

# Fixed Income Insights

MONTHLY REPORT - JULY 2023 | CANADA EDITION

FOR PROFESSIONAL INVESTORS ONLY

## Canadian credits show resilience in Q2 despite surprise BoC rate hike

Canadian government bonds fell, with most G7 bonds, in the last three months as disinflation slowed and after the Bank of Canada's surprise 0.25% rate rise, though inflation has now resumed its decline. Canadian credits still made modest gains in Q2. Canadian dollar strength reduced overseas returns in CAD terms.

### Macro and policy backdrop – BoC surprised with a 25bp hike, despite evidence of a slowdown, while Fed pauses

A de-synchronized G7 policy cycle, as BoC ends its policy pause with a 25bp hike, despite the economy cooling. (page 2)

### Canadian govts and credit – Structural flattening continues, but credit remains in sweet spot, despite recession fears

Canadian spreads for 20/2s fell through 10/2s in June, reinforcing recession risk signals. Credit held up well. (pages 3-4)

### Global yields and spreads – G7 7-10yr gov't yields edged higher in June after central bank hikes

The biggest moves were in gilts and Canadian yields, while US Treasury yields range traded on policy pause. (pages 5-6)

### Sovereign and climate bonds – Sovereign re-weighting drives WGBI spreads tighter vs climate-WGBI

June Climate WGBI re-weightings lead to a lower Japan overweight and higher UK overweight, after the UK issued more green gilts. (page 7)

### Performance – Most G7 gov't bonds fell a little in Q2 and YTD, on higher policy rates, but large FX moves a key factor

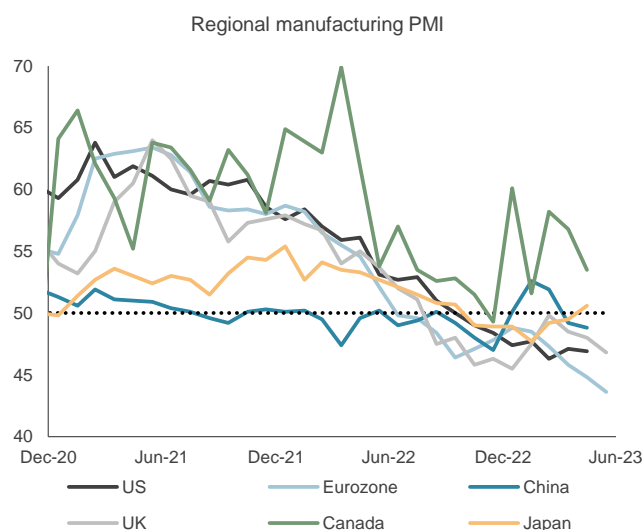
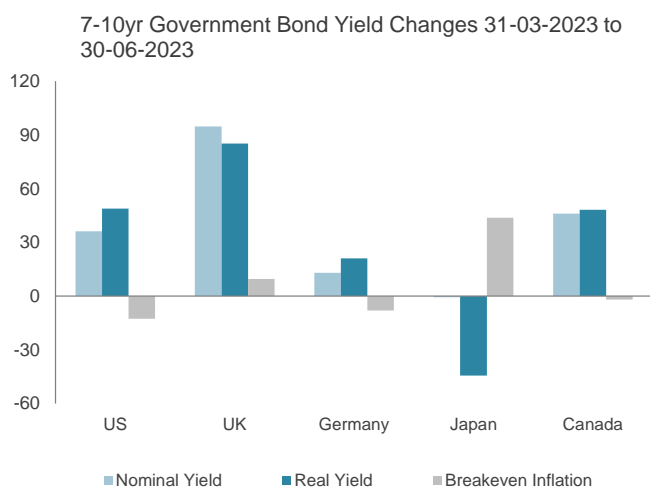
Returns for G7 government bonds were mostly negative in Q2, impacted by large currency moves. (pages 8-10)

### Appendix (from page 11)

Canadian & Global bond market returns, historical bond yields, durations and market values and foreign exchange returns.

Chart 1: Breakeven inflation was negative in all markets but the UK and Japan. Canadian real yields pushed nominal yields higher in Q2.

Chart 2: Manufacturing PMI has fallen in most G7 in 2023, and more gradually in Canada. Japan is the outlier, where activity has increased.



Source: FTSE Russell and Lipper global fund data. All data as of June 30, 2023. Past performance is no guarantee of future results. This report should not be considered 'research' for the purposes of MIFID II. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix for list of indices used for each market.

# Macroeconomic Backdrop – Growth and Inflation Expectations

The BoC ended its policy pause in June with a surprise 0.25% rate rise after economic activity remained ‘too’ strong, led by consumption, services and tight labour markets, and after inflation rose a little in April. But the sharp drop in recent inflation (3.4% y/y and 3.7% y/y core inflation), in line with BoC forecasts, suggest another policy pause may be close.

Resilience in the Canadian economy was signalled by Q1 GDP, showing unexpectedly strong 3.1% y/y growth. This highlights how far Consensus forecasts of 0.7% y/y in 2023 (Chart 1) are at odds with the IMF’s 1.5% prediction. But signs of weaker growth have been emerging from lower inflation, and weak manufacturing and housing starts (down 23% in May vs April) to falling wage inflation.

Canada joins Japan with the lowest CPI y/y increase among G7 countries (Chart 2). Canada’s inflation fell to 3.4% y/y in May from a peak of 8.1% y/y in June 2022 (vs Japan’s 3.2% y/y), aided by substantial base effects from lower energy prices and easing in supply chain bottlenecks. Canadian core inflation, closely watched by the BoC, also dropped to 3.7% y/y (from 4.1% in April).

Monetary policy has diverged materially, both within the G7 and including China, reflecting dispersion in inflation rates, as Chart 3 shows. The Fed’s pause on rates was in stark contrast to the BoC and ECB’s 25bp and BoE’s 50bp increases. The PBoC’s easing in the cost of credit reinforces earlier easing measures, with Chinese inflation near zero (see also Chart 2).

Chart 4 shows Canadian unemployment has risen from historical lows and wage inflation has slowed as the labour market cools.

Chart 1: Growth forecasts show the impact of policy tightening, but the 2023 consensus growth projection for Canada remains at odd with the IMF’s 1.5% estimate, putting it closer to the US rate.

Latest Consensus Real GDP Forecasts (% , June 2023)			
	2022	2023	2024
US	2.1	1.2	0.6
UK	4.1	0.2	0.8
Eurozone	3.3	0.6	1.0
Japan	1.6	1.1	1.2
China	3.0	5.4	5.0
Canada	3.5	0.7	1.4

Chart 2: Canada’s CPI reversed sharply from its April rebound in May and, at 3.4% y/y, fell close to the BoC’s 2% target and Japan’s 3.2% y/y inflation level.

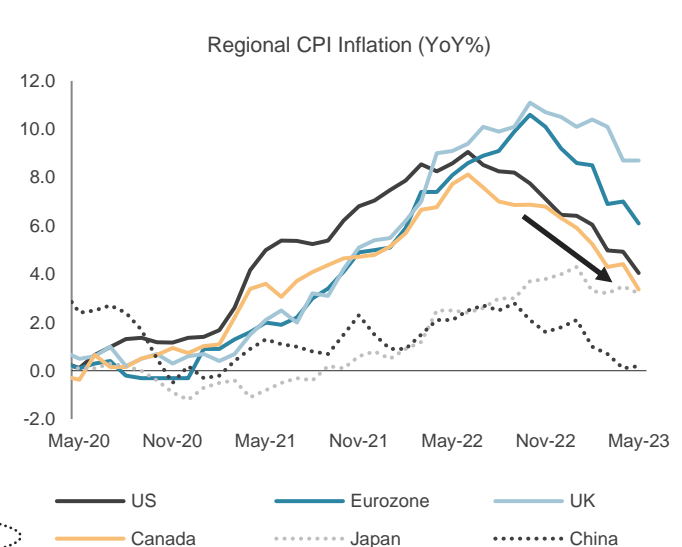
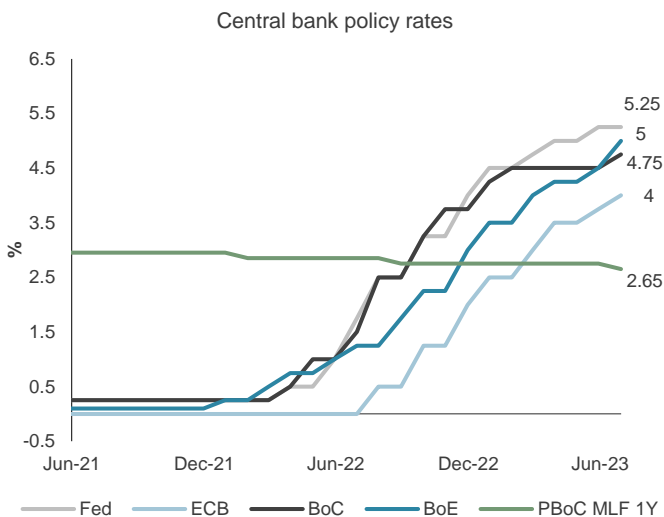


Chart 3: Policy rates diverged further in June, reflecting inflation performance. The Fed pause and ECB tightening move were well flagged, unlike the BoC’s 25bp and the 50bp by the BoE.

Chart 2: Canadian wage inflation has eased from its 2020 high, despite unemployment near cycle-lows, at 5.2%, helped by inflation falling to 3.4% y/y from a peak of 8.1% in 2022.



Source: FTSE Russell and Refinitiv. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

# Canadian Governments, Provinces and Municipalities

Chart 1: Spreads for 20/2s fell through 10/2s, increasing the recession risk signals in June, after the BoC surprised the market with a new 25bp rate rise to 4.75%.

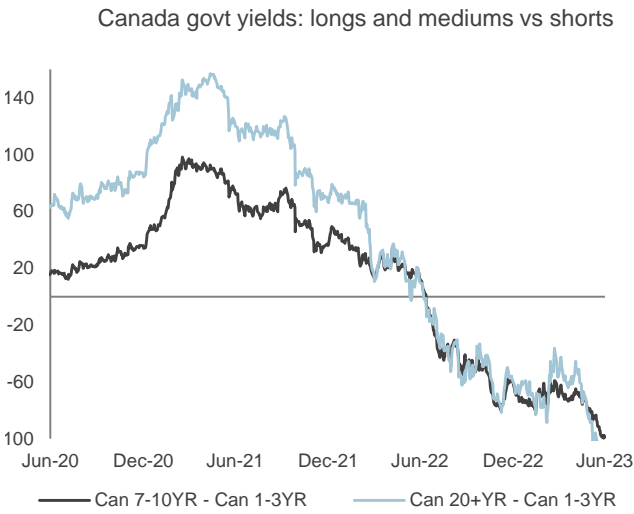


Chart 2: Canadian 7-10-year spreads rose sharply vs G7 peers in June (except vs the UK) after the BoC further tightened policy after stronger-than-expected headline inflation.

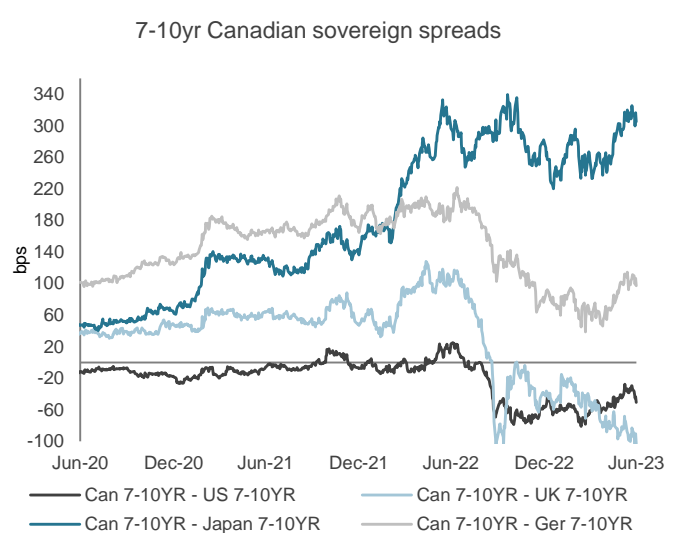


Chart 3: Long Canadian nominal and real yields have tracked closely since 2022, but nominal yields have yet to fully reflect the recent drop in inflation and weaker economic activity.

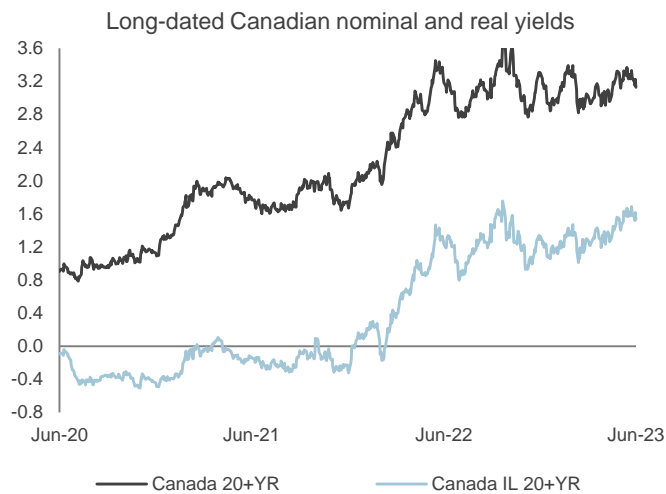


Chart 4: Canadian breakevens have fallen, however, and decoupled from G7 peers, after they stabilised in the US and Germany, and rose modestly in the UK.

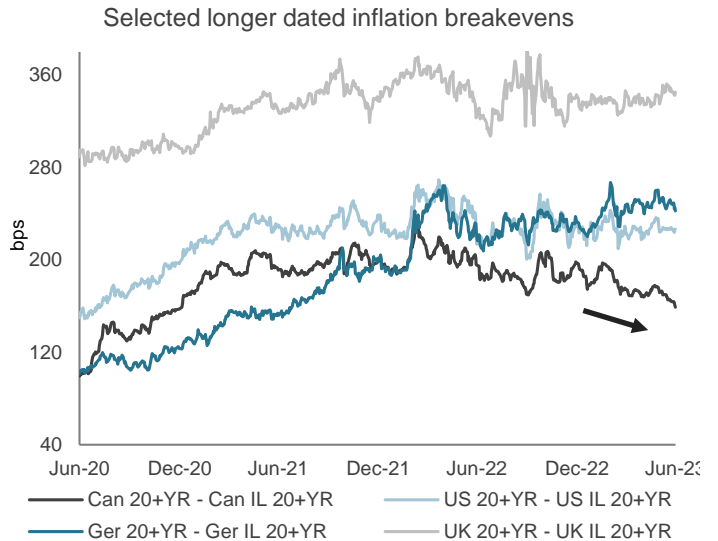


Chart 5: Provincial spreads have continued to converge higher, towards 65bp in June, despite credit quality differences between Canadian provinces.

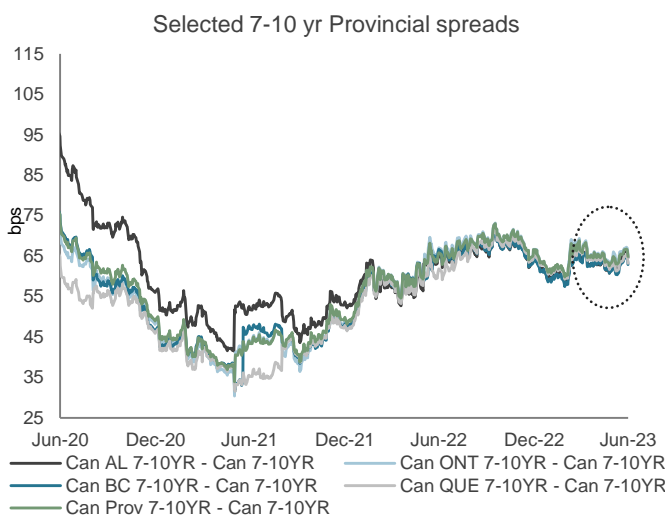
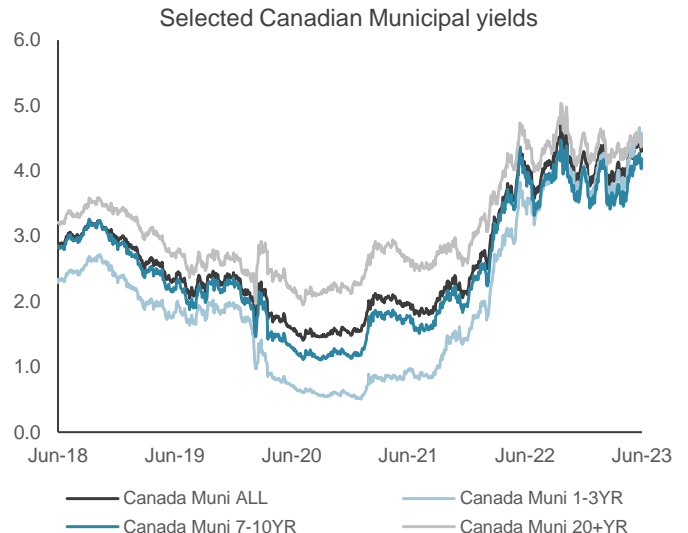


Chart 6: The Canadian municipal yield curve has flattened in June, as yields across the broad maturity spectrum converge towards 5%, and despite the impeccable credit record of Canadian munis.



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# Canadian Corporate Bonds

Chart 1: Yields of Canadian HY credits have been more stable than their sub-IG US peers, while US and Canadian IG corporates have tracked each other, though some decoupling is visible since Q4 22.

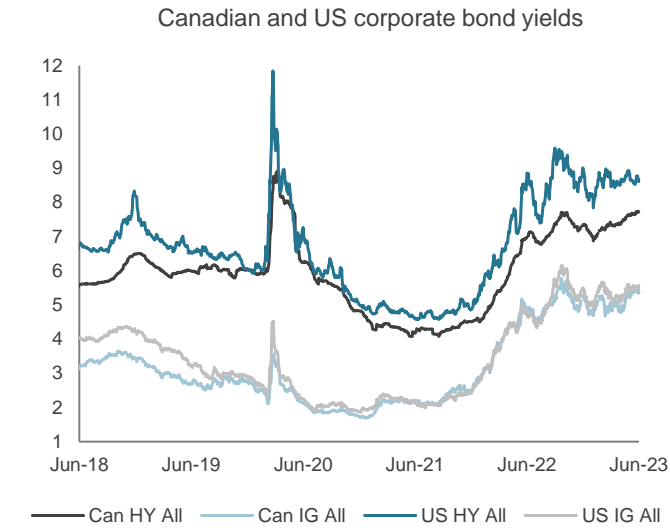


Chart 2: Canadian infrastructure spreads have decoupled from the rest of the sectors, after continuing to fall sharply in June. Real estate spreads widened further on higher rates.

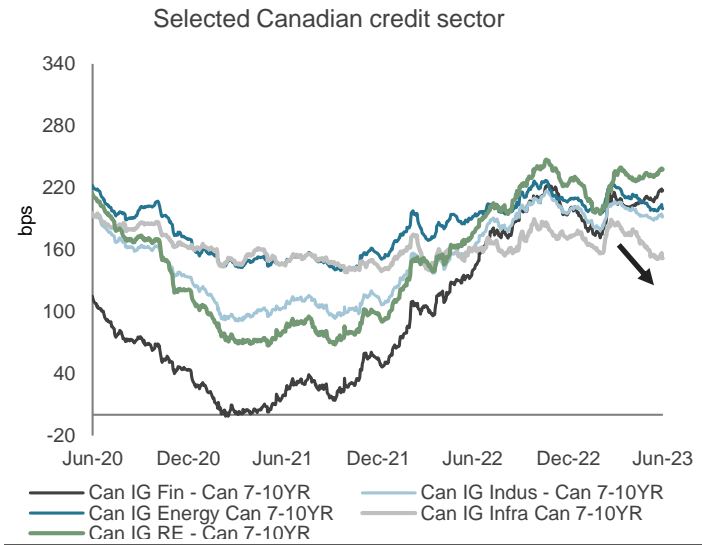


Chart 3: Canadian high yield spreads have been more volatile than their investment grade peers YTD; after tightening during the BoC policy pause, they have ticked back up modestly in June.

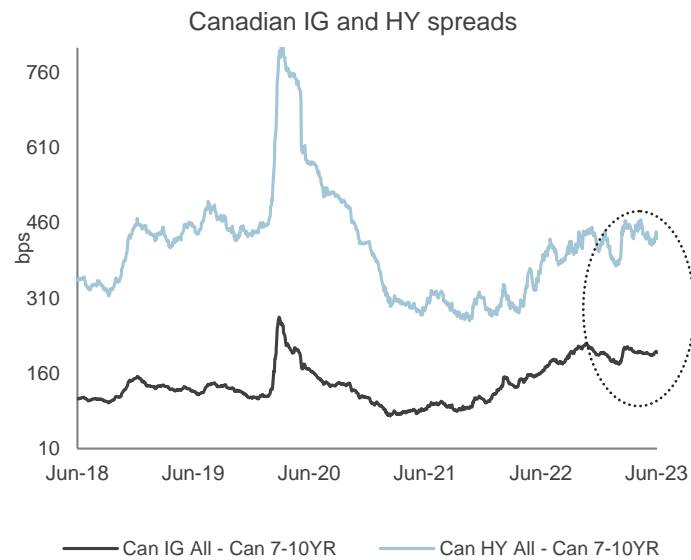


Chart 4: AAA spreads were hit hardest in the period of rising gov bond yields in 2021-22, with spreads near Covid highs. BBB credits have not yet suffered from higher default rate fears.

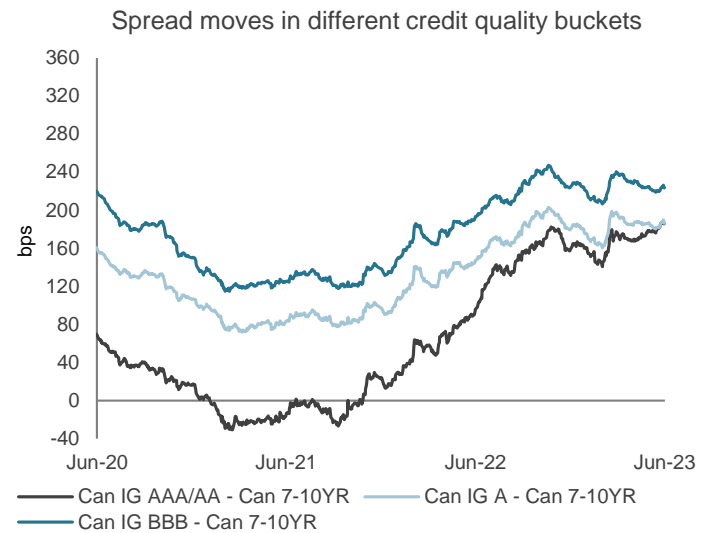


Chart 5: The increase in AAA spreads over 7-10yr governments has been 93bp in the last 12 months. BBB spreads have been less vulnerable, with lower issuance also restricting spread widening.

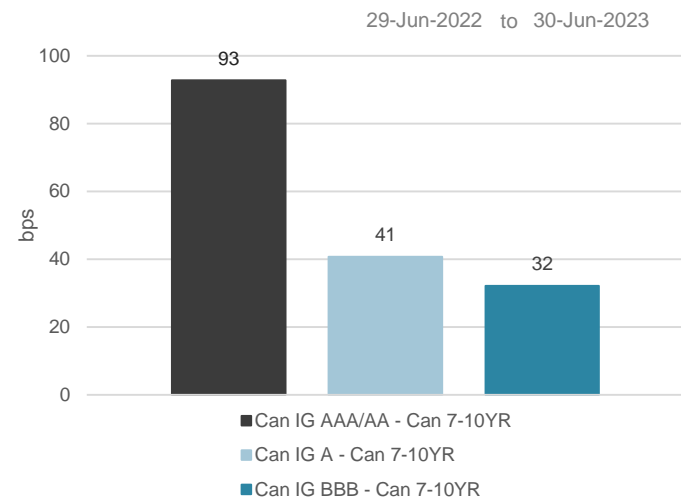
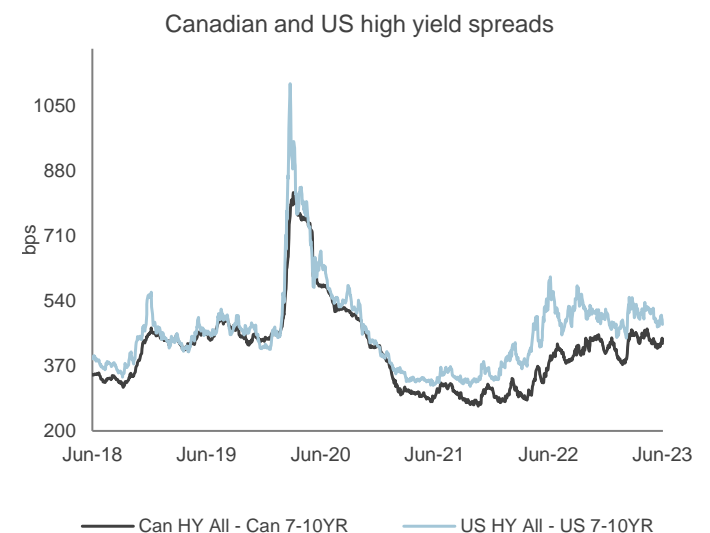


Chart 6: Canadian HY spreads have followed those of the US tighter since the reflation trade in March, but remain tighter, after decoupling since 2021.



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# Global Yields, Curves and Spread Analysis

Chart 1: G7 7-10yr yields edged higher in June. The biggest move was in gilts, with yields spiking on higher inflation and the BoE's 50bp move. Treasury yields range traded after the Fed policy pause.

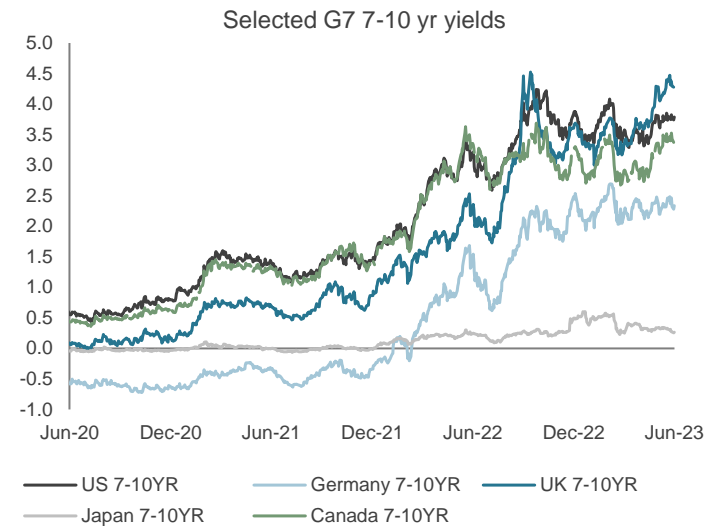


Chart 2: Real yields generally tracked nominals a little higher in June, but the biggest increase was in UK inflation linked bonds. US and UK real yields remain close to the cycle highs of 2022.

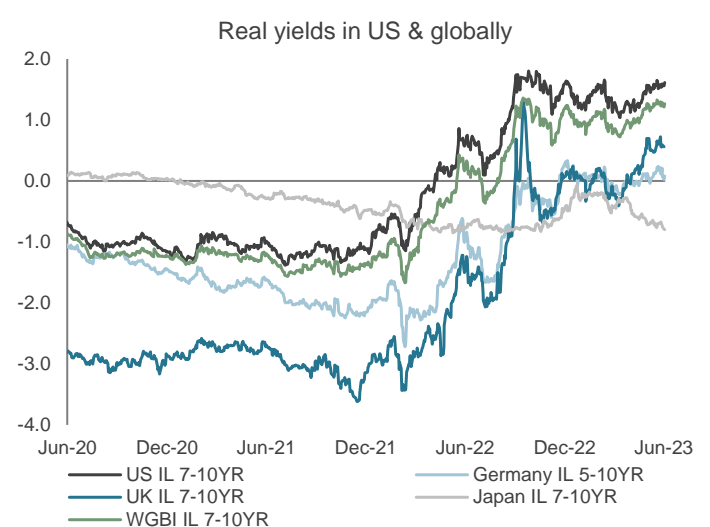


Chart 3: Deep inversion of G7 yield curves continues, led by the US 10s/2s, and the March steepening after the banking crisis stabilised. BoJ curve control continues to keep the JGB curve positively sloped.

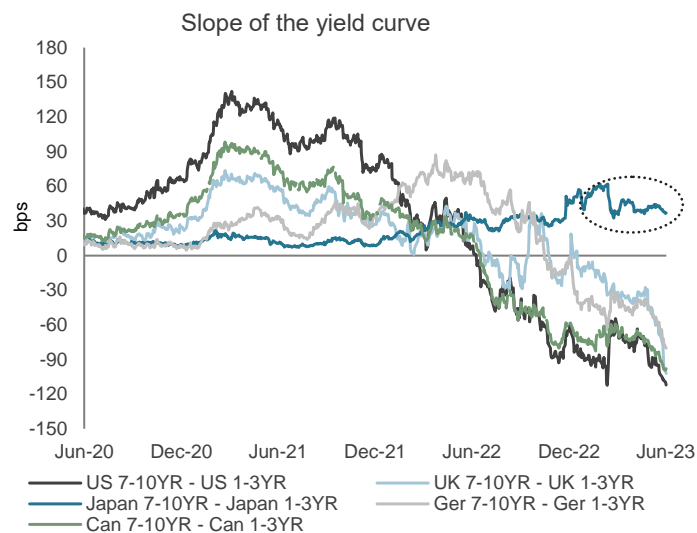


Chart 4: It is a similar story with inversion in long maturities, with Japan the exception. With yields near 15-year highs, investor concern over re-investment risks may be keeping curves inverted.

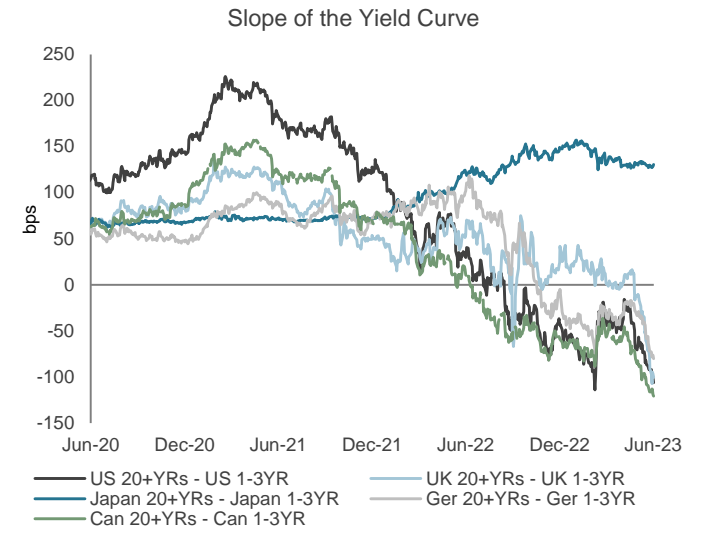


Chart 5: Inflation breakevens moved higher in the UK and Japan in June, while remaining stable near 2% elsewhere. This is in line with persistently higher inflation in the UK particularly, and Japan.

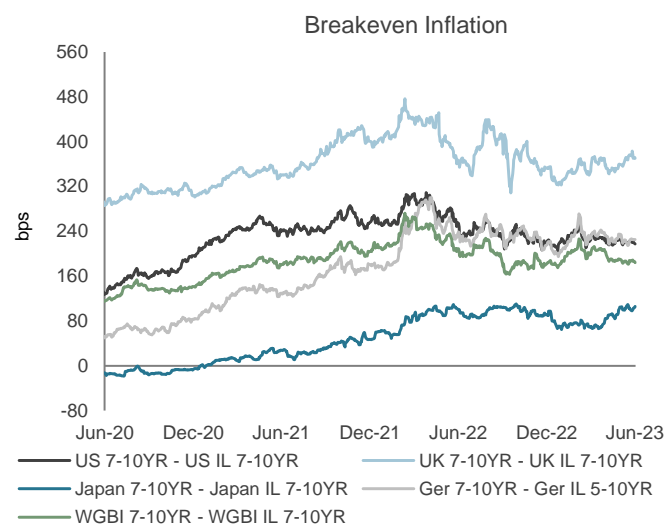


Chart 6: Global inflation breakevens of all tenors have converged near 2%, after a period of much higher short-dated breakevens. There is little evidence of inflation expectations destabilising.



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# Yield Spread and Credit Spread Analysis

Chart 1: US sovereign spreads widened versus Japan in Q2, but fell sharply versus the UK, after the spike in gilt yields, taking them to new post-Covid lows. Spreads widened versus Bunds.

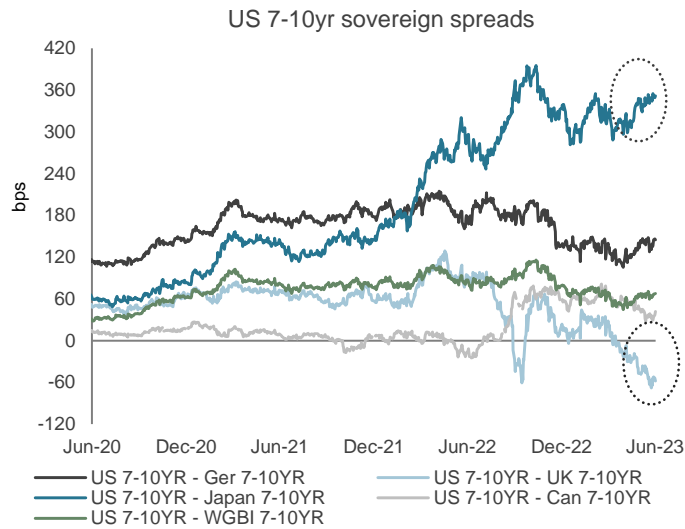


Chart 2: Peripheral Eurozone spreads fell, with Italy a strong performer, helped by lower energy prices, political stability, and support from the ECB's transmission protection instrument.

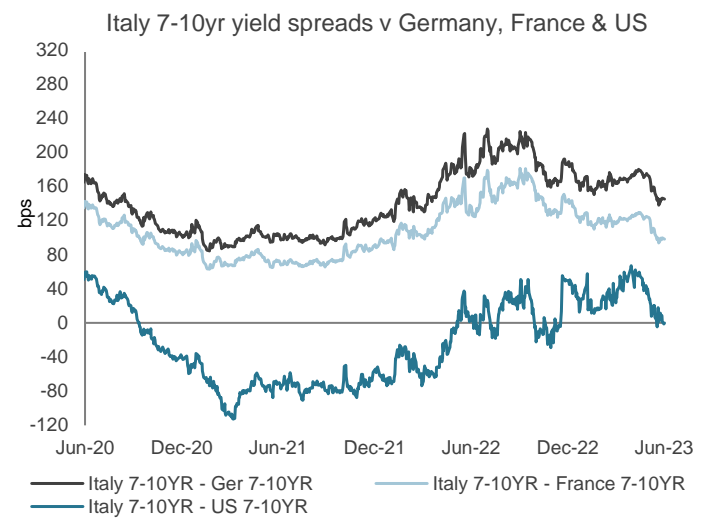


Chart 3: EM spreads remain at, or near post-Covid lows, reflecting early counter-inflation action by EM than the G7, reduced re-financing risks in EM debt, and favourable external accounts.

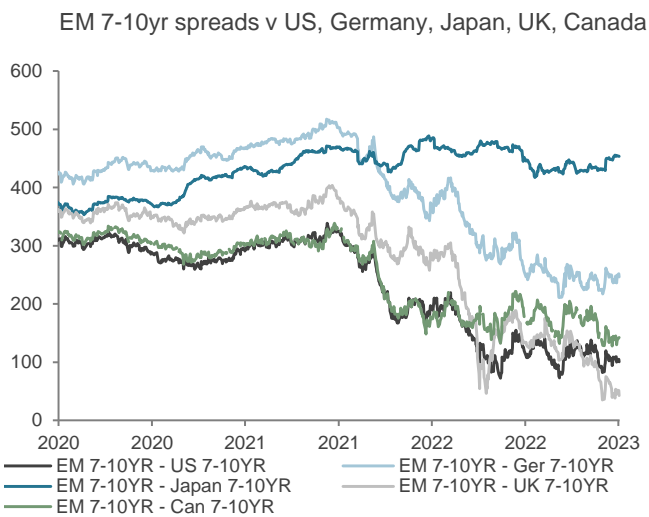


Chart 4: Chinese sovereign spreads tightened further in June, after the PBoC eased rates, and some G7 central banks raised rates. Very low inflation gives the PBoC room to ease rates further.

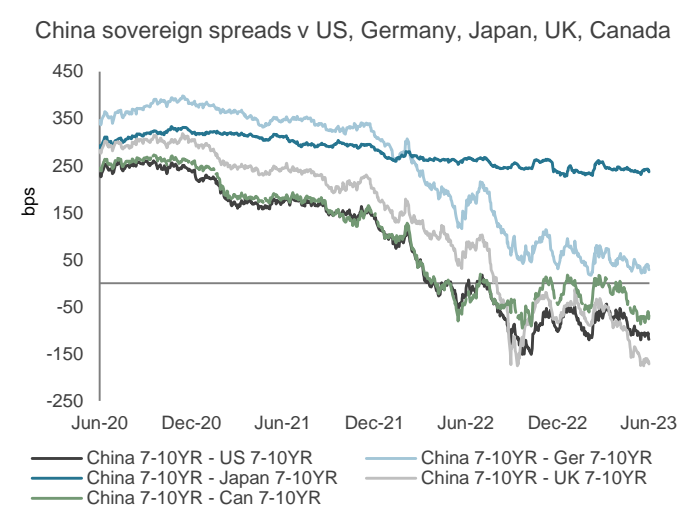


Chart 5: High yield spreads edged wider in June, led by Eurozone spreads, but they remain below Covid levels. US IG credits fell in June, perhaps reflecting the fact spreads are relatively high vs HY.

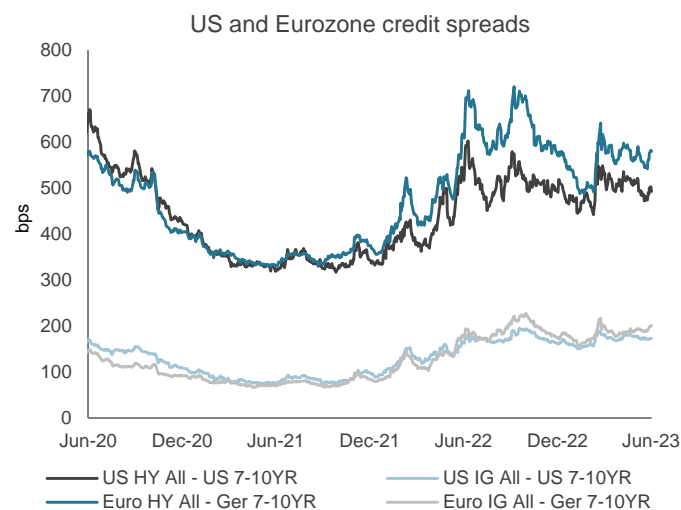


Chart 6: Chinese \$ HY spreads tightened in early June before backing up to 6000bps, after defaults by property developers and a lack of new property stimulus measures.



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# Sovereign and Climate Bonds Analysis

Chart 1: With yields surging in the UK, while near zero in Japan, and Japan's climate-WGBI weight falling, overall WGBI spreads narrowed sharply versus climate WGBI in June, led by 1-3 years.

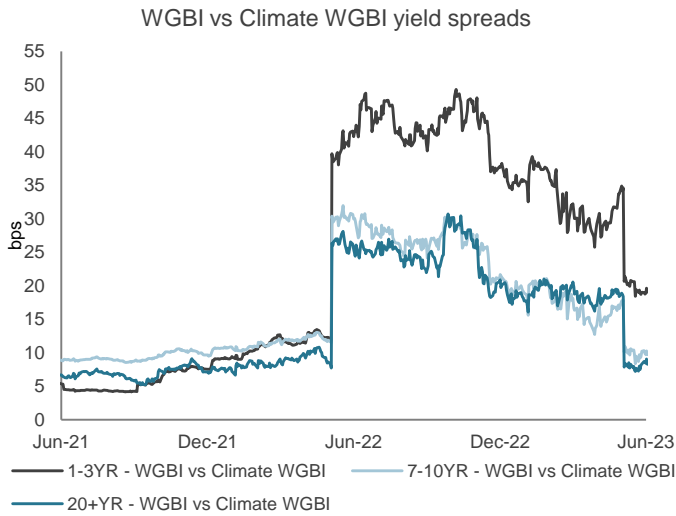


Chart 2: Both a decrease in Japan's overweight in Climate WGBI vs WGBI and an increase in UK's overweight were notable in the June re-weightings, after the UK issued more green gilts.

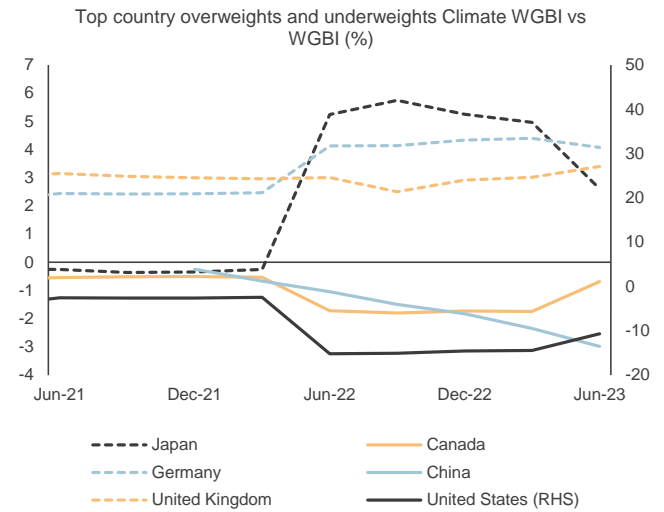


Chart 3: Within IG credit, green corporates are underweight in higher-rated sectors of AAA/AA vs global peers, and overweight most in the BBB sector (54.7% vs 51.4%).

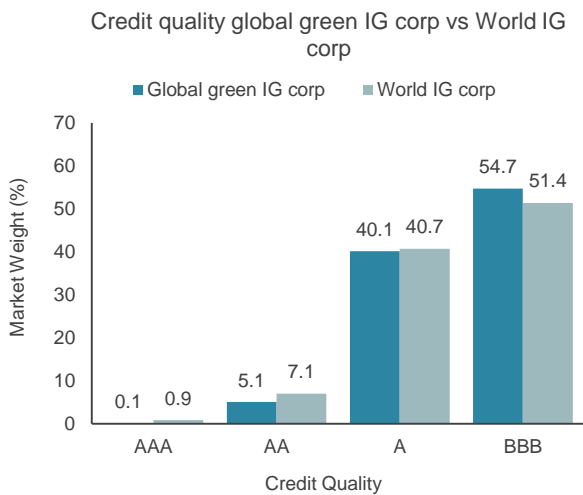


Chart 4: The opposite is seen in HY – higher rated BB bonds have a much larger share compared with global peers, 89.2% vs 54.5%, suggesting better credit quality for HY green corporates.

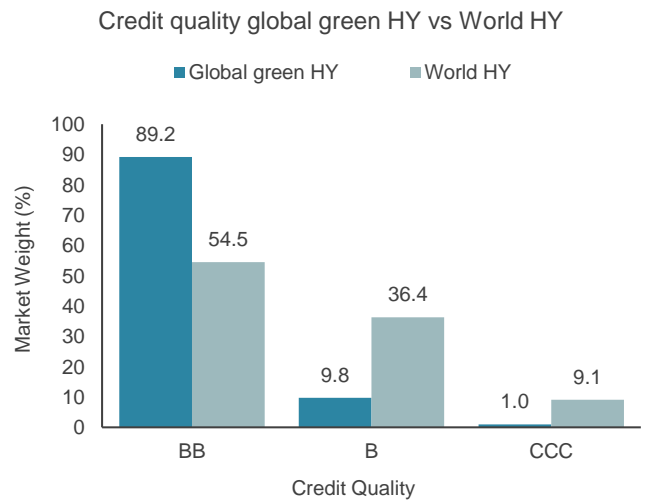


Chart 5: Euro green bonds dominate currency weights in the Global Green index at 68.3%, in contrast to the low USD weight (18%). This is reversed in WorldBIG with a USD weight of 55%.

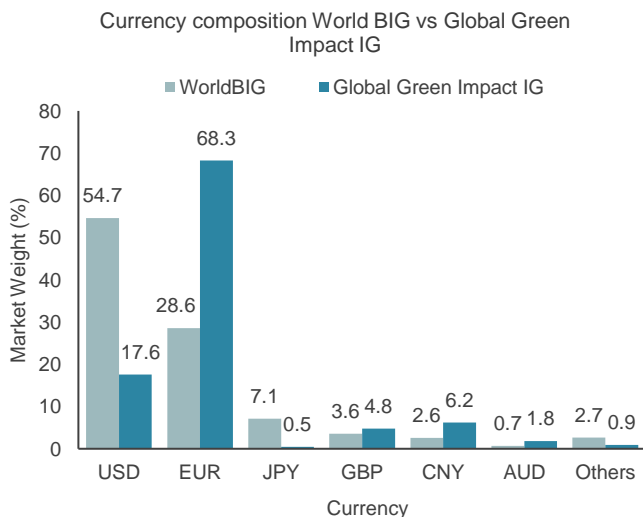
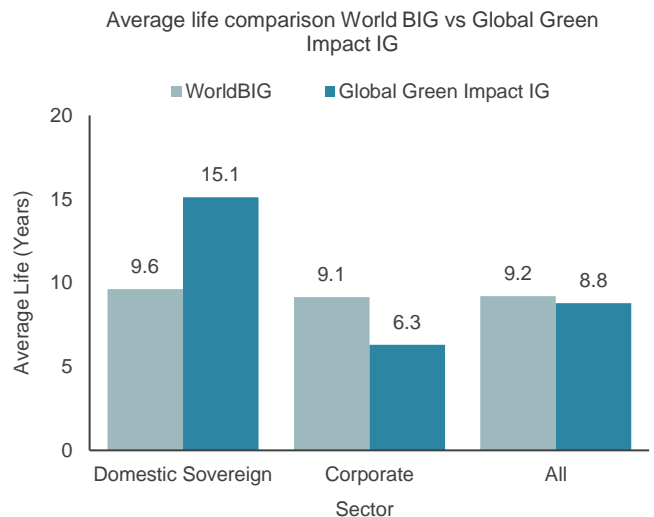


Chart 6: Breakdown of Global Green & WorldBIG indices shows differences in average life for different components. Corporates offset the Sovereign impact in boosting Global Green average life.



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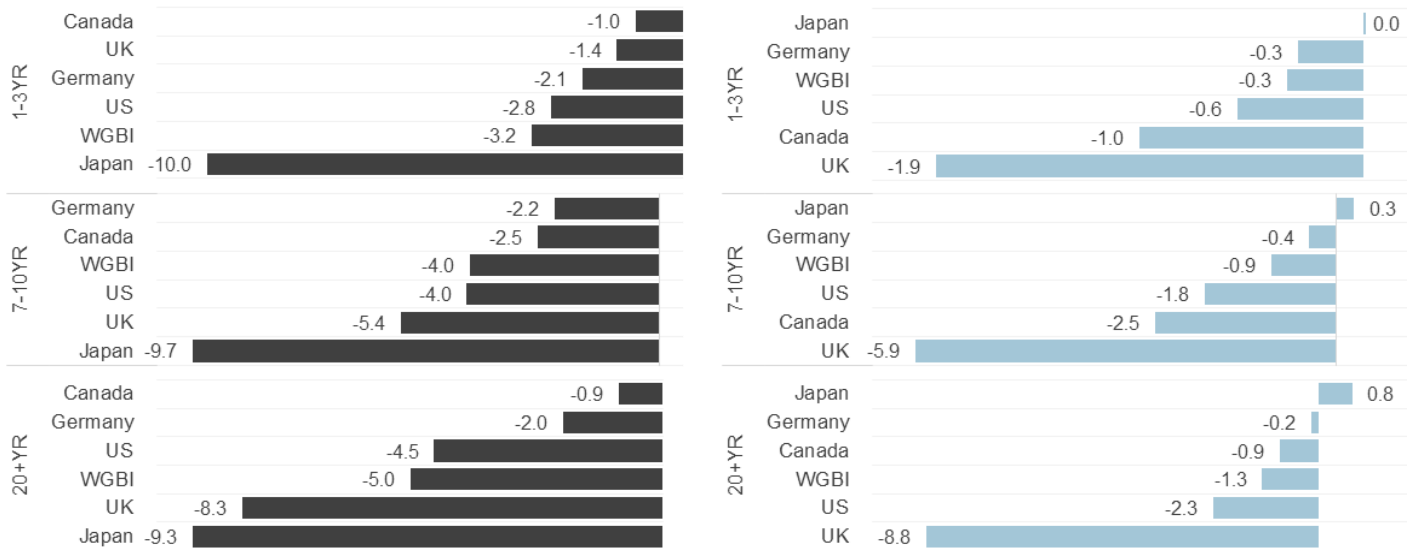
# Global Bond Market Returns – 3M & YTD % (CAD, LC, TR) as of June 30, 2023

Most government bonds returns were lower in the last three months, including 10/2s in Canada, driven by higher inflation and rates. Currency moves affected overseas returns in Canadian dollars. 10/2s UK gilts underperformed most in local currency terms, but losses were reduced by sterling strength. The significant yen depreciation turned modest JGB returns into losses. YTD, long Canadian and German conventionals performed best.

3M returns show the impact of severe yen weakness with the currency falling 10% versus the Canadian dollar, even though JGB returns were modestly positive in yen terms. The euro 2% depreciation vs Canadian dollar also eroded Bund returns (see page 18).

## CONVENTIONAL BONDS

3M CAD    3M LCY

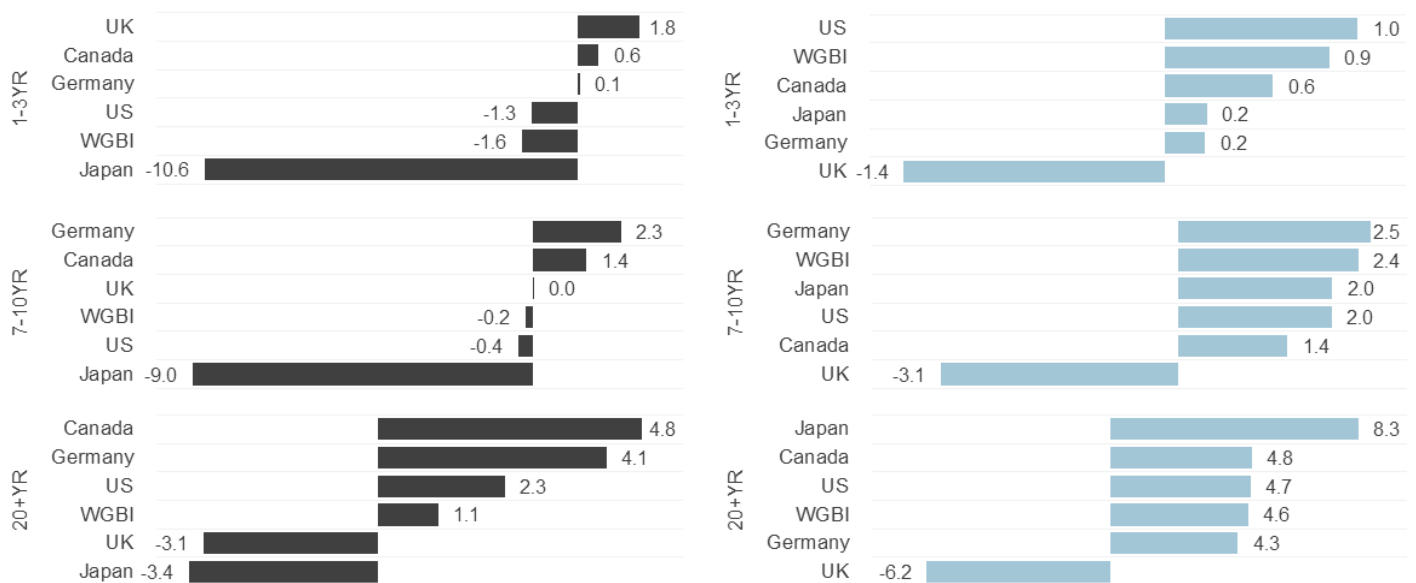


## INFLATION LINKED BONDS



## CONVENTIONAL BONDS

YTD CAD    YTD LCY



## INFLATION LINKED BONDS



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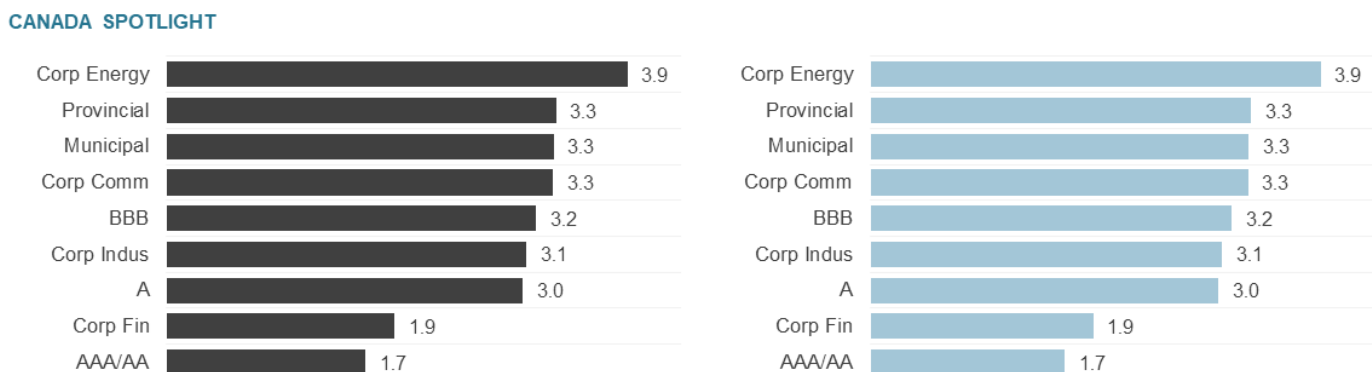
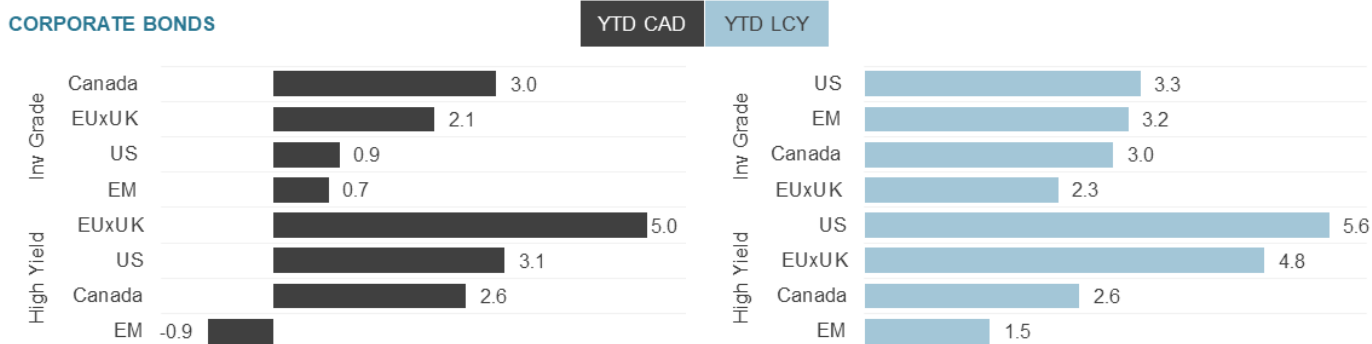
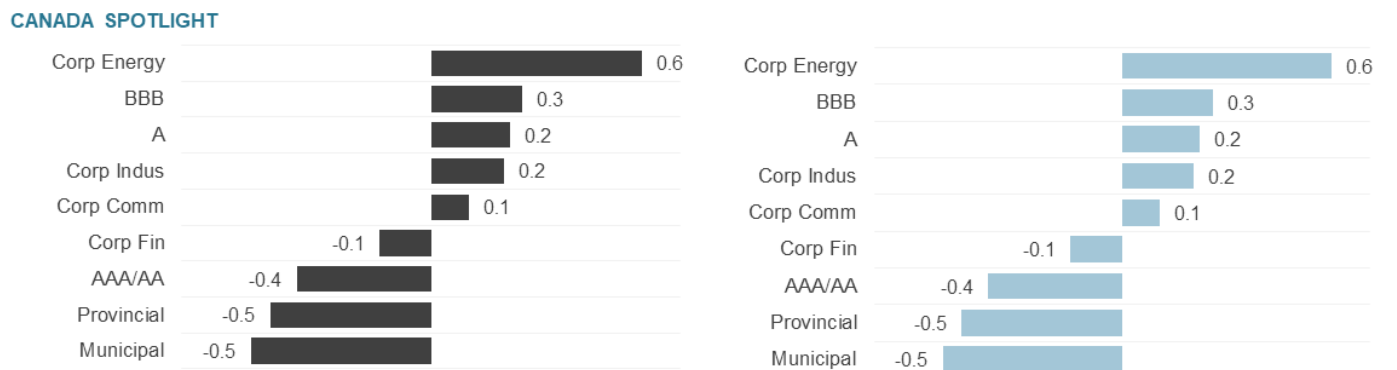
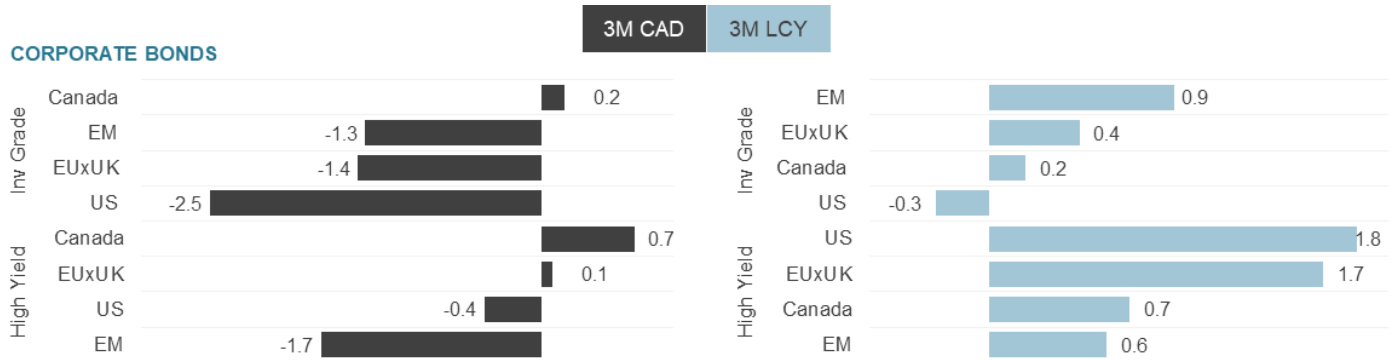


# Corporate Bond Returns – 3M & YTD % (CAD, LC, TR) as of June 30, 2023

Returns for both investment grade and high yield credit were mostly lower in Q2, except in Canada, which were flat. This was mostly due to the stronger Canadian dollar reducing overseas returns in Canadian dollar terms.

US IG corporates lost 2.5% in Canadian terms in Q2, while Canadian investment grade corporate returns were flat. EM high yield credits lost 2% in Canadian dollars versus a modest rise of 0.6% in local currency terms over the same period.

Provincials and Municipals finished Q2 modestly lower. YTD, Canadian corporate returns have averaged about 3%, with energy corporates outperforming, with a nearly 4% gain. Euro HY gained most up 5% in Canadian dollars.



Indices used: FTSE Canada Corporate Bond Index (AAA/AA, A, BBB, Financial, Communication, Industrial, Energy, Overall), FTSE Canada High Yield Bond Index, FTSE Canada Provincial Bond Index, FTSE Canada Municipal Bond Index.

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## Top and Bottom Bond Returns – 3M & 12M % (CAD, TR) as of June 30, 2023

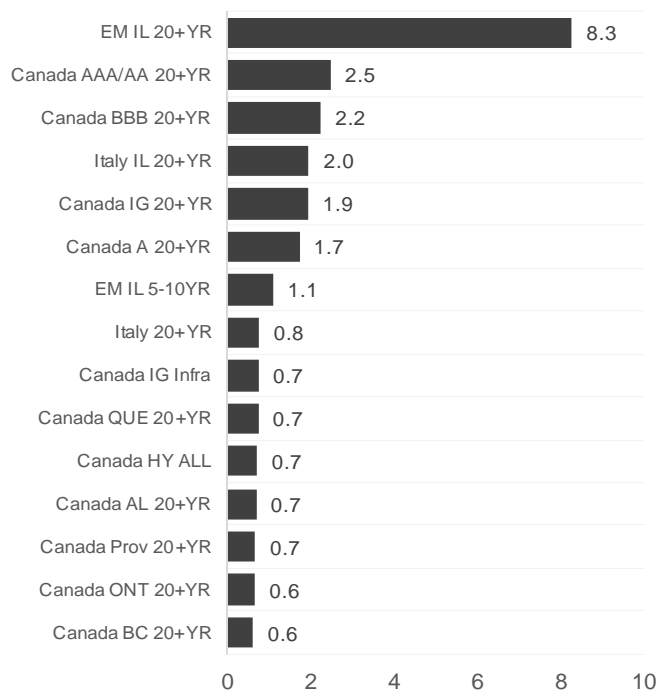
EM and Italian inflation-linked (IL) bonds and long Canadian IG corporate bonds topped the performance table over the last three months. Pronounced yen weakness drove negative JGB returns of up to 10%, while long Australian conventionals lost 11% in Canadian dollars. On 12M, long UK gilts and inflation linked lost most, while EM IL were the best performers.

Currencies have been big drivers of fixed income returns in 2023, reflecting differences in inflation and policy cycles. EM inflation-linked performed strongly, after early counter-inflation tightening.

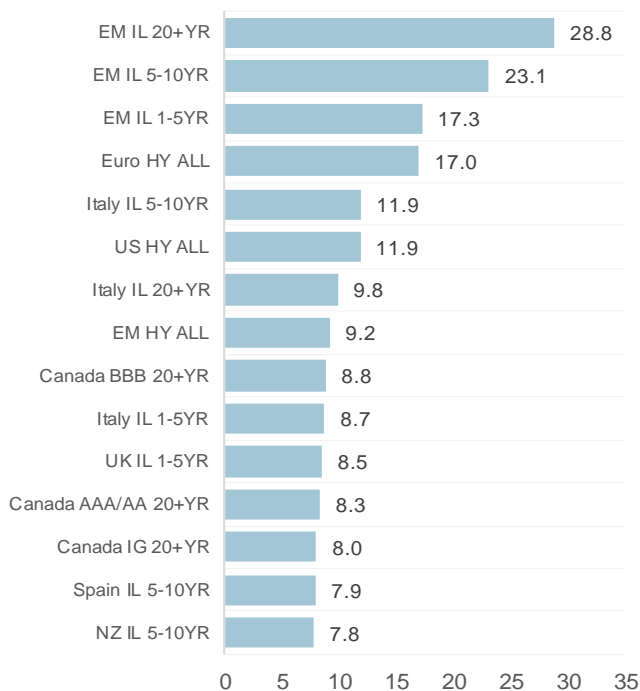
YTD, long UK gilts lost 22-24% and WGBI IL and conventional were also down 6-13%. EM inflation-linked bonds remained the top performers over the last twelve months, followed by Euro and US high yield credits, which benefited from the risk rally.

3M CAD 12M CAD

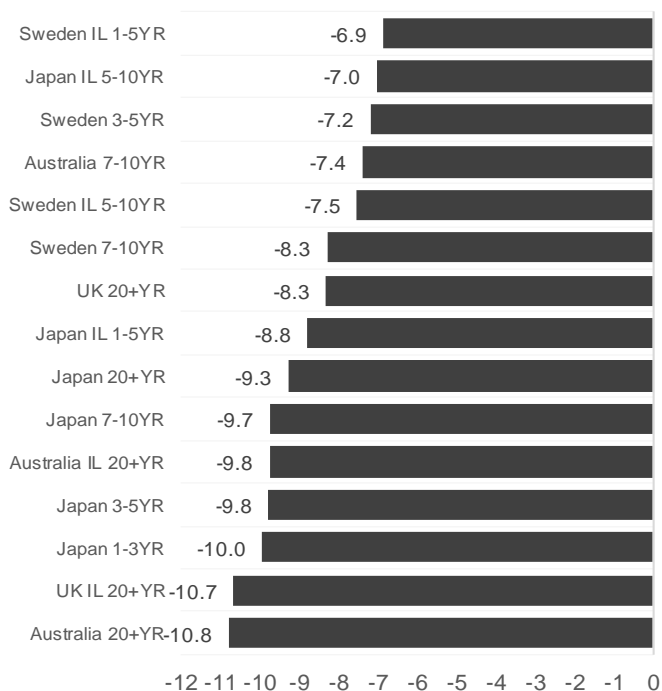
### Top 15



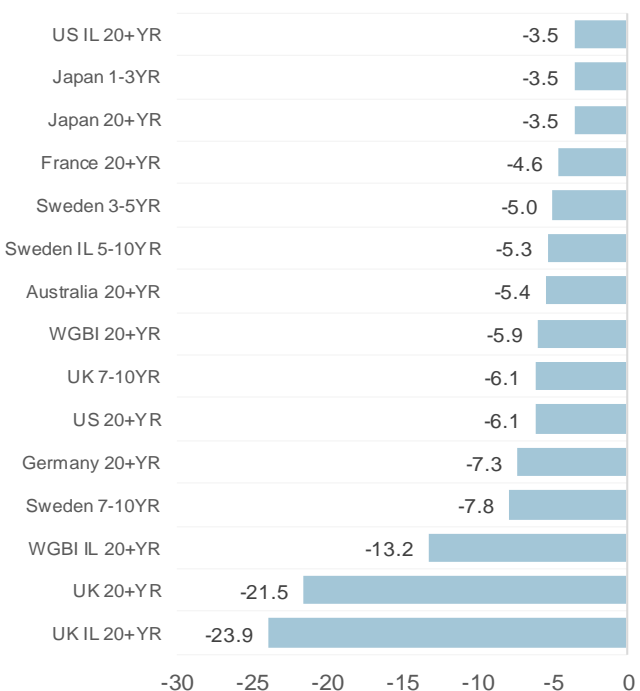
### Top 15



### Bottom 15



### Bottom 15



Source: FTSE Russell. All data as of June 30, 2023. This analysis is taken from 130+ FTSE Russell sub-indices. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

# Appendix – Canadian Bond Market Returns % (CAD vs USD, TR)

## Government and corporate bond returns

Top 15% Bottom 15%

		3M		6M		YTD		12M	
		Local	USD	Local	USD	Local	USD	Local	USD
<b>Government</b>	1-3YR	-1.00	1.25	0.58	2.99	0.58	2.99	0.57	-1.96
	7-10YR	-2.54	-0.32	1.43	3.86	1.43	3.86	2.25	-0.32
	20+YR	-0.87	1.38	4.75	7.26	4.75	7.26	3.60	1.00
<b>Inflation-Linked</b>	20+YR	-0.05	2.23	-0.43	1.96	-0.43	1.96	3.51	0.91
<b>Corporate</b>	1-3YR	-0.26	2.01	1.69	4.12	1.69	4.12	2.54	-0.04
	7-10YR	-0.84	1.42	2.49	4.95	2.49	4.95	4.28	1.65
	20+YR	1.93	4.25	6.17	8.71	6.17	8.71	8.01	5.30
<b>AAA/AA</b>	1-3YR	-0.36	1.91	1.49	3.92	1.49	3.92	1.97	-0.59
	7-10YR	-1.41	0.83	1.39	3.82	1.39	3.82	2.49	-0.09
	20+YR	2.46	4.79	7.06	9.62	7.06	9.62	8.30	5.58
	All	-0.38	1.89	1.70	4.13	1.70	4.13	2.31	-0.26
<b>A</b>	1-3YR	-0.29	1.97	1.61	4.05	1.61	4.05	2.47	-0.11
	7-10YR	-0.91	1.34	2.46	4.91	2.46	4.91	4.04	1.43
	20+YR	1.71	4.03	6.04	8.58	6.04	8.58	7.45	4.75
	All	0.22	2.50	3.04	5.51	3.04	5.51	4.13	1.51
<b>BBB</b>	1-3YR	-0.17	2.10	1.84	4.28	1.84	4.28	2.79	0.20
	7-10YR	-0.76	1.50	2.60	5.06	2.60	5.06	4.57	1.93
	20+YR	2.23	4.55	6.34	8.88	6.34	8.88	8.81	6.08
	All	0.26	2.54	3.16	5.63	3.16	5.63	4.75	2.12
<b>Sectors</b>	Comm	0.11	2.38	3.30	5.77	3.30	5.77	5.39	2.74
	Energy	0.59	2.88	3.93	6.42	3.93	6.42	5.87	3.20
	Fin	-0.15	2.13	1.94	4.39	1.94	4.39	2.75	0.17
	Indus	0.20	2.48	3.07	5.54	3.07	5.54	4.54	1.91
	Infra	0.73	3.02	4.63	7.14	4.63	7.14	5.77	3.11
	RE	-0.32	1.95	1.95	4.40	1.95	4.40	2.93	0.34
	Secur	-0.14	2.13	1.70	4.13	1.70	4.13	2.16	-0.41
<b>Provinces (All)</b>	1-3YR	-1.09	1.16	0.78	3.20	0.78	3.20	1.17	-1.38
	7-10YR	-1.84	0.39	1.98	4.42	1.98	4.42	3.36	0.76
	20+YR	0.66	2.95	5.33	7.85	5.33	7.85	5.81	3.15
	All	-0.45	1.81	3.32	5.80	3.32	5.80	4.02	1.40
<b>Ontario</b>	1-3YR	-1.05	1.20	0.80	3.22	0.80	3.22	1.21	-1.34
	7-10YR	-1.80	0.43	2.06	4.51	2.06	4.51	3.54	0.93
	20+YR	0.65	2.94	5.49	8.02	5.49	8.02	6.22	3.54
	All	-0.51	1.76	3.26	5.74	3.26	5.74	4.07	1.46
<b>Alberta</b>	1-3YR	-1.19	1.05	0.70	3.12	0.70	3.12	1.15	-1.40
	7-10YR	-1.94	0.29	1.78	4.22	1.78	4.22	3.09	0.49
	20+YR	0.68	2.97	4.75	7.26	4.75	7.26	4.21	1.59
	All	-0.57	1.69	2.80	5.26	2.80	5.26	3.04	0.44
<b>Quebec</b>	1-3YR	-1.09	1.16	0.81	3.23	0.81	3.23	1.18	-1.37
	7-10YR	-1.87	0.36	1.95	4.39	1.95	4.39	3.23	0.64
	20+YR	0.73	3.02	5.37	7.89	5.37	7.89	5.81	3.15
	All	-0.33	1.94	3.56	6.04	3.56	6.04	4.25	1.63
<b>BC</b>	1-3YR	-1.11	1.14	0.74	3.16	0.74	3.16	0.91	-1.63
	7-10YR	-1.89	0.34	1.93	4.37	1.93	4.37	3.39	0.79
	20+YR	0.61	2.89	5.20	7.72	5.20	7.72	5.71	3.05
	All	-0.55	1.71	3.33	5.80	3.33	5.80	3.95	1.33

Indices used: FTSE Canada Non-Agency Bond Index (Short, Mid, Long), FTSE Canada RRB Canada Index, FTSE Canada Corporate Bond Index (Short, Mid, Long, AAA/AA, A, BBB), FTSE Canada Provincial Bond Index, FTSE Canada High Yield Bond Index.

Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Global Bond Market Returns % (CAD vs LC, TR)

### Government bond returns

Top 15% Bottom 15%

Green highlight indicates highest 15%, red indicates lowest 15%.

		1M		3M		YTD		12M	
		Local	CAD	Local	CAD	Local	CAD	Local	CAD
US	1-3YR	-0.48	-3.12	-0.56	-2.77	1.04	-1.32	0.16	2.74
	7-10YR	-1.26	-3.87	-1.84	-4.02	2.01	-0.38	-3.31	-0.82
	20+YR	0.15	-2.51	-2.35	-4.52	4.73	2.28	-8.47	-6.11
	IG All	0.31	-2.35	-0.27	-2.49	3.30	0.88	1.46	4.08
	HY All	1.77	-0.93	1.84	-0.43	5.55	3.08	9.06	11.87
UK	1-3YR	-1.08	-1.22	-1.91	-1.39	-1.42	1.76	-2.68	4.51
	7-10YR	-1.66	-1.80	-5.90	-5.40	-3.11	0.01	-12.55	-6.08
	20+YR	2.38	2.24	-8.80	-8.31	-6.17	-3.15	-26.94	-21.54
EUR	IG All	-0.40	-0.77	0.45	-1.37	2.31	2.14	0.17	7.23
	HY All	0.48	0.13	1.67	0.09	4.78	4.99	9.23	17.00
Japan	1-3YR	0.03	-5.87	0.01	-9.95	0.23	-10.64	0.03	-3.55
	7-10YR	0.36	-5.56	0.25	-9.74	2.02	-9.05	0.33	-3.26
	20+YR	0.39	-5.53	0.76	-9.28	8.34	-3.41	0.03	-3.55
China	1-3YR	0.25	-4.55	1.05	-6.53	1.58	-5.06	2.76	-2.85
	7-10YR	0.58	-4.24	2.04	-5.62	2.86	-3.87	4.51	-1.20
	20+YR	1.21	-3.64	3.83	-3.96	4.78	-2.07	8.19	2.28
EM	1-3YR	0.40	-3.24	1.34	-4.31	2.20	-1.94	4.22	2.42
	7-10YR	0.70	-2.52	2.29	-2.92	4.65	0.54	7.78	5.67
	20+YR	1.44	-2.30	3.29	-3.29	5.17	-0.54	9.45	5.87
	IG All	0.13	-2.53	0.92	-1.32	3.15	0.74	2.82	5.47
	HY All	1.78	-0.92	0.59	-1.65	1.50	-0.88	6.41	9.16
Germany	1-3YR	-0.64	-1.01	-0.29	-2.10	0.22	0.05	-2.40	4.49
	7-10YR	-1.09	-1.47	-0.38	-2.18	2.52	2.35	-6.29	0.32
	20+YR	0.91	0.53	-0.16	-1.97	4.29	4.11	-13.40	-7.29
Italy	1-3YR	-0.55	-0.92	-0.08	-1.90	0.98	0.81	-1.03	5.95
	7-10YR	0.49	0.11	1.31	-0.52	6.57	6.39	-1.21	5.76
	20+YR	3.48	3.09	2.61	0.75	10.52	10.33	-6.39	0.21
Spain	1-3YR	-0.60	-0.97	-0.31	-2.12	0.56	0.39	-2.18	4.72
	7-10YR	-0.57	-0.95	-0.12	-1.94	3.17	2.99	-4.52	2.21
	20+YR	1.81	1.43	0.04	-1.78	4.43	4.26	-9.23	-2.83
France	1-3YR	-0.71	-1.09	-0.32	-2.13	0.51	0.34	-2.46	4.42
	7-10YR	-0.87	-1.25	-0.28	-2.09	2.62	2.44	-5.42	1.25
	20+YR	1.32	0.94	0.34	-1.48	3.83	3.66	-10.88	-4.60
Sweden	1-3YR	-0.60	-2.50	-0.34	-6.45	0.24	-5.56	-0.67	-3.33
	7-10YR	-2.15	-4.02	-2.30	-8.29	-0.77	-6.52	-5.29	-7.82
	20+YR					0.00	0.00	0.00	0.00
Australia	1-3YR	-1.00	-0.87	-1.52	-4.30	0.10	-4.04	0.66	-0.05
	7-10YR	-3.02	-2.90	-4.70	-7.39	1.95	-2.27	0.74	0.03
	20+YR	-3.79	-3.67	-8.22	-10.81	2.34	-1.90	-4.75	-5.41
NZ	1-3YR	-0.57	-1.06	-0.14	-4.39	1.43	-4.04	0.75	1.83
	7-10YR	-2.12	-2.60	-1.74	-5.92	1.11	-4.35	-1.57	-0.51
Canada	1-3YR	-0.41	-0.41	-1.00	-1.00	0.58	0.58	0.57	0.57
	7-10YR	-0.62	-0.62	-2.54	-2.54	1.43	1.43	2.25	2.25
	20+YR	0.92	0.92	-0.87	-0.87	4.75	4.75	3.60	3.60

Indices used: FTSE Canada Non-Agency Bond Index (Short, Mid, Long).

Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Global Bond Market Returns % (CAD vs LC, TR)

### Inflation-Linked Bond Returns

Top 15% Bottom 15%

Green highlight indicates top 15%, red indicates bottom 15%.

		1M		3M		YTD		12M	
		Local	CAD	Local	CAD	Local	CAD	Local	CAD
US	1-5YR	-0.34	-2.98	-0.96	-3.16	1.36	-1.01	-0.71	1.85
	5-10YR	-0.73	-3.36	-2.11	-4.28	2.04	-0.35	-1.73	0.81
	20+YR	0.58	-2.08	-1.49	-3.68	5.58	3.11	-5.97	-3.54
UK	1-5YR	-0.23	-0.37	-1.14	-0.61	-0.11	3.11	1.01	8.47
	5-10YR	0.35	0.20	-3.20	-2.68	0.99	4.24	-4.18	2.90
	20+YR	6.52	6.37	-11.15	-10.68	-6.53	-3.52	-29.11	-23.87
EUxUK	1-5YR	-0.93	-1.30	-0.41	-2.22	0.31	0.15	-2.06	4.85
	5-10YR	-1.00	-1.38	0.07	-1.74	2.74	2.57	-1.92	5.00
	20+YR	-1.08	-1.46	0.21	-1.61	7.40	7.23	-5.61	1.04
Japan	1-5YR	0.78	-5.17	1.32	-8.78	2.19	-8.90	3.21	-0.48
	5-10YR	1.38	-4.60	3.26	-7.03	3.88	-7.39	4.33	0.59
EM	1-5YR	2.11	0.80	1.29	-1.50	6.05	6.40	13.75	17.27
	5-10YR	2.76	2.07	2.81	1.09	6.67	8.67	17.24	23.14
	20+YR	2.63	4.91	6.56	8.25	9.69	16.51	14.96	28.82
Germany	1-5YR	-0.93	-1.30	-0.41	-2.22	0.31	0.15	-2.06	4.85
	5-10YR	-1.00	-1.38	0.07	-1.74	2.74	2.57	-1.92	5.00
	20+YR	-1.08	-1.46	0.21	-1.61	7.40	7.23	-5.61	1.04
Italy	1-5YR	-0.49	-0.86	-0.01	-1.82	1.41	1.25	1.56	8.72
	5-10YR	0.79	0.40	1.97	0.12	6.76	6.58	4.55	11.92
	20+YR	3.45	3.06	3.84	1.95	16.99	16.79	2.61	9.84
Spain	1-5YR	-0.87	-1.25	-0.43	-2.23	0.78	0.61	0.36	7.44
	5-10YR	-0.61	-0.98	0.04	-1.78	2.76	2.59	0.83	7.94
France	1-5YR	-0.94	-1.31	-0.36	-2.17	0.53	0.36	-2.61	4.26
	5-10YR	-1.16	-1.54	-0.17	-1.98	2.63	2.46	-1.74	5.19
	20+YR	0.21	-0.17	1.86	0.01	7.54	7.37	-2.58	4.29
Sweden	1-5YR	-0.70	-2.60	-0.78	-6.86	0.54	-5.28	2.77	0.01
	5-10YR	-1.72	-3.60	-1.48	-7.52	0.30	-5.51	-2.71	-5.31
Australia	1-5YR	-1.20	-1.07	-1.11	-3.90	2.79	-1.46	4.14	3.41
	5-10YR	-2.53	-2.40	-2.76	-5.50	4.26	-0.05	6.14	5.40
	20+YR	-5.16	-5.04	-7.14	-9.76	5.42	1.06	4.34	3.61
NZ	5-10YR	-1.27	-1.76	-0.62	-4.85	4.15	-1.47	6.62	7.77
	20+YR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada	20+YR	0.08	0.08	-0.05	-0.05	-0.43	-0.43	3.51	3.51

Indices used: FTSE Canada RRB Canada Bond Index.

Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

# Appendix – Canadian Historical Bond Yields % as of June 30, 2023

## Canadian Bond Yields

Top 15% Bottom 15%

		1-3YR	7-10YR	20+YR	All Mat
<b>Canada</b>	Current	4.34	3.34	3.13	
	3M Ago	3.58	2.87	3.03	
	6M Ago	3.90	3.30	3.31	
	12M Ago	3.08	3.21	3.18	
<b>IL</b>	Current			1.54	
	3M Ago			1.28	
	6M Ago			1.33	
	12M Ago			1.23	
<b>Provincial</b>	Current	4.43	3.99	4.11	4.15
	3M Ago	3.72	3.54	4.08	3.84
	6M Ago	4.03	3.97	4.32	4.15
	12M Ago	3.44	3.86	4.22	3.93
<b>Ontario</b>	Current	4.41	4.00	4.10	4.16
	3M Ago	3.74	3.54	4.07	3.83
	6M Ago	4.05	3.97	4.32	4.15
	12M Ago	3.45	3.88	4.24	3.92
<b>Quebec</b>	Current	4.47	3.98	4.06	4.11
	3M Ago	3.69	3.53	4.04	3.83
	6M Ago	3.99	3.96	4.28	4.13
	12M Ago	3.38	3.82	4.18	3.93
<b>Alberta</b>	Current	4.40	3.99	4.14	4.15
	3M Ago	3.69	3.52	4.10	3.82
	6M Ago	3.99	3.95	4.29	4.11
	12M Ago	3.46	3.86	4.14	3.86
<b>BC</b>	Current	4.50	3.97	4.09	4.11
	3M Ago	3.67	3.51	4.05	3.80
	6M Ago	3.97	3.95	4.28	4.12
	12M Ago	3.41	3.87	4.19	3.92
<b>Municipal</b>	Current	4.49	4.07	4.34	4.30
	3M Ago	3.77	3.61	4.29	3.96
	6M Ago	4.08	4.05	4.58	4.29
	12M Ago	3.45	3.92	4.45	4.01
<b>Corporate</b>	Current	5.54	5.23	5.05	5.36
	3M Ago	4.99	4.88	5.08	5.00
	6M Ago	5.28	5.18	5.33	5.27
	12M Ago	4.57	5.05	5.23	4.83
<b>High Yield</b>	Current				7.72
	3M Ago				7.37
	6M Ago				7.34
	12M Ago				6.98

		1-5YR	5-10YR	20+YR	All Mat
<b>AAA/AA</b>	Current	5.24	4.97	4.50	5.21
	3M Ago	4.64	4.50	4.58	4.63
	6M Ago	4.94	4.70	4.78	4.89
	12M Ago	4.08	4.46	4.71	4.17
<b>A</b>	Current	5.49	4.93	4.78	5.21
	3M Ago	4.91	4.56	4.80	4.83
	6M Ago	5.16	4.92	5.06	5.10
	12M Ago	4.52	4.74	4.96	4.68
<b>BBB</b>	Current	5.74	5.42	5.45	5.58
	3M Ago	1.44	1.17	1.53	5.27
	6M Ago	2.09	1.68	1.82	5.54
	12M Ago	0.29	0.63	1.16	5.14
<b>Comm</b>	Current	5.20	5.48	5.61	5.34
	3M Ago	4.82	5.55	5.01	5.12
	6M Ago	5.18	5.78	5.31	5.42
	12M Ago	5.05	5.81	4.62	5.16
<b>Energy</b>	Current	5.61	5.32	5.15	5.34
	3M Ago	5.01	5.03	5.18	5.09
	6M Ago	5.31	5.35	5.42	5.37
	12M Ago	4.62	5.30	5.36	5.13
<b>Financial</b>	Current	5.54	5.34	5.12	5.52
	3M Ago	4.99	4.99	5.25	5.00
	6M Ago	5.26	5.10	5.45	5.25
	12M Ago	4.55	4.91	5.22	4.61
<b>Industrial</b>	Current	5.45	5.08	5.10	5.26
	3M Ago	4.88	4.78	5.23	4.94
	6M Ago	5.26	5.09	5.45	5.26
	12M Ago	4.51	4.87	5.41	4.82
<b>Infrastructure</b>	Current	5.02	4.87	4.83	4.86
	3M Ago	4.50	4.46	4.83	4.72
	6M Ago	4.83	4.80	5.10	5.01
	12M Ago	4.08	4.65	4.96	4.80
<b>Securitization</b>	Current	5.55			5.55
	3M Ago	4.93			4.93
	6M Ago	5.25			5.25
	12M Ago	4.34			4.34

Indices used: FTSE Canada Non-Agency Bond Index (Short, Mid, Long), FTSE Canada RRB Canada Index, FTSE Canada Corporate Bond Index (Short, Mid, Long, AAA/AA, A, BBB), FTSE Canada Provincial Bond Index, FTSE Canada High Yield Bond Index.

Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

# Appendix – Historical Bond Yields % as of June 30, 2023

## Global Bond Yields

Top 15% Bottom 15%

Green highlight indicates top 15%, red indicates bottom 15%.

		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	5.01	4.31	3.85	3.95	2.45	1.72	1.68	5.53	8.61
	3M Ago	4.20	3.72	3.49	3.76	1.44	1.17	1.53	5.25	8.45
	6M Ago	4.54	4.13	3.88	4.11	2.09	1.68	1.82	5.50	9.00
	12M Ago	2.96	3.03	2.97	3.28	-0.04	0.64	1.14	4.74	8.86
UK	Current	5.36	5.04	4.38	4.35	1.78	0.72	0.90		
	3M Ago	3.79	3.55	3.43	3.80	0.00	-0.27	0.35		
	6M Ago	3.50	3.65	3.69	3.92	-0.68	0.15	0.49		
	12M Ago	1.94	1.73	2.01	2.51	-2.87	-1.70	-0.71		
Japan	Current	-0.10	-0.01	0.29	1.21	-1.64	-0.87			
	3M Ago	-0.09	0.02	0.30	1.22	-1.30	-0.51			
	6M Ago	0.03	0.15	0.48	1.50	-1.22	-0.54			
	12M Ago	-0.09	-0.02	0.21	1.19	-0.99	-0.67			
China	Current	2.09	2.33	2.66	3.08					
	3M Ago	2.31	2.56	2.84	3.25					
	6M Ago	2.28	2.53	2.85	3.26					
	12M Ago	2.19	2.47	2.82	3.34					
EM	Current	3.67	4.04	4.79	4.42	4.15	4.07	4.86	5.95	11.86
	3M Ago	3.62	4.37	4.69	4.52	2.59	3.67	5.15	5.77	11.18
	6M Ago	3.78	4.38	4.95	4.61	2.79	3.04	5.15	5.92	11.40
	12M Ago	3.64	4.35	4.87	4.82	3.61	3.71	5.26	5.08	12.30
Germany	Current	3.17	2.66	2.37	2.36	0.96	0.19	-0.06		
	3M Ago	2.69	2.36	2.24	2.33	-0.02	-0.12	-0.15		
	6M Ago	2.56	2.53	2.54	2.51	0.40	0.34	0.18		
	12M Ago	0.56	0.32	0.64	1.07	-2.33	-1.57	-1.07		
Italy	Current	3.79	3.71	3.87	4.25	1.74	1.78	1.70		
	3M Ago	3.27	3.43	3.88	4.34	0.45	1.50	1.74		
	6M Ago	3.34	3.72	4.38	4.72	1.16	2.19	2.18		
	12M Ago	1.34	1.90	2.69	3.18	-2.47	0.29	1.01		
France	Current	3.21	2.94	2.85	3.19	0.88	0.47	0.55		
	3M Ago	2.83	2.66	2.70	3.17	-0.29	0.05	0.53		
	6M Ago	2.85	2.82	2.97	3.30	0.15	0.44	0.77		
	12M Ago	0.81	0.85	1.25	2.02	-2.47	-1.28	-0.34		
Sweden	Current	3.43	2.94	2.61	0.00	1.18	0.91			
	3M Ago	2.85	2.56	2.25	0.00	0.09	0.32			
	6M Ago	2.80	2.65	2.37	0.00	-0.24	0.25			
	12M Ago	1.74	1.55	1.38	0.00	-1.59	-1.45			
Australia	Current	4.17	3.99	4.02	4.36	1.04	1.47	1.85		
	3M Ago	3.03	3.00	3.27	3.82	0.01	0.82	1.43		
	6M Ago	3.43	3.62	4.01	4.37	0.60	1.45	1.88		
	12M Ago	2.92	3.18	3.38	3.79	-0.41	0.75	1.51		
NZ	Current	5.08	4.67	4.61	4.77	1.53	2.15	0.00	0.00	0.00
	3M Ago	4.78	4.37	4.23	4.37	1.04	1.72	0.00	0.00	0.00
	6M Ago	5.00	4.62	4.46	4.54	1.54	2.06	0.00	0.00	0.00
	12M Ago	3.54	3.77	3.89	4.29	0.39	1.65	0.00	0.00	0.00
Canada	Current	4.34		3.34	3.13			1.54	5.36	7.72
	3M Ago	3.58		2.87	3.03			1.28	5.00	7.37
	6M Ago	3.90		3.30	3.31			1.33	5.27	7.34
	12M Ago	3.08		3.21	3.18			1.23	4.83	6.98

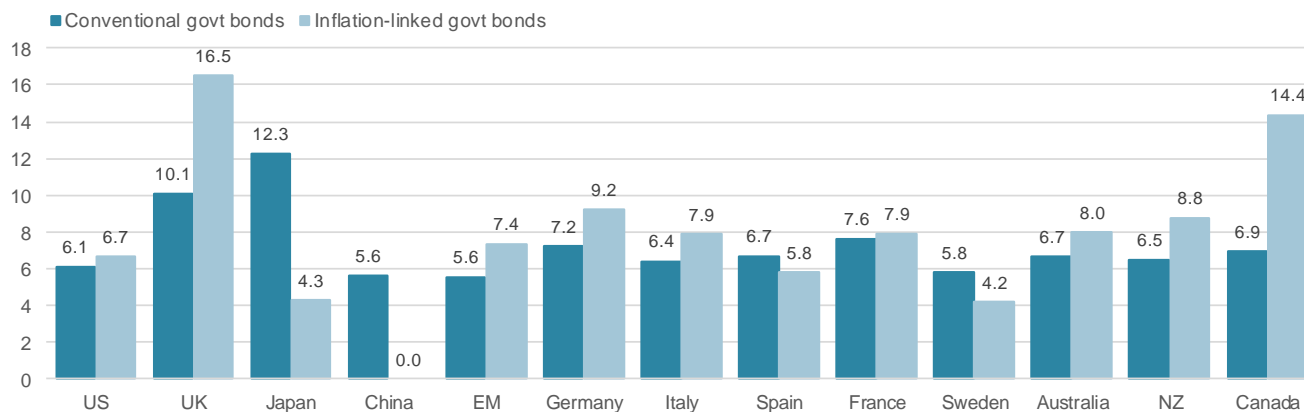
Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Duration and Market Value (USD, Bn)

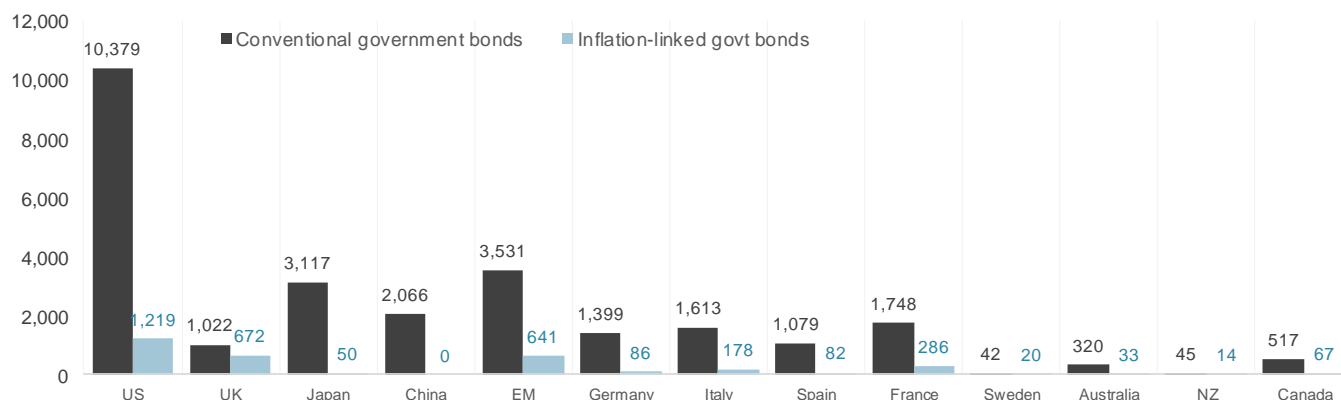
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
<b>US</b>	3.7	7.5	17.5	<b>6.1</b>	2,282.7	1,053.3	1,291.9	<b>10,379.5</b>	7.0	21.6	<b>6.7</b>	401.0	124.4	<b>1219.3</b>
<b>UK</b>	3.5	7.4	18.6	<b>10.1</b>	137.6	150.1	296.1	<b>1,021.6</b>	6.7	28.1	<b>16.5</b>	129.6	258.3	<b>672.2</b>
<b>Japan</b>	3.9	7.9	24.0	<b>12.3</b>	345.7	360.9	698.4	<b>3,117.1</b>	7.2		<b>4.3</b>	17.8		<b>49.7</b>
<b>China</b>	3.7	7.6	17.6	<b>5.6</b>	494.9	311.8	243.2	<b>2,066.2</b>						
<b>EM</b>	3.5	7.0	15.9	<b>5.6</b>	776.12	619.98	343.05	<b>3,530.8</b>	5.5	13.9	<b>7.4</b>	136.5	167.1	<b>640.8</b>
<b>Germany</b>	3.8	7.7	20.5	<b>7.2</b>	294.31	230.26	155.36	<b>1,399.1</b>	7.3	22.0	<b>9.2</b>	42.0	19.2	<b>86.5</b>
<b>Italy</b>	3.7	7.3	16.4	<b>6.4</b>	304.59	265.68	154.27	<b>1,613.1</b>	8.1	26.5	<b>7.9</b>	55.2	5.7	<b>178.1</b>
<b>Spain</b>	3.6	7.4	17.2	<b>6.7</b>	218.31	192.38	108.40	<b>1,078.9</b>	6.9		<b>5.8</b>	22.5		<b>81.8</b>
<b>France</b>	3.9	7.8	20.5	<b>7.6</b>	304.76	295.56	211.53	<b>1,747.8</b>	6.8	24.6	<b>7.9</b>	102.7	21.7	<b>286.1</b>
<b>Sweden</b>	3.9	7.8		<b>5.8</b>	13.15	8.61		<b>42.0</b>	5.9		<b>4.2</b>	9.4		<b>20.3</b>
<b>Australia</b>	3.7	7.8	17.6	<b>6.7</b>	50.66	87.55	15.00	<b>319.7</b>	7.3	22.5	<b>8.0</b>	9.5	2.6	<b>32.7</b>
<b>NZ</b>	4.0	7.7	17.2	<b>6.5</b>	9.23	10.46	2.29	<b>44.6</b>	6.4		<b>8.8</b>	3.1		<b>13.7</b>
<b>Canada</b>		7.3	18.9	<b>6.9</b>		186.00	88.00	<b>517.4</b>		14.4	<b>14.4</b>		67.0	<b>67.0</b>

	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
<b>US</b>	11.0	8.8	7.4	6.7	<b>7.2</b>	74.0	451.3	2,591.1	3,292.0	<b>6,408.4</b>	4.0	1,162.9
<b>Euro</b>	6.4	4.9	4.7	4.3	<b>4.5</b>	9.5	186.1	1,160.6	1,445.9	<b>2,802.1</b>	3.1	418.8
<b>EM</b>		5.9	4.9	5.1	<b>5.1</b>		45.08	222.29	330.9	<b>598.2</b>	3.3	191.2

Average Duration



Total Market Value (USD Billions)



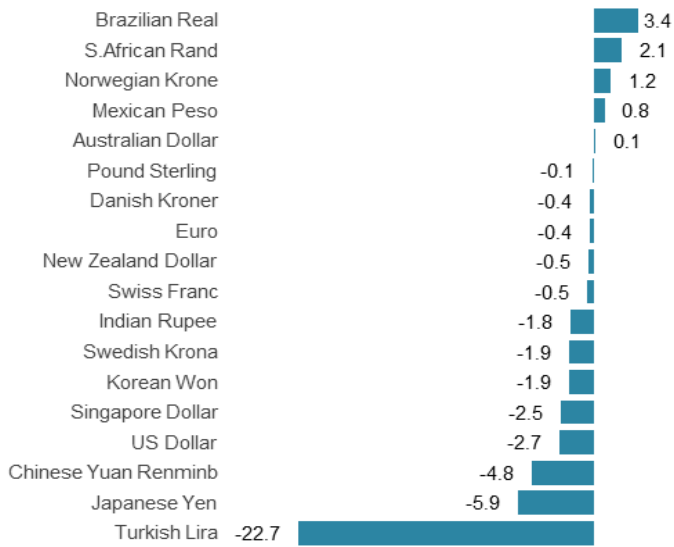
Indices used: FTSE Canada Non-Agency Bond Index (Mid, Long, Overall), FTSE Canada RRB Canada Bond Index.

Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indexes used for each market. For professional investors only.

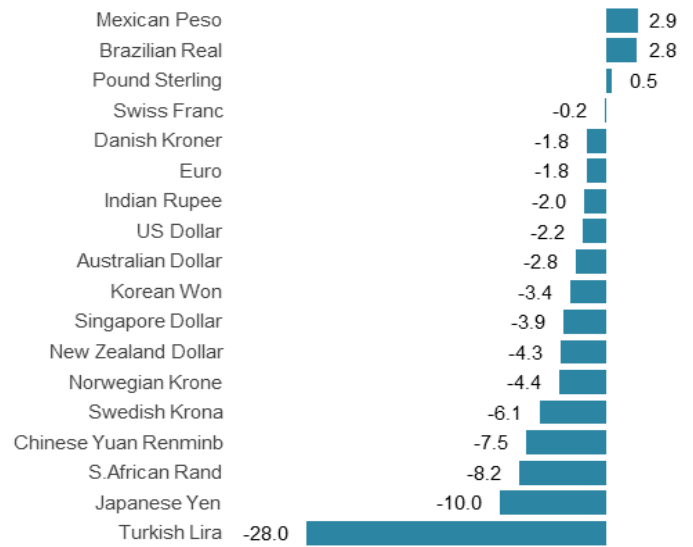


## Appendix – Foreign Exchange Returns % as of June 30, 2023

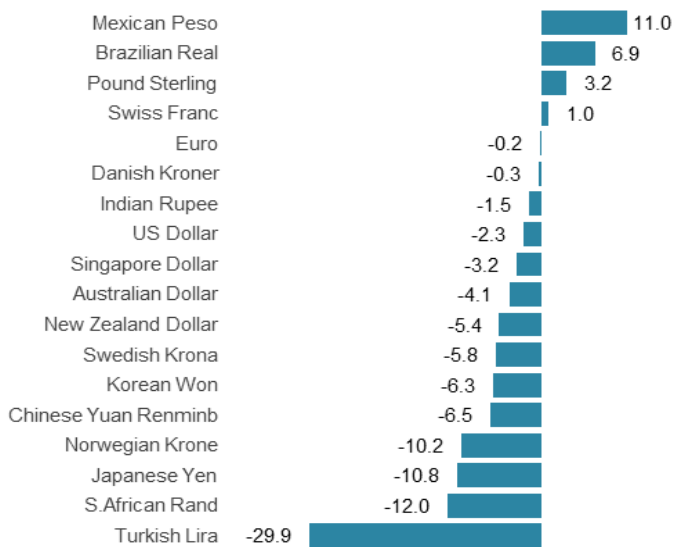
### FX Moves vs CAD - 1M



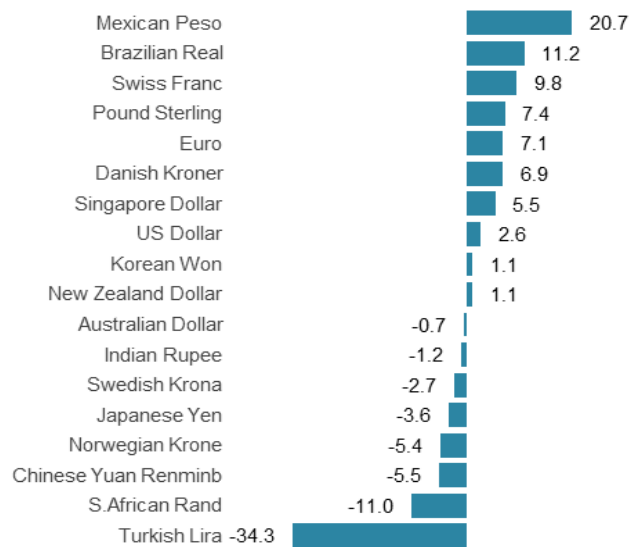
### FX Moves vs CAD - 3M



### FX Moves vs CAD - YTD



### FX Moves vs CAD - 12M



Source: FTSE Russell and Refinitiv. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Glossary

### Bond markets are based on the following indices:

FTSE Canada Universe Bond Index for all Canadian government and corporate bond markets\*

FTSE Canada High Yield Bond Index for the Canadian high yield market

FTSE Canada RRB Canada Index for the Canadian inflation-linked bond market

FTSE World Government Bond Index (WGBI) for all global government bond markets

FTSE World Inflation-Linked Securities Index (WorldILSI) for all global inflation-linked bond markets

FTSE US Broad Investment-Grade Bond Index (USBIG®) for the US corporate bond market

FTSE US High-Yield Market Index for the US high yield bond market

FTSE Euro Broad Investment-Grade Bond Index (EuroBIG®) for the Euro-denominated corporate bond market

FTSE European High-Yield Market Index for the European high yield market

FTSE Chinese Government and Policy Bank Bond Index (CNGPBI) for the Chinese government bond market

FTSE Emerging Markets Inflation-Linked Securities Index (EMILSI) for the emerging markets inflation-linked bond market

FTSE Emerging Markets Broad Bond Index (EMUSDBBI) for the emerging markets corporate bond market

### List of Abbreviations used in charts:

IL = Inflation-linked bonds

IG = Investment-grade bonds

HY = High-yield bonds

BPS = Basis points

EM = Emerging market

LC = Local currency

### \* FTSE Canada Bond Indexes

1-3YR = Short Term Bond Indices

7-10YR = Mid Term Bond Indices

20+ YR = Long Term Bond Indices

Total Returns

Growth/Inflation

Financial Conditions

Govt. Bonds

Corporate Bonds

Spreads

Inflation-Linked

Credit/Equities

Appendix



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