Developed Markets	Maximum Underweight	Financial uncertainty facing the global bond market combined with elevated inflation readings in developed markets continue to drive expectations for higher short-term rates via interest rate hikes. Global bond markets continue to face heightened volatility due to tighter financial conditions and geopolitical events. Additional risks around the Bank of England's continued intervention in the bond market and its warning about risks facing the U.K.'s financial system lead us to remain maximum underweight.
Global Bonds-Emerging Markets	Neutral	The dispersion of returns within emerging markets has presented some opportunities in fixed income, and we are comfortable maintaining a neutral outlook to what we consider higher quality sovereign debt.

		Equities: Neutral Overall
Canadian Equities	Modest Overweight	We maintain a modestly positive outlook for Canadian equities despite potential headwinds, including the ongoing real estate correction. Financials stock valuations appear reasonable, as banks are well capitalized and will likely see growing interest income as interest rates remain elevated. Additionally, Canadian energy companies/producers have been diligent in managing expenses and should remain profitable even with lower energy prices. The excess free cash flows that these companies have generated over the last 12 months, with higher oil prices, has helped to improve balance sheets and increased share buy backs.
U.S. Equities	Neutral	We are seeing broad evidence of earnings revisions rolling over as the macroeconomic weakness manifests itself in slowing company fundamentals. While earnings will likely need to be revised even lower, we do not anticipate a destruction in corporate profits similar to what was experienced in 2007-2008. For certain sectors we may be nearing attractive entry points to achieve positive returns over a longer investment horizon. Going into the final quarter of 2022 we remain focused companies that can continue to generate strong free cash flows, have competitive advantages and pricing power. This highly uncertain environment argues for a defensive approach to U.S. equity investing.
International Equities	Modest Underweight	Despite equity valuations at near multi year lows, International stocks continue to struggle due to geopolitical tensions, elevated inflationary pressures and aggressive monetary policy tightening by global central banks, which have heightened global economic recession concerns. Overall business activity has been weak, evidenced by a slowdown in the manufacturing and services sectors. Additionally, the new U.K. government's fiscal policy uncertainty has increased market volatility and created some instability in financial markets.
Chinese Equities	Neutral	China's economy has faced headwinds ranging from weak domestic demand to ongoing lockdown restrictions, supply chain disruptions and a struggling property market. Manufacturing activity has also contracted due to lower output and new orders. However, Chinese authorities have reduced rates to help spur China's economy, keep credit flowing, and support its ailing property market. We maintain a neutral outlook.
Emerging Market Equities (excluding China)	Neutral	Emerging markets equities, similar to most regions of the world, are being challenged by persistently high inflation, concerns over global central bank monetary tightening, and the prospect of recession in many western markets. Our outlook for emerging markets remains cautious while recognizing depressed valuations my present longer-term opportunity.

		Alternatives: Modest Overweight Overall
Commercial Mortgages	**Modest Overweight**	Commercial mortgages continue to provide accretive income while insulating investor returns from the increased volatility in interest rates. Commercial mortgages offer attractive yields and may also provide less interest rate risk for investors that are looking to reduce the inflation impacts within their fixed income allocation.
Domestic Real Estate	**Neutral**	After a record pace of transaction activity for Canadian real estate in the first half of 2022, there are tempered expectations for the second half of the year, given the continued rise in interest rates, construction costs and growing recessionary fears by the market. Income stability and income growth will support valuations, with high-quality assets in major cities expected to provide greater capital preservation.
Global Real Estate	**Neutral**	Global real estate investors are closely monitoring the effects of rising interest rates and higher inflation levels, for how it may potentially impact valuations. Despite this uncertainty, real estate fundamentals remain intact within high quality assets.
Infrastructure	**Modest Overweight**	We continue to have a strong conviction towards infrastructure, and our continued overweight reflects our belief that outperformance is available for certain types of infrastructure assets. Contracted earnings have less sensitivity to global gross domestic product (GDP) and inflation passthrough can help offset rising discount rates. Renewable energy infrastructure investments continue to have a high propensity for outperformance.

		Sub classes
Gold	**Modest Overweight**	Despite gold's recent weakness we maintain a modest overweight view for the metal which typically acts as a defensive measure against extreme events and high inflation.
Canadian vs. U.S. Dollar	**Neutral**	The Canadian dollar's (CAD) recent decline versus the U.S. dollar (USD) can be partially attributed to resource and commodity price weakness, combined with the expectation that slowing global growth will crimp energy demand. Continued strength of the U.S. dollar against many currencies, as well as interest rate differentials remaining narrow, may limit Canadian dollar upside.
U.S. Dollar vs. basket of currencies	**Modest Underweight**	We believe that the USD may be at peak value at current levels and as interest rate differentials narrow globally, this could put pressure the USD over the coming months. However, the combination of the Fed's aggressive rate hikes to stomp out inflation, the safe haven appeal of the USD, and general currency instability in other developed nations, could keep the currency at elevated levels in the interim.
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.

Current Investment Themes

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

1. Entering the fourth quarter of 2022, we expect the global economy to continue to weaken due to the challenging macroeconomic environment and the increased probability of many developed economies entering recession over the next several months.

2. We expect below trend growth to carry into 2023 as central banks tighten monetary conditions to restrict growth. Risks to the outlook include entrenched high inflation, rising interest rates, the war in Ukraine and other ongoing geopolitical tensions.

3. Our expectation is that global stocks will remain volatile as earnings growth decelerates. While earnings and revenue estimates have been broadly reduced, we expect more meaningful downgrades to come during the upcoming earnings season. We believe companies with strong balance sheets and competitive advantages will be less sensitive to a decelerating growth environment and may provide the best strategic opportunity.

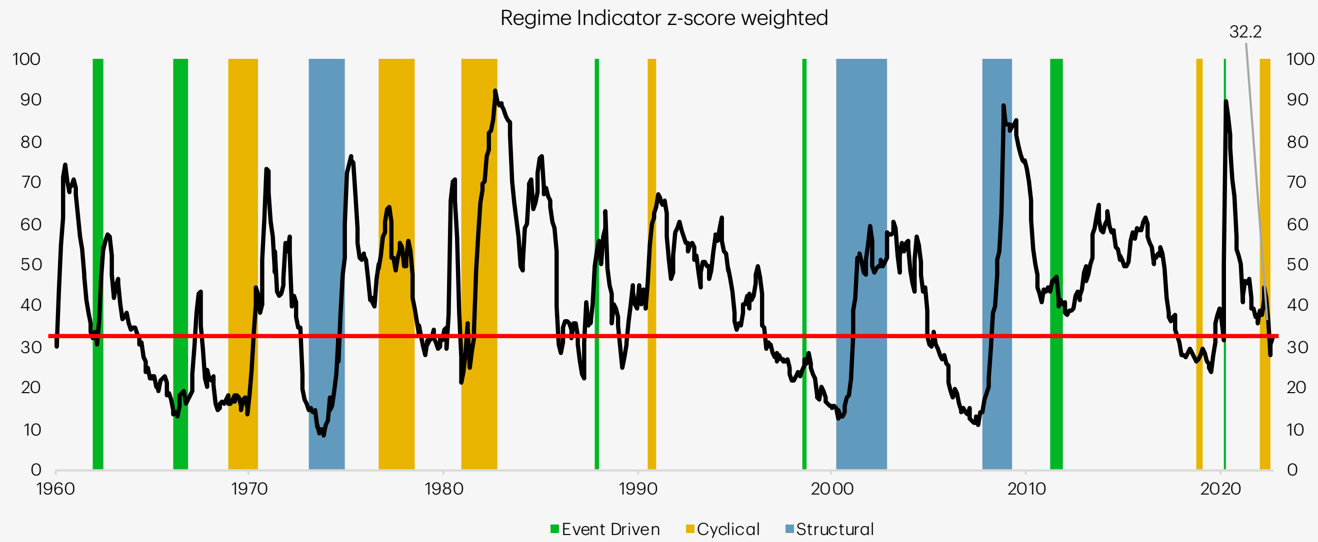
4. Despite poor year-to-date returns, we believe a fixed income allocation has become an increasingly important component of a multi-asset portfolio. Within the current interest rate environment, bonds have the potential to generate positive returns comprised of capital gains and income. From a historical perspective, bonds have also been effective at acting as a portfolio ballast, while helping to preserve capital over the longer term.

5. Given that higher 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 mortgages, infrastructure and real estate 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.

Regime Score

The regime indicator continued to decline over the quarter, but is still modestly above 30 at 32.2. The fundamental backdrop continues to deteriorate as we see signs of weaker growth from various components of the regime indicator. The global economy is expected to weaken over the next few quarters due to the challenging macroeconomic environment. At the same time, while equity markets have declined, bond yields have also moved higher, so on an absolute basis, equities look reasonably attractive, but on an equity risk premium metric (compared to bond yields), equities still look expensive. For now, the regime indicator continues to point to a conservative stance.

Figure 2: Regime score of of 32.2 points to a conservative stance



Note: the indictor is scaled form 0 to 100. The higher the more bullish, the lower the more bearish. Most of the previous bear markets are captured when this indicator is falling below 30.
Source: TD Wealth Asset Allocation Committee and Refinitiv Datastream, as of October 13, 2022.

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	
	Strat	Dyn	Strat	Dyn	Strat	Dyn	Strat	Dyn	Strat	Dyn
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	4.0%
Fixed Income	63.0%	62.0%	48.0%	47.0%	33.0%	33.0%	23.0%	23.0%	0.0%	0.0%
Government	32.0%	32.0%	24.0%	24.0%	17.0%	17.0%	11.0%	11.0%	0.0%	0.0%
Corporate	31.0%	30.0%	24.0%	23.0%	16.0%	16.0%	12.0%	12.0%	0.0%	0.0%
Equity	35.0%	36.0%	50.0%	51.0%	65.0%	65.0%	75.0%	75.0%	98.0%	96.0%
Canadian	11.0%	13.0%	15.0%	17.0%	20.0%	22.0%	23.0%	25.0%	29.0%	33.0%
U.S.	14.0%	15.0%	20.0%	20.0%	26.0%	26.0%	30.0%	30.0%	40.0%	40.0%
International	7.0%	5.0%	10.0%	9.0%	13.0%	11.0%	15.0%	13.0%	19.0%	13.0%
Emerging Markets	3.0%	3.0%	5.0%	5.0%	6.0%	6.0%	7.0%	7.0%	10.0%	10.0%

Strat: Strategic, Dyn: Dynamic. Source: Wealth Investment Policy Committee, as of October 13, 2022.

Expanded Strategic and dynamic asset-class weights by investor profile

Asset Class	Balanced Income		Balanced		Balanced Growth		Growth		Aggressive Growth	
	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.	Strat.	Dyn.
Cash	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	4.0%
Fixed Income	56.0%	55.0%	41.0%	40.0%	26.0%	26.0%	16.0%	16.0%	0.0%	0.0%
Domestic Gov't Bonds	20.0%	22.0%	14.0%	16.0%	9.0%	11.0%	5.0%	6.0%	0.0%	0.0%
Invest. Grade Corp Bonds	19.0%	20.0%	14.0%	15.0%	9.0%	10.0%	6.0%	6.0%	0.0%	0.0%
Inflation Linked Bonds	4.0%	4.0%	3.0%	3.0%	2.0%	1.0%	1.0%	1.0%	0.0%	0.0%
High Yield Bonds	4.0%	3.0%	3.0%	2.0%	2.0%	1.0%	1.0%	0.0%	0.0%	0.0%
Global Bonds - Developed	6.0%	3.0%	5.0%	2.0%	3.0%	2.0%	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%	11.0%	15.0%	16.0%	15.0%	16.0%	15.0%	16.0%	13.0%	14.0%
Mortgages/Private Debt	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	0.0%	0.0%
Real Estate/Infrastrucutre	3.0%	4.0%	8.0%	9.0%	8.0%	9.0%	8.0%	9.0%	13.0%	14.0%
Equity	32.0%	32.0%	42.0%	42.0%	57.0%	56.0%	67.0%	66.0%	85.0%	82.0%
Canadian	10.0%	12.0%	12.0%	14.0%	17.0%	19.0%	20.0%	22.0%	25.0%	28.0%
U.S.	13.0%	13.0%	17.0%	17.0%	23.0%	23.0%	27.0%	27.0%	35.0%	35.0%
International	6.0%	4.0%	8.0%	6.0%	11.0%	8.0%	13.0%	10.0%	15.0%	9.0%
Emerging Markets ex. China	3.0%	3.0%	5.0%	5.0%	6.0%	6.0%	7.0%	7.0%	10.0%	10.0%
Fixed Income	65.0%	64.0%	50.0%	49.0%	35.0%	35.0%	25.0%	25.0%	2.0%	4.0%
Equity	35.0%	36.0%	50.0%	51.0%	65.0%	65.0%	75.0%	75.0%	98.0%	96.0%

Strat: Strategic, Dyn: Dynamic. Source: Wealth Investment Policy Committee, as of October 13, 2022.

Dynamic positioning by risk factor weights

Assets	Positioning	Fixed Income Factor	Equity Risk Factor	Currency Risk Factor	Illiquidity Risk Factor	Alpha
Factor Positioning		Neutral	Neutral	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	Underweight	●		●		●
Global Bonds - Emerging	Neutral	●		●	●	●
Equity	Neutral					
Canadian	Overweight		●			●
U.S.	Neutral		●	●		●
International	Underweight		●	●		●
Emerging Markets ex China	Neutral		●	●		●
China	Neutral		●	●		●
Real Assets	Overweight					
Mortgages/Private Debt	Neutral	●	●	●	●	●
Real Estate/Infrastructure	Overweight	●	●	●	●	●

Source: Wealth Investment Policy Committee, as of October 13, 2022.

Economic Outlook

Threading the Needle

TD Economics

Global economic conditions are deteriorating and there is no single factor behind the weakness. In Europe, an energy crisis is battering household finances and weighing on industrial output. China is reckoning with the fallout of its real estate slowdown and strict COVID controls. In North America, central banks continue to rapidly tighten policy to cool the surge in inflation powered by a return of post-lockdown consumer activity and excess savings. Monetary authorities around the globe have their work cut out for them, with increasing questions on whether they can pull off a softish landing: reduce demand enough to wrestle inflation down from 40-year highs, without crashing their economies into a deep or prolonged recession. Adding it all up, the global economic outlook has been downgraded sharply. Although Europe is careening towards a recession, we are often asked if we are forecasting the same for the U.S. and Canada. It's the wrong question to ask. Our latest forecast embeds a two-year period of stagnation, with momentum holding meaningfully below the long-run trend alongside a rising unemployment rate. The duration reflects the needed dynamics to take pressure off demand-push inflation. In the event that economic momentum gets thrown into reverse, this could shorten up the adjustment period on inflation. Either way, it's not going to feel good. There's no easy exit from this cycle.

Global

• Compared to our prior June forecast, we have marked down global growth 0.1 percentage points, taking it to 2.8% in 2022 (from 2.9% previously). The outlook for 2023 has deteriorated substantially, with growth expected to advance 2.2% – down from 2.7% in June.

• The deepening energy crisis in Europe is expected to buckle the economy as the year progresses. Limited natural gas supplies reflects a supply-side shock that ultimately reduces the productive capacity of the economy. Establishing new energy supply lines will take time. In the interim, some firms will be unable to operate, and others will face higher energy input costs that compress margins. Given the backdrop, ongoing fiscal support for worker retention schemes and to offset rising gas costs will be critical to mitigating the reduction in labor demand, but is unlikely to prevent it.

• In China, well-below-trend growth is set to continue through 2023 as depressed consumer confidence and the sagging real estate market weigh on output. Moreover, soft export growth amid weaker demand from advanced economies will offset the competitive benefits of a weaker renminbi. That said, a policy pivot could counter the decidedly gloomy outlook. For instance, further relaxation of COVID containment policies and additional support for the real estate market can help to restore consumer confidence, but we're not overly confident that the government will embrace that pivot. If it does, it would help lay the foundation for a stronger bounce-back in 2023.

United States

• U.S. economic growth disappointed through the first half of the year, with the average of Q1/Q2 growth contracting by 1.1%. This outcome was at odds with other measures of economic activity – such as gross domestic income – that showed an expanding U.S. economy over the same period. Neither measure is perfect, and the reality likely lies somewhere in the middle. Either way, the slowdown in domestic demand has not been sufficient to take the heat off inflation, which continues to surprise to the upside. This has led us to expect a more aggressive path for monetary tightening through the remainder of this year. Likewise, we have revised down our economic growth forecast for 2022 to 1.8 % (from 2.2%) and 2023 to 0.6% (from 1.4%).

• The U.S. consumer has shown a degree of resilience in the face of rising inflation and higher interest rates. Consumer spending growth has hovered around a trend pace (1.9%) through the first half of 2022. If a soft landing is achievable, consumers hold the lynchpin. Our near-term tracking suggests spending will hold somewhere in the 1%-1.5% range through the second half of 2022, before slowing to a 1% pace in 2023 as household's are further squeezed by higher rates and weaker employment growth. However, excess savings and student debt relief (which has not been incorporated into the forecast) offer some upside.

• The pace of job growth has defied gravity through 2022, and various indicators point to continued momentum over the near term. However, the labor market will not remain immune to the Fed's rapid rate hike cycle. Job growth is expected to cool through 2023, putting upward pressure on the unemployment rate. We expect the unemployment rate to rise by 150 bps – peaking at 5.1% by the end of 2024.

• Inflation is showing more persistence across both goods and service categories. This has led to an upward revision to the near-term inflation outlook and more persistence. Core PCE inflation is still expected to cool over the next year in response to weakening demand – reaching 2.7% y/y by the end of 2023 – but it will still be sitting above the central bank's target. The move back to 2% will prove to be far slower, with core PCE not expected to reach 2% until early-2025.

Canada

• The Canadian economy grew at a 3.3% pace over the second quarter of 2022, making it a standout performer on the global stage. Since public health restrictions were lifted earlier this year, mobility has increased, propelling spending, corporate profits, and nominal incomes. Elevated commodity prices are also providing a fillip to Canada's expansion rate this year. A strong first half will boost annual average GDP growth to over 3% in 2022, but that conceals a slowdown to effectively stall speed starting in the second half of this year and into 2023.

• A further rotation away from durable goods spending towards services likely continued in Q3-22, as pent-up demand for recreation and entertainment were unleashed. However, the impact of higher interest rates and elevated inflation are starting to leave a growing mark on overall spending activity.

• Given the expected slowing in demand, the underlying economic dynamics won't be sufficient to generate enough jobs to absorb people entering the labour force or those already on the sidelines. This means the unemployment rate should push higher. It has already risen from a low of 4.9% to 5.2% and is expected to reach 6.5% in 2024.

• The impact of higher mortgage rates will continue to depress residential investment through 2023. Prospects for nonresidential investment are brighter, supported in part by relative strength in commodity industries and development of long-term resource projects.

• The inflation outlook for this year has been upgraded since the June forecast, with little relief expected in the second half of this year. In 2023, CPI inflation is forecast to return to a more palatable level with the help of easing supply chain disruptions, lower energy prices and under more stagnant economic growth. All told, headline and core CPI are expected to reach 2.6% year-on-year by the end of 2023.

Financial

• Excess demand and multi-decade high inflation have central banks determined to lift rates further into restrictive territory. Having said that, we don't believe the Bank of Canada will tighten as much as the Federal Reserve. Canadian housing activity and household debt levels are comparatively lofty, which points to a higher sensitivity to rising borrowing costs. We expect the Fed to hike its policy rate to 4.50% by early 2023, while Canadian short-term interest rates are likely to reach a peak at 4.00% by year-end.

• Deceleration in inflation later next year on both sides of the border will open the door for some policy reversal, with short-term interest rates falling back to a 3.50-3.75% range by late 2023.

• In light of the negative policy-rate differential that is expected to open up between Canada and the U.S., the Canadian dollar is likely to fall back to around 70 US cents by Q2-23. Much bad news has already been priced into the euro and pound, but further downside can't be ruled out given the threat to energy supply over the coming winter. We remain pessimistic on EM currencies relative to the USD, given weakness in their respective economic recoveries.

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%)*	**5.1**	**2.0**	**0.4**	**1.2**
U.S.	5.7	1.8	0.6	1.2
Japan	1.7	1.5	1.5	1.1
Euro Area	5.2	3.1	-0.2	1.4
Germany	2.6	1.6	-0.9	1.6
France	6.8	2.6	0.2	1.4
Italy	6.6	3.3	-0.3	1.2
United Kingdom	7.4	3.5	-0.7	0.9
Canada	4.5	3.3	0.9	1.0
Consumer Price Index (annual per cent change)				
G7	**3.2**	**7.2**	**4.0**	**1.9**
U.S.	4.7	8.1	3.7	2.1
Japan	-0.2	2.0	1.5	1.2
Euro Area	2.6	8.2	5.6	1.8
Germany	3.2	8.2	5.7	1.8
France	2.1	6.4	4.8	1.9
Italy	1.9	7.9	5.9	1.8
United Kingdom	2.6	8.9	5.6	2.1
Canada	3.4	6.9	3.8	2.1
Unemployment Rate (per cent annual averages)				
U.S.	5.4	3.7	4.2	4.9
Japan	2.8	2.6	2.5	2.4
Euro Area	7.7	6.8	7.5	7.6
Germany	5.7	5.4	6.0	5.7
France	7.9	7.6	8.2	8.0
Italy	9.5	8.3	9.2	9.2
United Kingdom	4.5	3.8	4.6	4.9
Canada	7.4	5.4	6.1	6.5

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

Asset Class Analysis

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Quarter in Review

The Fed, Misread

Aurav Ghai, Senior Fixed Income Analyst; Mansi Desai, Senior Equity Analyst | TD Wealth

Central banks sustained their hawkish stance throughout the third quarter, although equities and government bond markets did attempt a rebound in the first half of the quarter before giving in to the will of central banks in the latter half. Over the quarter, both equity and fixed income markets added to their losses from the first half of the year, with the yield on 10-year Treasuries rising to 3.83%, a level last attained in the period prior to the global financial crisis. Global equities, meanwhile, declined by 5.0%, taking valuations back close to their historical average. All this while an investor flight to safety lifted the U.S. dollar index to 112.12 — a level not seen since the bursting of the dot-com bubble in 2002.

The Fed delivered two policy rate hikes of 75 basis points (bps) each in July and September while revising its projected terminal rate upward in its September forecast. Surprisingly, the market interpreted the July press statements from the Fed chair as dovish, signaling a potential pivot in 2022 or early 2023, which led to a sharp bounce-back in risk assets along with lower government yields. But the hopes and the rally didn't last long. In August, a series of Fed speakers along with a speech by the Fed chair at the Jackson Hole Economic Symposium reiterated the goal of price stability at all costs. This led to the upward revision in terminal rate projections and a sharp rise in real yields, which drove nominal yields to their highest level since the global financial crisis.

Performance through a macroeconomic lens

If we look at Q3 from a macroeconomic perspective, rising inflation, stalling growth and tightening central-bank policies forced the market to price in two uncertainties at the same time: the magnitude of the growth slowdown and the stickiness of the current inflation regime. This led almost all asset classes to post negative returns during the quarter. The few exceptions included Canadian nominal and inflation-linked bonds and a few commodities, like natural gas and agriculture.

Growth assets sold off as negative sentiment arose regarding the extent that central-bank tightening could damage economic growth. These conditions led to volatility in government yield markets and other asset classes that derive their pricing from risk-free government yields, driving both equities and bonds lower during the quarter.

Equities fell due to continued pressure on earnings estimates and multiples, whereas bonds continued to suffer solely from higher rate-hike expectations, although credit spreads remained broadly resilient. Bonds added to their losses from Q2 as major central banks expedited their policy rate hikes and initiated balance-sheet runoffs to reverse the stimulant policies introduced after March 2020.

Key government bond-yield curves rose almost in parallel over the quarter in the U.S., while the Canadian curve saw only shorter-maturity yields go up, as markets priced in more rate hikes than previously anticipated. Government yield curves flattened and inverted, as shorter-term yields surged in anticipation of those rate hikes, while longer-term yields also priced in weaker inflation and growth as well as lower rates after the current tightening phase. Future growth concerns overrode persistent inflation concerns, leading global and U.S. nominal bonds to outperform inflation-linked (IL) bonds. Investors recognized that the "all it takes" approach to tame inflation by the central banks would lead to lower economic growth and milder inflation in the longer term; therefore, expected future inflation, as shown by inflation breakevens, moved lower from their peaks. This, combined with higher real yields from aggressive financial conditions, led to underperformance by IL bonds.

The following sections summarize market performance during Q3 through an approach that breaks economic conditions into four macroeconomic environments (Figure 1): deflationary growth, inflationary growth, deflationary contraction (recession) and inflationary contraction (stagflation).

Deflationary Growth: Rising Growth and Falling Inflation Assets

During the quarter, equity markets hoped against hope that peak inflation would lead to a policy pivot from the Fed, appreciating by 15% between mid-June to mid-August. As noted above, equity markets got a reality check from the Fed's undeterred hawkish stance, along with strong inflation data and a strong Employment Report from the Bureau of Labour Statistics in early September. Together, these showed that a Fed pivot would not come soon and that a recession could be necessary to cool inflation. Global equities declined by 5%, with U.S. equities declining by 4.8% while Canadian and international equities (EAFE) declined 1.4% and

Figure 1: Asset-class performance by macroeconomic environment

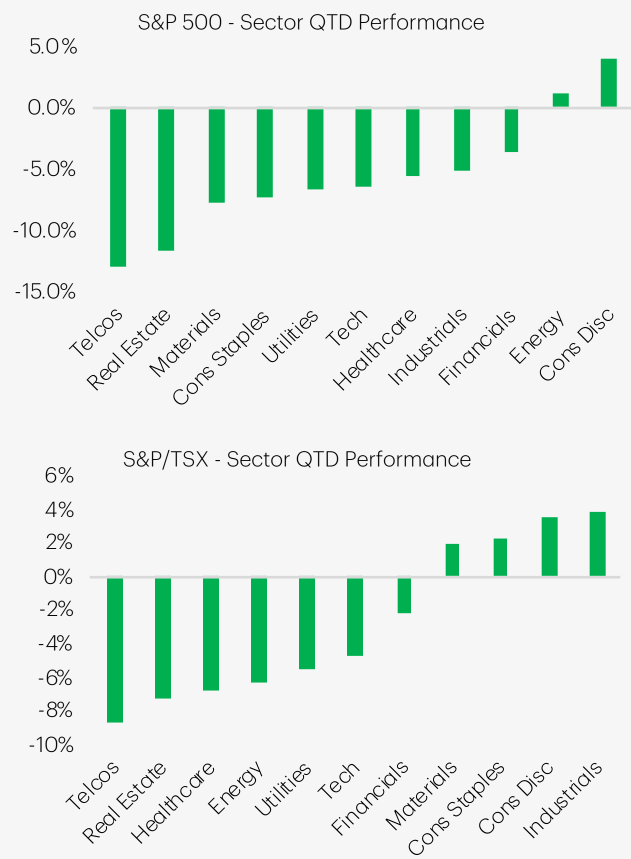
Economic Environment	Falling Inflation		MTD	QTD	1 Year	Rising Inflation		MTD	QTD	1 Year
Rising Growth	Equities	Global	-8.4%	4.9%	-16.2%	Commodities	GSCI	-7.8%	-10.3%	23.6%
		US	-4.9%	-4.8%	-17.6%		Energy	-11.2%	-14.9%	37.3%
		Canada	-16.2%	-1.4%	-5.4%		Oil	-11.2%	-24.8%	5.9%
		EAFE	-6.2%	-3.6%	-11.1%		Natural Gas	-25.9%	24.7%	15.3%
		EM ex. China	-10.4%	-5.6%	-24.4%		Copper	-1.8%	-6.5%	-12.5%
		China	-6.7%	-14.3%	-20.1%		Agriculture	0.5%	1.4%	20.4%
		US Small Cap.	-9.6%	-2.2%	-23.5%		Industrial Metals	-5.4%	-7.5%	-13.2%
		Global REIT	-12.1%	-10.0%	-16.6%					
		Global Infra.	-11.8%	-9.6%	-6.0%					
	Corporate Bonds	Global IG	-4.5%	-4.3%	-16.7%	Emerging Market Debt	Hard	-6.1%	-4.2%	-22.2%
		Global HY	-4.5%	-1.4%	-16.6%		Local	-4.6%	-4.3%	-19.4%
		Private Debt	-2.3%	1.4%	-2.5%					
Falling Growth	Nominal Gov't Bonds	Global	-2.7%	-3.0%	-10.8%	Inflation-Linked Gov't Bonds	Global	-6.3%	-5.6%	-14.7%
		US	-3.5%	-4.3%	-12.9%		US	-6.6%	-5.1%	-11.6%
		Eurozone	-3.8%	-5.1%	-17.1%		UK	-7.4%	-9.7%	-27.0%
		Japan	-4.8%	-4.4%	-22.6%		Canada	-2.5%	0.9%	-11.3%
		Canada	-0.4%	0.6%	-10.7%	Commodities	GSCI	-7.8%	-10.3%	23.6%
							Energy	-11.2%	-14.9%	37.3%
							Gold	-2.9%	-7.9%	-5.7%

Source: Bloomberg Finance L.P. as of September 30, 2022. Note: All returns are in local currency unless indicated otherwise.

3.6% respectively. Higher commodity exposure for Canadian equities and lower valuations favoured the relative performance of non-US developed-market equities. Emerging-market equities underperformed primarily due to the poor performance of Chinese equities. A slowdown in economic activity, and the continued lacklustre state of the real estate sector, weighed on the performance, leading to a decline in valuations below their historical average.

In the United States, a rebound in consumer spending and reduced valuations led a rotation to some growth-oriented sectors like consumer discretionary and away from defensive sectors like consumer staples and utilities which had become relatively highly valued. High energy prices led to the continued dominance of energy in the top-contributing sectors. With attractive valuations and dividend yields, financials and industrials outperformed, while tech stocks continued to be hindered by fears of higher interest rates and a decline in top-line growth, given the strong appreciation in dollar. Softening commodity prices and rising recessionary fears led to weakness in materials companies, while telcos, which have a large representation of media stocks in the U.S., also lagged due to the sluggish growth outlook for media giants like Facebook, Netflix and Alphabet.

Figure 2: North American equities sector performance



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

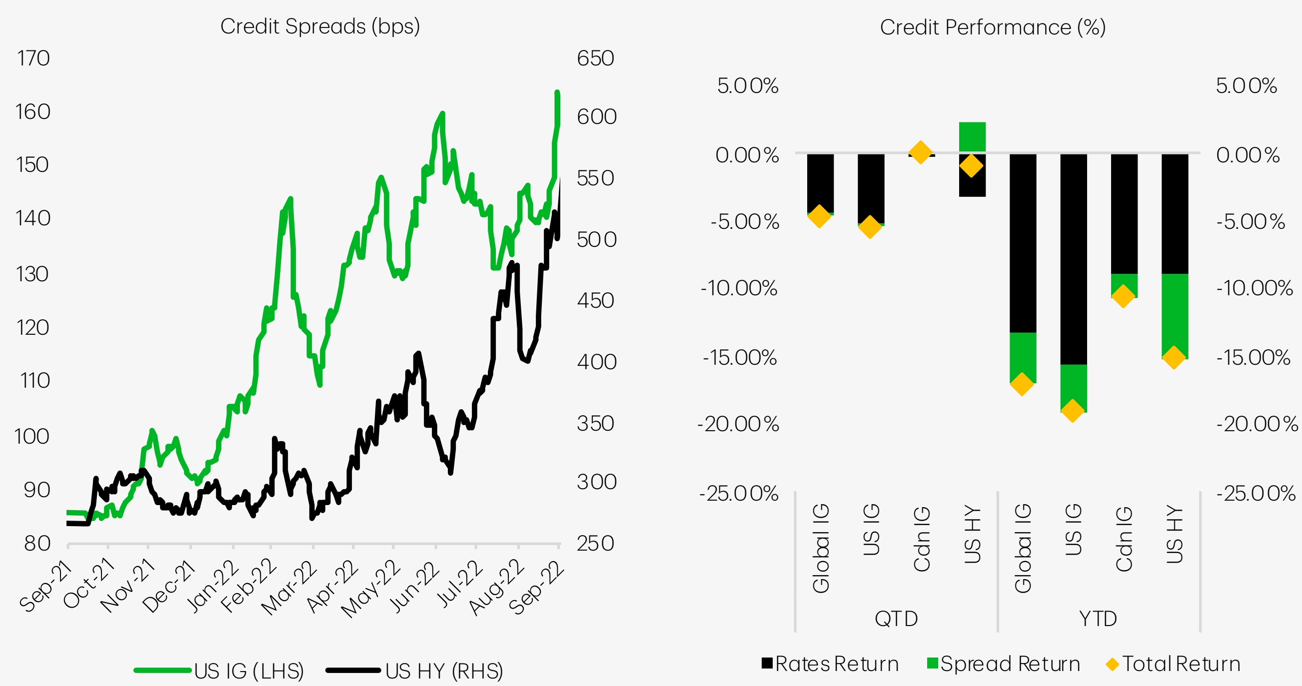
Within the broad Canadian equities index, consumer staples continued to add value, while we saw a strong rebound in consumer discretionary and industrial stocks for the very same reasons highlighted above for U.S. equities. Sector composition led to differences in the performance of both the materials and energy sectors in Canada relative to the United States. We continue to believe that there are risks for equities in the days ahead and that current price levels do not represent a bottom for equity markets. Although equity markets have begun to price in the risk of a probable recession, the impact of high inflation and higher wage growth has yet to impact corporate earnings. We believe the next major risk for equities is a downgrade to earnings. Given these risks, we continue to favour overall defensive positioning in equities, high-quality large-cap stocks and active managers with resilient historical performance in order to weather heightened volatility in coming quarters.

The upward repricing of government bond yields in Q3 drove losses in investment-grade (IG) and high-yield (HY) corporate bonds, as interest rates surged in response to tightening financial conditions due to aggressive monetary policy. In this environment, IG and HY credit spreads remained resilient, with spreads mostly tightening in July but widening in August and September. Stricter funding conditions and more expensive borrowing costs, combined with lower funding needs, led to significant declines in new issuance.

The YTD U.S. IG supply is at US$1,035 billion compared to US$1,220 billion in 2021 and US$1,650 billion in 2020. There has been more robust issuance in U.S. financials, with $567 billion YTD compared to $562 billion in 2021, whereas U.S. industrials witnessed a significant decline. For the quarter, IG credit spreads in the U.S. modestly widened by 2 bps whereas the HY spreads tightened by 16 bps, respectively, to 158 and 552 bps (Figure 3).

For IG credit, higher government yields drove the losses, although spreads did not contribute materially to the overall performance. For HY credits, meanwhile, tighter spreads aided in offsetting the losses from higher government yields. Within HY, the spreads for lowest-quality issuers widened, whereas higher-quality BB- and B-rated issuer spreads tightened amid bids for higher-quality, and the growing fear of a growth slowdown driven higher default rates. Energy and commodity issuers benefited from the sharp rally in commodities. U.S. credit spreads were relatively well contained until the end of August, but with a lower probability of the Fed pivot, growing fears of a looming recession and downward earning revisions led to spread-widening in September. Overall, despite the shocks and negative outlook that dominated the quarter, credit held up strongly. Both IG and HY credit spreads remained tight compared to past recessionary levels and were supported by strong corporate balance sheets and earnings.

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



Source: FactSet and Bloomberg as of September 30, 2022

Deflationary Contraction: Falling Growth and Falling Inflation Assets

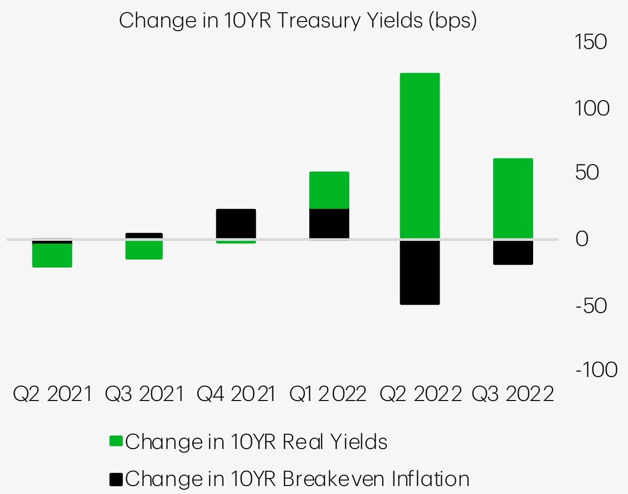
Nominal government bonds and other rate-sensitive assets, which tend to perform well when economic expectations are weak, sold off heavily in Q3 due to higher rate-hike expectations amid stickier-than-expected inflation. Against this backdrop global bonds returned -3.0%, outperforming the U.S. Treasury bonds, which fell 4.3% during the quarter. U.S. 10-year government bond yields climbed by 81 bps in Q3, driven by increases in real rates, although inflation expectations fell during the quarter. The Fed delivered two 75-bp hikes in July and September, thereby taking the upper bound of the federal funds range to 3.25%. In anticipation of further rate hikes, the entire U.S. yield curve has risen and inverted. The long end did not move as much as the short end as investors expect inflation and economic growth to fall, leading the Fed to pause and end its hiking cycle in 2023 (Figure 4).

Rising rates drove heavy losses across the curve, especially for long-duration assets, with the U.S. 20-year-plus Treasury falling by 10.8% in Q3, adding to its 13% drop in Q2. Global high-quality corporate (IG) bonds and lower-quality (HY) fixed income fell, respectively, by 16.7% and 16.4% so far this year — one of the worst drawdowns on record. There was simply no refuge across traditional fixed income during the quarter and year to date. Losses piled up even before central banks began offloading bonds on their balance sheets significantly during the third quarter. High volatility due to uncertainty in pricing the magnitude of future hikes, the stickiness of the current inflation regime and worsening liquidity conditions became a reality for bond markets during the second half of the quarter as market-makers trimmed their trading books (especially for off-the-run bonds) in response to market turbulence.

In Canada, higher repricing of the projected terminal policy rate caused shorter-maturity government bond yields to move sharply upwards and the curve to invert as longer-maturity bond yields remained stable. This unique performance relative to other global bond markets led to modest, positive performance of 0.6% in Q3 for Canadian government bonds. Canadian 10-year government bond yields, for example, fell by 5 bps to 3.17% (Figure 5).

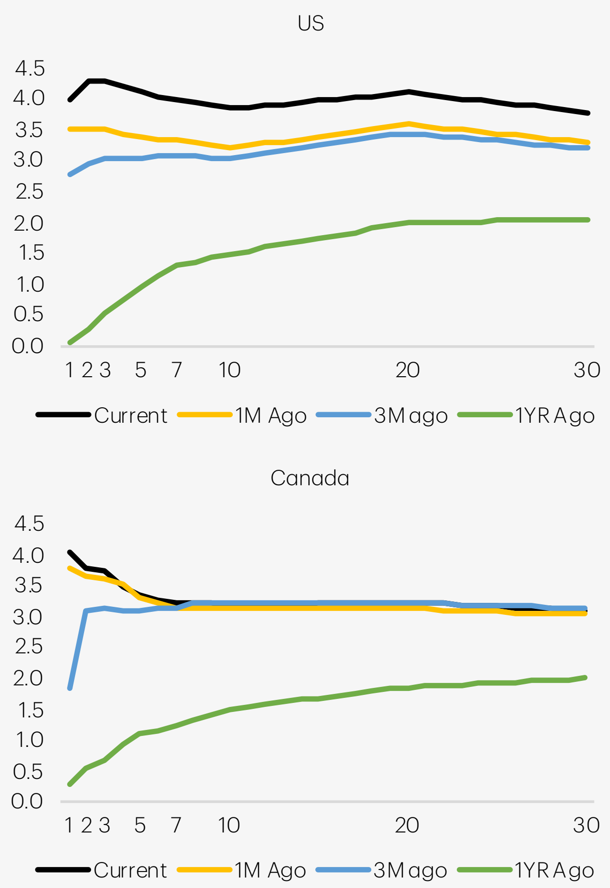
Eurozone government bonds also posted sizeable losses, as rising price pressures led to significantly tighter monetary policy despite a weaker growth outlook and soaring energy costs. The eurozone bond yield curve also moved significantly upwards, an indication of higher terminal policy rates and stickier inflation. German 10-year yields climbed 77 bps, while equivalent Italian yields rose 125 bps. The historic weakness in the euro provided some support for exports, but this was largely due to the significant divergence in growth and inflation outlooks between the U.S. and Europe, and the strength of the U.S. dollar as investors sought the safe haven.

Figure 4: Contributions to changes in 10-yr Treasury yields



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

Figure 5: Government bond yield curves



Source: Bloomberg Finance LP as of September 30, 2022

The euro depreciated by 6.5% in Q3, adding to the 5.3% drop in Q2 2022. In harmony with the Fed, the European Central Bank (ECB) pivoted to a more hawkish policy stance in light of stubbornly high inflation. It hiked the policy rates by 50 bps in July and 75 bps in September and announced a need for further aggressive hikes in coming months. Investors have priced in multiple rate hikes by the ECB in coming quarters, a significant reversal from the outlook at the start of the year, when no rate hikes were expected.

Inflationary Growth and Contraction: Rising Inflation Assets

Inflation continued to climb in North America and Western Europe, reaching levels not seen in four decades. The presence of ever-rising inflation upended markets and seeped into long-term inflation expectations in April, but aggressive rate hikes led to those expectations subsiding over the summer. U.S. long-term inflation expectations, based on 10-year breakeven inflation rates, ended the quarter at 2.15%, compared with 2.8% at the end of Q1, after peaking at 3% in April (Figure 6). Subsiding breakevens indicate that investors remain confident in the ability of central banks to tackle inflation over the short to medium term, possibly at the expense of economic growth.

Inflation-linked bonds understandably diminished during Q3 as future inflation expectations subsided. While current inflation remains high, losses have been driven by the rapid rise in the real yields driven by hawkish central banks. U.S 10-year real yields moved up by 61 bps to 1.14% during Q2. As a result, U.S. IL bonds fell 5.1% in Q3, underperforming the 4.3% loss of their nominal counterparts, as falling inflation expectations worked in favour of nominals and against IL bonds.

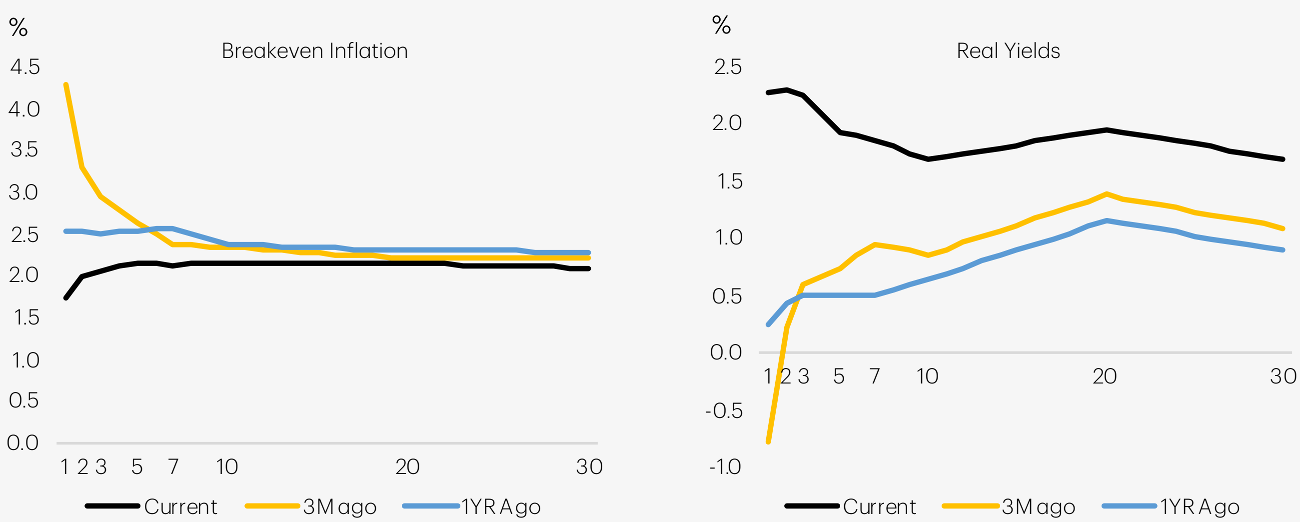
The yield curve for U.S. Treasury inflation-protected securities (TIPS), or real yields, moved higher and inverted in most parts, as financial conditions further tightened over the quarter and inflation expctations remained subdued. Similar to U.S. TIPS, global inflation-linked bonds also sold off (down 5.6%) and underperformed nominal bonds due to rising real rates and falling inflation expectations or breakevens. Canadian real-return bonds posted much better performance of 0.9%, with falling real yield at the longer maturity to offset any losses at the shorter maturities.

Commodities saw continued volatility during the quarter as recession fears lingered and drove uncertainty over the demand for energy and materials. WTI crude futures sold off 24.8% over the third quarter to below US$80 per barrel for the first time since mid-January this year. Natural gas, on the other hand, experienced large swings in price, rising by as much as 80% before closing the quarter up 24.7%, as the ongoing conflict in Europe created supply concerns that flowed through global markets.

Concerns over a global growth slowdown also continued to weigh on base metal prices, despite lingering supply issues from mine and smelter disruptions. Weakness in the Chinese growth combined with ongoing challenges in the Chinese property market added to the pressure on metal prices in the quarter. Although metals prices did not see the magnitude of weakness this quarter as they did in Q2, prices failed to bounce back and traded sideways to down, with copper closing 6.5% lower.

The ongoing inflation concerns should have provided a strong backdrop for gold, but the surging U.S. dollar along with sharply rising real rates were a headwind for the yellow metal, sending gold down 7.9% in Q3.

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



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

Outlook on Fixed Income

Modest Overweight

The Power of Yields

Aurav Ghai, Senior Fixed Income Analyst | TD Wealth

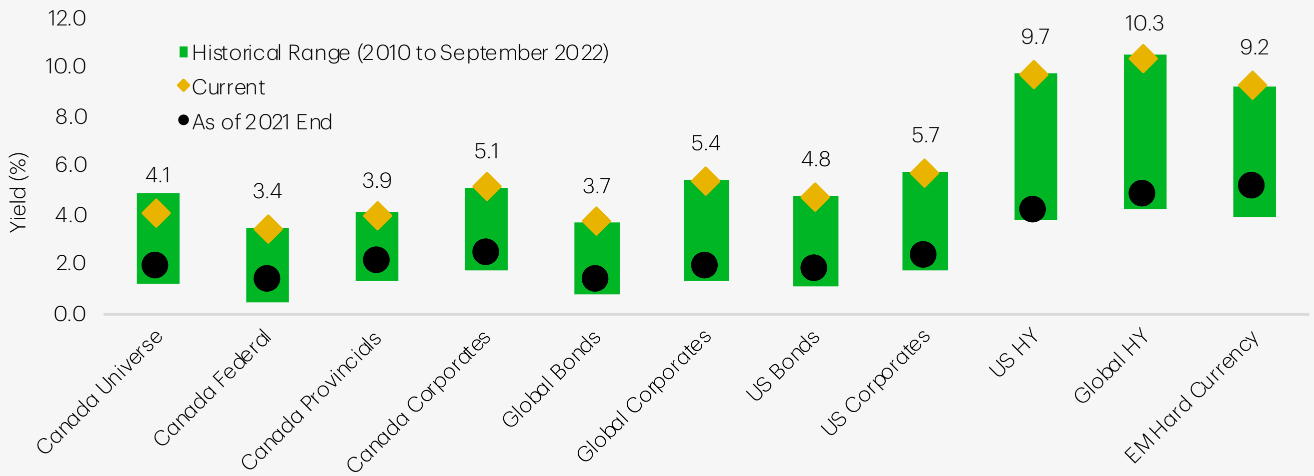
As we've all seen and heard, central banks are doubling down in their struggle to curb inflation. Many still have a long way to go as they try to put an end to rising prices without sending economic growth into a tailspin.

Geopolitical tensions, elevated market volatility, and the fastest pace of central bank tightening in decades are all adding to the unusually uncertain environment. Buffeted by the turbulence, investors are looking over their shoulders, trying to see when recession will strike developed markets and at the same time hoping inflation has peaked.

We believe the effects of tighter monetary policy have yet to be felt in most regions and will eat into economic growth in 2023 before eventually chomping away at inflation. Given our tumultuous surroundings and heightened uncertainty which we have referred to as "radical uncertainty," it's impossible to see how widely circulated point forecasts for growth and inflation can be anything more than useful references. In fact, from where we stand the range of possible outcomes is so vast that the only thing we do know is that the probability of recession has increased.

Investors may feel uneasy allocating funds towards fixed income amid surging inflation, volatility, and losses caused by rising policy rates, but today's starting yields offer attractive entry points for those able to look beyond near-term volatility. Yields across fixed income sectors are well above the lows of the past decade and offer real potential for future returns.

Figure 1: Yields, the most crucial valuation metric for fixed income instruments, reset to 12yr highs



Source: Bloomberg, TD Wealth, as of September 30, 2022

Instead of dwelling on the losses we've incurred, let's look ahead to the segments of the fixed income market that offer attractive opportunities. We believe yields will become even more appealing investment opportunities as implied volatility subsides or central banks change course and focus on underpinning economic growth rather than controlling inflation.

While it's still important for investors to act with caution and be flexible and ready to change positions when it comes to portfolio decisions, we believe the investment outlook and conviction has improved for bonds:

- We are modestly overweight fixed income investments in general and modestly overweight domestic government (U.S. and Canada) bonds. Canadian and U.S. government bonds have become more attractive at current yield levels despite higher volatility as growth concerns look set to eventually win out over inflation in the long run.
- We remain modestly overweight investment grade (IG) credit largely because of the resilience offered by robust balance sheets. Limited new bond issuance, or supply, continues to support valuations. High-quality issuers in the IG credit universe have over the past few years generally taken a conservative approach, built up inventories, raised debt to support future liquidity requirements and refinanced near-term outstanding debt. 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 in a unique cycle with changing characteristics that have boosted overall quality and tightened spreads. This should keep spreads from returning to previous levels during recessions, but spreads will widen if the growth outlook keeps deteriorating.

Government Bonds

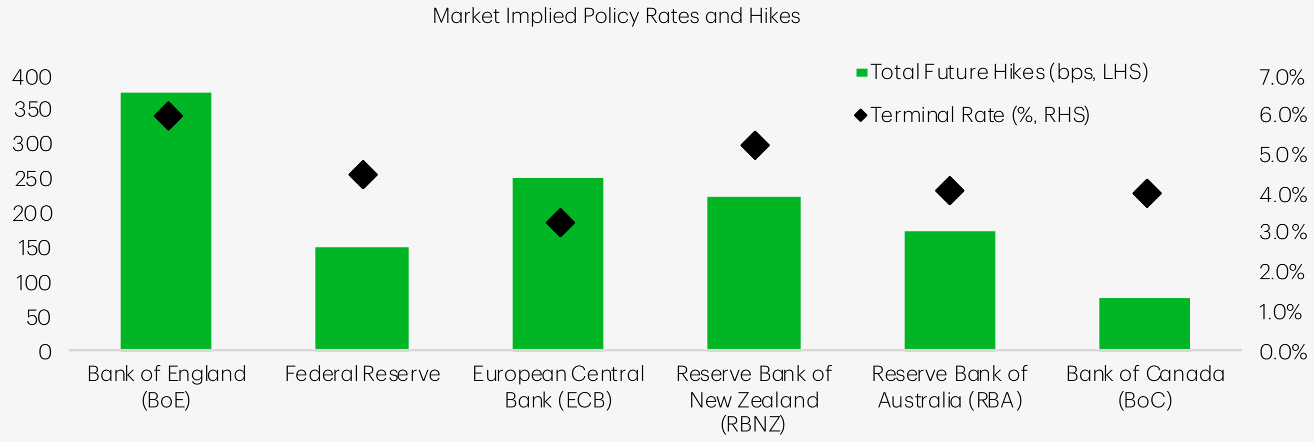
Policymakers shrugged off what looks to be an impending global recession in September and doubled down on their efforts to beat inflation. Even after the slew of interest rate increases over recent months, many central banks remain far from terminal policy rates (Figure 2).

With terminal policy rates in many countries around neutral or heading into restrictive territory, we expect 10-year government bond yields, some of which are at the highest level since 2010, to decline and remain below policy rates in coming months. We also expect central banks to hold rates at terminal levels for much of 2023, even if economic growth slows, as they gauge the strength or weakness of labour markets. Amid this, Canadian and U.S. nominal government yields are likely to remain range-bound with bursts of volatility. Yields will become more attractive investment opportunities as implied volatility subsides or central banks change course and focus on underpinning economic growth rather than controlling inflation. Until then, inflation and systematic shocks or events we haven't even imagined (like the U.K. gilt market) remain key risks to government yields.

United States

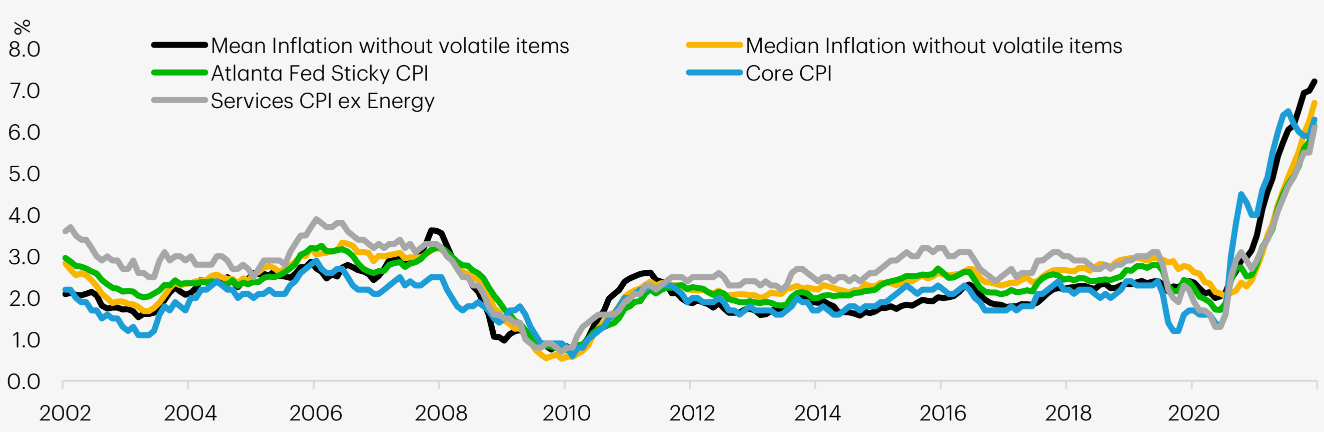
The macro outlook and forecasts from Fed officials have clearly evolved since our last Portfolio Strategy Quarterly. Inflation looks stickier and wider spread, wage inflation has accelerated, and inflation expectations have shot up (Figure 3). Economic data shows the economy reaccelerated after a weak patch in May and June, and the labour market appears particularly resilient.

Figure 2: Market indications for forthcoming hikes and terminal rates



Source: Bloomberg, TD Wealth, as of September 30, 2022

Figure 3: U.S. inflation measures point to stickiness

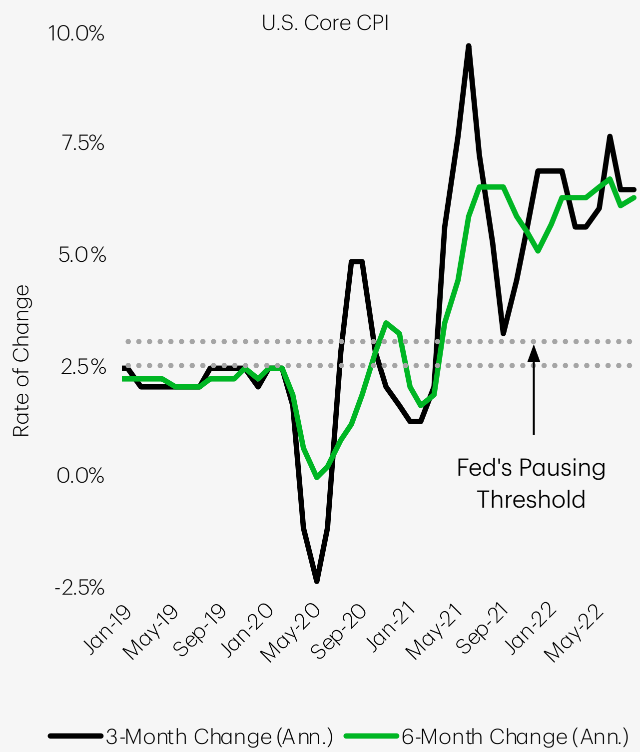


Source: Bloomberg, Federal Reserve, TD Wealth, as of September 30, 2022

As you know, the Fed responded quickly to inflation data, hiked the policy rate in September and increased its outlook for 2022 and 2023 interest rates, taking the projected median terminal policy rate to 4.6%. It appears increasingly likely that we will have to experience higher unemployment and slower economic growth to curtail inflation. In its May report, the San Francisco Fed estimated the nonaccelerating inflation rate of unemployment (NAIRU) at 6% suggesting U.S. unemployment, running near 50-year lows, and pinned at 3.5% in September, has quite a gap to fill before it helps tame inflation.

The Fed is obviously still concerned about the strength and tenacity of inflation (Figure 4). While Fed officials have acknowledged economic growth is taking a back seat to inflation, no central banker is going to admit they're aiming for recession. Persistently high inflation has capped real interest rates (nominal yields adjusted for inflation) at low levels and broadening inflation suggests we'll need more monetary tightening to push real rates above neutral. And over all of this hangs the cloud of second-round effects: elevated inflation could mean people anticipate even more inflation in the future and push us beyond pandemic-related supply shocks into a more acute and entrenched inflationary trend. The Fed definitely doesn't want this.

Figure 4: The Fed and investors will monitor the rate of change for inflation in coming months



Source: Bloomberg, TD Wealth, as of September 30, 2022

It's abundantly clear that the Fed is determined to stabilize prices. Rate path forecasts suggest a 75-bp hike in November and a 50-bp hike in December, indicating a 4.6% terminal rate. On top of this, six Federal Open Market Committee (FOMC) members pencilled in 4.8% so the Fed is ready to revise the terminal rate even higher if inflation drops too slowly. We believe the Fed will leave the policy rate at terminal value for some time before the economy slows and the trade-off between inflation and unemployment becomes more challenging.

We don't expect the volatility affecting government yields to dissipate any time soon. Depending on data and changes to the environment, the Fed could flip and decide economic growth is more important than inflation. Over the short-term, we anticipate U.S. government bond yields will remain range-bound with upside risk depending on incoming economic data and imported turbulence from other major government bond markets (U.K. gilts).

We believe current levels are attractive enough for long-term investors to pursue if they are willing to weather the short-term volatility. Even if inflation readings remain high and the Fed keeps hiking rates, longer maturity yields will perform favourably as the inflation risk premium declines and growth concerns step to the fore.

Canada

For the first three quarters of the year it was clear that the BoC (Bank of Canada) needed to jack up policy rates: the economy was nudging further into excess demand, inflation was surprising to the upside and, until July, policy rates were accommodative or below neutral. The BoC's balancing act is about to become trickier as growth slows amid tightening financial conditions, and inflation looks to have peaked or close to it. Slack in the economy and restrictive policy rates will eventually start to slow inflation but could take some time.

Back in December, the BoC introduced a two-tiered mandate (inflation plus economic growth) which allowed it to work towards supporting employment once inflation goals were met. That scenario is long gone. Now the BoC is only paying attention to growth insofar as it feeds into future inflation, indicating a willingness to tolerate slow growth. We should also note that the BoC was quite blasé about the housing market during the exuberance of the last two years so we doubt it will throw more than a passing glance at the sector on the way down.

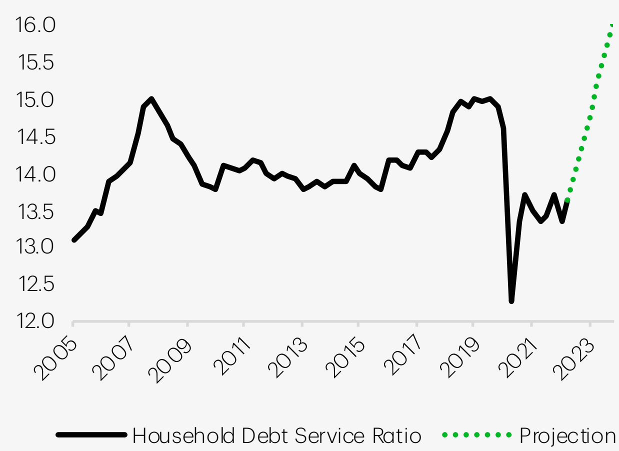
In a more typical hiking cycle, the BoC would probably be content to pause here, given the growth outlook, and let inflation drift back to target. However, BoC members have voiced some concern that persistently high short-term inflation expectations could become entrenched into longer-term expectations, making their eventual 2% target more difficult to achieve (Figure 5). In this context, the BoC could work to stifle inflation quickly, overshoot and force the terminal policy rate higher than planned.

Households in Canada have yet to feel the full impact of higher policy rates. In fact, 2023 is looking like it will be a particularly difficult year because the sector is already highly leveraged and will have to absorb rising consumer interest rates along with higher prices. Since the end of 2019, 5-year fixed mortgage rates have hovered at historic lows prompting households to add nearly C$400 billion in mortgage debt and exposing them to the pressure of higher refinancing rates: the debt service ratio could move towards 16% by end 2023, according to TD Securities (Figure 6). Since Statistics Canada started keeping track of the data in 1990, the debt service ratio has never exceeded 15%. Such elevated leverage among Canadian households implies incremental rate hikes will have more effect in Canada than the U.S., forcing the BoC to divert from the Fed once rates are in restrictive territory. It bears repeating here that the Canadian economy hasn't operated at more than a 1.75% policy rate since 2008 so as we wade further into restrictive territory, the risk of a hawkish policy mistake tipping the economy into recession increases.

Put differently, the BoC is balancing two risk scenarios: it could overtighten, push unemployment higher than necessary, and rebuild its credibility as a stalwart of anti-inflation or, it could fall short in its policy tightening, take longer to rein in inflation, and further erode its credibility. If forced to choose, we suspect the BoC will overtighten.

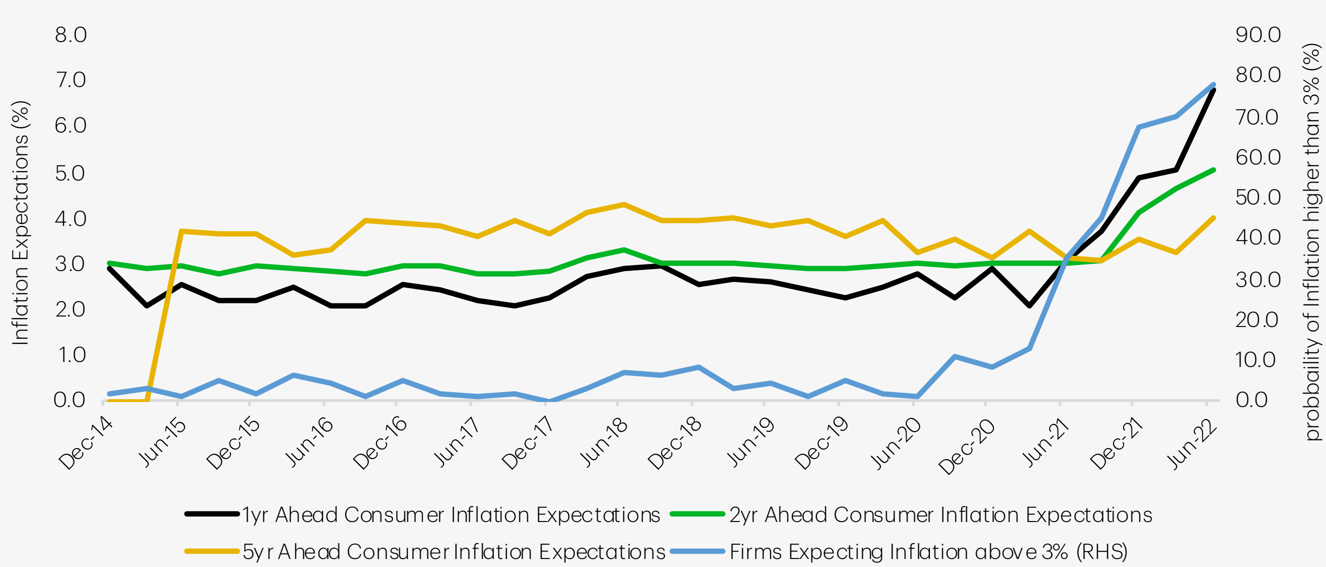
With current policy rates already restrictive at 3.75%, we expect the pace of BoC tightening to ease in coming meetings: the most prudent course of action would be to move in 25 bp increments. At the same time, market expectations have a way of becoming self-fulfilling—with questions lingering about credibility, the BoC cannot risk material downside surprises relative to market expectations. We expect the BoC to hit the 4.25% terminal rate by January 2023, followed by rate cuts later that year.

Figure 6: Canadian household debt service ratios could be headed for trouble



Source: Statistics Canada, TD Securities, TD Wealth, as of September 30, 2022

Figure 5: BoC surveys show short-term and longer-term expectations unanchored



Source: Bloomberg, Statistics Canada, TD Wealth, as of September 30, 2022

Europe

In September, the European Central Bank (ECB) raised its three key interest rates by 75 bps signalling it's frontloading policy tightening. Some members of the Governing Council warned that if inflation keeps growing, they may have to lift rates more aggressively. According to revised ECB projections: inflation will peak at more than 9% in Q4 and importantly core inflation is still expected sit above target at 2.3% in 2024; GDP growth will contract 0.1% q/q in Q4 and post flat growth in Q1; and eurozone headline inflation in October is expected to remain near its September 10% y/y level (up from 9% in August). We expect the Governing Council will have this data by the end-October meeting and likely use it to justify another 75 bp hike. With inflation expectations elevated, we believe the Council will keep pumping up rates until its own measures of inflation expectations start to recede (Figure 7). As such, we're watching for a 50-bp increase in December and 25 bps thereafter, bringing the ECB Depo Rate (the interest paid on interbank deposits) to a 2.50%-3.00% terminal rate.

The Fixed Income section of this PSQ would be incomplete without a reference to events in the U.K gilt (bond) market. After the Bank of England (BoE) lifted the bank rate to 2.25% in September, the monetary policy committee (MPC) unanimously approved the start of active gilt sales, aiming to trim the balance sheet by £80 billion over the first 12 months of the program. When Chancellor Kwasi Kwarteng revealed the new government's mini-budget—which turned out to be anything but mini—gilt yields shot up across the curve with significant price losses for longer maturity bonds as pension fund managers panic sold to cover margin calls. The BoE stepped in to stabilize gilts, launched a temporary scheme to buy back long-maturity bonds and delayed its gilt sales until end October.

The U.K. is in unchartered territory. While we believe the BoE's move provides a temporary fix for the chaos in the Pension Funds/Liability Driven Investment (LDI) market, given ongoing vulnerabilities the only certain outcome is persistent volatility in the short term and probably even higher volatility than any other fixed income market.

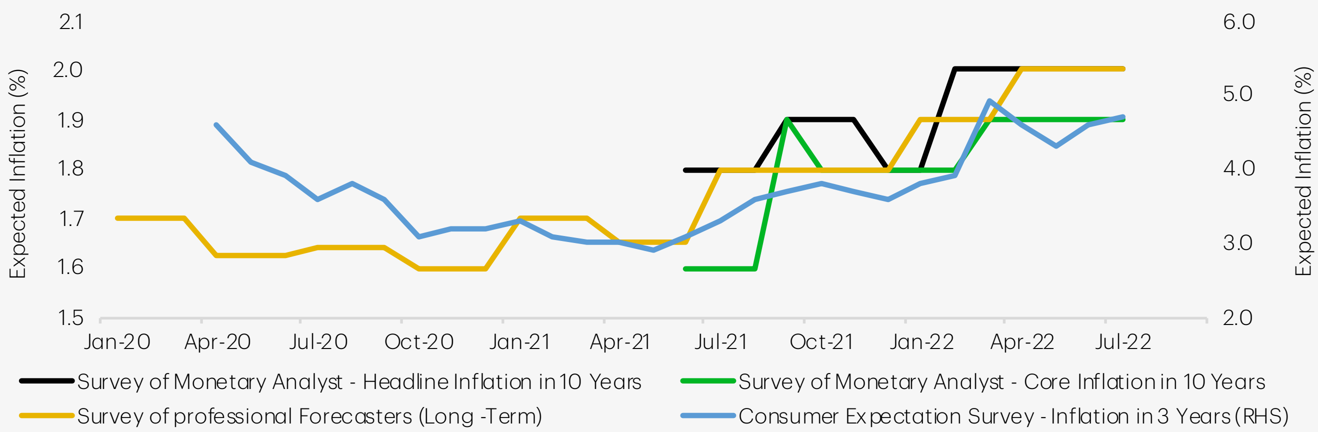
Credit: Investment Grade And Sub-Investment Grade

As you can imagine, the abrupt move by central banks to strict monetary tightening has sent credit investors scrambling and filled our inboxes with questions. Investors want to know how much the rising cost of financing will affect corporate balance sheets and whether credit markets are the canary in the gold mine or about to become part of the problem as they did in the 2008 global financial crisis (GFC).

Overall, we are modestly constructive on Investment grade (IG) credit and maintain our defensive stance on High Yield (HY) credit. While the potential for a near-term payment shock is low for all credit groups, if growth stagnates and funding costs return to pre-GFC levels, we can say adieu to three decades of improving interest coverage ratios. (Higher interest coverage ratios reflect a company's ability to repay debt and indicate robust financial health.)

We believe IG-rated companies, which have a longer maturity profile, more financial flexibility and operational agility are well positioned to adapt to higher funding costs without rating downgrades. HY credit bond issuers are also well positioned given their exceptionally low refinancing needs for the next two years. However, persistently higher yields will eventually weigh on interest coverage ratios, exposing problems that lay dormant during the last 14 years or so of low yields.

Figure 7: ECB survey measures of long-term inflation expectations



Source: Bloomberg, ECB, TD Wealth, as of September 30, 2022

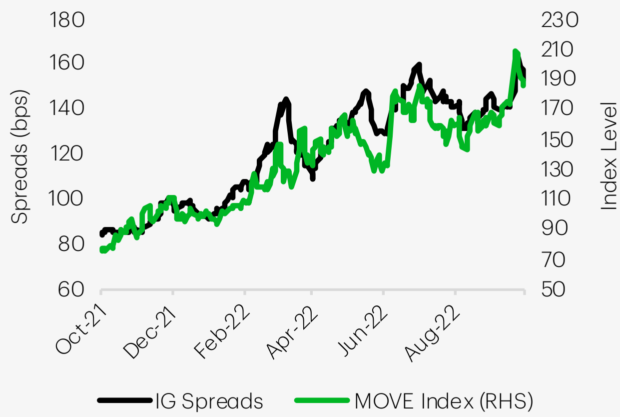
We remain cautious on credit spreads in the near term due to their strong correlation with government bond yield volatility (Figure 8). We continue to focus on fundamentals and relative value: valuations have clearly become more attractive with almost 90% of the IG universe trading at a discount. Dramatic interest rate moves have brought IG credit prices to new lows and close to levels unseen since the darkest days of 2008 (Figure 9); underlying bonds will mature at par value and therefore, at current levels, the bonds look priced for a Black Friday sale.

1. How will higher policy rates and government bond yields affect the debt servicing capacity of issuers?

Interest coverage ratios are coming head to head with the most aggressive hiking cycle in more than three decades. This will test the strength of corporate balance sheets which have seen low interest rates trim overall interest expenses and boost interest coverage ratios. Credit issuers took advantage of these low interest expenses, raising more debt without compromising their debt servicing capability. This turned out to be an ideal situation for credit investors (because default rates remained low) and an attractive opportunity for corporates to add even more leverage which eventually inflated equity multiples. But if borrowing costs return to pre-GFC levels, it's all about to change.

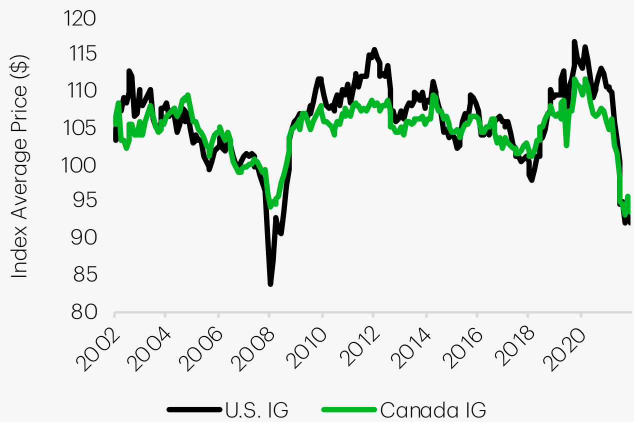
On a positive note, HY corporate borrowers have since 2020 strategically taken advantage of ultra-low policy rates, posted record-high issuance and built up strong debt servicing capacity. In fact, at the end of Q2 interest coverage ratios for HY bond issuers were moving towards the highest levels witnessed in the past decade partly because of strong earnings growth (Figure 10).

Figure 8: IG credit spreads widen with government bond yield volatility



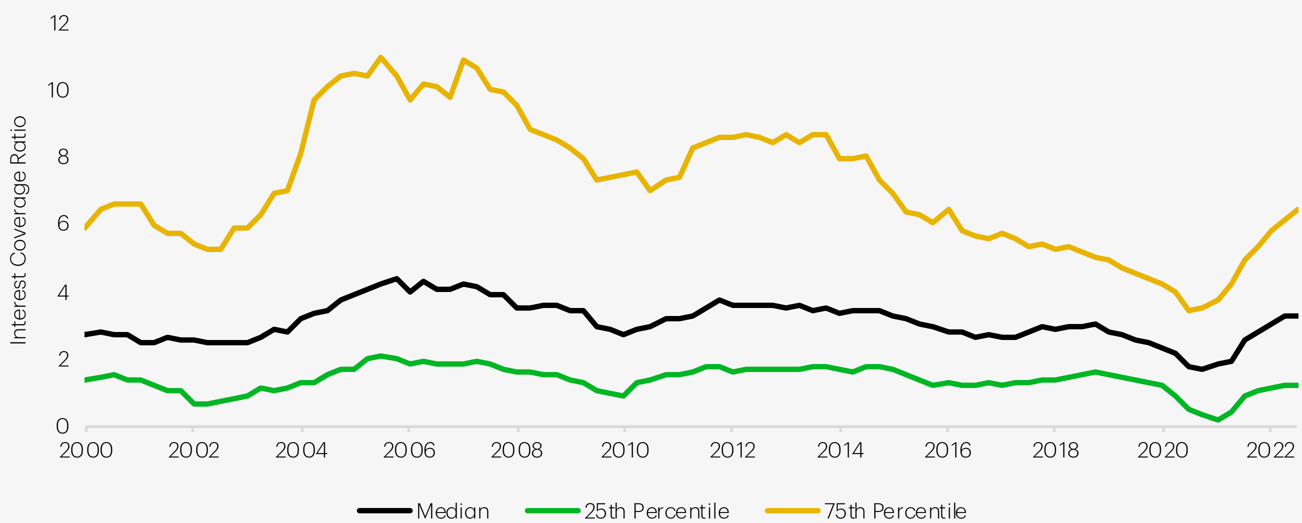
Source: Bloomberg, TD Wealth, as of September 30, 2022.

Figure 9: IG credit indices trade at lowest price since 2009



Source: Bloomberg, TD Wealth, as of September 30, 2022.

Figure 10: Interest coverage ratio for U.S. HY credit issuers



Source: FactSet, TD Wealth, as of September 30, 2022

While HY credit issuers are able to digest higher borrowing costs, slower earnings growth and higher funding costs are just around the corner, implying interest coverage ratios have peaked. This raises the question about knock-on effects: how quickly will debt servicing capacity decline and which areas are most vulnerable? We believe this cycle's hikes will drive up interest expenses for leveraged loan issuers much faster than HY so their coverage ratios will also deteriorate more quickly than their peers in the HY credit market. Despite low refinancing needs in the near term, and assuming the Fed funds rate peaks at 4.5%-4.75%, the average running coupon payment for leveraged loans (which are based on floating rates) will probably more than double to 8% in 2023, up from 3.8% in 2020. Although even if the running coupon doubles, interest expenses probably won't because issuers have hedged part of their floating rate exposure.

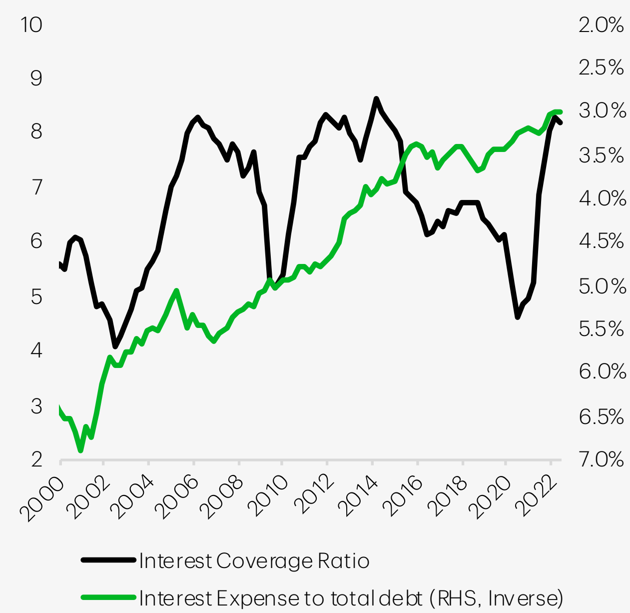
2. How long until higher policy rates and yields spill over into more onerous interest expenses?

IG credit issuers, like their HY peers, will eventually have to deal with declining interest coverage ratios. Having said that, interest coverage ratios climbed over the past decade as the cost of debt fell, so it's only logical that any lasting shock to debt costs would reverse this trend (Figure 11). This process, however, will be much slower and more gradual for IG credit than for HY credit issuers because of the strengths we mentioned previously (financial flexibility, operational agility and the average maturity profile for IG credit is 11 years, more than double HY). IG credit issuers can also deploy active deleveraging strategies quickly if the higher cost of debt starts to eat into earnings. We believe IG credit will be able to transition smoothly and absorb higher funding costs without a wave of rating downgrades as long as we don't end up in an unexpected episode of prolonged stagflation.

Funding costs for HY credit issuers won't be immediately affected by policy rate changes. Rather, the change in the cost of debt depends on how quickly issuers must refinance low coupon bonds with new higher ones. If the small amount of outstanding HY bonds due before 2025 is any indicator, HY credit near-term refinancing needs are quite low (Figure 12). In fact, the wave of new issues in 2020 and 2021 pushed the number HY bonds maturing in the next two years to 15-year lows.

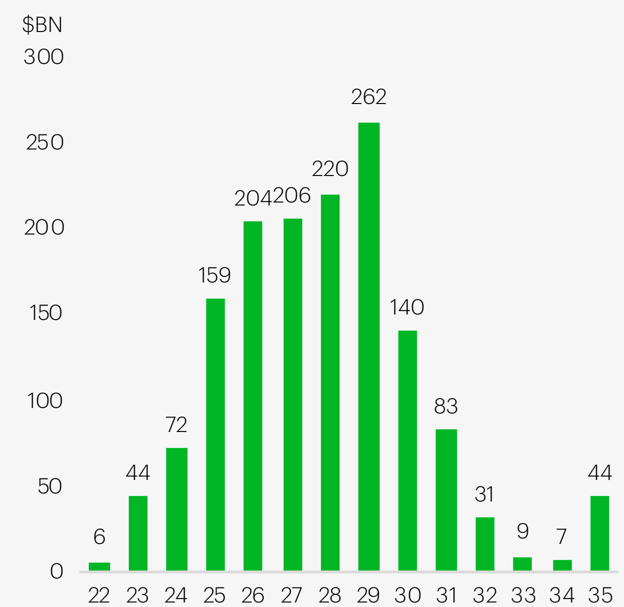
All this to say that HY credit issuers (especially bond-only capital structures)—with their low financing needs and the fixed rate nature of their debt—will transition more smoothly towards higher policy rates and higher cost of capital than their peers in the leveraged loan market. Remember though that corporate interest coverage ratios have advanced upwards since 2010 mainly because of declining yields and therefore lower interest expenses. This trend will reverse if funding costs shift up. We expect earnings growth to remain subdued in the near term due to below-trend GDP growth and hence strong earnings might not be enough to offset higher interest expenses. This could eventually push interest coverage ratios below 1.0 and impair the debt servicing capacity of the bottom quartile of HY credit issuers leading to financial distress (Figure 10).

Figure 11: Declining cost of debt key to stable interest coverage ratios of IG credit issuers



Source: FactSet, TD Wealth, as of September 30, 2022

Figure 12: Modest upcoming principal payments until 2025 for HY credit issuers



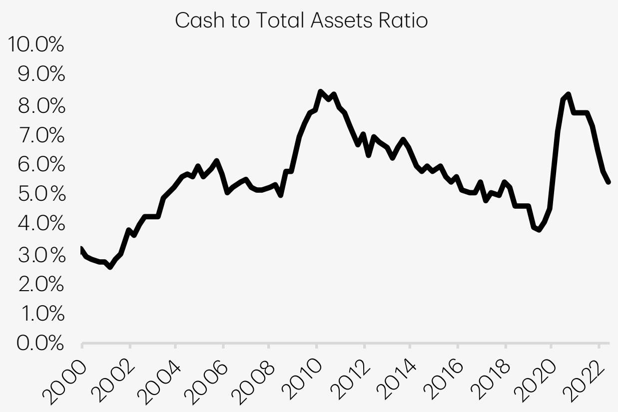
Source: Bloomberg, TD Wealth, as of September 30, 2022

3. Is there enough excess liquidity to tackle the higher-for-longer cost of capital?

It appears that the pandemic liquidity buffer has now normalized for HY credit and leveraged loan issuers, however, IG-credit issuers remain significantly above pre-covid levels. High-quality issuers in the IG credit universe have generally taken a conservative approach and steered away from capital expenditures: instead they built up inventories, raised debt to support future liquidity requirements and refinanced near-term outstanding debt.

It's quite a different story for HY corporates. Liquidity positions for HY credit issuers tumbled in the first half of 2022—median cash to total assets has almost returned to pre-pandemic levels, leaving us wondering what happened to all the funds accumulated in 2020 and 2021 (Figure 13).

Figure 13: HY credit issuers deploy liquidity cushion built in 2020-2021



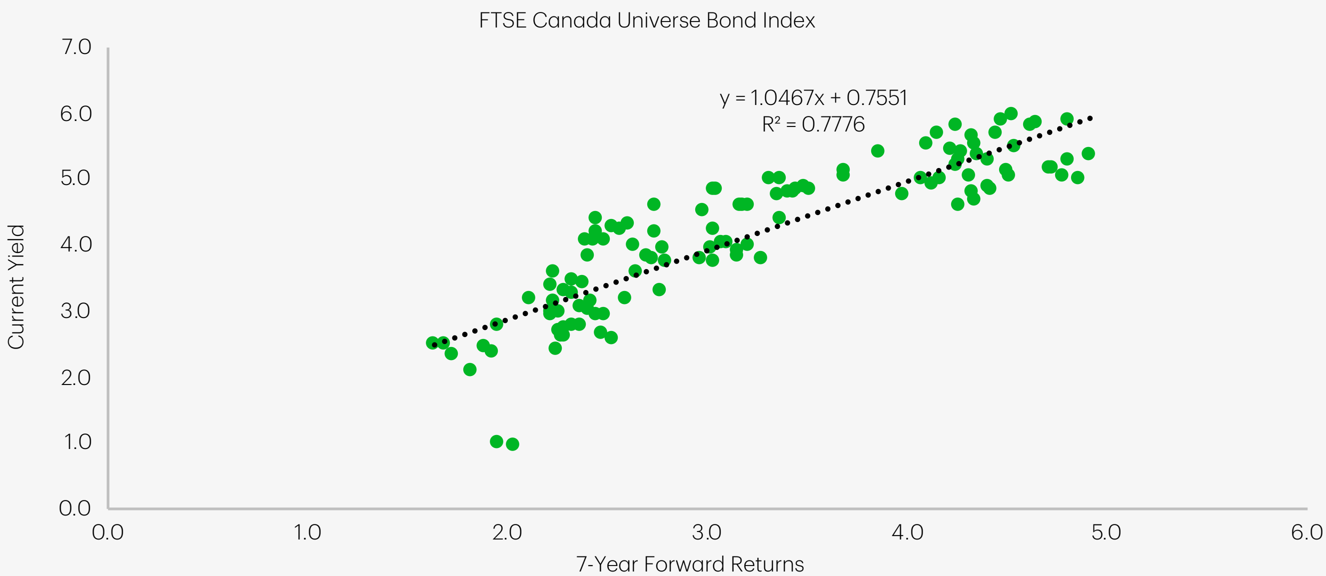
Source: FactSet, TD Wealth, as of September 30, 2022

Aggregate cash flow usage in the first half of the year suggests an uptick in dividends and buybacks and a decline in debt repayment. As per various reports the share of dividends and buybacks jumped to 13% as of end Q2 compared with 8% in 2021 and debt repayment among HY non-financial corporations represented 54% of the total cash flow, down from 61% in 2021. These moves imply a shift in capital management priorities towards appeasing shareholders over paying down debt. We believe that current cash balances, while elevated, are unlikely to allow companies to wait much longer before turning to the primary market for debt funding. On top of that, current liquidity for HY credit issuers won't be able to provide sustained support if the higher cost of capital scenario lasts for longer.

Higher Yields: A Blessing In Disguise?

Historical data suggests that higher yield levels translate into higher total returns in the future (Figure 14). This means that investors could benefit from holding bonds across fixed income asset classes—including government bonds, IG and HY credit, and even emerging markets bonds—because increased income tends to bolster total returns over time, even if prices remain volatile in the short term. In fact, a greater portion of income needs for investors can now be met with traditional fixed income than would have been the case in recent years. Bonds tend to perform well during recessionary periods meaning the backdrop for fixed-income investments could be even stronger when Fed actions start to clip inflation. Remember, higher potential income and improved diversification are two of the bedrock reasons for owning bonds.

Figure 14: Yield is a good indicator of future returns



Source: Bloomberg, TD Wealth, as of September 30, 2022

With the U.S. 10-year yield around 4.0% (as of October 31) and most high-quality bonds offering even more, fixed income could provide positive real yields in a comparably safe and liquid asset. Other relatively defensive areas of fixed income markets are also offering more attractive yields than we've seen in some time. This has helped to increase potential income for investors while offering more downside protection because higher yields can offset losses from a price rout in the near term. For example, a U.S. 10-yr yielding 4.0% will post positive returns even if 10-year yields jump another 50 bps over the next 12 months. If yields go up 50 bps that same 10-yr bond yields 4.5%. Higher yields mean that bonds have a larger cushion protecting their total return from any negative surprises in the future. That is the power of yield—capital preservation plus income!

While uncertainties abound and the world seems unpredictable, try to remember we're not the only investors to find ourselves at the sharp end of a painful market. If you can see through the temporary clouds, we still maintain that recent declines will reset asset valuations and set the stage for better future returns.

We have moved to modest overweight for the fixed income market overall. Our base case view is that government bond yields will remain largely range-bound with high daily volatility. If more policy rate 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 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 or persistent future inflation will support yields or even push them higher.

In credit markets, we expect spreads to remain resilient for the coming months, but they could move higher if recessionary fears deepen. 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 inherent volatility will likely persist as market participants constantly reprice inflation and growth concerns. The ability of bonds to fulfill their traditional roles of acting as a risk diversifier, will be restored once the inflation narrative defers to slowing growth and the hiking cycle pauses. 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

Neutral

Where's the Bottom?

David Beasley, Senior Portfolio Manager; Chris Blake, Senior Portfolio Manager; Mansi Desai, Senior Equities Analyst; and Kevin Yulianto, Portfolio Manager | TD Wealth

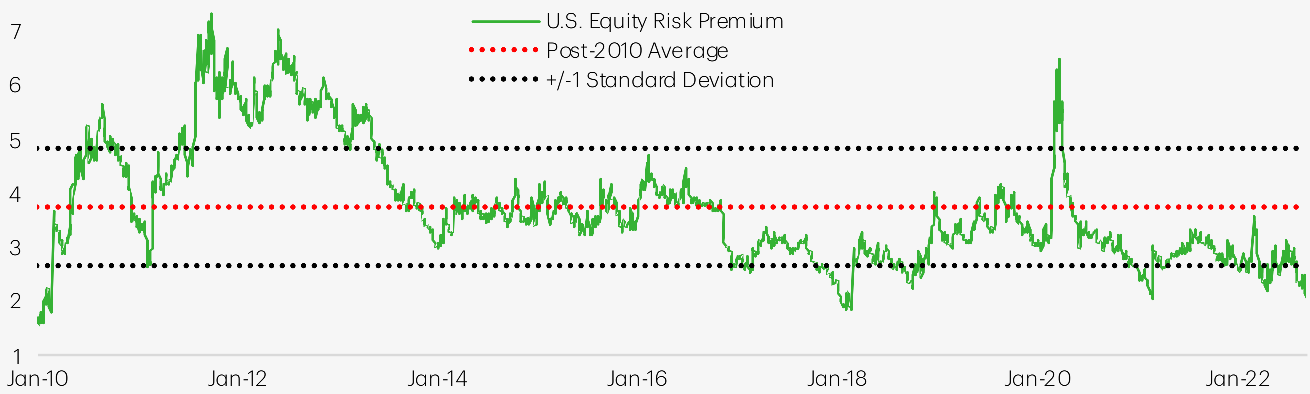
The likelihood of a recession in North America has increased since our last quarterly update, and the likelihood of it being a shallow recession is declining.

At the same time, U.S. equities appear to be overvalued, given that slowing growth and tightening monetary policy bode poorly for both multiples and earnings. The S&P 500 has declined 20% over the last six months, but surprisingly, the equity risk premium (ERP) has fallen even further to 2.2%, significantly below its historical average of 3.8% (Figure 1). This is because the 10-year Treasury yield has also risen, from 2.3% at the end of March to 4.0% today. Unless yields start to fall — meaning that the Fed is softening its stance towards policy tightening — the pain for equities will likely continue as growth deteriorates into 2023.

We think the equity risk premium has to rise above 4% for risk assets to bottom. That means that either yields have to fall or multiples have to decline further (Figure 2), or some combination of the two.

Given that the Fed seems willing to inflict some pain on the economy in order to bring inflation down, valuation multiples should fall to below their historical average, which is around 16 times forward earnings. So far this year, the correction in equities has been largely driven by multiples compression; earnings estimates have only just started to come down and likely have further to go.

Figure 1: Equity risk premium below historical average



Source: TD Wealth, FactSet as of September 30, 2022

Figure 2: Yields or multiples? Something's gotta give

ERP		U.S. 10-year Treasury Yield (%)									
		0.50%	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%
S&P 500 Forward P/E	10.0	9.5%	9.0%	8.5%	8.0%	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%
	12.5	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	4.5%	4.0%	3.5%	3.0%
	15.0	6.2%	5.7%	5.2%	4.7%	4.2%	3.7%	3.2%	2.7%	2.2%	1.7%
	17.5	5.2%	4.7%	4.2%	3.7%	3.2%	2.7%	2.2%	1.7%	1.2%	0.7%
	20.0	4.5%	4.0%	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%
	22.5	3.9%	3.4%	2.9%	2.4%	1.9%	1.4%	0.9%	0.4%	-0.1%	-0.6%
	25.0	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	-0.5%	-1.0%
	27.5	3.1%	2.6%	2.1%	1.6%	1.1%	0.6%	0.1%	-0.4%	-0.9%	-1.4%
	30.0	2.8%	2.3%	1.8%	1.3%	0.8%	0.3%	-0.2%	-0.7%	-1.2%	-1.7%

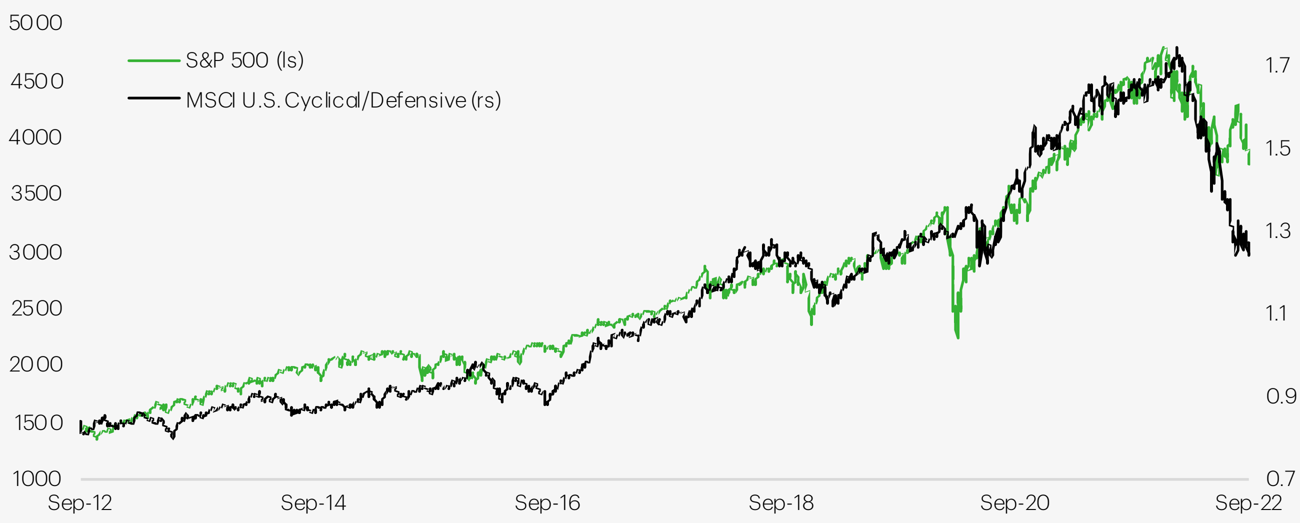
Source: TD Wealth, FactSet as of September 30, 2022

As long as monetary conditions are tightening and the growth outlook is continuing to weaken, staying defensive is key when it comes to allocating capital to equities. Defensive stocks this year have outperformed cyclicals, which unlike the broader U.S. equity benchmark, have yet to stage any meaningful rebound. It's important to note that, historically, a cyclical bottom in equity markets coincides with a bottom in the cyclical/defensive ratio, making this ratio important to monitor as confirmation of a "true" bottom, which we believe has yet to come (Figure 3).

Currently, as in mid-June, the S&P 500 is trading at 16.5 times forward earnings. Our base-case scenario has the P/E trending within a range of 14x and 16x, along with a 10% EPS contraction, implying a fair value for the S&P 500 at around 3,200. We expect that there will be counter-trend rallies along the way given that the positioning reached is extremely bearish, but these would be difficult to time. If anything, investors should stay defensive as the macro conditions remain negative for risk assets.

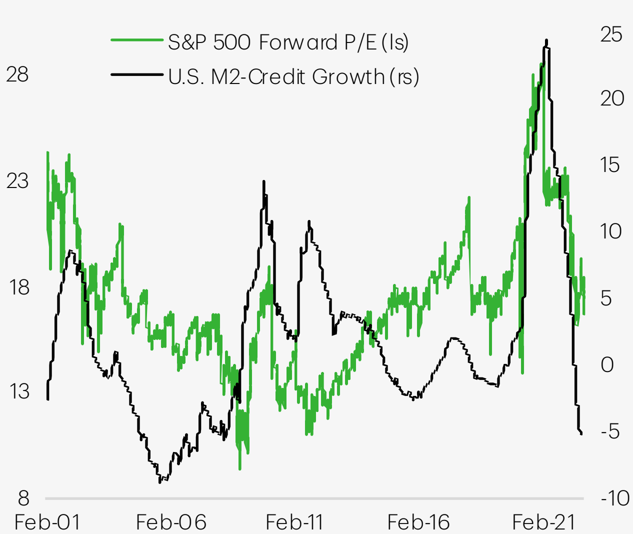
A discount P/E ratio of around 14.0x is based on deteriorating liquidity conditions, which should prick the bubble in high-multiple stocks with poor cash flow (Figure 4). Liquidity could continue to worsen in the coming quarters as the lagged impact of previous rate hikes and quantitative tightening takes effect. Meanwhile, leading indicators, such as the growth tax, are indicating that earnings will fall by at least 10%. This is consistent with the likelihood for the S&P 500 margin to fall to 11.5% from 13% currently amid input cost pressure (Figure 5).

Figure 3: Waiting for cyclical/defensive ratio to bottom



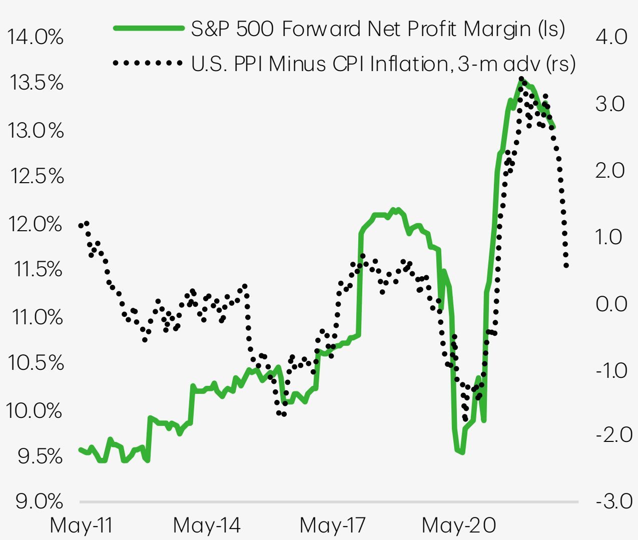
Source: TD Wealth, FactSet as of September 30, 2022

Figure 4: Monetary conditions still tightening



Source: TD Wealth, FactSet as of September 30, 2022

Figure 5: Margins still under pressure



Source: TD Wealth, FactSet as of September 30, 2022

Technical and Scenario Analysis

Given heightened uncertainty in the outlook for equity markets, we examined potential levels of key indices where the fundamental analysis and technical analysis coincide.

On the fundamental side, we considered two key metrics: estimated earnings per share and the price-earnings multiple. In the following exhibits, the base case is represented by the implied multiple at the current consensus EPS estimate for the S&P 500 and the S&P/TSX Composite Index. The upside and downside scenarios from there (Figures 6&7) are driven by: (1) two turns in the multiple (e.g., from 15x to 17x), higher and lower from current; and (2) three 5% increment changes in EPS from the base case.

The corresponding technical analysis is illustrated in a three-year, weekly period candlestick chart, which shows where the coinciding technical levels may lie, based on prior price lows and highs, which act as technical support and resistance.

Given the current outlook for slowing growth and a potential recession, the risk is likely greater to the downside in EPS as well as sentiment, which would drive a lower multiple, so we added emphasis to the downside scenarios, but also note the potential for positive sentiment to drive markets to higher levels as economic conditions resolve.

We apply this analysis to three major indices: S&P 500; S&P/TSX Composite; and the MSCI EAFE (Europe, Australasia, Far East).

Figure 6: U.S. Technical Scenario Analysis

		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**14.1x**	**15.1x**	**16.1x**	**17.1x**	**18.1x**
	-15%	2,822	3,022	3,222	3,421	3,621
	-10%	2,988	3,200	3,411	3,622	3,834
	-5%	3,154	3,377	3,601	3,824	4,047
	-	3,321	3,555	3,790	4,025	4,260
	5%	3,487	3,733	3,980	4,226	4,472
	10%	3,653	3,911	4,169	4,427	4,685
	15%	3,819	4,089	4,359	4,628	4,898

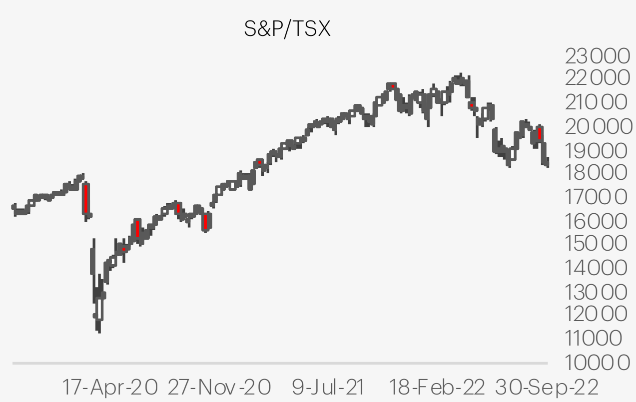
		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**14.1x**	**15.1x**	**16.1x**	**17.1x**	**18.1x**
	-15%	-25.5%	-20.3%	-15.0%	-9.7%	-4.5%
	-10%	-21.1%	-15.6%	-10.0%	-4.4%	1.1%
	-5%	-16.8%	-10.9%	-5.0%	0.9%	6.8%
	-	-12.4%	-6.2%	0.0%	6.2%	12.4%
	5%	-8.0%	-1.5%	5.0%	11.5%	18.0%
	10%	-3.6%	3.2%	10.0%	16.8%	23.6%
	15%	0.8%	7.9%	15.0%	22.1%	29.2%

Source: Bloomberg Finance L.P., TD Wealth as of October 4, 2022

Figure 7: Canadian Technical Scenario Analysis

		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**9.8x**	**10.8x**	**11.8x**	**12.8x**	**13.8x**
	-15%	13,683	15,074	16,465	17,855	19,246
	-10%	14,488	15,961	17,433	18,905	20,378
	-5%	15,293	16,847	18,402	19,956	21,510
	-	16,098	17,734	19,370	21,006	22,642
	5%	16,903	18,621	20,339	22,056	23,774
	10%	17,708	19,507	21,307	23,107	24,906
	15%	18,513	20,394	22,276	24,157	26,038

		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**9.8x**	**10.8x**	**11.8x**	**12.8x**	**13.8x**
	-15%	-29.4%	-22.2%	-15.0%	-7.8%	-0.6%
	-10%	-25.2%	-17.6%	-10.0%	-2.4%	5.2%
	-5%	-21.0%	-13.0%	-5.0%	3.0%	11.0%
	-	-16.9%	-8.4%	0.0%	8.4%	16.9%
	5%	-12.7%	-3.9%	5.0%	13.9%	22.7%
	10%	-8.6%	0.7%	10.0%	19.3%	28.6%
	15%	-4.4%	5.3%	15.0%	24.7%	34.4%



Source: Bloomberg Finance L.P., TD Wealth as of October 4, 2022

U.S. Equities: S&P 500

The S&P 500 is currently trading at 16.5x consensus blended EPS for 2022 and 2023. While we have recently seen a number of bellwether companies warn and report lower-than-expected outlooks, we are yet to see substantial cuts to the estimates. Therefore, the risk would be to the downside if cuts are forthcoming. Looking at the various downside scenarios (Figure 6), the 3,200-to-3400 range would coincide with key technical chart support. If such cuts are not forthcoming and market sentiment were to improve, an upward repricing of the multiple would look towards more recent levels of 4,000 to 4,200 on the chart.

Canadian Equities: S&P/TSX Composite

Similarly, a decline in the multiple or a moderate reduction in estimated earnings would point to levels below those achieved prior to Covid, where prices traded above gaps and support previously in the 16,000-to-17,000 "worst-case-scenario" levels (Figure 7). Conversely, if we were to see an improvement in sentiment, the 21,000 level might be a realistic upside case over the next few months.

International Developed Market Equities: MSCI EAFE

International developed-market stock indices have been driven by negative sentiment as economic conditions, particularly in Europe, continue to deteriorate, with a looming energy crisis and ongoing geopolitical uncertainty. The multiple traded down to 10.5x at the 1,600 level before rebounding. However, if economic conditions and sentiment worsen, there's not a lot of prior support on the chart down to 1,400 (Figure 8). On the upside, there is the prior chart support now acting as resistance at 1,800, so it would likely take a meaningful improvement in conditions to see the multiple reprice one to two multiple units to lift the MSCI EAFE back to 2,000.

International Outlook: Cheap, but energy crisis and inflation are major threats to outlook

High inflation and the energy crisis continue to be the key threats to international equities, and unfortunately, there are yet no early signs that inflation is peaking, especially in Europe and UK. In addition, Russia's decision to halt the natural gas supply to Europe since the beginning of September, combined with Europe's decision to place an embargo on Russian oil and petroleum products in December 2022 and February 2023, has led to the strong possibility of a recession in Europe against the backdrop of high energy prices.

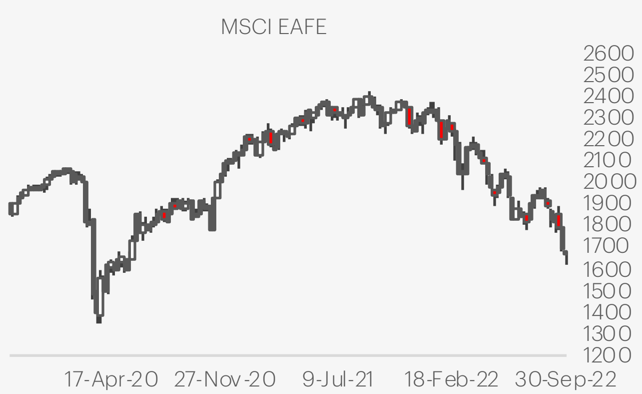
Although Europe is working towards reducing its dependency on Russian gas by diversifying its sources, we believe it is not yet in a position to fill the supply gap, especially given that winter is around the corner. High energy prices — with natural gas rising to almost 200 euros per megawatt hour from an average of 16 in the five years to 2020 — has led to a precarious situation for the manufacturing industry, especially for metal producers. Many companies have chosen to partially halt their production and furlough their employees, rather than pay current energy prices. We believe it could take a quarter or two for Europe to adequately fill in the Russian supply gap. Until then, high energy costs will continue to hurt margins, especially for energy-intensive industries like mining, steel, cement and chemicals.

The UK, meanwhile, is facing its own domestic challenges. The recent new government attempted to launch a massive fiscal stimulus program, in the form of tax cuts, that would have accounted for 8% of the country's GDP.

Figure 8: International Technical Scenario Analysis

		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**9.5x**	**10.5x**	**11.5x**	**12.5x**	**13.5x**
	-15%	1,224	1,353	1,482	1,611	1,740
	-10%	1,296	1,433	1,569	1,706	1,843
	-5%	1,368	1,512	1,656	1,801	1,945
	-	1,440	1,592	1,744	1,895	2,047
	5%	1,512	1,671	1,831	1,990	2,150
	10%	1,584	1,751	1,918	2,085	2,252
	15%	1,656	1,830	2,005	2,180	2,354

		Worst		Base		Best
		Price-Earnings Multiple				
Delta in 2022/23e EPS		**9.5x**	**10.5x**	**11.5x**	**12.5x**	**13.5x**
	-15%	-29.8%	-22.4%	-15.0%	-7.6%	-0.2%
	-10%	-25.7%	-17.8%	-10.0%	-2.2%	5.7%
	-5%	-21.5%	-13.3%	-5.0%	3.3%	11.5%
	-	-17.4%	-8.7%	0.0%	8.7%	17.4%
	5%	-13.3%	-4.1%	5.0%	14.1%	23.3%
	10%	-9.2%	0.4%	10.0%	19.6%	29.2%
	15%	-5.0%	5.0%	15.0%	25.0%	35.0%



Source: Bloomberg Finance L.P., TD Wealth as of October 4, 2022

The plan was criticized by economists at the IMF as a threat to further inflation. Eventually, market upheaval and political pressure have since forced the government to backtrack. In addition, the strong labour market, with an unemployment rate at 3.8% — the lowest in 47 years — poses another threat to inflation, as wages rise alongside labour demand.

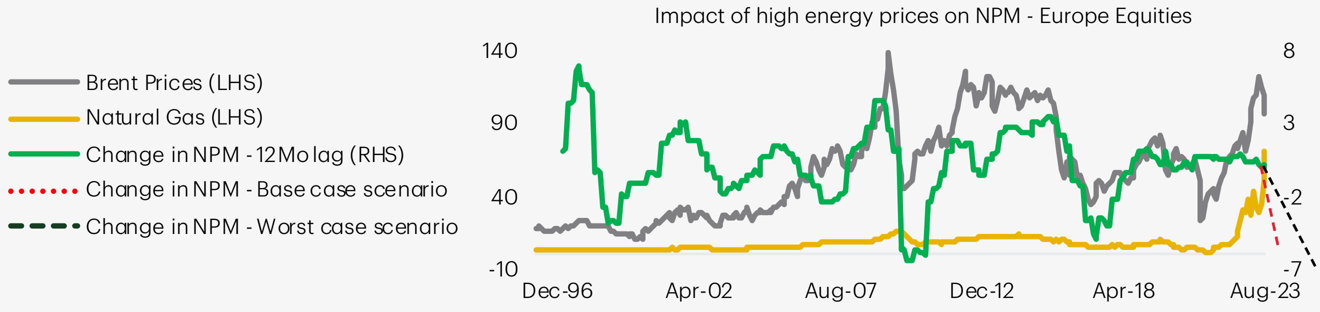
Japan is not yet in a bad spot with respect to inflation. The Bank of Japan has maintained its dovish policy stance. However, being an export-oriented economy, a slowdown in U.S. and China — its two largest export markets — would pose a threat to Japanese equities. Dovish policy, in the face of extreme hawkishness from the Fed, has also aggravated the depreciation of the yen, leading the currency to slump to one of its lowest levels since 1990. This forced the BoJ to defend the currency for the first time in 24 years and has also led to further multiples contraction for Japanese equities.

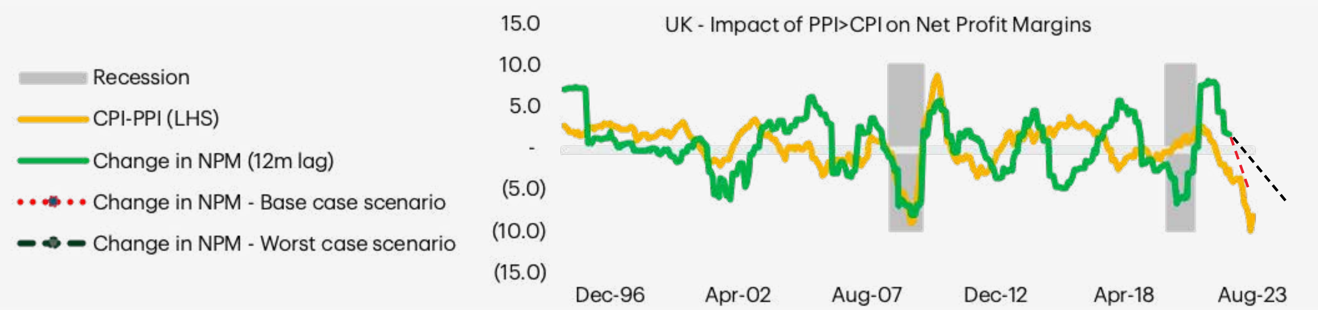
One silver lining for international equities can be found in the discount applied to these stocks, which limits the risk of further downside. As a result, international equities outperformed U.S. and global equities during the quarter by 1.7 percentage points in local-currency terms. Having said that, the total impact of the energy crisis and high inflation may not yet be fully priced in.

If you look at the historical effect of high energy prices on net margins for European equities (Figure 9), you find that the lagging effect of high energy prices have not yet been accounted for in earnings estimates. If the intensity of the energy crisis and inflation persists beyond Q1 2023, the drawdown risks in international equities could be significantly higher, with net margins declining by 3% in a base-case scenario and 7% in a worst-case scenario, which could lead to further contraction in valuation multiples in the range of 15% to 30%. In the worst-case scenario, it could lead to lower multiples than during the global financial crisis, given the intensity of the rise in input costs for equities.

We believe the earnings estimates for 2023 have not yet factored these key risks: the currently estimated 34% and 63% earnings growth for European and UK equities will be difficult to achieve. The accompanying chart (Figure 10) provides a snapshot of the ranking of global equities on valuations, although drawdown risks for international and EM equities could be higher.

Figure 9: Consistent rise in input costs will impact margins going forward





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

Figure 10: Valuations are no longer stretched but further earnings downgrades pose a risk

	Current Valuation (Fwd PE)	Historical average	Premium over historical average	2023 Estimated earnings growth
FTSE 100	8.5	13.6	-37.80%	63.00%
MSCI Europe	10.6	14.5	-26.90%	34.00%
S&P/TSX	11.7	15.9	-26.60%	14.00%
MSCI Japan	11.7	15.7	-25.50%	24.00%
MSCI EAFE	11.2	14.4	-22.20%	8.00%
MSCI EM	10.4	12.5	-16.80%	-3.60%
S&P 500	16.3	16.7	-2.40%	20.00%

Source: Bloomberg as of September 30, 2022

Emerging Markets: Signs of resilience, so far

Emerging-market equities underperformed developed-markets by four percentage points during the quarter, due in large part to the slowdown in economic activity and the vulnerable state of the real estate industry in China, where equities fell by 9.7%. On a positive note, inflation in most of the major EM countries (comprising 70% of MSCI EM) is peaking, while eastern European countries (comprising less than 3%) continue to face rising inflationary pressures, with no signs yet of peaking. Although a few Latin American countries continue to face inflationary pressures, equities in that region rose 3.2% during the quarter, owing to their status as commodity exporters, while global developed-market equities declined by 5%.

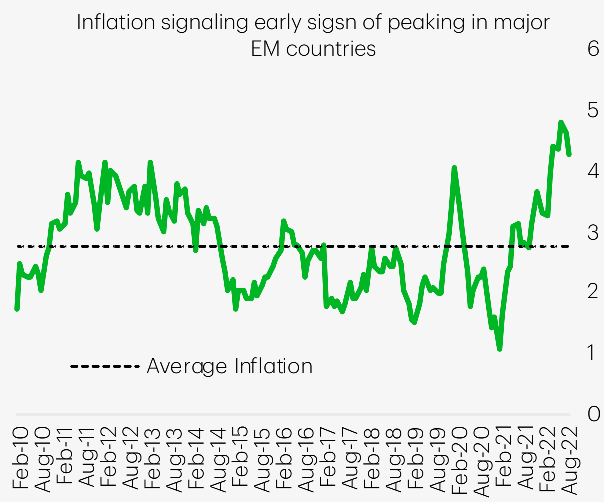
Going forward, the slowdown in economic growth is expected to soften commodity prices. In addition, any prolonged duration of inflationary pressure is expected to impact margin resiliency and equity performance for these countries. Among major EM countries, India is facing strong inflationary pressure given that it heavily relies on energy importsand food costs comprise over 50% of its CPI basket. Consequently, inflation remains stubborn at 7%, compared to the Reserve Bank of India's target rate of 4%.

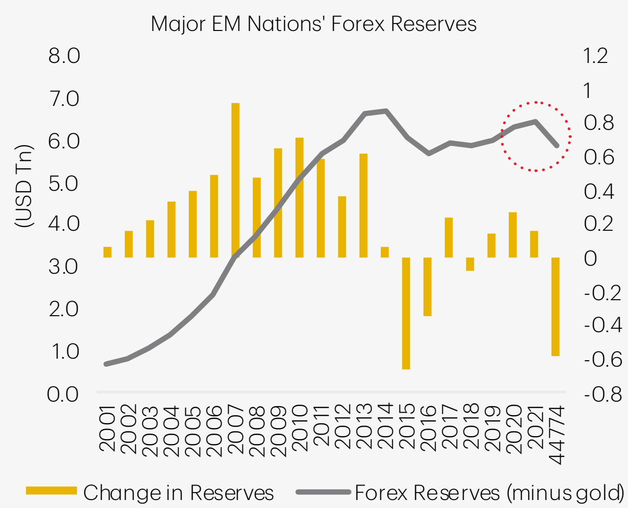
Interestingly, EM currencies have been more resilient to the U.S. dollar's strong appreciation this time around. That's because, since 2013, a majority of EM nations have transitioned from a deficit to a surplus position in their current accounts, with an increase in net financial accounts reflecting lower risk from "hot" capital flows. This led to a strong increase in foreign-exchange reserves for EM nations, which has helped EM central banks support their currencies against the robust appreciation of the USD. After increasing by US$800 billion over the past five years, in 2022 forex reserves for major EM nations declined by a whopping US$600 billion, reducing the margin of safety to support an extended period of USD strength as well as high import bills based on the rise in food and fuel costs. A softening in commodity and food prices, since their peak in June 2022, should bring some relief to high import bills paid by EM nations. However, further declines in forex reserves could elicit panic in both currency and equity markets for EM nations.

Having suffered a severe setback in economic activity, due to draconian lockdowns imposed in first half of 2022, China is showing early signs of recovery, although the road to recovery could take longer. Although China's Caixin Manufacturing Index was still below 50 in August, it has been consistently higher than the low of 46 recorded in April. Industrial profits have improved, recording marginal growth of 0.8% after declining by 6.5% and 8.5% in April and May 2022. Early signs of improvement in economic activity are also supported by China's credit impulse ratio, which has now recorded a growth rate of 1.5% after consistent declines for 14 months since April 2021. Real estate has been a lacklustre contributor for China's economy and continues to be sluggish, even though the government has eased reforms on availability of incremental debt for property developers. Sales of residential buildings continued to decline by 20% y/y although the pace of that decline has improved from -40% recorded in April and May 2022.

Given that many EM central banks transitioned to hawkishness before their developed-market peers, inflation in major EM nations (except for India) appears close to peak. It remains to be seen, however, how long it will take inflation in EM nations to come down

Figure 11: EM nations have demonstrated higher resilience so far





Source: Bloomberg as of September 30, 2022 to target levels, or whether inflation leads to the kind of cost-of-living crisis that's already being witnessed in Sri Lanka, Pakistan and Egypt (together they comprise less than 1% of MSCI EM). Valuations in selective EM equities like Brazil, South Africa and Taiwan are very attractive; however, at the overall global index level, EM equities are not the cheapest opportunity set (Figure 12). Hence, despite attractive valuations, we continue to be neutral in emerging markets, given that they still face headwinds from a strong US dollar and high import bills.

North American Equities

With the Fed on a mission to slay the beast of inflation, it seems that an acceptable casualty of the battle is the economy. The Fed chair has warned on this clearly. Equity markets seem only half-convinced, vacillating between "the Fed will have to pivot" and "OMG, they aren't going to pivot."

Currently, it seems safer to sit on the sidelines and wait this out. Chair Powell has invoked the lessons of the '70s, when Arthur Burns erred on the side of ignoring inflation for too long, leaving real interest rates too low for too long and sparking an inflationary spiral that was only halted by dramatic rate hikes by Paul Volker. Volker took rates from 11.3% at the time of his appointment in August 1979 to 19.85% at the end of March 1980. A second round of dramatic hikes saw rates rise from 8.6% near the end of the early 1980 recession to a peak over 20% in 1981. That second round triggered a long recession, which lasted from the beginning of the third quarter of 1981 to November 1982. To be sure, rates aren't as high as they were in the early '80s, nor do the inflationary forces seem as well entrenched.

The pandemic distorted the normal demand functions in the economy. These distortions combined with supply-chain problems engendered by the pandemic to create large supply-demand imbalances, which resulted in price increases. The Fed believed the imbalances to be temporary and so believed the inflation would be "transitory." Ultimately the imbalances will move back to equilibrium and the Fed will have been correct. The problem is that the time scale suggested by the word "transitory" seems shorter than what has been experienced, and the longer that the imbalances and resultant price distortions are with us, the more likely that an inflationary mindset becomes the norm. This past summer saw several headlines indicating rather large wage settlements. These are akin to the pernicious wage-price spirals of the 1970s, which is what the Fed seeks to prevent.

So, with that bit of history as a guide to our thoughts, we must take the Chair at his word when he suggests that there may be some "pain" ahead as the Fed moves to bring inflation down. While the impact of rate hikes are said to take as much as a year to be felt in the economy, the early signs are already becoming evident. So far, the evidence is mostly anecdotal, but third-quarter earnings reports from companies will most likely contain notes of caution around several items: the strength of the U.S. dollar, cost pressures from raw materials and still some supply-chain issues. It's also possible that we begin to hear some stories of abatement of cost pressures, given that the price of energy was lower this quarter than it was in the second quarter, as were many agricultural commodities and metals.

We see the potential for a variety of outcomes in North American economies, ranging from a moderate slowdown to a potential full-blown recession. Equity strategy in the coming months will naturally depend on the course of the economy, and we will be closely monitoring earnings reports and conference calls as well as incoming economic data for signs indicating the course of the economy. We believe that overall earnings estimates will remain biased to the downside and company commentary will be framed in cautious tones. In this environment of uncertainty, we are holding a portfolio tilted in favour of defence. We believe that there will come a time over the coming months to shift to a more aggressive stance.

Figure 12: Valuation snapshot for EM nations

	Current Valuation (Fwd PE)	Historical average	Premium over historical average
Brazil	6.4	13.8	-53.60%
South Africa	8.5	14	-39.30%
Taiwan	9.2	14.8	-37.80%
China	10.7	12.3	-13.20%
South Korea	9.6	11	-12.70%
India	21.4	18.6	15.10%

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

Outlook on Real Assets

Strong Fundamentals in Turbulent Times

Modest Overweight

Kenneth Sue, Senior Alternative Investments Analyst | TD Wealth

With central banks out to conquer inflation and interest rates at the highest levels since the global financial crisis there are only two main scenarios for real assets. They could feel a lot of pain or just a little.

A soft landing would bode well for real assets (where some sectors are more sensitive to GDP than others) however the interest rate pacemaker of the world, the Fed, has shown no inclination to reverse its restrictive policy in the near term. Worst case scenario, it could push economies into deep recession and send real asset valuations lower. But let's not go there just yet.

The bottom line is that rising rates and slowing growth hurts real estate valuations, however, managers are in a better financial position now than they were before the pandemic. They've spent two years locking and loading during ultra-low rates and are sporting record funds from operations (a measure of operating performance).

Given this backdrop, we don't expect recent rate increases to have much impact aside from higher financing costs rendering some new projects financially untenable and paper losses on valuations. In fact, the higher interest rates haven't pushed up average interest paid on debt or hurt interest coverage ratios in any material way.

On the rent side, residential rents continue to climb in Canada, while those in the U.S. are slipping. Industrial vacancies across Canada remain near record lows, pushing occupiers towards the prairie cities.

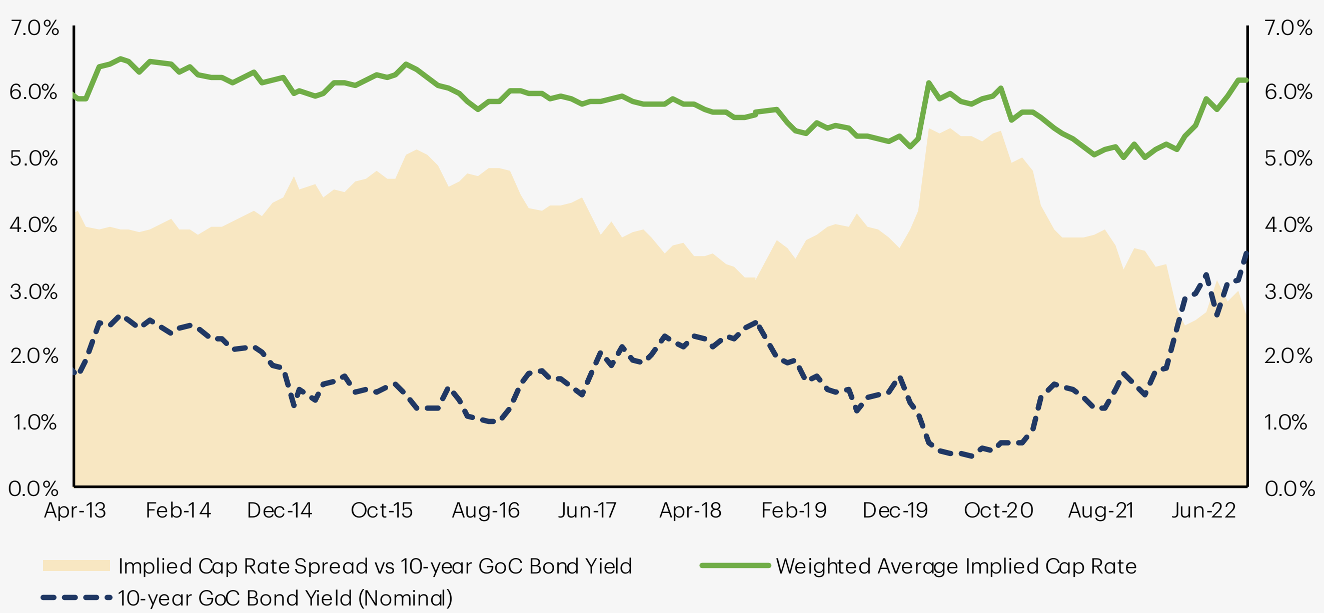
TD Wealth maintains a modest overweight stance on real assets given strong fundamental and operational strength within the space. Real assets offer protection against inflation and provide real returns to investors and as such remain a key allocation in portfolios.

Financing New Deals Difficult

Let's look at this more in depth. Economic uncertainty and higher rates have put the brakes on activity in real assets. They're not slamming on the brakes—it's more of a deceleration from record speed which is expected to persist through to year end. In Q1, global real estate investment activity fell 14% in U.S. dollar terms from peak levels at the end of 2021 and dropped a further 13% q/q in Q2.

Financing new real estate deals has also become increasingly difficult. Tougher market conditions, the Fed's quantitative tightening, and rising interest rates are all working together to push up financing costs. In fact, some projects underwritten during market conditions a few months ago may no longer be viable because the conventional secured borrowing rates have increased to levels close to average cap rates (Figure 1).

Figure 1: Financial Costs on the Rise



Source: TD Securities Inc. as of October 20, 2022.

Attractive Entry Level Valuations on the Horizon

It probably comes as no surprise then that we expect real estate yields, or cap rates, to adjust upwards, lagging interest rates by two or three quarters. But before cap rates can increase, valuations need to decline. As real assets continue to normalize from the record returns of 2021 and valuations retreat, we believe managers will be provided with attractive entry level valuations over the coming quarters.

Despite economic turbulence, real estate fundamentals remain strong. Since the beginning of the pandemic, most asset managers have been working hard to optimize their portfolios, refinance debt, and lock in historically low rates for longer, thereby insulating their assets from any material change in interest costs or interest coverage ratios (Figure 2).

Asset managers have also boosted their operational buffer over the past two years. Funds from operations (FFO), which measures operating performance for real assets, posted a record high in Q2 2022 with nearly US$20 billion across all Real Estate Investment Trusts (REITs) in the U.S., compared with US$13 billion in 2020 and US$16 billion in 2019. That US$20 billion represents a 50% improvement from 2020 and a 22% improvement from 2019 (Figure 3).

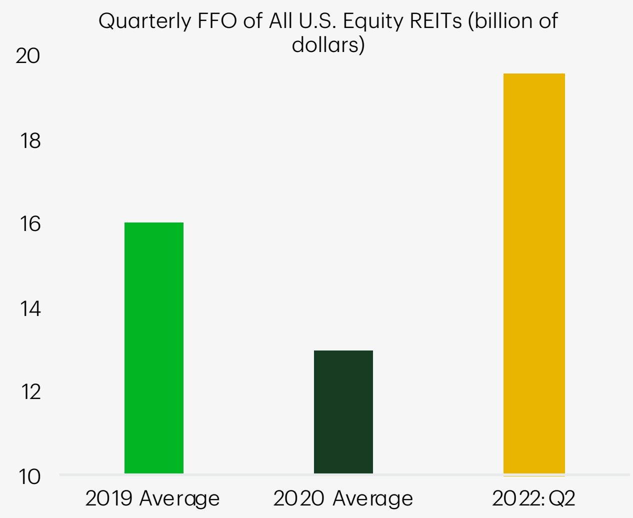
Residential & Industrial

- Residential rents in Canada continue to march upwards: many potential homebuyers are sitting on the sidelines waiting for the housing market to adjust to rising rates. However, in the U.S., cracks have started to appear: residential asking rents slipped 0.4% in Q3, according to a report by CoStar Group.

- In Canada, the national vacancy rate for industrials is still hovering near all-time lows at 1.5% and new deliveries for industrial space have been 88% pre-leased. With nearly half of the major markets essentially out of space across the country, occupiers have looked towards the prairie markets pushing availability down 280 bps in Edmonton, 240 bps in Calgary, and down 160 bps in Winnipeg.

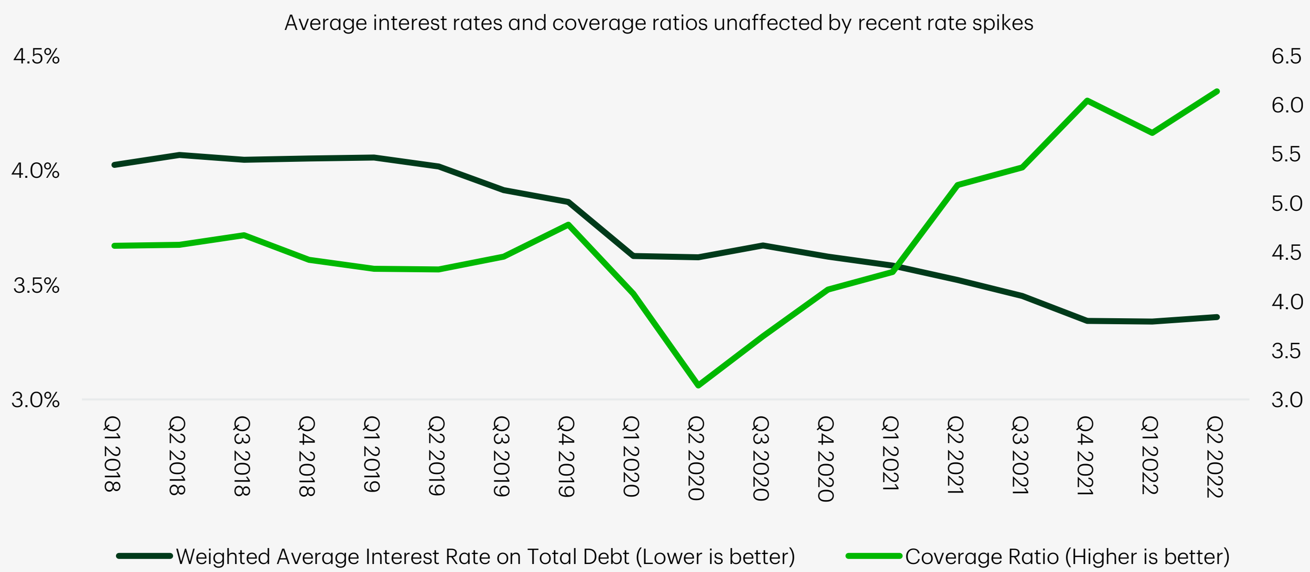
TD Wealth maintains a modest overweight stance on real assets given the strong fundamental and operational strength within the space. Real assets remain a key allocation in portfolios because they offer protection against inflation and provide real returns to investors.

Figure 3: Funds From Operations Post Record High



Source: S&P Capital IQ Pro, Nareit T-Tracker, Q2 2022

Figure 2: Average Interest Rates Remain Low, Coverage Ratios Still High



Source: NARIET Q2 2022

Outlook on Currencies

The dollar is overvalued, but for a reason

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

The number one question on many investors' minds is when does the US dollar peak and what's the catalyst. While we think we are nearing the top for this cycle, that is measured in months rather than weeks. At the same time, a peak in the U.S. dollar (and the start of a reversal) 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.

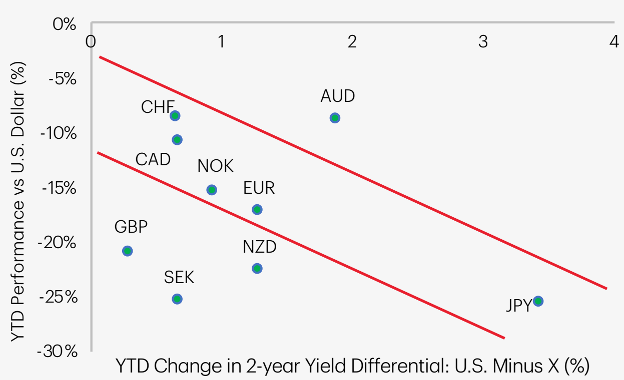
We're less inclined to sell the U.S. dollar here, despite some evidence that the Fed has started to shift its rhetoric a bit without a lift to global growth. The China growth deceleration favours a resilient U.S. dollar, also offsetting some of EUR's string of positive news. The global economy simply hasn't bottomed out yet.

The U.S. dollar has risen by over 15% in real terms relative to a basket of global currencies on the back of more aggressive Fed tightening and inflows into safe-haven assets (Figure 1). The dollar has climbed into overvalued territory, leaving it at risk for weakness next year, once the Fed finishes tightening monetary policy and the global growth outlook improves.

In the near term, we expect that inflation and Fed policy response will continue to be the primary driver of all major currencies. As the risk of recession in the U.S. increases, Europe falls into recession, and Chinese growth falls below 3%, the bar is high for monetary policy to significantly tighten from current levels. As the country with the strongest economy that is less reliant on global trade, the U.S. dollar will remain a safe haven asset, at least until Fed tightening cycle is over.

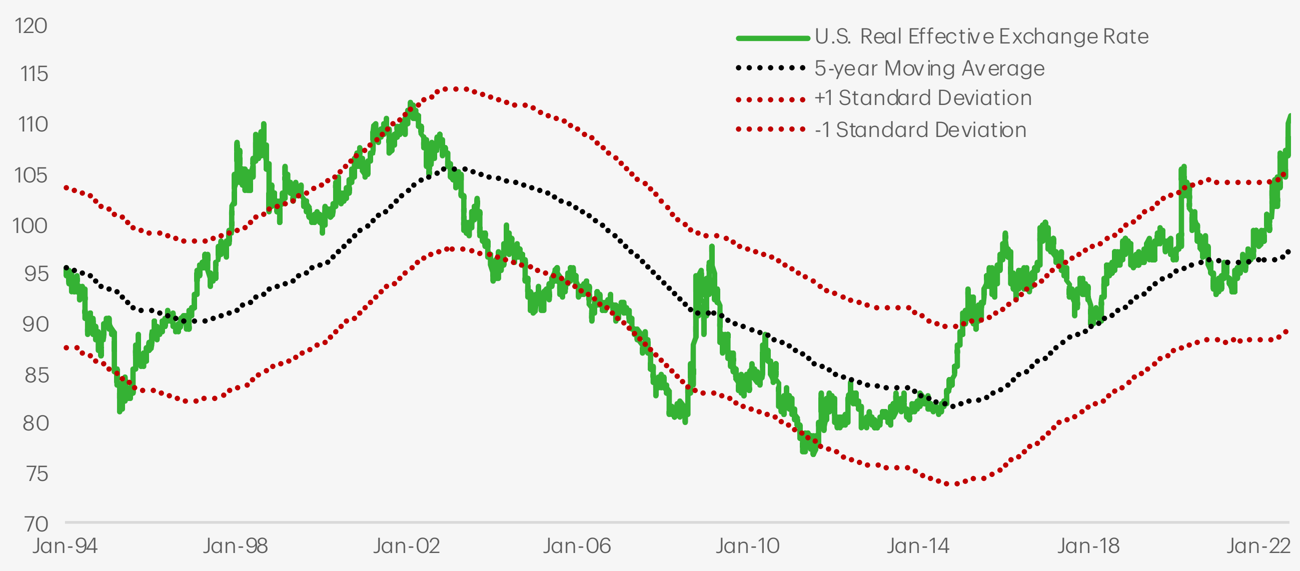
Figure 2 shows that year-to-date, interest rate expectations in the U.S. has outpaced all other major central banks. In general, countries with a more dovish central bank saw their currency depreciated the most against the dollar, e.g., Japanese Yen (JPY). Although historically JPY has been a decent hedging currency, this has not been the case this year due to downward pressures on the currency from burgeoning energy import costs and rate differentials against the U.S. dollar.

Figure 2: The Fed Tightening Has Outpaced Other Major Central Banks



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

Figure 1. The Dollar is Expensive and Overbought



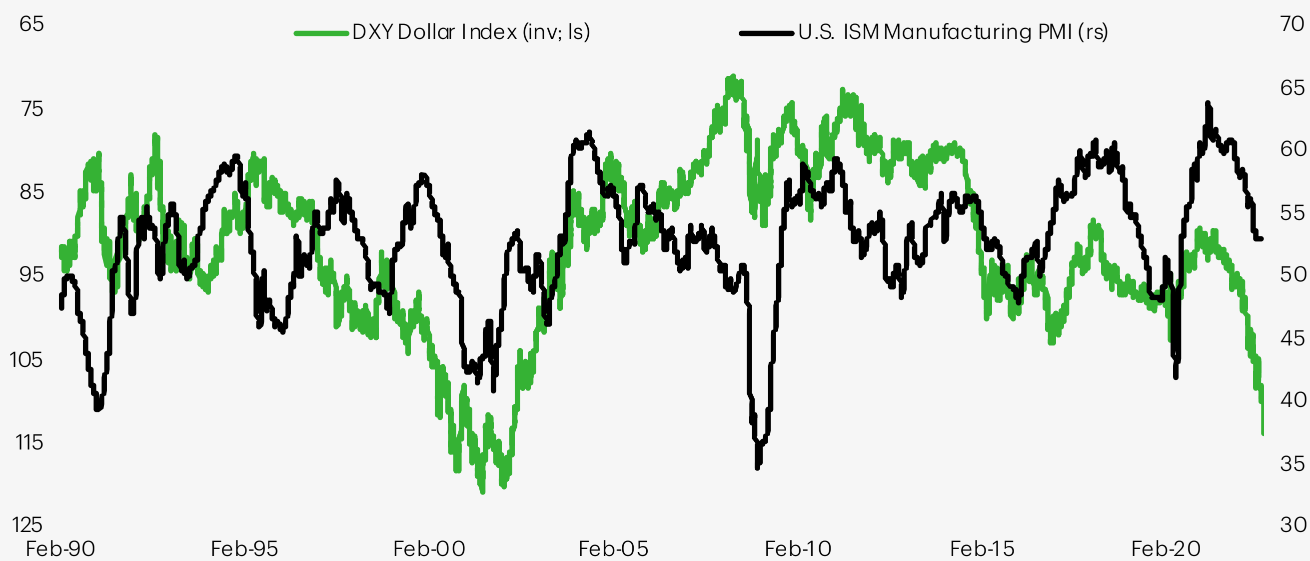
Source: Bloomberg Finance L.P as of September 30, 2022

As we move into next year, we expect domestic-specific issues to play a greater role in determining each countries' currency movement relative to the dollar. Investors need to be watchful for housing vulnerabilities to start to weigh on the likes of Canadian dollar (CAD), Australian dollar (AUD), and Scandis.

Fundamentally, TD Securities continues to hold a cautious view of the Canadian dollar. The latest nosedive in the loonie comes ahead of expectations of a rough ride for the Canadian macro outlook in Q4 as high debt servicing burden should prevent the consumer from supporting the economy to the same degree it has in the past. This will likely mean that the Bank of Canada will not be able to tighten as much.

The bottom line is that a pause in Fed's rate hike should trigger a cyclical decline in the dollar, especially if global growth starts to bottom around mid-2023 (Figure 3). The decline in the US dollar will likely coincide with the decline in Treasury yields, which should 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 strongly once it is clear that global growth is accelerating and liquidity conditions improve.

Figure 3. U.S. dollar Index vs U.S. Manufacturing PMI



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

Figure 4: Our key market views and trading themes

	Currency Biases Matrix (1m horizon)						
	Max Bearish			Neutral			Max Bullish
G10		CAD	NZD				
	EUR		AUD	JPY		USD	
		GBP					
		SEK					
		NOK					
EM							
	TRY			BRL		HUF	
		PHP	IDR	CNH		MXN	
			KRW				
		THB					

Source: TD Securities, Global Rates, FX & Commodities Strategy as of October 24, 2022

Outlook on Commodities

Structural Supply Challenges

Bart Melek, Global Head of Commodity Strategy, TD Securities

Structural Supply Challenges in the Oil Patch

Energy supply risks are still rising. As commodities watch the growing risk of a recession, supply risk permia is increasingly offering an insulating force for the petroleum complex. While oil prices have been dysfunctionally ignoring supply risks, the OPEC+ group of producers' production cuts could continue to reinvigorate interest in the complex, helping energy supply risks' importance in driving the variation in oil prices to rise once again.

The OPEC+ producer group cut its production quotas by two million bbls/d starting in November, which increases the risk of deficits heading into 2023. Despite recent reports showing inventory builds, the US crude and product inventory landscape still points toward levels much below normal, with much less SPR (Strategic Petroleum Reserves) also available to deploy in the future. At the same time, global inventory levels are near historic lows. Plus, there is a scarcity of heavy fuels, and crack spreads are at very elevated levels, which adds to crude oil price pressure. As such, there is an outsized probability that crude prices can surge higher, particularly if demand concerns fail to materialize to the extent some bears expect, and oil consumption growth remains in the 1.5 million b/d range or higher.

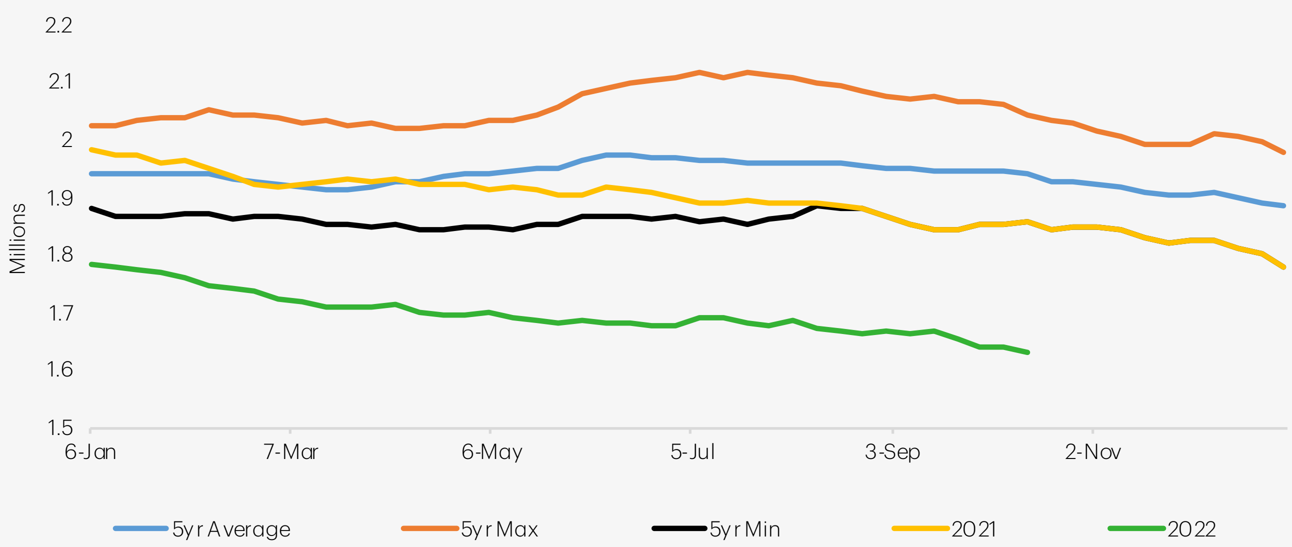
While the recent announcement to cut OPEC+ supply marks the largest reduction by the cartel and its allies since 2020, we expect that the effective production cut will amount to a much smaller 1.1m bpd as several member countries face operational constraints which have resulted in a sustained period of underproduction relative to their quota allocation. In fact, we expect that Gulf nations including Saudi Arabia, Kuwait, Iraq and the UAE will account for 97% of the effective output cut. Most of the other nations participating in the OPEC+ agreement will be compliant with their new limits without having to reduce output.

In addition to supporting prices, the recent OPEC+ cut announcement should help to reinvigorate participation in the complex once there is somewhat more certainty surrounding the economy, inflation, and the timing of the eventual central bank signals that they are ready to pivot towards a dovish policy.

We expect this to be a late 2023 story. For that reason, TD Securities does not expect crude to be in triple figure territory until then.

Despite our fairly bullish narrative, there are potentially serious headwinds which can still hinder the rally. A deep recession, continued Chinese lockdowns, some sort of financial market liquidity crisis, or additional SPR releases for a prolonged period could all still dent sentiment in energy markets.

Figure 1: From OPEC+ Meeting: Total US Crude Oil and Petroleum Products Inventory - Still Extremely Low



Source: IEA, Bloomberg Finance LP, TD Securities as of October 18, 2022.

Figure 2: From OPEC+ Meeting: Less than Advertised, but Big Cuts Nonetheless

	August 22 Production	November 22 Quota	Expected Production	Effective Cut
Algeria	1.02	1.01	1.01	-0.01
Angola	1.18	1.45	1.18	0.00
Congo	0.27	0.31	0.27	0.00
Eq Guinea	0.08	0.12	0.08	0.00
Gabon	0.20	0.18	0.18	-0.02
Iraq	4.54	4.42	4.42	-12.00
Kuwait	2.80	2.67	2.67	-0.13
Nigeria	0.98	1.74	0.98	0.00
Saudi Arabia	10.96	10.45	10.45	-0.51
UAE	3.40	3.02	3.02	-0.38
Azerbaijan	0.55	0.68	0.55	0.00
Kazakhstan	1.24	1.62	1.24	0.00
Oman	0.85	0.84	0.84	-0.01
Russia	9.77	10.45	9.77	0.00
Others	0.88	1.05	0.88	0.00
Total OPEC 10	25.43	25.38	24.26	-1.17
Total Non-Opec	13.29	14.65	13.29	0.00
Total Opec +-19 in cut deal	38.72	40.03	37.55	-1.17

*All values in mln bpd
Source: Bloomberg Finance L.P., IEA, TD Securities as of October 13, 2022.

Industrial Metals: Demand falling

'With the world's central bankers unleashing the most aggressive tightening of monetary policy since the 1980s, the risk of recession has grown. China is unlikely to offset weaker demand from the rest of the world, as it did in previous cycles, so the commodity complex is likely to remain volatile in the near term. With those dynamics taking root, commodity prices have declined amid fears that demand will drop, and we expect this environment will remain into 2023.' This was our opening paragraph in the last edition of PSQ, and we believe it will remain our stance for the near future.

Having said that, there have been a few shifts in the global landscape. A proposed US ban on Russian aluminum has shaken aluminum markets. Theoretically, trade flows would likely be reshuffled with Russian metal likely to flow to China for exports. But historical analogs highlight unintended consequences in trade flows resulting from a new sanctions regime that could roil aluminum prices for some time.

This adds to uncertainty following the LME's discussion paper on a proposed ban of new Russian metal, which could plausibly create a growing discount for this material. LME warehouses appear filled with Russian branded copper, and represent nearly a fifth of LME aluminum stocks, suggesting a high likelihood of significant market implications under suspensions or threshold limits for this metal. Nonetheless, the current environment places attention on the deteriorating macroeconomic backdrop which continues to weigh on base metal prices.

The good news is that while there are near term headwinds for the metals complex, we believe the amount of time on the bottom is likely to be short and the rate of price recovery faster. This is due to investors' focus on ESG, government regulation and the Ukraine-Russia conflict. These factors have resulted in lower capital investment, which has kept excess capacity at minimal levels and should provide long-term support to the complex.

Gold and Precious Metals: Macro Challenges Remain a Headwind

Ongoing strength in the US dollar and rising rates continue to weigh on the precious metals complex as aggressive Federal Reserve expectations are being priced in. The persistence of inflation continues to support an aggressive effort by the Fed, and we expect the Fed will continue to hike rates through year-end. In this context, while we may see short term rallies in the yellow metal, overall we believe it will remain under pressure as the restrictive rates regime is set to last for longer. Indeed, gold prices have tended to display a systematic underperformance when markets expect the real level of the Fed funds rate to rise above the neutral rate.

While gold is generally viewed as a hedge against inflation, it tends to perform poorly if inflation is so high as to prompt the Federal Reserve to take an aggressive monetary tightening stance, such as the current environment. The yellow metal sells off when real and nominal rates move higher and as the U.S. dollar strengthens. However, at the same time, gold generally benefits from rising recession odds as traders look to gold as a safe-haven alternative. A flat and inverted yield curve has also historically been associated with a slowing growth outlook and concurrently rising gold prices. This cycle, however, inflation's increasing persistence is a constraint for the Fed, which suggests that a restrictive rates regime may persist for longer than historical precedents. In this context, gold prices are unlikely to rise with a deteriorating growth outlook until the Fed makes progress in the war on inflation.

Figure 3: Rising real yields a headwind for gold price

Source: FactSet, as of October 18, 2022

Market Performance

Canadian Indices ($CA) Return	Index	1 Month (%)	3 Months (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)	20 Years (%)
S&P/TSX Composite (TR)	70,967	-4.26	-1.41	-11.14	-5.39	6.59	6.54	7.30	8.55
S&P/TSX Composite (PR)	18,444	-4.59	-2.21	-13.09	-8.10	3.45	3.36	4.12	5.62
S&P/TSX 60 (TR)	3,499	-3.88	-1.73	-11.18	-4.29	7.14	7.26	8.02	8.98
S&P/TSX SmallCap (TR)	1,115	-7.06	-2.48	-16.30	-13.76	6.47	2.43	3.19	0.05
U.S. Indices ($US) Return									
S&P 500 (TR)	7,603	-9.21	-4.88	-23.87	-15.47	8.16	9.24	11.70	9.84
S&P 500 (PR)	3,586	-9.34	-5.28	-24.77	-16.76	6.40	7.31	9.55	7.69
Dow Jones Industrial (PR)	28,726	-8.84	-6.66	-20.95	-15.12	2.19	5.10	7.89	6.88
NASDAQ Composite (PR)	10,576	-10.50	-4.11	-32.40	-26.81	9.75	10.24	13.00	11.63
Russell 2000 (TR)	8,705	-9.58	-2.19	-25.10	-23.50	4.29	3.55	8.55	9.36
U.S. Indices ($CA) Return									
S&P 500 (TR)	10,421	-5.09	1.17	-17.69	-9.07	9.41	11.31	15.47	9.04
S&P 500 (PR)	4,915	-5.23	0.75	-18.67	-10.45	7.63	9.34	13.24	6.90
Dow Jones Industrial (PR)	39,372	-4.70	-0.72	-14.54	-8.69	3.37	7.08	11.53	6.10
NASDAQ Composite (PR)	14,495	-6.44	1.99	-26.92	-21.26	11.02	12.32	16.81	10.82
Russell 2000 (TR)	11,931	-5.48	4.03	-19.02	-17.70	5.49	5.51	12.21	8.57
MSCI Indices ($US) Total Return									
World	10,648	-9.26	-6.08	-25.13	-19.25	5.06	5.84	8.69	8.65
EAFE (Europe, Australasia, Far East)	7,663	-9.31	-9.29	-26.76	-24.75	-1.38	-0.36	4.15	6.40
EM (Emerging Markets)	2,181	-11.67	-11.42	-26.89	-27.80	-1.71	-1.44	1.42	9.10
MSCI Indices ($CA) Total Return									
World	14,595	-5.14	-0.11	-19.06	-13.13	6.27	7.85	12.36	7.86
EAFE (Europe, Australasia, Far East)	10,503	-5.19	-3.52	-20.81	-19.05	-0.24	1.53	7.67	5.62
EM (Emerging Markets)	2,990	-7.67	-5.78	-20.96	-22.33	-0.58	0.42	4.84	8.31
Currency									
Canadian Dollar ($US/$CA)	72.96	-4.34	-5.98	-7.51	-7.05	-1.14	-1.86	-3.26	0.73
Regional Indices (Native Currency, PR)									
London FTSE 100 (UK)	6,894	-5.36	-3.84	-6.65	-2.72	-2.37	-1.33	1.84	3.13
Hang Seng (Hong Kong)	17,223	-13.69	-21.21	-26.39	-29.92	-12.93	-8.97	-1.89	3.26
Nikkei 225 (Japan)	25,937	-7.67	-1.73	-9.91	-11.94	6.03	4.97	11.33	5.22

Benchmark Bond Yields	3 Months	5 Yrs	10 Yrs	30 Yrs
Government of Canada Yields	3.79	3.33	3.17	3.10
U.S. Treasury Yields	3.25	4.09	3.83	3.78

Canadian Bond Indices ($CA) Total Return	Index	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
FTSE TMX Canada Universe Bond Index	1,050	-0.53	0.52	-11.78	-10.48	-2.51	0.70	1.65
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	728	-0.07	-0.31	-4.69	-5.16	-0.15	0.95	1.32
FTSE TMX Canadian Mid Term Bond Index (5-10)	1,156	-0.17	0.84	-10.60	-10.30	-1.79	0.89	1.92
FTSE TMX Long Term Bond Index (10+ Years)	1,627	-1.49	1.51	-20.96	-17.20	-6.09	0.09	1.84
HFRI Indices ($US) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	17,099	-2.27	-0.57	-6.18	-5.77	6.18	4.52	4.61
HFRI Fund of Funds Composite Index	7,069	-0.61	0.72	-5.92	-5.51	4.52	3.30	3.57
HFRI Event-Driven (Total) Index	19,094	-3.97	-1.14	-8.42	-7.46	4.97	3.82	4.80
HFRI Equity Hedge Index	25,475	-4.24	-2.34	-13.81	-13.25	6.24	4.37	5.32
HFRI Equity Market Neutral Index	6,067	0.37	0.98	0.70	1.28	2.63	2.16	3.05
HFRI Macro (Total) Index	19,246	1.71	2.20	10.91	10.53	7.91	5.66	3.17
HFRI Relative Value (Total) Index	13,846	-1.39	0.29	-1.84	-1.66	3.60	3.37	4.16
HFRI Indices ($CA) Total Return (as of March 31, 2020)								
HFRI Fund Weighted Composite Index	23,571	2.88	6.48	2.25	2.39	7.61	6.61	8.20
HFRI Fund of Funds Composite Index	9,744	4.62	7.86	2.53	2.66	5.93	5.37	7.13
HFRI Event-Driven (Total) Index	26,320	1.09	5.87	-0.20	0.54	6.39	5.89	8.39
HFRI Equity Hedge Index	35,118	0.81	4.59	-6.07	-5.74	7.68	6.46	8.94
HFRI Equity Market Neutral Index	8,363	5.66	8.14	9.75	10.05	4.02	4.21	6.59
HFRI Macro (Total) Index	26,531	7.07	9.45	20.87	20.09	9.37	7.78	6.71
HFRI Relative Value (Total) Index	19,086	3.81	7.40	6.98	6.85	5.00	5.44	7.74

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return, as of September 30, 2022.

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