

Q4 | Quarterly Market Review

Everything you need to know about the quarter that was

January 4, 2022

Wealth Investment Office

QMR - Q4 22 | Highlights

David Dias • Aurav Ghai, CFA • Chadi Richa, MBA, CFA | TD Wealth

Unless otherwise indicated, performance figures are stated on a total-return basis. This document is for distribution to Canadian clients only. Please refer to Appendix A of this report for important disclosure information.

U.S. Equities

- Equity markets clung to the belief, for much of the quarter, that the Fed was on the verge of pivoting to dovishness, but those hopes were snuffed out by a strong jobs report in early December, as the pivot narrative morphed into a "higher for longer" reckoning.
- The S&P 500 increased by 7.6%, the Dow Jones Industrial Average increased by 16.0% and the Nasdaq Composite Index fell 0.8%.
- Nine of the 11 sectors in the S&P 500 produced a positive return. Energy and industrials outperformed. Consumer discretionary lagged.
- Large-cap stocks outperformed small-caps in Q3. Value stocks outperformed growth.

Canadian Equities

- The broad Canadian index tracked its American counterpart closely in Q4, following the push and pull narratives that stem from falling inflation data versus an overheated labour market. This tug of war led Canadian markets to seesaw in Q4.
- The S&P/TSX Composite Index ended the quarter up 6.0%, with nine of 11 sub-indices posting positive returns.
- The Canadian dollar rose 1.9% against the USD. WTI rose 1.0% to US\$80.26. Gold prices rose 9.2% to US\$1,826 per ounce.

Canadian & U.S. Fixed Income

- The FTSE Canada Universe Bond Index to post 0.1%, while the Bloomberg U.S. Aggregate Bond Index posted 1.8%.
- The Canadian government bond index fell 0.2% in Q4; the U.S. government bond index rose 0.7%.
- Canadian and U.S. investment-grade corporate bond indices registered returns of 1% and 3.5%, respectively.
- U.S. investment-grade corporate spreads modestly tightened by 29 bps over the quarter, while U.S. "high-yield" spreads tightened by 83 bps.

International Equities

- International developed markets were a bit of a mixed bag in Q4. The MSCI European Monetary Union Index rose 12.5%, in euro terms, after European states managed to secure energy supply outside Russia. The Nikkei, meanwhile, rose 0.8% on a hawkish monetary-policy tilt.
- The MSCI Emerging Markets Index, in local currency terms, rose 6.7% in Q4, led by a 7.2% rise in India, where metal prices supported producers.
- In China, the Shanghai Composite surged in early November after widespread protests forced the government to abandon its zero-Covid policy.
- In Brazil, meanwhile, shares fell 2.9% after leftist Luiz Inácio Lula da Silva won the presidential election, sparking violent protest.

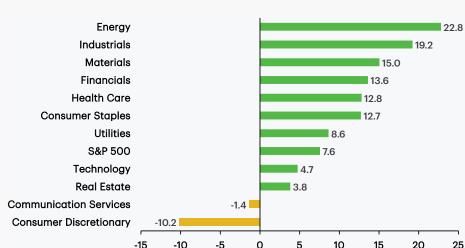
Market Movers Equities in Review

Early Octo	ber	October 14	Late October			December 14
With U.S. ir off its peak 9.1% in Jur sentiment to build ard the idea th Fed may b verge of ski its torrid por rate hikes. narrative w U.S. dollar gives gold industrial r a lift.	c of he, risk begins ound hat the e on the owing ace of This veighs rbought and and	After a disastrous government budget in the UK, which had sunk the pound and government bonds, Prime Minister Lis Truss fires her finance minister and then, a week later, is forced to herself resign. UK equities, bonds, currency all enjoy a relief rally.	while natural gas inventor strengthening euro and v November 2 Fed raises its po slow as early as N U. In	unteroffensive in the Kherson oblast gath ories in Europe are replenished quicker the veakening Russia combine to lift Europeo licy rate by 75 bps but signals that the po December. Evember 8 S. mid-term elections eventually lead to or vestors shrug as an increase in policy ce ecrease in fiscal stimulus.	an expected. A an markets. ace of hikes may a split Congress.	Fed hikes by 50 bps. Markets initially react positively but end the day down as Chair Powell makes clear in a press conference that rates are likely to remain "higher for longer."
5		October 26		November 10	Dec	cember 20
October 5 OPEC and its allies agree to a supply cut of two million barrels per day starting in November, but bil prices barely	credence narrative, bps after pr	October 26 Bank of Canada lends to the growing "pivot" hiking rates by just 50 evious hikes of 75 bps er and 100 bps in July. October 30	Early November Markets cheer as announces – after rare protests acro	Equity markets catch fire as the U.S. reports weaker-than-expected CPI inflation in October, at 7.7%. Beijing	Bank of Japan s market with a haw saying it will reviev its market interv control long-term appropriate, and 10-year yield to w	shocks the kish pivot, w whether rentions to yields are a allow the
October 5 OPEC and its allies agree to a supply cut of two million barrels per day starting in November, but bil prices barely move as fears of a global economic slowdown dominate.	credence narrative, bps after pr in Septemb Leftisi the sparl shif	Bank of Canada lends to the growing "pivot" hiking rates by just 50 evious hikes of 75 bps er and 100 bps in July. October 30 Luiz Inácio Lula da Silva wins Brazilian presidential election, ting violent protest. The policy t and political turmoil depress emerging-market indices.	Markets cheer as announces — after rare protests acro- the mainland — th end of its "zero-co- policy. Investors a encouraged by th prospect of Chino economic reopen but hopes are qui	Equity markets catch fire as the U.S. reports weaker-than-expected CPI inflation in October, at 7.7%. Beijing sr ss December 2 vid" U.S. reports 263,000 re jobs generated in e November, much 's stronger than the ng, 200,000 estimate ckly This tempers market	Bank of Japan s market with a haw saying it will review its market interv control long-term appropriate, and 10-year yield to w Despite s currencies end euro and p and 8.3%. Th	shocks the kish pivot, w whether rentions to yields are d allow the trade in a ider band. Late December souring risk sentiment, foreign the quarter way up. The yen, bound end Q4 up 10.1%, 9.4% ie loonie rises a mere 1.9% on
October 5 OPEC and its allies agree to a supply cut of two million barrels per day starting in November, but jil prices barely move as fears of a global economic slowdown	credence narrative, bps after pr in Septemb Leftisi the sparl shif	Bank of Canada lends to the growing "pivot" hiking rates by just 50 evious hikes of 75 bps er and 100 bps in July. October 30 Luiz Inácio Lula da Silva wins Brazilian presidential election, ing violent protest. The policy t and political turmoil depress	Markets cheer as announces — after rare protests acro- the mainland — th end of its "zero-co- policy. Investors a encouraged by th prospect of Chino economic reopen	Equity markets catch fire as the U.S. reports weaker-than-expected CPI inflation in October, at 7.7%. Beijing sr ss December 2 vid" U.S. reports 263,000 re jobs generated in e November, much 's stronger than the ng, 200,000 estimate ckly This tempers market	Bank of Japan s market with a haw saying it will review its market interv control long-term appropriate, and 10-year yield to w Despite s currencies end euro and p and 8.3%. Th bets that th	shocks the kish pivot, w whether rentions to yields are d allow the trade in a ider band. Late December souring risk sentiment, foreign I the quarter way up. The yen, sound end Q4 up 10.1%, 9.4%

U.S. Equities

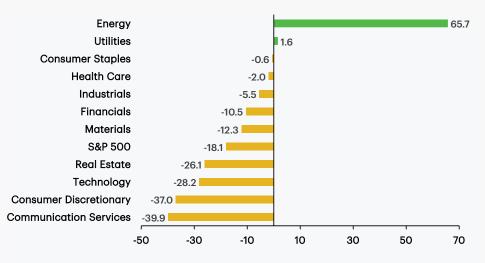
Indices	Q4 Return (%)	Q4 Return (%, C\$)	Annual Return (%)	Annual Return (%, C\$)
Dow Jones Industrial Average	16.01	13.86	-6.86	-0.38
S&P 500	7.56	5.57	-18.11	-12.41
S&P 400	10.78	8.73	-13.06	-7.01
Nasdaq Composite	-0.79	-2.62	-32.54	-27.84
Russell 2000	6.23	4.26	-20.44	-14.89

Source: Bloomberg Finance L.P. as of December 31, 2022. Total returns including dividends and distributions. Index returns calculated in U.S. and Canadian dollars.



Q4/22 S&P 500 Sector Returns





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

Equity markets clung to the belief, despite ample evidence to the contrary, that the Federal Reserve was on the verge of pivoting to a more dovish policy (or perhaps even pausing rate hikes altogether). This dubious narrative prevailed for much of the quarter despite stronger-than-expected economic data, an inflation-inducing OPEC supply cut, and even a few hawkish comments from the Fed itself. Nevertheless, investor sentiment grew from tenuous optimism to outright exuberance, catching fire on November 10, when U.S. inflation came in under expectations.

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

From mid-October to the end of November, trough to peak, the broad index rose 14%. Hopes that the relief rally would extend into a year-ending Santa Claus bump were snuffed out, however, by a strong jobs report in early December followed by hawkish comments from the Fed chair. Stocks gave back most of their gains as the pivot narrative morphed into a "higher for longer" reckoning — an understanding that, even if rate hikes do slow, the Fed is nowhere near a rate cut, and there's no sign of the kind of economic slowdown that would bring inflation back to target. For the three months ended December 31, 2022, the S&P 500 increased by 7.6%, the Dow Jones Industrial Average increased by 16.0% and the Nasdaq Composite Index decreased by 0.8%. Nine of the 11 sectors in the S&P 500 produced a positive return. Energy and industrials outperformed, with returns of 22.8% and 19.2% Consumer discretionary was the worstperforming sector, falling 10.2%. Large-cap value stocks outperformed during the quarter. Large-cap stocks (S&P 500) rose by 7.6%, outperforming small-cap stocks (Russell 2000), which returned 6.2% in the fourth quarter. Growth stocks (S&P 500 Growth Index) registered a total return of 1.4% during the quarter, underperforming value stocks (S&P 500 Value Index), which returned 13.6%.

Looking back to Q3, data released in late December by the Bureau of Economic Analysis showed a surging economy, leaving behind back-toback contractions recorded in the first half of the year. Growth rebounded sharply in Q3, rising 3.2% (q/q annualized, -0.6% in Q2). That's much higher than initial market expectations of 2.3%. However, the top-line figure was flattered by an outsized gain in net exports. Consumer spending remained supportive (+2.3%), tapping into pent-up demand for services; however, consumers did pull back slightly on goods expenditures. The weakest area of domestic demand was residential investment, which fell 27%, marking the sixth consecutive quarterly decline and the steepest since 2010. The outsized pullback was the result of plunging home sales and residential construction through the third quarter, with higher interest rates making mortgages less affordable.

Businesses are also beginning to feel the pinch from higher rates, although leading indicators reveal a growing schism between the service and manufacturing sides of the economy. The Institute of Supply Management's purchasing managers index (PMI) for manufacturers fell to 49.0 in November from 52.8 in August — slipping into contraction after 29 consecutive months of expansion. The PMI for services, meanwhile, has remained flat, posting 56.5 in November from 56.9 in August. Stability on the services side of the economy can be attributed to heightened inflationary pressures, given that wages make up a higher proportion of service costs. Looking forward to fourth-quarter data, TDE expects activity to slow, with real GDP forecasted to rise 1.1%. Surprising strength in the

third quarter, however, has led the bank to raise its projection for 2022 economic growth, from 1.6% to 1.9%.

For some indication of the daunting challenge that the Fed still faces in its battle against inflation, look to the labour market, which has defied expectations consistently this year. In the fourth quarter, the job market showed some signs of slowing, but nowhere near as much as expected. Job growth has now beaten expectations for 10 of the past 11 months. The economy generated 269,000 jobs in September, 284,000 in October and 263,000 in November — levels that point to an economy that's still healthy, if not quite booming. Hourly earnings for the month, meanwhile, remained high at 5.1% year-over-year (5.2% in August), and the unemployment rate has kept steady at 3.7%, with increased labour participation largely offsetting any increase in employment.

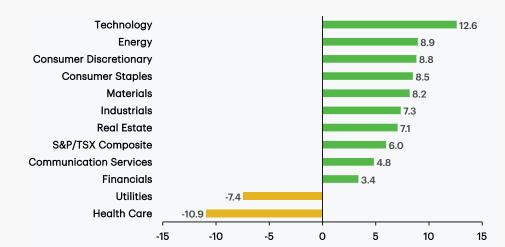
On the other hand, we have seen meaningful signs that inflationary pressures are easing, with the three-month reading on the core measure having declined in each of the past five months. While goods prices appear to have peaked, some service prices continue to rise. Core inflation, which excludes volatile food and energy but includes wages, cooled from 6.6% in September to 6.3% in October and 6.0% in November. Headline inflation, meanwhile, has fallen more dramatically — from 8.2% in September to 7.1% in November — due mainly to cooling energy prices as fears intensify over the possibility of a global recession.

Despite these promising disinflationary signs, the year-ago measure of core inflation continues to run at a clip that's roughly three times the Federal Reserve's 2% target. While we suspect the Fed will continue to dial back on the pace of rate hikes, policymakers will need to see more convincing inflation data before calling it quits on this tightening cycle. In the third quarter, the Fed raised its policy rate by 125 bps, with a 75-bp hike in November and a 50-bp hike in December. The upper bound of the federal funds target range now sits at 4.5%. The Fed survey of board members (the "dot plot") shows the policy rate rising to 5.25% at some point in 2023 before falling to 4.25% in 2024. TD Economics thinks the Fed will stop just short of that; it expects the policy rate to peak at 5.00% by the third quarter of 2023.

Canadian Equities

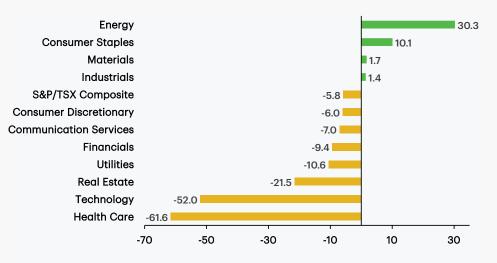
Indices	Q4 Return (%)	Annual Return (%)
S&P/TSX Composite	5.96	-5.84
S&P/TSX 60	5.56	-6.24
S&P/TSX Completion	7.65	-4.22
S&P/TSX SmallCap	8.37	-9.29
S&P/TSX Preferred Share	-3.24	-18.08

Source: Bloomberg Finance L.P. as of December 31, 2022. Total returns including dividends and distributions.



Q4/22 S&P/TSX Sector Returns

Annual S&P/TSX Sector Returns



Source: Bloomberg Finance L.P. as of December 31, 2022. Index total returns.

The broad Canadian index tracked its American counterpart closely in the fourth quarter, following the push and pull narratives that stem from, on the one hand, falling inflation data, and on the other, an overheated labour market. This tug of war led Canadian markets to seesaw in Q4, with stocks north of the border underperforming the S&P 500 slightly as prospects for the large energy sector dimmed on the rising Canadian dollar, fears of a global slowdown and a US\$60 price cap on Russian petroleum. These headwinds came despite an OPEC supply cut in October.

Source: Bloomberg Finance L.P. as of December 31, 2022. Index total returns.

Canadian markets were less volatile than in the U.S., however, given reduced exposure to deflating mega-caps, along with a rebound in the price of gold and copper and a substantial fall in the U.S. dollar against global currencies. The yen and euro rose 10.1% and 9.4%, respectively, against the greenback in Q4, while the Canadian dollar rose 1.9%. This relatively underwhelming performance can be attributed in part to the perception that the Bank of Canada will not be able to keep pace with the Federal Reserve, given the exceptionally tight labour market in the U.S.

(even compared to Canada). That being said, the weak loonie has kept the Canadian economy humming for much of the year and helped to smooth out some of the volatility.

The S&P/TSX Composite Index ended the quarter up 6.0%, with nine of 11 sub-indices posting positive returns. Small-cap growth stocks outperformed in the fourth quarter, which was not the case in the United States. Small-cap stocks (S&P/TSX Canadian Small Cap Index) rose 8.4%, outperforming large-cap stocks (S&P/TSX 60 Index), which rose 5.6%. Growth stocks (MSCI Canada Growth Index) increased 7.0% over the quarter, outperforming value stocks (MSCI Canada Value Index), which ended the quarter up 5.3%.

West Texas Intermediate, the North American benchmark for oil prices, finished the quarter at US\$80.26, up 1.0% from the September 30 close of US\$79.49. The final quarter of the year saw a little less volatility in the oil market, with a price range of US\$70.08 to US\$93.74 as the threat of lower demand in a looming recession pushed back against stories of increased demand coming from the relaxation of Chinese Covid restrictions and the refilling the Strategic Petroleum Reserves in the United States, not to mention a supply cut of two million barrels per day from OPEC and its allies in early October.

Canadian financials increased 3.4% on a total-return basis. Insurers (+10.7%) were the best performers followed by banks (+2.7%), while diversified financials (-3.9%) ended the quarter in negative territory. The six largest Canadian banks reported fiscal Q4 earnings that were down 4.5%, as strong net interest income was offset by weak capital-market revenue and higher provisions for credit losses. On average, earnings missed consensus estimates by 3%. The spot price of gold, meanwhile, ended the quarter at US\$1,826, up 9.2% from the third-quarter close, and 1.3% above the close on June 30. It's worth noting, however, that gold often shows seasonal strength into the early part of a new year.

Statistics Canada reported in late November that third-quarter GDP had clocked in higher than expected, rising 2.9% (q/q annualized, 3.3% in Q2). The top-line figure was nearly double the 1.6% growth forecasted by

TD Economics — powered by a buildup of inventory along with an 8.6% pickup in exports as global supply chains loosened. Some of the details, however, remain a cause for concern. Just below the headline figure, the impact of rising interest rates on household spending and residential real estate investment is glaring. Consumer spending fell 1% in the quarter, as households pulled back on big-ticket items like furniture and cars. An uptick in services spending (+3.8%) managed to offset some of these losses, with travel expenditures remaining elevated. However, as mortgage rates rose, residential investment continued to contract, dropping 15.4% in Q3. These trends are set to continue as the Bank of Canada tightens.

On the labour front, meanwhile, predictions that the Canadian job market had begun to loosen seem to have come a bit prematurely. After losing a total of 114,000 jobs in the prior three-month period (June, July, August), the Canadian economy blew away expectations in September, October and November, adding 139,000 jobs in total (21,000, 108,000 and 10,000, respectively). Unemployment, meanwhile, actually fell from 5.4% in August to 5.1% in November, and year-over-year wage growth continued to rise from 5.4% to 5.6% over that time. The bottom line is that the labour market remains hot, which points to a likely improvement in overall consumer spending in the fourth quarter. The bounceback in jobs, however, will reinforce expectations that the Bank of Canada will need to continue hiking its policy rate.

The Bank, however, will also need to monitor the state of household finances, which continue to deteriorate in the face of weak markets and higher mortgage costs. Net worth fell 2.1% in Q3 for the second consecutive quarter — the first time that's happened since the global financial crisis in 2008. Financial assets fell 0.4% on market weakness, while non-financial assets (primarily land and real estate) fell 2.8% amid the downturn in the housing market. Cumulatively, stock market turbulence and the downturn in the housing market have reduced household wealth by 7.7% (\$1.26 trillion) since March. That compares to an 8.5% drop in wealth, peak to trough, during the financial crisis.

Rising interest rates lifted the ratio of debt-servicing costs to disposable income to 14% (13.5% in Q2, 13.3% in Q1). This is still lower than the

15% that was common prior to the pandemic, but the quick rise points to normalization in the not-too-distant future. The ratio of debt to disposable income, meanwhile, rose to 183.3% (182.6% in Q2), which is already higher than the 181% recorded before the pandemic. Given the rising cost of debt, there's little surprise that consumers had to tighten their purse strings and reduce consumption in the third quarter. Some of these pressures are expected to ease, but it will likely be some time before households see a reprieve from higher debt-servicing costs.

While Canadian consumers are showing signs of strain, the Bank of Canada will be hard-pressed to reduce the policy "overnight" rate until it sees inflation come down from stubborn highs. From August through November, core inflation (CPI-Common) continued to tick upwards, from 6.4% to 6.7%, in large part due to the rising cost of shelter as mortgage and rental costs rise simultaneously. Meanwhile, the more volatile consumer price index (which includes energy and food prices) recorded an annual increase of 6.8% in November (down slightly from 7% in August) due to falling gasoline prices.

While the Bank of Canada has already signalled that it may be nearing the end of its rate-hiking program, it may have to reassess its position if strong economic growth and wage inflation continue to argue in favour of tightening. The central bank delivered a 50-bp hike in October and then followed up with a surprisingly hawkish 50-bp hike in December, leaving the policy rate at 4.25%. With the battle against inflation not yet won, TD Economics expects the Bank to hike a quarter-point in January before moving to the sidelines. At the December meeting, for instance, Governor Tiff Macklem stated that the Bank "will be considering whether the policy interest rate needs to rise further to bring supply and demand back into balance and return inflation to target."

Preferred Shares

The S&P/TSX Preferred Share Index further weakened in the fourth quarter, ending its worst year on record. The rise in interest rates due to tightening monetary policy has been severe in pace and magnitude,

and among the sharpest in decades. The consequence of this has been to push yields on risk assets higher to compete with rising yields on cash and risk-free assets.

An investor can now earn over 3% per year for five years on government bonds and 5% on a corporate bond, which makes the 5% dividend yield on an investment-grade preferred share less attractive — hence the weakness when interest rates are rising. This has been probably exacerbated by tax-loss selling and continued outflows from the largest exchange-traded funds. The S&P/TSX Preferred Share Index, on a totalreturn basis, declined 3.2% in Q4/22 and 18.1% since the beginning of the year. The five-year Government of Canada yield increased 9 bps during the quarter and 215 bps during 2022.

With more than 90% of fixed rate-resets trading below par, the maximum price return potential (if all discounted issues go to par) has increased to 35%, compared to around 10% at the end of 2021. Combined with an average yield of approximately 6% for investment-grade issues, we believe the return profile for Canadian preferred shares has become more compelling. Aside from periods of severe downturn, such as the global financial crisis or the beginning of the pandemic, it's very rare to see Pfd-2 issues with yields ranging from 6% to 7%, and there are quite a few of them today.

Not surprisingly, redemptions have slowed down meaningfully during the quarter. There were only two redemptions with a total size of \$420 million in the fourth quarter, compared to an average of \$2.4 billion during the previous three quarters. Banks have also been extending their issues, for the first time since October 2020, with dividend rates resetting at 6.4% on average. Extensions make more economic sense than issuing institutional preferred shares, which were priced at an average reset spread of 420 bps compared to the 300 bps of the issues that were just extended.

Covernment Band Vield	Canada			United States			
Government Bond Yield	Current (%)	Q/Q Change (pp)	Annual Change (pp)	Current (%)	Q/Q Change (pp)	YTD Change (pp)	
91-Day Treasury Bill	4.24	0.47	4.08	4.34	1.10	4.31	
2-Year Government Bonds	4.05	0.26	3.10	4.43	0.15	3.69	
5-Year Government Bonds	3.41	0.08	2.15	4.00	-0.09	2.74	
10-Year Government Bonds	3.30	0.13	1.87	3.87	0.05	2.36	
30-Year Government Bonds	3.28	0.18	1.60	3.96	0.19	2.06	

Canadian & U.S. Fixed Income

Source: Bloomberg Finance L.P. as of December 31, 2022. Index returns are reported on a total-return basis; pp (percentage point).

Global fixed income markets took a breather over the fourth quarter. Price pressures rolled over, and though most developed-market central banks delivered substantial policy-rate hikes, they also dialled back on the unprecedented pace of those rate hikes. This resulted in moderate upward market repricing of government bond yields, with shortermaturity bonds impacted more than the longer-maturity bonds for both Canada and U.S. The credit spreads led to significant dispersion between Canadian and U.S. fixed income performance over the quarter, with more spread tightening in the U.S. leading to significant outperformance. In the Canadian fixed income universe, losses from higher yields across the tenure were mostly offset by tighter credit spreads and higher income, leading the FTSE Canada Universe Bond Index to post 0.1%, while the Bloomberg U.S. Aggregate Bond Index (CAD-hedged) posted 1.8%.

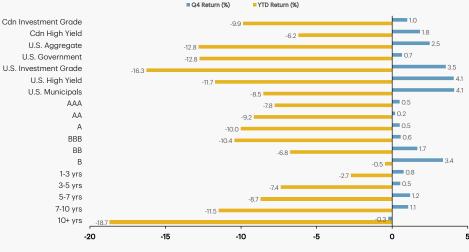
In the U.S., the Fed raised rates twice over the quarter, with a 75-bp hike in November and a 50-bp hike in December. It was the update to the Federal Open Market Committee's summary of economic projection (SEP) that got a big overhaul in the December meeting and signalled Fed expectations of a substantially higher terminal rate in 2023, with a real upside risk attached to it. At the post-meeting press conference, Chair Powell singled out the persistently elevated rates of core services inflation, linked to a tight labor market, as the main concern for the Fed for 2023.

The Bank of Canada also delivered hikes of 50 bps each at its October and December meetings to bring the overnight rate to 4.25%. In its December

Fixed Income Indices	Q4 Return (%)	YTD Return (%)	
FTSE Canada Universe Bond Index	0.1	-11.7	
FTSE Canada Universe All Government Bond Index	-0.2	-12.3	
FTSE Canada All Corporate Bond Index	1.0	-9.9	
FTSE Canada Real Return Bond Index	2.8	-14.3	
FTSE Canada Provincial Bond Index	-0.3	-15.1	

Source: Bloomberg Finance L.P. as of December 31, 2022. Total index returns.

Canadian & U.S. Fixed Income



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

meeting, the Bank signalled that it may be finished with rate hikes as it softened its forward guidance, implying that 4.25% will be the Bank's terminal rate. The statement itself was more balanced than previous months, with the Bank citing evidence that interest rates are working to slow demand and that inflation momentum is softening.

Broad global fixed income, represented by the Bloomberg Global Aggregate Index (CAD-hedged), posted 0.9% over the quarter. U.S. Treasuries outperformed Canadian sovereign bonds and the global universe, with the U.S. Treasury Index (CAD Hedged) returning 0.7%, while the Canadian government bond index returned -0.2%. The U.S. 10-year Treasury yield started the quarter at 3.83% and ended at 3.87%, while the equivalent Canadian government bond yield started at 3.17% and ended at 3.30%.

Surprisingly resilient economic data and expectations of an end to the central-bank hiking phase led to a risk-on narrative and tighter credit spreads. On the Canadian side, the investment-grade spread widened by 10 bps and ended the quarter at an option-adjusted spread of 162 bps. Flattish performance from Canadian government bonds didn't contribute much, but higher overall yields from corporate bonds added to the gains from tighter spreads. The sector posted returns of 1.0%, outperforming the aggregate Canadian fixed income index return of 0.1%. Diving deeper, lower-quality credit benefited the most from risk-on sentiment, with BBB-rated credit posting returns of 0.6%, which modestly outperformed higher-quality A-rated and AAA-rated credit at 0.5%, and AA-rated credit at 0.2%.

Medium-maturity corporate bonds outperformed both long- and shortmaturity bonds, given that medium-maturity government bond yields moved up less than the shorter-maturity and longer-maturity yields, though credit spreads tightened across all credit maturity profiles. Over the quarter, the medium-maturity cohort of seven- to 10-year and fiveto seven-year returned 1.1% and 1.2%. The longest-maturity cohort of 10-year-plus posted returns of -0.3%. And the shorter-maturity cohorts of three- to five-year and one- to three-year bonds returned 0.5% and 0.8%. Higher carry and lower real yields boosted the performance of Canadian

Global Fixed Income



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

real-return bonds and led the sector to post returns of 2.8%, outperforming the government bond universe at -0.2%. Canadian provincial bonds, with higher interest-rate sensitivity and no spread tightening, underperformed corporate bonds over the quarter, returning -0.3%.

For global corporate bonds, the risk-on narrative aided the performance across geographies as spreads tightened over the quarter. U.S. investment-grade corporate spreads modestly tightened by 29 bps over the quarter, while U.S. sub-investment-grade (aka "high-yield") corporate spreads tightened by 83 bps. The U.S. investment-grade corporate bond universe (CAD-hedged) returned 3.5%, outperforming the global investment-grade corporate universe (CAD-hedged), which returned 3.0%. Despite growing recession concerns, U.S. sub-investment-grade corporate bonds (CAD-hedged) remained resilient by posting 4.1% over the quarter, although they underperformed the global sub-investment-grade corporate universe (CAD-hedged) at 6.3%. USD-denominated emerging-market debt also posted strong performance over the quarter, posting 6.6%, while local-currency debt returned 5.9%.

International Equities

Indices	Q4 Return (%)	Q4 Return (%, C\$)	Annual Return (%)	Annual Return (%, C\$)
FTSE 100	8.69	15.95	4.70	0.10
DAX	14.93	23.42	-12.35	-12.17
CAC 40	12.57	20.88	-6.68	-6.10
MSCI European Monetary Union (LC)	12.51	20.77	-14.55	-14.00
Nikkei 225 Stock Average	0.80	9.29	-7.34	-13.76
MSCI Emerging Markets Free (LC)	6.66	7.76	-15.16	-14.15

Source: Bloomberg Finance L.P. as of December 31, 2022. Total returns including dividends and distributions. Index returns calculated in local currencies and Canadian dollars.

International developed markets were a bit of a mixed bag in Q4, with eurozone markets leading the way. The UK's blue-chip FTSE 100 brought in a healthy return of 8.7% on the back of a dramatically shifting political landscape. After a disastrous budget in Q3 - which had sunk the pound and government bonds — former finance minister Kwasi Kwarteng was sacked on October 14. That sparked a relief rally that was supported a week later when Prime Minister Liz Truss was forced to resign, making way for new leadership under Rishi Sunak. The pound also rebounded, rising 8.3% in the fourth quarter. This will no doubt weaken the earnings of FTSE constituents, which are dominated by multinational exporters, but investors in Q4 chose to focus instead on bumper earnings reported the previous quarter (when the pound was weak). GDP contracted 0.8% in Q3 (q/q annualized, +0.8% in Q2). The UK consumer confidence index continues to show weakness, but sentiment rose markedly in December (-42) from an all-time low in October (-47). Business confidence is also negative but moving in the right direction, with the composite PMI rising to 49 in December from 48.2 in November. Against this backdrop, the Bank of England hiked rates by 75 bps in November and 50 bps in December, lifting the policy rate to 3.50%.

Eurozone markets, after three straight quarters of underperformance, surged past their American peers in Q4, with the MSCI European Monetary Union Index rising 12.5% (in euro terms). European investors grew bullish as the war in the east continued to shift in favour of their Ukrainian allies, while nimble manoeuvring at the state level had managed to secure energy supply outside Russia, thereby avoiding a winter energy crisis. Softening U.S. inflation also provided hopes of a central-bank pivot, while earnings from German and Swiss multinationals like SAP, UBS and Logitech easily beat analyst estimates. The European economy decelerated in Q3, growing 0.8% (q/q annualized, 3.2% in Q2), but consumer and business confidence seem to be picking up, with indicators still negative but beginning to move in the right direction. Economic sentiment rose from 92.7 in October to 93.7 in November. The Eurozone Composite PMI rose from 47.8 in November to 48.8 in December. And inflation fell from 10.6% in October to 10% in November. Investors were also buoyed by the European Central Bank, which tapped the brakes on rate hikes, delivering a 75-bp hike in October followed by a 50-bp hike in December.

Japan's Nikkei 225 Stock Average recorded the worst performance among its peers, rising a paltry 0.8% Q4. The story this quarter turned on the Bank of Japan, which has been an outlier for the year, maintaining ultra-loose policy despite historic inflation throughout nearly all of the developed world. By the end of Q3, however, as inflation approached 30-year highs (3% in September, rising to 3.8% in December), there was a sense that something had to happen. The yen rose 10.1% against the U.S. dollar in Q4, but the BoJ move didn't come until December 20, when the Bank announced it would review its "yield curve control" policy (whereby it sets long-term yields through market intervention) and loosen the band around which the 10-year yield is allowed to trade. The Bank's hawkish tilt forced the market in December to give up whatever gains it had achieved for the quarter. The Japanese economy, meanwhile, posted a surprise contraction of 1.2% in Q3 (q/q annualized, +4.6% in Q2), due mainly to a widening trade deficit. Business confidence, however, has picked up of late. The Jibun Bank Composite PMI rose to the expansionary threshold of 50 in December from 48.9 in August.

Emerging markets performed about on par with developed markets this auarter, with the exception of Brazil, where risk sentiment was held back by significant political turmoil. The MSCI Emerging Markets Index, in local currency terms, rose 6.7% in Q4, led by a 7.2% rise in India. High prices for metals supported producers on the Nifty 50, as well as easing inflation data. The Indian economy, meanwhile, grew 3% in calendar Q3 (all a/a annualized) after flatlining for much of the year (-0.1% in Q2). In China, the Shanghai Composite surged in early November after widespread protests forced the government to abandon its zero-Covid policy, although the consequent Covid outbreak has stoked new fears about an economic slowdown. Looking back to Q3, the Chinese economy rebounded 3.9% after a historic 2.7% contraction in Q2. Shares on the Mexican IPC rose 4.4%, alongside the rising peso and historically high interest rates. Mexico's economy continued to power ahead in Q3, accelerating to 4% growth (3.6% in Q2). And in Brazil, shares on the Bovespa fell 2.9% after leftist Luiz Inácio Lula da Silva won the presidential election, sparking violent protest. The Brazilian economy slowed in Q3 to 1.6% (4% in Q2). TD Economics forecasts 2022 growth of 6.9% (fiscal year), 5.0%, 1.3% and 0.8%, respectively, for these nations.

Wealth Investment Office, TD Wealth

Head of Wealth Investment Office

Brad Simpson | Chief Wealth Strategist

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

Managed Investments:

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

Investment Consulting:

Brian Galley | Head of Investment Consulting Shanu Kapoor | Senior Portfolio Consultant Richard Nauven | Senior Portfolio Consultant Shaun Arnold | Senior Portfolio Consultant Grea 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 Shajara Hossain | Portfolio Consultant Taimur Malik | Portfolio Consultant Hai Ho | Portfolio Consultant Joseph Abinaked | Portfolio Consultant Jack Zhang | Analyst Dan losipchuck | 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 2022. 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.