



# Yield

---

Monthly Perspectives  
September 2023

15 minutes

# Yield: Better early than late

Brad Simpson, Chief Wealth Strategist | TD Wealth

Aurav Ghai, Senior Fixed Income Analyst & Portfolio Manager, WIO | TD Wealth

After more than a decade on the sidelines, bonds are finally coming in to their own. Yields that had shrunk to near irrelevance since the global financial crisis, and were deeply embedded in investor expectations, have risen to heights unseen in decades. Investors can now tap into attractive yields in almost all segments of the fixed income market. Indeed, we may now be witnessing a bond bull market fuelled by yields that, while unexceptional in historic terms, seem extravagant relative to the depths plumbed in recent years.

## The bond bull market looks set to resume in the quarters ahead.

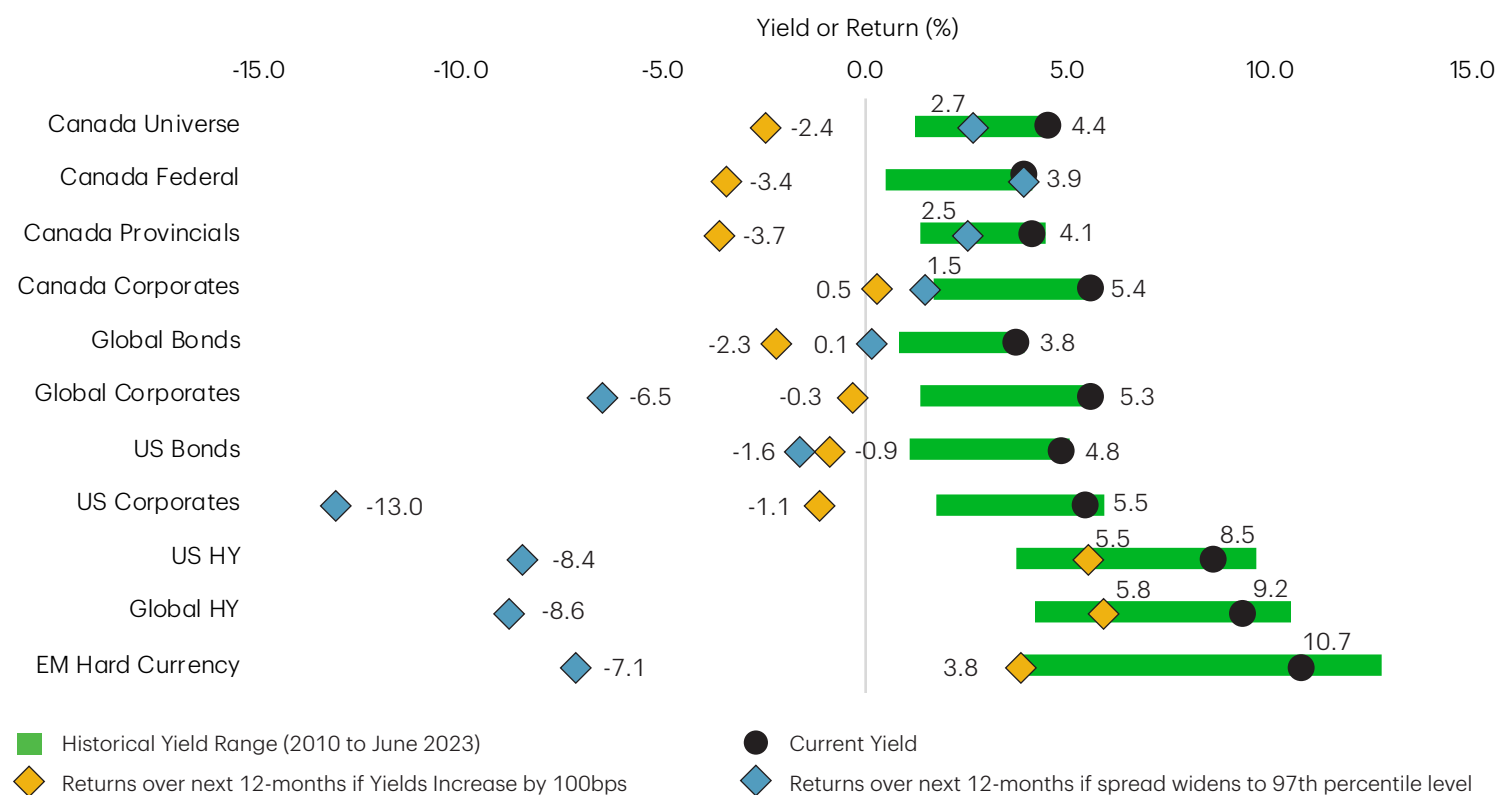
With economic uncertainty a risk for equity markets, the income and diversification on offer from bonds now is far more enticing. Today's starting yields provide attractive entry points across fixed income sectors. As the mixed second-quarter performance demonstrates, those returns may be volatile over the short term: however, they will accrue for those

with longer-term time horizons. On the other hand, even in the event of adverse scenarios (e.g., higher government rates, wider credit spreads), income levels today provide a healthy cushion (Figure 1) that will likely be able to offset losses.

### Wait a minute, what about last quarter?

Keen observers of the bond market may feel like they've heard this one before. Most investment managers have had a positive outlook for fixed income for close to a year, only to see heightened volatility leave the overall returns relatively flat for the year. While calls for a bond bull market have been premature, we'd rather be early than late - or worse, miss out altogether. Further, there are attractive opportunities today and many of the factors that have kept yields elevated to date are gradually moving to the sidelines, if not yet eliminated. For example, the central-bank hiking cycle is closer to an end, if it has not ended already, while inflation and economic data is moderating. But the new factors, such as faster-than-expected Treasury issuance-led supply, pullback from global buyers like central banks, and a higher-than-expected policy neutral rate, have been added to the list of factors to be mindful of.

Figure 1: With yields at 12-year highs, income offers “cushion” against capital losses



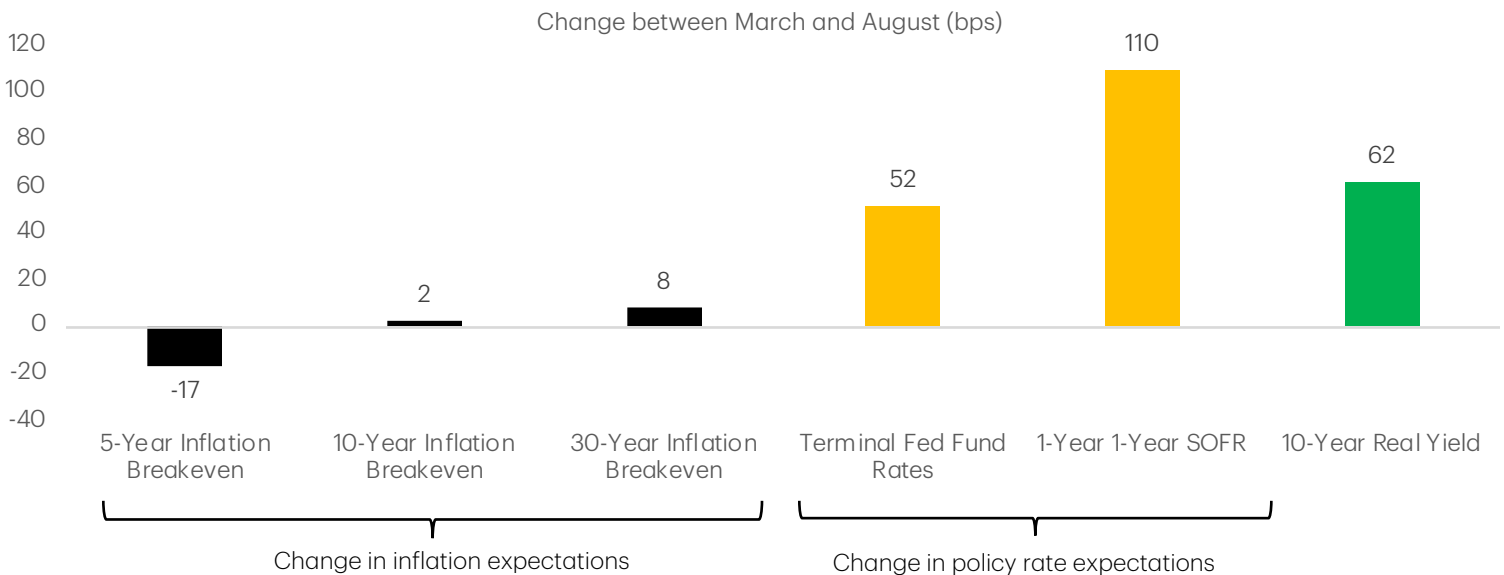
In early April, the 10-year Treasury yield troughed at 3.28%, after fears of a regional banking crisis led to a general flight to quality. Once those fears receded, however, investors turned their attention once again to monetary policy. Markets soon realized that, with sticky inflation and a resilient labour market, central banks were unlikely to shift to a rate-cut cycle anytime this year. The Wealth Investment Office's stance of "no rate cuts in 2023" was proven right when the market consensus moved out their expectations to 2024. Yields then rose, also helped by additional central-bank rate hikes, with the U.S. 10-year moving up by almost of full percentage point, settling around 4.2% at time of writing.

The Fed's recent pivot isn't the only factor that has lifted yields to date. In our view, there are several reasons, both fundamental and technical, that have contributed. Let's review:

**1. Still robust economic data.** The strength of incoming macroeconomic data has increased the probability of a soft landing. Most leading indicators, however, still point to recession. The Conference Board's Leading Economic Indicators Index, which leads turning points in the business cycle by around six to eight months, has declined for 15 consecutive months — the longest streak since 2008 — and is deeply negative year-over-year.

**2. Higher policy rates for longer.** The Federal Reserve (Fed) has implied in recent commentaries that it may cut policy rates next year — even if inflation remains above its 2% target — as long as price pressures continue to ease. While some may see this as the Fed growing more tolerant of inflation, the market seems to have dismissed the threat of long-term inflation. Since the beginning of April, inflation expected by

Figure 2: Markets expecting higher for longer policy rates have pushed yields higher, not a shift in long-run inflation expectations



Source: FactSet, as of August 31, 2023.

market participants, also known as "breakeven inflation" rates, have risen just a few basis points for five-, 10- and 30-year Treasuries (Figure 2), while the expected peak (or "terminal") policy rate has drifted up by about 50 bps since the beginning of April. Essentially, this shows the shift in market expectations for the Fed to keep policy rates higher for longer, and not just more hikes in the near term.

**3. More U.S. Treasury supply.** The U.S. Treasury boosted its estimate for federal borrowing for the third and fourth quarters to US\$1 trillion and US\$852 billion, respectively, bringing additional Treasury supply to the market. In addition, the Treasury is targeting a higher cash balance of US\$750 billion for the Treasury General Account (TGA) by year's end. This additional supply for government spending, however, is unsustainable over the long term. It also comes at a time when the Fed is tightening monetary supply by shrinking its holdings of Treasuries (i.e., quantitative tightening).

**4. Fitch downgrade of U.S. debt.** The market reaction to Fitch's downgrade of U.S. Treasury debt was significant, albeit short-lived. The 10-year U.S. Treasury yield rose near the announcement as fears of cascading corporate defaults intensified. However, a closer look at the market for credit default swaps (CDS), where the spread on U.S. debt widened a mere 4 bps, indicated that these initial fears were overblown, allowing yields to ease back.

**5. Bank of Japan loosening of YCC.** Since 2016, the Bank of Japan has intervened in public bond markets in order to control long-term yields, in a policy known as "yield curve control" (YCC). Theoretically, the recent loosening of this policy could weaken foreign demand for U.S. Treasuries. If Japanese government yields were allowed to rise, that would make Japanese government bonds more attractive to Japanese investors. Therefore, the surprise BoJ action did contribute to the rise in U.S. government bond yields.

In summary, improved prospects for economic growth and a Fed policy rate on hold for longer have contributed to the Q2 move higher in nominal government bond yields. In addition, more Treasury supply and potentially softening demand from foreign investors likely added another layer of pressure on yields. With the third quarter underway, however, the pace of economic growth is now moderating.

Policy rate hikes, meanwhile, are getting smaller and farther apart. These are signs that most of the increases are behind us and that any hikes to come will be fine-tuning exercises with only marginal impact. Therefore, we urge investors to look past the threat of further hikes and focus instead on the longer investment horizon when making portfolio investment decisions.

True, that horizon remains clouded by geopolitical events and the potential lagged impact of policy rate hikes, all of which dictate vigilance. But the fact remains that the global economy has weathered the start of a war, upward inflation shocks, a fair amount of quantitative tightening and a historic amount of rate hikes in reasonably good form. In the coming months, with central banks moving to the sidelines while moderating their hawkish monetary-policy stance, the bond bull market looks set to resume in the quarters ahead.

#### Understanding the risks: credit and interest rate

To understand fixed income portfolio construction, we need to peek into the key risks for bonds. The first of these is called **“interest-rate risk,”** and it’s largely driven by changes in the policy rate and how they influence the “risk-free” rate on government bonds at various maturities. Longer-maturity bonds are naturally more sensitive to interest-rate risk, measured in “duration years,” since the price of a bond reflects the value of the income it delivers through its coupon

(interest) payments over the bond’s maturity. So, the longer the maturity, the more sensitive a bond is to the change in interest rates or government yields. As such, a portfolio with longer “duration” (i.e., a longer average maturity and higher interest-rate sensitivity) carries more interest-rate risk.

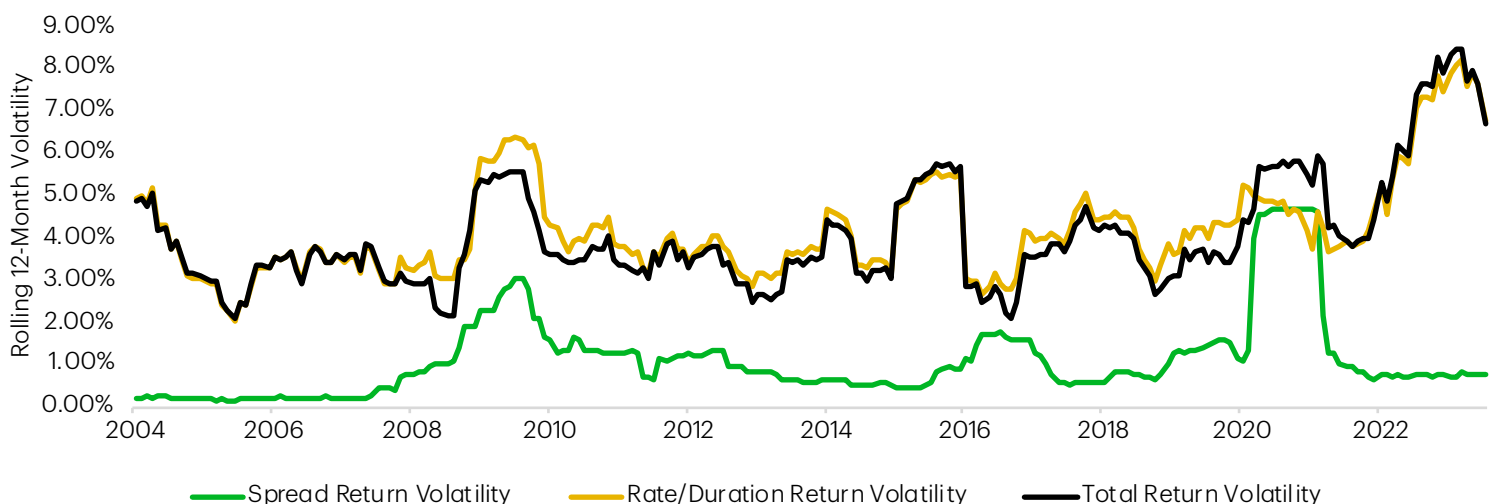
**“Credit risk,”** meanwhile, relates to the risk of a default, and is measured by the bond’s credit spread, which is the yield premium over the risk-free rate or government bond yield that investors require to compensate them for the risk of the issuer not paying back the promised coupons or principal. (This, incidentally, speaks to the reliability of a so-called “risk-free” domestic government bond; while emerging-market governments do default on their debt occasionally, the risk of a major economy doing so is so negligible as to be considered nonexistent.)

The risk of widespread defaults in a deep-recession scenario may seem more significant, but over the past 20 years, it’s actually interest-rate risk that has been the main source of volatility for a core Canadian bond index. Over that period, the interest-rate component had been significantly more volatile than the credit-risk portion, except during a handful of short-lived periods. While this phenomenon is slightly counterintuitive, it can be especially true during an elevated and uncertain period of inflation (Figure 3).

Many investors dismissed the elevated volatility of interest rates for decades, which was understandable considering the predominant trend of falling interest rates or government yields that acted as a tailwind for core bond returns. However, elevated inflation, higher government yields and the uncertain monetary backdrop of the current regime have exposed the potential pitfalls of relying solely on interest-rate exposure as the primary return driver of core bond portfolios.

Figure 3: Policy moves contribute more to volatility than bankruptcies

#### Canada Bond Universe



## Bond-market Breakdown: Government bonds

Is now the time to add duration, or will there be another move higher in government bond yields? It's a tough call, but we see risk skewed to the downside for yields over a slightly longer investment horizon. To be clear, we don't expect yields to plummet (unless markets experience a severe systematic or geopolitical event). Rather, we believe that government bond yields will remain range-bound over the short term as long as we lack clear guidance from central banks and fixed income investors remain opportunistic.

Government bond yields are volatile, so it's important to take a risk-managed and risk-measured approach to duration or interest-rate-sensitive assets. That being said, given the high government yields or interest rates now on offer, it would benefit investors to leg into duration or increasing interest-rate sensitivity of the investments. We maintain our modest overweight position on government bonds.

## Bond-market Breakdown: Corporate bonds

The year-to-date rally in corporate credit may have caught some investors by surprise, given fears this year of a recession — historically a bad environment for credit spreads. The bullish macro view argues that robust labour markets, declining inflation and resilient consumer confidence have pushed the threat of a recession farther out or perhaps even eliminated it entirely (in the elusive “soft landing” scenario).

A more cautious view tells us that tight monetary policy should contribute to a slowdown in growth and, in turn, wider spreads. Given the wide range of views on the direction of the economy, credit investors should consider why spreads have tightened year-to-date, the potential timing and magnitude of spread-widening and sectoral trends that suggest an active management approach going forward.

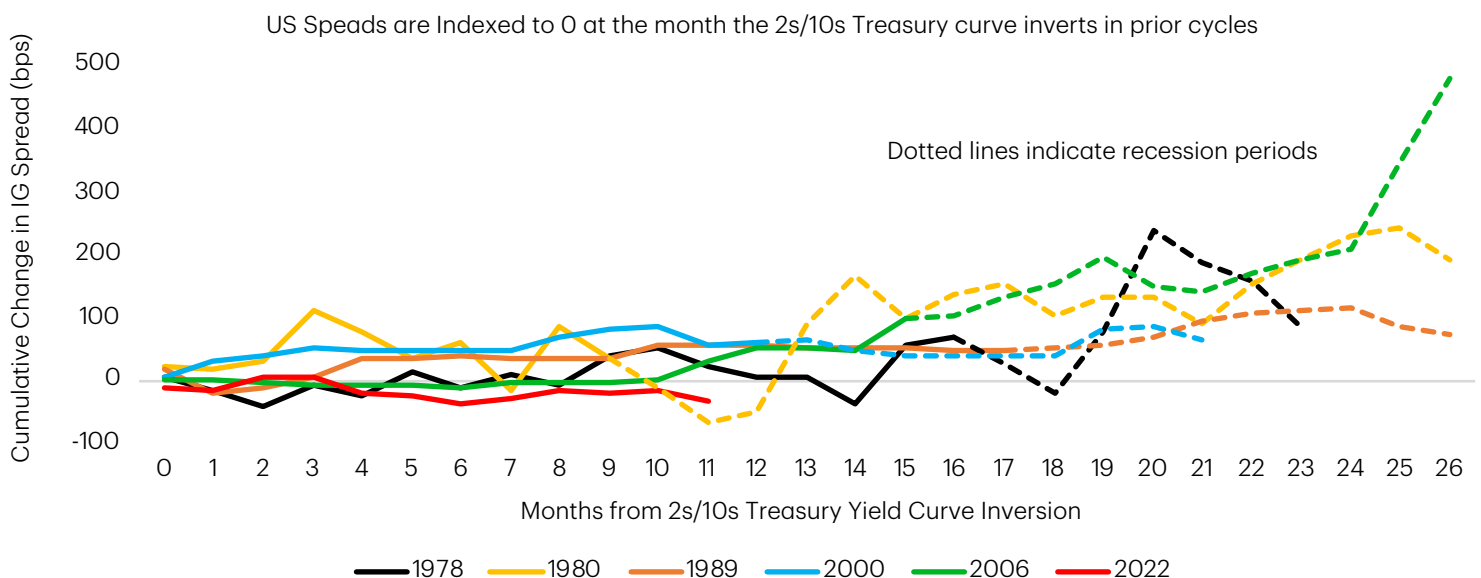
Importantly, there have been both technical and fundamental dynamics that have supported investment-grade (IG) credit this year.

**Fundamentals:** While second-quarter revenue growth and EBITDA has led to lower profits compared to mid-2021 peaks, debt levels are manageable, potentially leading to further improvement in credit metrics. The trailing 12-month total debt/EBITDA ratio for the U.S. IG universe has been stable at 2.5x for the past four consecutive quarters, down from a peak of 3.3x in the second quarter of 2020 and lower than the pre-pandemic 2.8x in the fourth quarter of 2019. Moreover, around 8% of IG debt was upgraded in the first half of 2023, almost four and a half times the amount of debt downgraded.

**Technicals:** Corporate bond issuance has been generally on par with issuance trends over the past two years. Notably, demand has remained strong for institutional and foreign investors. Indeed, while spreads remain tight — accounting for around 25% of the yield on IG bonds — the overall yield of approximately 5.5% remains attractive to pension funds and foreigners given the perceived low risk of default.

We expect these trends to support IG credit spreads in the near term. However, we are cognizant of the impact that a growth slowdown could have on IG credit spreads. For this reason, we remain cautious and prefer short-maturity, high-quality IG credit, due to its favourable yield cushion. That said, history suggests that spreads don't widen until much later in the business cycle and, in some cases, not until the recession arrives (Figure 4).

Figure 4: Spreads don't tend to widen until much later in the business cycle



It would be a fool's errand to try to predict the peak in IG spreads, but certain sectors within investment-grade (e.g., finance companies, REITs, banks) have meaningfully wider spreads than the broad market, which present opportunities, while certain other segments have relatively tight spreads and less cushion, indicating risk if the economy comes under pressure. In summary, we recommend an active management approach in the IG credit space, while preferring shorter maturity and sectoral tilts based on valuations.

### Bond-market Breakdown: Private Credit

Private debt, also known as private credit, is an alternative source of financing for private businesses. For individual investors, the idea of purchasing debt in the private market may seem complicated, but an increasing number of investors have opted for higher potential returns by sacrificing the liquidity within the bond market. Since the global financial crisis of 2008, the market for private debt has expanded six-fold to US\$1.5 trillion. For investors, private debt offers many compelling features:

**Yield Premium:** Private debt has historically commanded a premium of 900 basis points (or 9 percentage points) over the cash rate, due to the complexities and illiquidity associated with private loans.

**Floating-rate yields:** Most private-debt loans are floating-rate, meaning duration is zero and the yield rises and falls in line with the overnight lending rate and the fed funds rate. As a result, private-debt funds have not been susceptible to the kind of interest-rate volatility associated with the Fed's hiking program, while providing larger coupon payments.

**Secured against assets:** Unlike public bonds, which are unsecured, private debt deals are typically underwritten against the assets of a company. Therefore, in the event of a default, senior secured loans have claim priority, which has lifted recovery rates above those in the public markets.

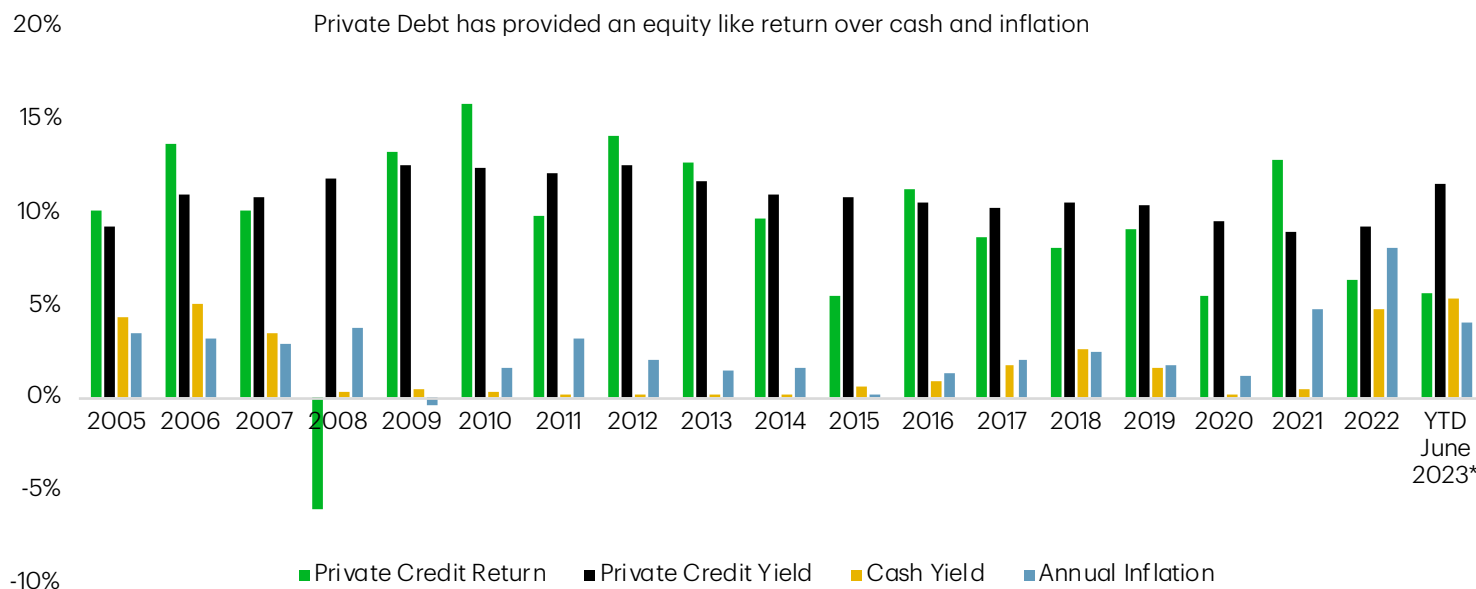
That said, it's important to note that risk and reward go hand in hand. Private debt can be higher-risk, which would serve to complement a portfolio's existing investment-grade bond exposure rather than replace it, much like publicly traded high-yield debt.

Because of its more speculative nature, private debt has provided an equity-like return of 9% annually since 2007, with only a single negative year of 6.1% in 2008 (Figure 5) all the while providing the downside protection inherent in fixed income. It is higher in the capital structure than equity, and because yields float alongside policy rates, this asset class can act to partially hedge against inflation.

### Making the case for shorter, tactical duration – Capital Preservation

The FTSE Canada Universe Bond Index, a bellwether core bond investment universe, suffered a significant 11.7% loss or drawdown in 2022 due to its interest-rate-sensitive or high-duration profile, whereas the FTSE Canada Short-term Bond Index, with relatively low duration, had a drawdown of 4% over the same period. Both indices are considered high-quality and significant allocations in traditional bond portfolios and hence are often referred to as "core bond solutions," but it is often missed that both indices are very different bond investments with different objectives. Capital preservation is often assumed

Figure 5: Equity-like returns, but with some protection against default



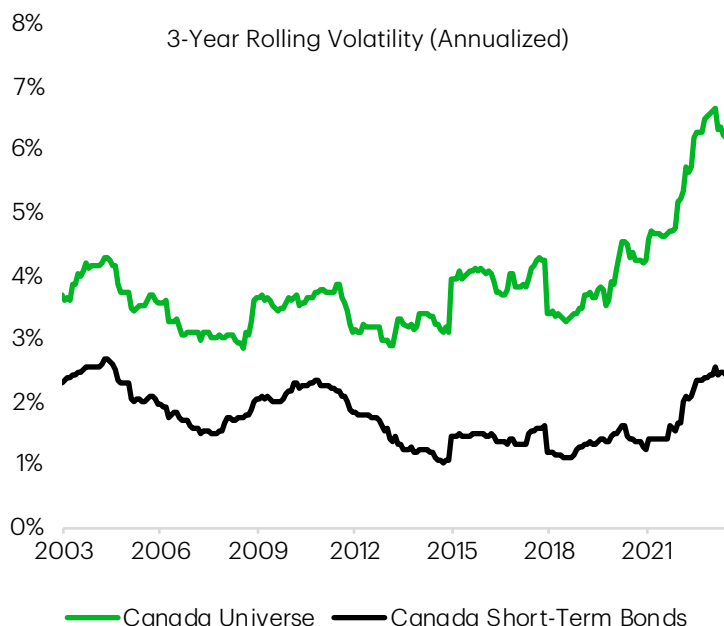
Source: Cliffwater LLC, Minneapolis Fed, US Department of the Treasury, Wealth Investment Office as of June 2023. Note: An estimate for 2023 is based on the change in the CPI from second quarter 2022 to second quarter 2023. Cash yield: 1 Year Treasuries.

to be the same as risk diversification, and therefore bond allocations with relatively higher duration are often expected to provide capital preservation as well. But that expectation and assumption about high-duration bonds has been proven wrong with 2022 drawdowns. The low volatility and consistent return profile associated with low-duration bonds can provide capital preservation, while negative correlation with the risk assets on offer by higher-duration investment can provide risk diversification. There is always a place for risk-diversifying investments in portfolios, but it's important to know that the longer-duration core bonds have been much more volatile, and that volatility has been rising since 2020, while the short-term bond index has had a much smoother volatility profile all through its 20-year history (Figure 6).

Of course, the longer-duration profile (around 7.5 years) for the Canada universe index has contributed to higher overall returns than the short-term bond index (3.7% vs 2.8% annualized over 20 years), but moving forward, we believe there is a strong case for higher-quality, shorter-duration products, given that they allow for tactical positioning and less drawdown during periods of interest-rate volatility.

To clarify, we're not advocating for the elimination of interest-rate risk in a portfolio. Interest-rate risk has an essential role as a yield generator and a hedge against a cyclical slowing in the economy. However, it's important to note that many bond and equity portfolios already carry outsized exposure to interest-rate risk. Our case for higher-quality, shorter-duration credit is a risk-management exercise aimed at preventing excessive interest-rate sensitivity and adding a capital-preservation aspect to the investment portfolios.

Figure 6: Duration highly volatile in periods of government bond yield or interest rate uncertainty



Source: FactSet, as of August 31, 2023.

What does excessive duration look like? Take a 10-year Treasury bond, for example. If the yield on such a bond were to rise from 4% to 5%, it would generate a loss of around 7%. The same calculation for a 30-year bond, meanwhile, would generate a loss of 20%. Therefore, we need to be cautious with regards to how much interest-rate sensitivity or duration we own in the portfolio, given that higher interest-rate sensitivity may induce high volatility if government yields maintain their wild swings in coming months.

### Conclusion: Be Compensated for Volatility

Only time will tell whether we have a full-blown recession in the coming quarters or not, but the risk of an economic slowdown is elevated. Therefore, maintaining a balanced and diversified portfolio is important. With yields finally reaching attractive levels, the income component of fixed income is back. Short-term volatility in yields will likely persist as markets guess and second-guess when central banks will begin to cut policy rates and whether the economic slowdown will accelerate. This will drive market participants to constantly reprice the future of policy rates and economic growth.

An attractive income cushion should provide a buffer against these bouts of volatility. Good buying opportunities can arise quickly during periods of heightened uncertainty — such as the one we find ourselves in today — and so it's important to maintain an active management approach that can balance both duration and credit exposure tactically and opportunistically.

A final word on the difference between short-term bonds and term deposits like GICs. Though extremely tempting, investing in a traditional GIC can limit investor flexibility, given that these products generally lock in the investment until maturity. GICs may be useful for investors who absolutely need 100% of their principal investment at some specific point in the future, but for investors who can tolerate some price fluctuations, bonds are a better option because they allow investors to earn similar yields to locked-in GICs while still keeping the flexibility to switch to more attractive opportunities later. Investors are also taking re-investment risk by investing in a 1-year maturity product. As per the historic GIC yield data from the Bank of Canada, the GICs maturing now are understandably offering attractive roll-over yield (i.e., higher yield for 1-year GIC starting now versus the yield on offer a year ago.) But that attractive roll-over yield has never lasted beyond few months. Therefore, there is a significant risk that the yield on offer can be significantly less when the GICs mature in a year's time—this is a reinvestment risk. And as per bond math, under the same assumption of falling yields in coming months, the bonds will appreciate in price leading to GIC-equivalent yield plus capital gains. Importantly, the best way to mitigate re-investment risk is to extend the maturity profile of the investments by locking in the higher yields on offer in bonds.

## Market Performance

		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
<b>Canadian Indices (\$CA) Return</b>		<b>Index</b>	<b>1 Month</b>	<b>3 Months</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>20 Years</b>
S&P/TSX Composite (TR)	80,418	-1.37	4.57	6.94	8.49	10.36	7.80	8.05	8.08	
S&P/TSX Composite (PR)	20,293	-1.62	3.68	4.68	4.98	7.11	4.53	4.84	5.10	
S&P/TSX 60 (TR)	3,930	-1.45	4.26	6.43	7.97	10.52	8.17	8.61	8.40	
S&P/TSX SmallCap (TR)	1,261	-1.31	5.31	4.36	5.11	10.29	4.69	4.78	4.33	
S&P/TSX Preferred Share(TR)	1,553	-4.21	-1.58	-2.68	-12.31	0.75	-1.28	0.63	1.88	
<b>U.S. Indices (\$US) Return</b>										
S&P 500 (TR)	9,710	-1.59	8.28	18.73	15.94	10.52	11.12	12.81	9.93	
S&P 500 (PR)	4,508	-1.77	7.84	17.40	13.97	8.80	9.21	10.69	7.78	
Dow Jones Industrial (PR)	34,722	-2.36	5.51	4.75	10.19	6.89	5.98	8.89	6.74	
NASDAQ Composite (PR)	14,035	-2.17	8.50	34.09	18.78	6.03	11.59	14.61	10.78	
Russell 2000 (TR)	10,075	-5.00	9.00	8.96	4.65	8.12	3.14	7.96	8.36	
<b>U.S. Indices (\$CA) Return</b>										
S&P 500 (TR)	13,139	1.06	7.71	18.62	19.66	11.89	11.92	15.65	9.80	
S&P 500 (PR)	6,100	0.87	7.27	17.29	17.63	10.14	10.00	13.47	7.65	
Dow Jones Industrial (PR)	46,985	0.27	4.95	4.65	13.73	8.22	6.75	11.64	6.62	
NASDAQ Composite (PR)	18,992	0.47	7.93	33.97	22.59	7.34	12.40	17.49	10.65	
Russell 2000 (TR)	13,634	-2.44	8.43	8.85	8.01	9.46	3.88	10.68	8.23	
<b>MSCI Indices (\$US) Total Return</b>										
World	13,636	-2.35	7.10	16.54	16.21	8.93	8.88	9.86	8.77	
EAFE (Europe, Australasia, Far East)	10,017	-3.82	3.85	11.35	18.55	6.58	4.65	5.43	6.73	
EM (Emerging Markets)	2,511	-6.13	3.66	4.86	1.69	-1.01	1.36	3.37	7.85	
<b>MSCI Indices (\$CA) Total Return</b>										
World	18,452	0.28	6.54	16.43	19.94	10.28	9.66	12.62	8.65	
EAFE (Europe, Australasia, Far East)	13,555	-1.23	3.30	11.24	22.36	7.90	5.40	8.09	6.61	
EM (Emerging Markets)	3,398	-3.60	3.11	4.76	4.95	0.22	2.09	5.97	7.73	
<b>Currency</b>										
Canadian Dollar (\$US/\$CA)	73.90	-2.62	0.53	0.09	-3.11	-1.22	-0.72	-2.46	0.12	
<b>Regional Indices (Native Currency, PR)</b>										
London FTSE 100 (UK)	7,439	-3.38	-0.09	-0.17	2.13	7.65	0.02	1.50	2.95	
Hang Seng (Hong Kong)	18,382	-8.45	0.81	-7.07	-7.88	-9.95	-8.00	-1.66	2.64	
Nikkei 225 (Japan)	32,619	-1.67	5.61	25.00	16.12	12.13	7.36	9.31	5.91	
<b>Benchmark Bond Yields</b>			<b>3 Months</b>	<b>5 Yrs</b>	<b>10 Yrs</b>	<b>30 Yrs</b>				
Government of Canada Yields			5.14	3.89	3.56	3.39				
U.S. Treasury Yields			5.47	4.26	4.11	4.22				
<b>Bond Indices (\$CA Hedged) Total Return</b>		<b>Index</b>	<b>1 Mo (%)</b>	<b>3 Mo (%)</b>	<b>YTD (%)</b>	<b>1 Yr (%)</b>	<b>3 Yrs (%)</b>	<b>5 Yrs (%)</b>	<b>10 Yrs (%)</b>	
FTSE TMX Canada 91-day Treasury Bill Index	442	0.41	1.14	2.96	4.23	1.66	1.60	1.18		
FTSE TMX Canada Universe Bond Index	1,064	-0.18	-1.25	1.19	0.76	-4.20	0.39	1.96		
FTSE TMX Canada All Government Bond Index	1,005	-0.22	-1.59	0.74	0.15	-4.82	0.03	1.72		
FTSE TMX Canada All Corporate Bond Index	1,273	-0.09	-0.25	2.51	2.52	-2.46	1.39	2.66		
Bloomberg U.S. Corporate High Yield Bond Index	268	0.22	3.15	6.63	6.35	1.34	2.52	4.03		
Bloomberg Global Aggregate Bond Index	243	-0.18	-0.32	2.44	-0.09	-3.30	0.45	1.98		
JPM EMBI Global Core Bond Index	475	-1.74	2.16	3.50	4.19	-5.25	-0.40	2.43		
<b>Credit Suisse (\$US) Total Return</b>		<b>Index</b>	<b>1 Month</b>	<b>3 Month</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>	
Credit Suisse Equity Market Neutral USD	304	-0.39	2.08	2.89	5.90	3.43	1.70	1.86		
Credit Suisse Event Driven USD	800	0.07	3.48	5.62	4.75	7.00	3.89	3.16		
Credit Suisse Global Macro USD	1,293	-1.01	2.19	-7.43	-11.98	7.01	6.40	4.58		
Credit Suisse Hedge Fund USD	759	0.17	3.07	3.37	3.61	6.02	4.72	4.17		
Credit Suisse Long/Short Equity TR USD	939	-0.04	2.84	7.43	10.35	5.16	4.38	5.16		
Credit Suisse Managed Futures USD	395	-0.26	0.28	-3.04	-3.12	8.98	5.83	4.38		

Source: TD Securities Inc., Morningstar®, TR: total return, PR: price return, as of August 31, 2023.

# Wealth Investment Office, TD Wealth

Brad Simpson | Chief Wealth Strategist & Head of Wealth Investment Office

## North American Equities:

Chris Blake | Senior Portfolio Manager  
Chadi Richa | Manager, North American Equities  
David Beasley | Senior Portfolio Manager, Global Equities  
Kevin Yulianto | Quant Equity Portfolio Manager, Global Equities  
Andrej Krneta | Manager, Global Equities  
Neelarjo Rakshit | Senior Equity Analyst

## Managed Investments:

Christopher Lo | Head of Managed Investments  
Fred Wang | Senior Portfolio Manager  
Aurav Ghai | Senior Fixed Income Analyst  
Kenneth Sue | Senior Alternative Investments Analyst  
Mansi Desai | Senior Equity Analyst  
Nadeem Kassam | Senior Equity Analyst

## Investment Consulting:

Brian Galley | Head of Investment Consulting  
Shanu Kapoor | Senior Portfolio Consultant  
Richard Nguyen | Senior Portfolio Consultant  
Shaun Arnold | Senior Portfolio Consultant  
Greg McQueen | Senior Portfolio Consultant  
Duncan Morton | Senior Portfolio Consultant  
Remek Debski | Senior Portfolio Consultant  
Jesse Kaufman | Senior Portfolio Consultant  
Ivy Leung | Senior Portfolio Consultant  
Anita Linyu Li | Portfolio Consultant  
Shaiara Hossain | Portfolio Consultant  
Taimur Malik | Portfolio Consultant  
Joseph Abinaked | Portfolio Consultant  
Jack Zhang | Analyst  
Dan Iosipchuk | Analyst

---

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

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

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

Source: London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). © LSE Group 2023. FTSE Russell is a trading name of certain of the LSE Group companies. "FTSE®", "Russell®", and "FTSE Russell®" are trademarks of the relevant LSE Group companies and are used by any other LSE Group company under license. "TMX®" is a trade mark of TSX, Inc. and used by the LSE Group under license. All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication.

Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. All rights reserved.

All trademarks are the property of their respective owners.

© The TD logo and other trade-marks are the property of The Toronto-Dominion Bank.