

Fixed Income Insights

MONTHLY REPORT - AUGUST 2023 | CANADA EDITION

FOR PROFESSIONAL INVESTORS ONLY

Canadian bonds underperform as BoC tightening nears completion

Canadian economic activity slowed more broadly in July, as unemployment increased, wage growth slowed and inflation fell sharply. But the BoC raised rates further, taking out more insurance against inflation rebounding. Canadian governments and corporates, notably longs, underperformed in July.

Macro and policy backdrop – Despite rapid disinflation, the BoC tightens to safeguard low inflation regime

The BoC and other central banks tightened despite falling inflation, as buoyant services reduced recession risks. (page 2)

Canadian govts and credit – Curve inversions deepen after tightening as term premium falls further

Spreads for 20/2s fell through 10/2s, after the BoC raised rates by 25bp for the second time since June. Deep curve inversions normally signal high recession risks, but QE may have reduced signalling power of yield curve. (pages 3-4)

Global yields and spreads – G7 yields back up, after more tightening; JGB curve steepens sharply

Deep curve inversion and negative carry remain, reflecting re-investment risk, as tightening cycles near end. (pages 5-6)

Sovereign and climate bonds – “Greenium” stabilises after duration and country weight changes

Higher country weights for longer duration sovereign bond markets, notably Japan and UK, are key to spread moves. (page 7)

Performance – July proves to be a difficult month for Canadian bond returns

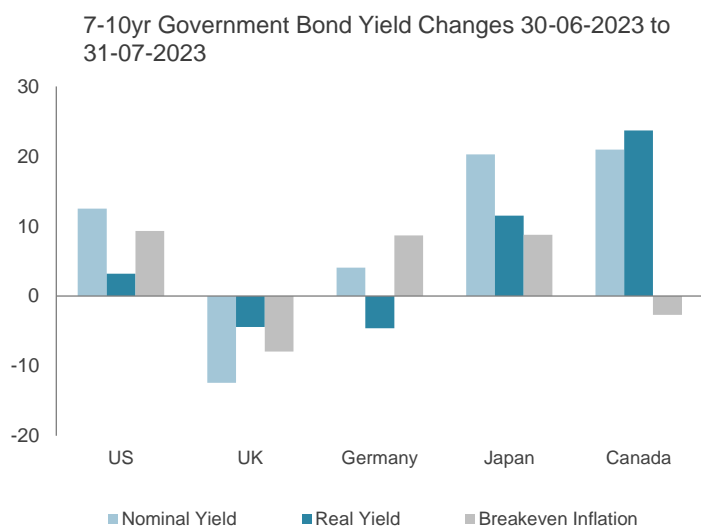
Except for HY credits, most Canadian corporates, munis and provis, and govts, notably longs, registered negative returns in July. (pages 8-10)

Appendix (from page 11)

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

Chart 1: Breakeven inflation has remained positive in most regions, except Canada and the UK in July, despite falling inflation (ex Japan).

Chart 2: Gold has recovered since the Ukraine shock and Fed, and other central banks, tightening began. Oil prices fell on weaker growth outlook.



Source: FTSE Russell and Refinitiv. Latest data available as of July 31, 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

Divergence in G7 growth and inflation continues, with rapid disinflation seen in Canada, the US and China. Even so, the BoC raised rates for a second time since pausing policy in April, identifying ‘robust demand and tight labour markets’ as concerns. With economic activity clearly slowing, a policy pause at the next September BoC meeting is not excluded.

Although growth rates slowed sharply, only the Eurozone briefly fell into recession in Q1, and the US and Canada avoided one, buoyed by services, and the resilient consumer (Chart 1). As a result, Canada’s Consensus GDP forecast for 2023 was revised upwards to 1.3% in July, from 0.7% in the previous month.

Regional inflation rates continued to ease globally, helped by base effects. Canada’s CPI fell to 2.8% y/y in June, the lowest since March 2021 and near the BoC’s 2% price target, thanks to lower energy prices. US headline inflation also fell sharply to 3.0% y/y (from 9.1% in June 22), while Eurozone HCIP fell to 5.3% in July. Despite falling, UK CPI trailed at 7.9% y/y (Chart 2).

Following the surprise rate rise in June, the BoC raised policy rates a further 25bps in July to 5.0%. This was in line with market expectations and extended Canada’s tightening cycle, after the brief pause in March and April. The BoC pointed to strong consumption and continued tight labour markets driving inflationary pressures, especially for services (Chart 3).

Canada’s unemployment has moved higher from its cycle-low of 4.9% in June/July 2022, to 5.4% in June 2023, a level last seen in February 2022, while wage growth weakened again, suggesting cyclical inflationary pressures may be easing (Chart 4).

Chart 1: North America and Asian forecasts show no recessions, helped by the post-Covid recovery in services, and Asian policy support. Eurozone and UK risks of a had landing are higher.

Latest Consensus Real GDP Forecasts (% , July 2023)			
	2022	2023	2024
US	2.1	1.5	0.7
UK	4.1	0.2	0.7
Eurozone	3.3	0.5	1.0
Japan	1.6	1.1	1.1
China	3.0	5.5	4.8
Canada	3.5	1.3	1.0

Chart 2: Canada’s inflation fell below market expectations in June and close to the BoC’s 2% target. UK and Eurozone CPI remained well above target, despite recent declines. Japan CPI moderated.

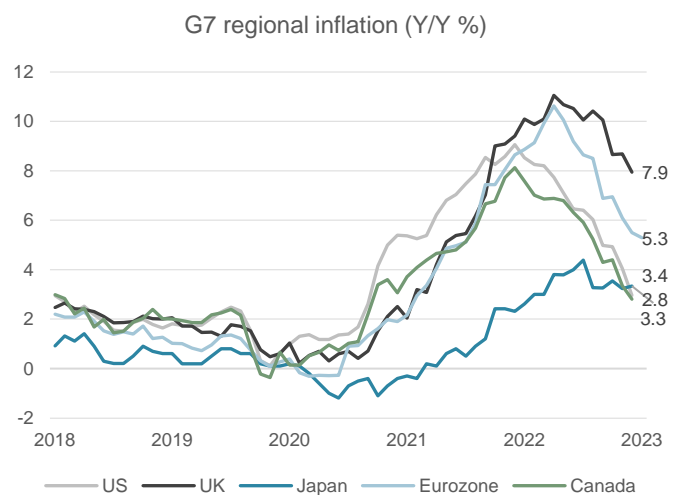


Chart 3: Central banks have synchronised rate increases in July, starting with the BoC in early July, followed by the Fed and ECB at the end of the month. Japan retained its yield curve control.

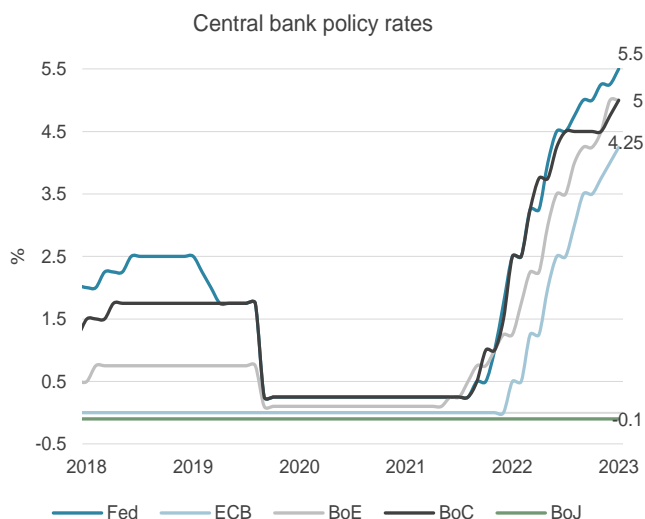
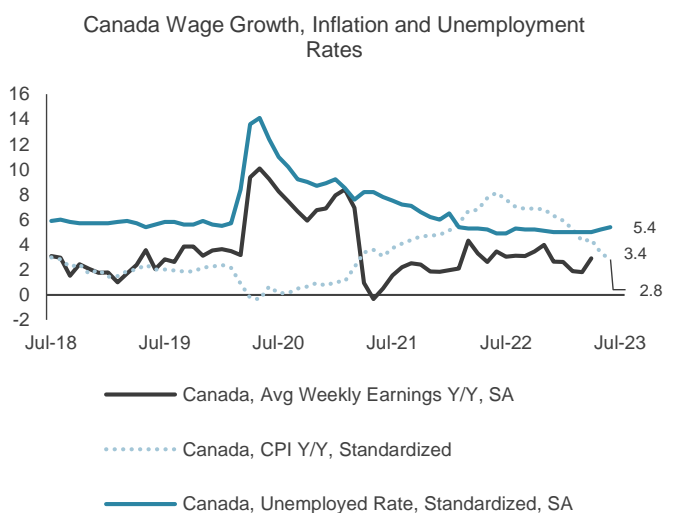


Chart 4: Latest Canadian wage inflation ticked up, highlighting low unemployment levels, despite a modest rise to 5.4% in June, and underpinning robust consumption.



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Canadian Governments, Provinces and Municipalities

Chart 1: Spreads for 20/2s fell through 10/2s, after the BoC raised rates a further 25bp. Curve inversions have not proved as reliable as recession signals in this cycle to date.

Canada govt yields: longs and mediums vs shorts

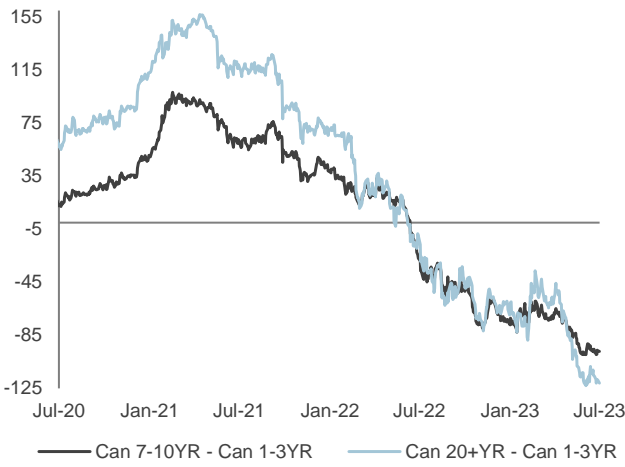


Chart 2: Canadian 7-10 year spreads continued to rise sharply vs G7 peers in July after the BoC tightened policy, with Canadian spreads trading through those in the UK and US.

7-10yr Canadian sovereign spreads

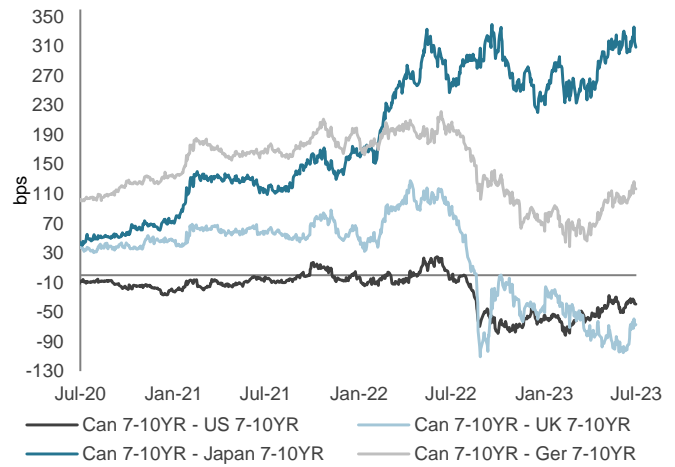


Chart 3: Long Canadian nominal and real yields have tracked closely since 2022, but nominal yields have yet to fully reflect the recent drop in inflation and weaker economic activity.

Long-dated Canadian nominal and real yields

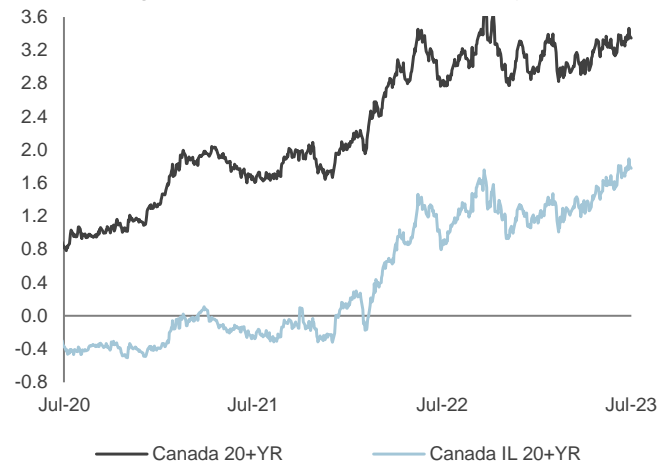


Chart 4: Evidence of Canada's economy slowing is more visible in long Canadian breakevens, which have decoupled from G7 peers since January 2023.

Selected longer dated inflation

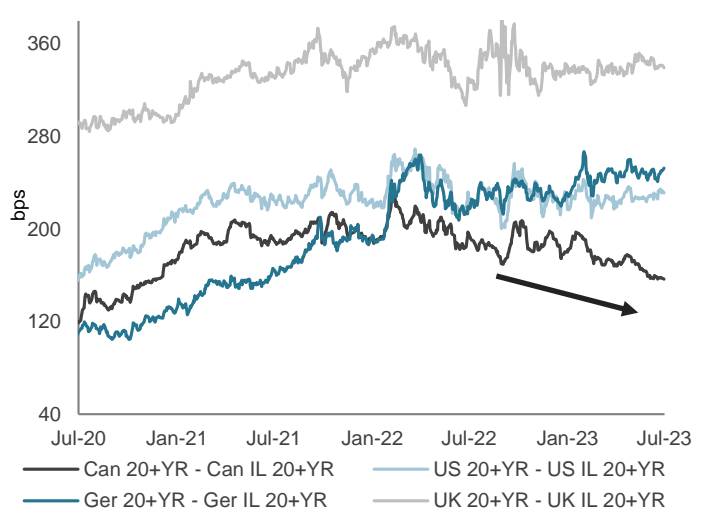


Chart 5: Provincial spreads have flatlined, but remained close to 65bp versus 7-10 year Canadian government peers, with no noticeable spread widening after the BoC rate hike in July.

Selected 7-10 yr Provincial spreads

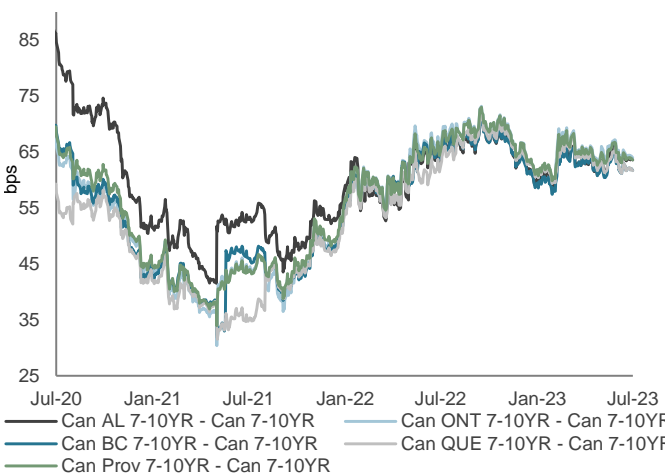
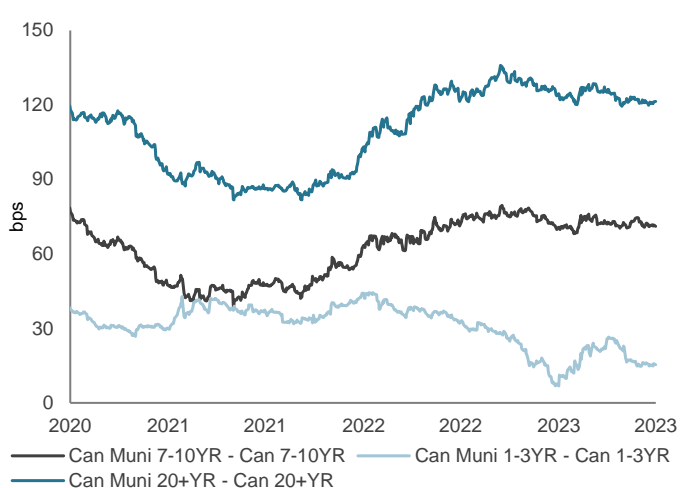


Chart 6: Short muni spreads have diverged from longer equivalents, which stabilized in July, but short government yields rose sharply after the BoC rate rise, before reversing on slowing activity.

Duration matched Municipal spreads



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Canadian Corporate Bonds

Chart 1: Canadian HY credit yields are below their 2020 peaks, like US HY. Both Canadian and US IG yields stand at higher relative levels than HY, and are close to five year highs.

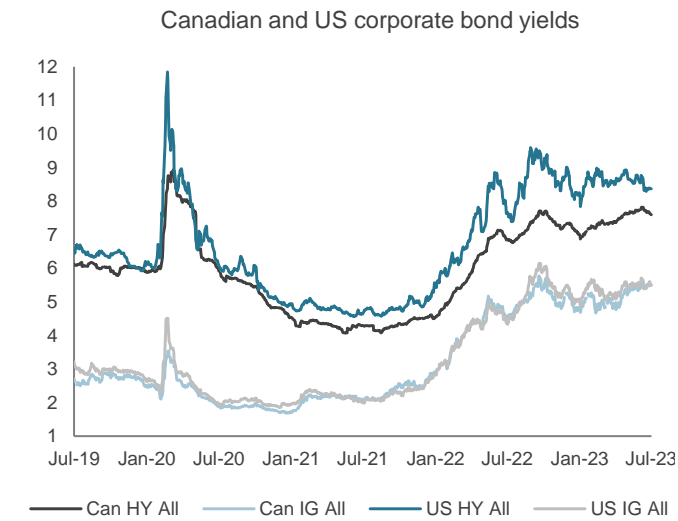


Chart 2: Canadian infrastructure spreads decoupled further from sector peers, after continuing to fall sharply in July. Real estate spreads have stabilised despite higher rates.

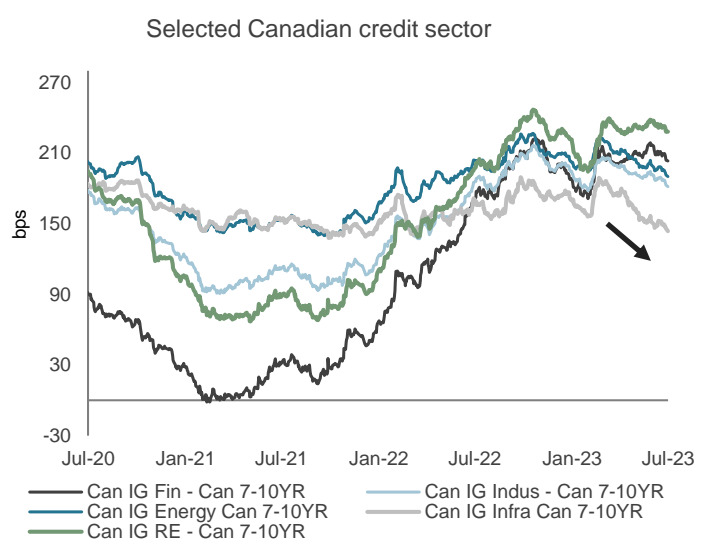


Chart 3: Canadian high yield spreads have been less volatile than US high yield credits, though both have benefited from the equity market rally as BoC and Fed policy tightening are close to ending.

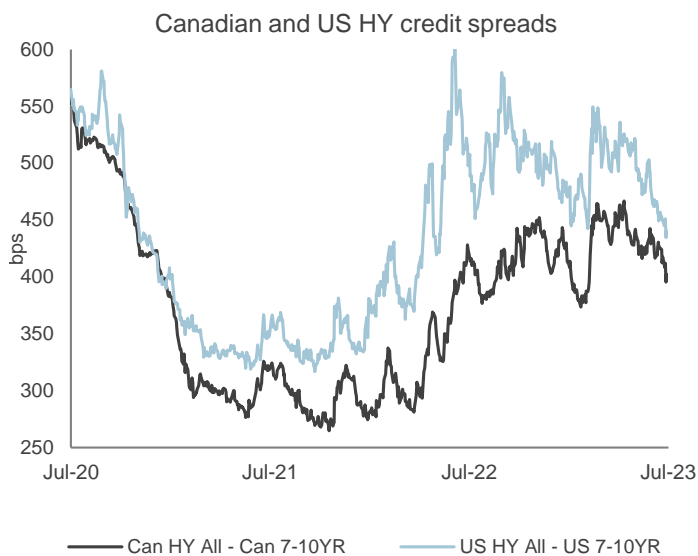


Chart 4: AAA spreads have been hit hardest in the period of rising government bond yields, with spreads near Covid highs. BBB credits have not yet suffered from higher default rate fears YTD.

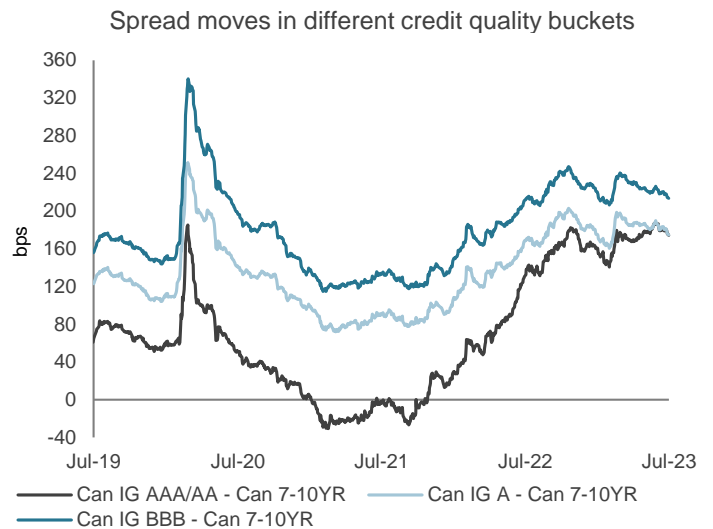


Chart 5: Lower quality Canadian credit spreads have benefited from the equity rally in July and tightened, while AAA rated spreads have widened over 3 years, adding an extra 30bp since June 2023.

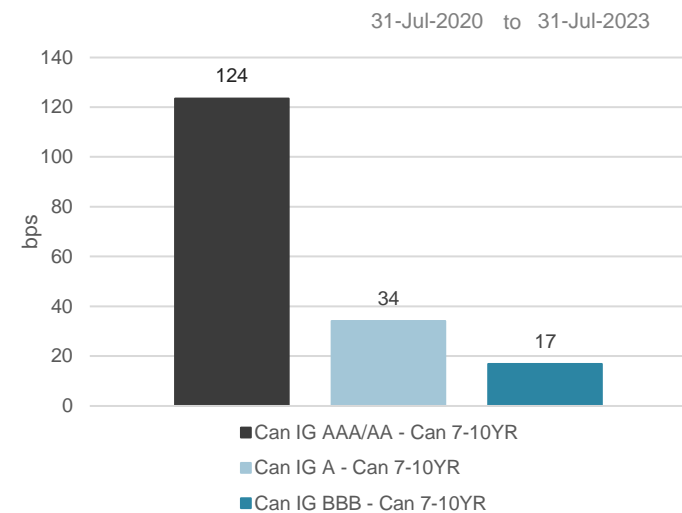
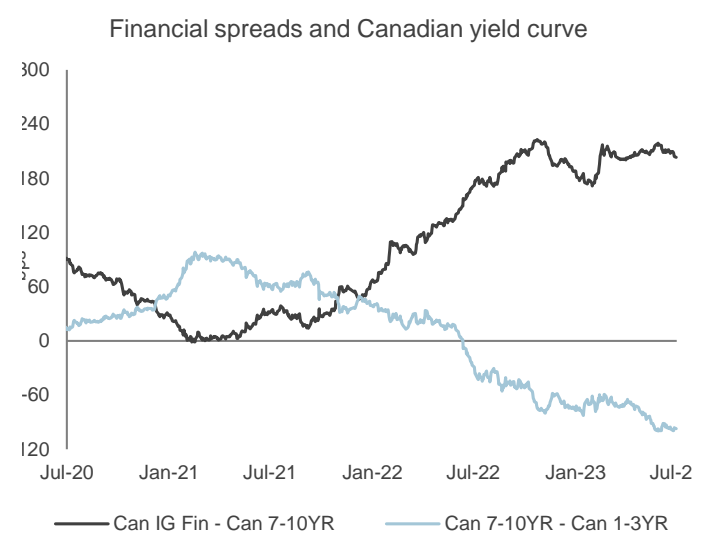


Chart 6: Financial spreads have risen modestly since January, and have stabilised more recently, while the Canadian government yield curve remains deeply inverted following renewed BoC rate hikes.



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Global Yields, Curves and Spread Analysis

Chart 1: G7 7-10 year yields remained rangebound, including US and Canadian govts, reflecting the combination of lower inflation but positive growth (ex Eurozone). Gilts rallied on better UK inflation.

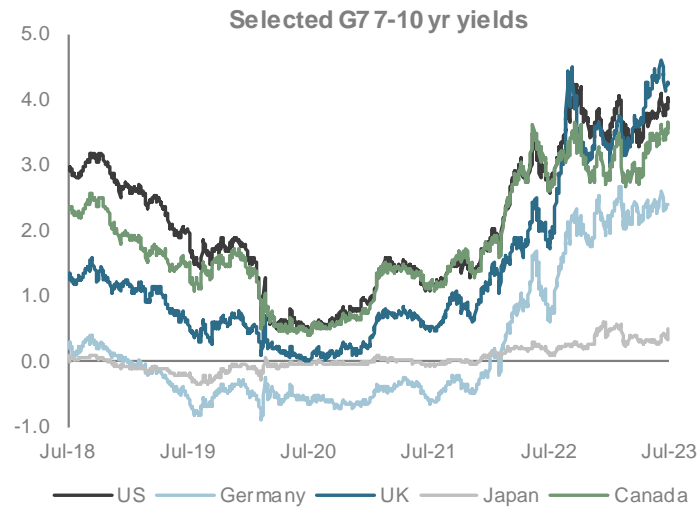


Chart 2: Real yields have tracked nominal yields in July, apart from Japan, where the combination of higher inflation accruals and zero rates have helped demand for JGB inflation linked bonds.

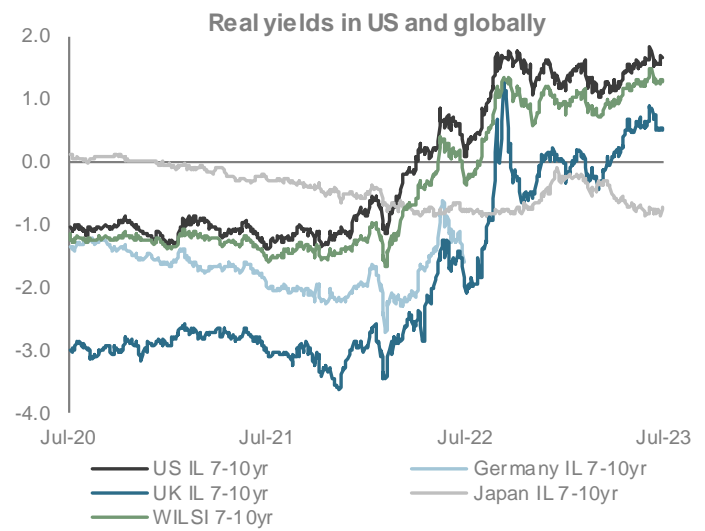


Chart 3: G7 yield curve inversion remains near cyclical lows (ex Japan), after further rate hikes by the Fed and ECB. Canadian curve inversion deepened after the BoC's rate increases in June and July.

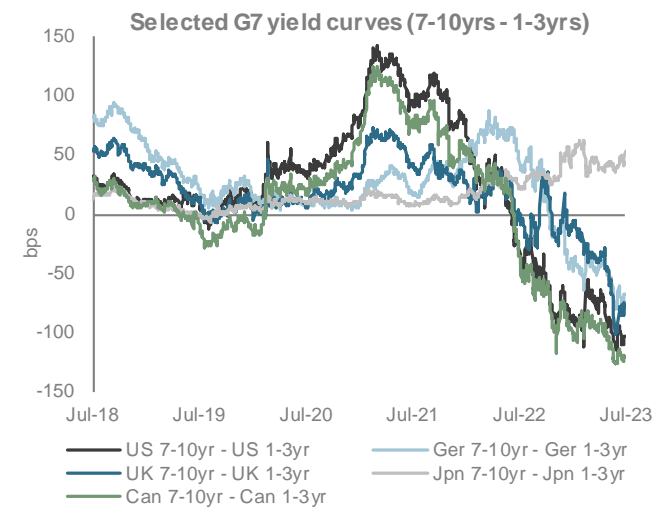


Chart 4: It is a similar story with inversion in long maturities, with Japan the exception. With yields near 15-year highs, investor concern over re-investment risks may be keeping curves inverted.

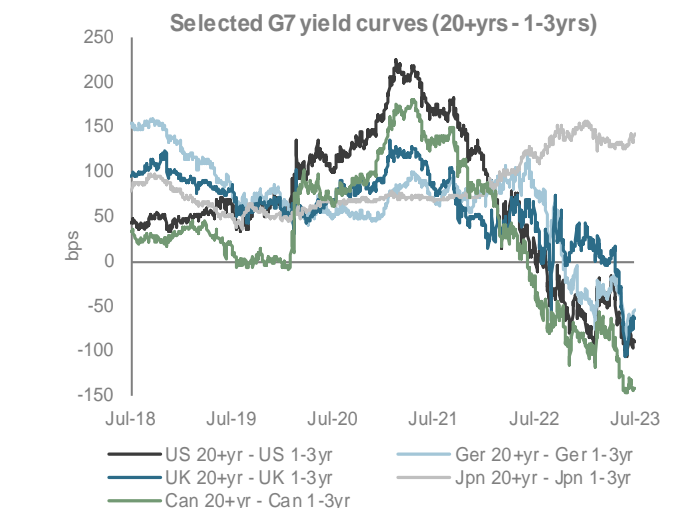


Chart 5: Inflation breakevens have moved most decisively higher in Japan, reflecting higher inflation. US and WGBI breakevens have converged towards 2%, while UK breakevens eased at month-end.

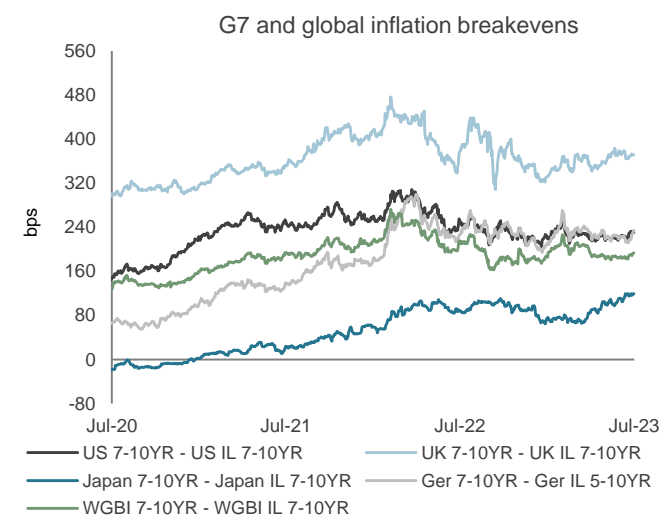


Chart 6: Global inflation breakevens of all tenors have converged near 2%, after a period of much higher short-dated breakevens. There is little evidence of inflation expectations de-stabilising.



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Yield Spread and Credit Spread Analysis

Chart 1: US 7-10 year sovereign spreads remain stable, awaiting clearer Fed signals that the tightening cycle is over. The break lower vs the UK, after gilt yields spiked in Q2, remains a feature.

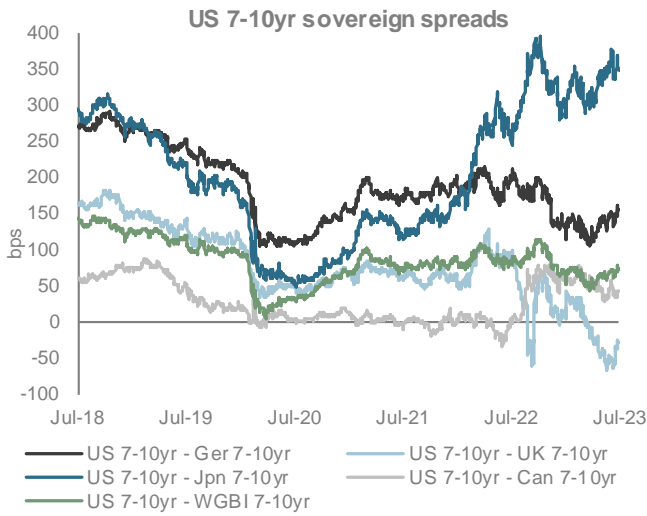


Chart 2: Italian spreads stabilised in July, though the risk rally drove them tighter since Q4 2022, supported by the ECB's transmission protection instrument (designed to protect peripheral spreads).

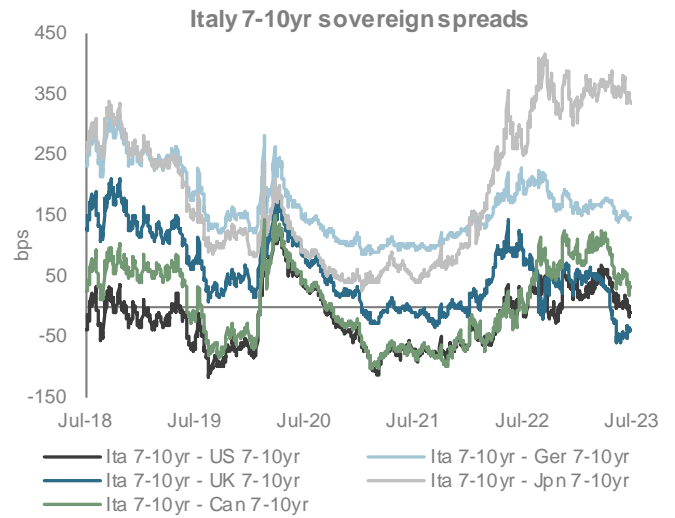


Chart 3: Despite predictions, an EM crisis failed to materialise after both Covid and Ukraine shocks and G7 tightening in 2022-23. Spreads are consolidating near cycle lows, apart from versus JGBs.

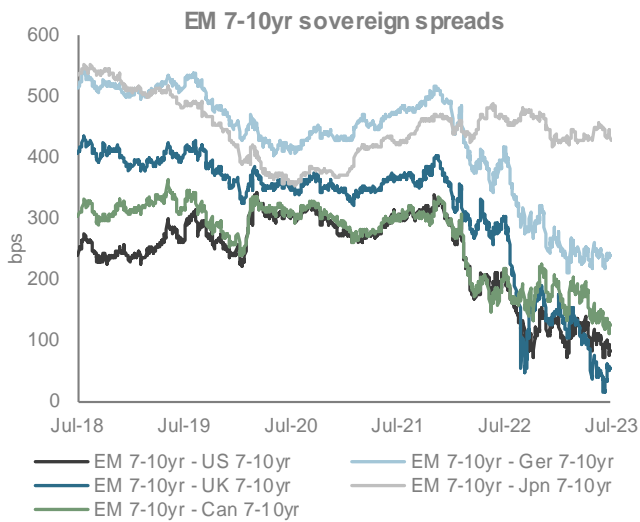


Chart 4: Low correlation of China with the G7 economic and policy cycle continues after different Covid policies and lockdown timings. Yield spreads have traded in wide ranges since the 2020 pandemic.

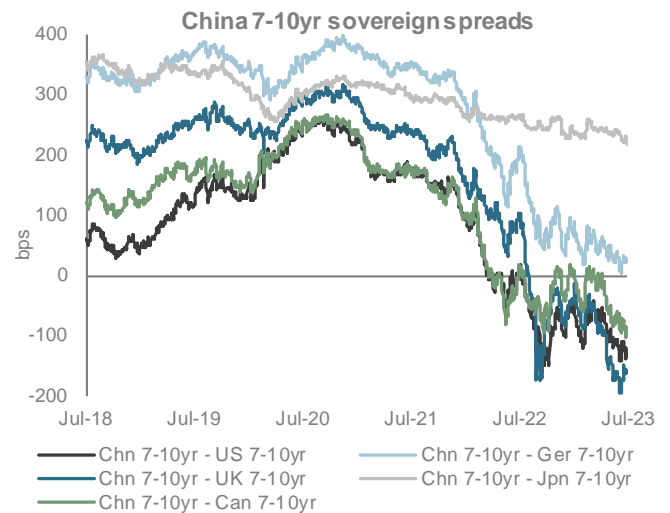


Chart 5: Although credit spreads are well above cycle lows, there is little sign of major stress, particularly in US high yield, which has mean-reverted to pre-Covid levels. Eurozone spreads remain wider.

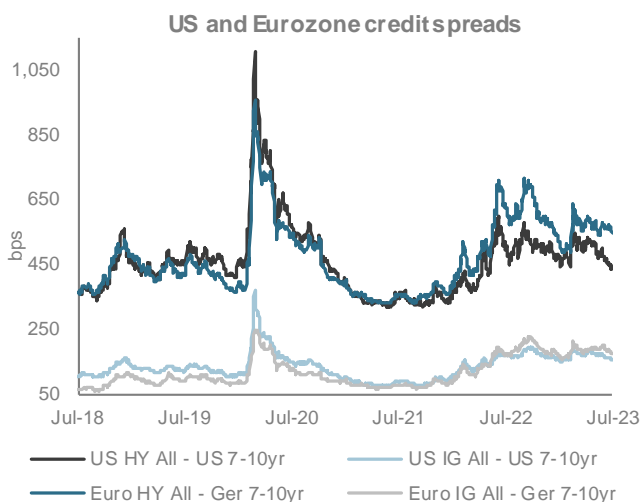


Chart 6: Chinese \$ HY spreads widened above 8000bps in July, after Evergrande delayed its financial results and debt restructuring. US HY spreads narrowed, benefiting from the risk rally.



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Sovereign and Climate Bonds Analysis

Chart 1: Climate WGBI outperformed WGBI during the years of very low yields, helped by extra duration, but this reversed in 2022, when rates and yields rose sharply. This has stabilised in 2023.

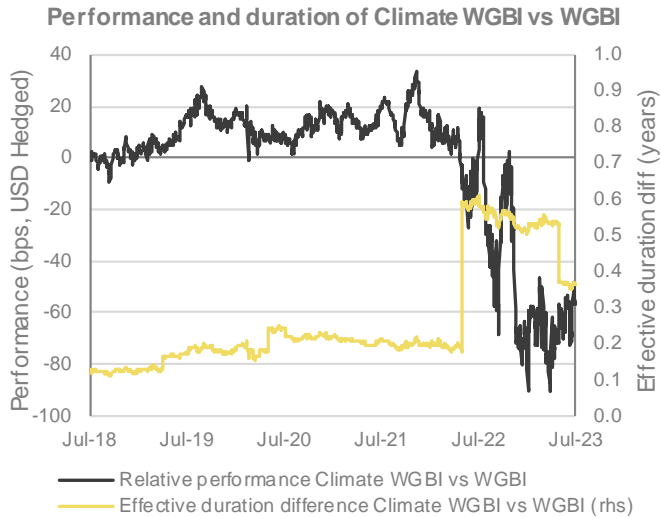


Chart 2: A reduction in US underweight in Climate WGBI vs WGBI and an increase in the UK's overweight were notable in the July re-weightings. Italy's overweight was slightly reduced. Italy's overweight was slightly reduced.

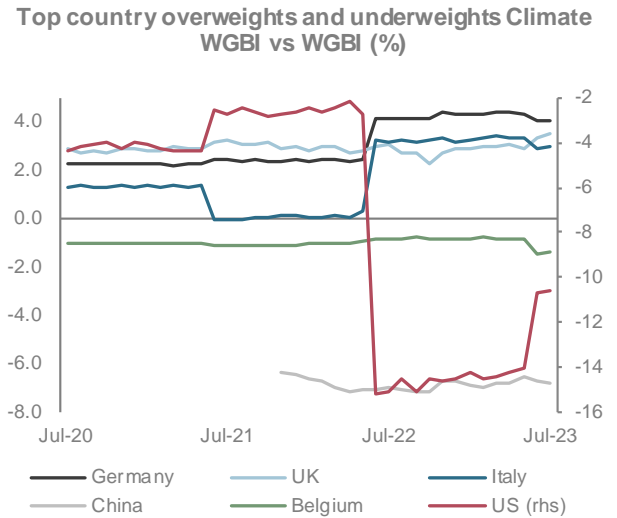


Chart 3: The increase in Japan's country weight in 2022 caused the yield on climate WGBI to drop sharply relative to WGBI. But this has fallen away with UK gilt yields rising sharply another factor in this.

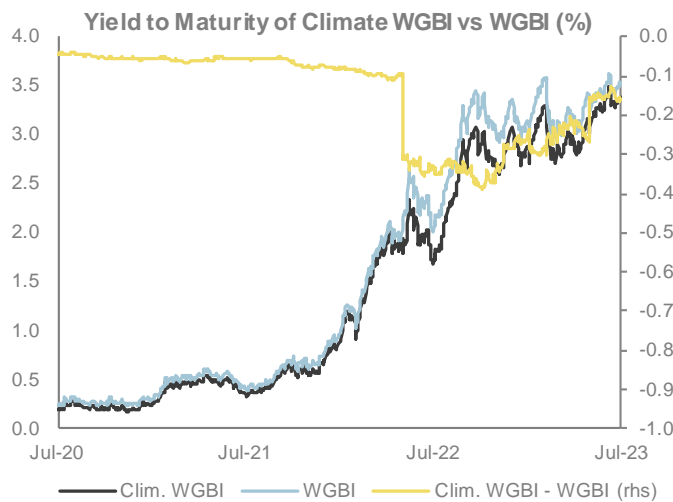


Chart 4: Climate WGBI's higher weighting in the Eurozone gives the index higher AAA weight, with Bunds rated AAA, but the lower US weighting in climate WGBI means the AA weight is notably lower.

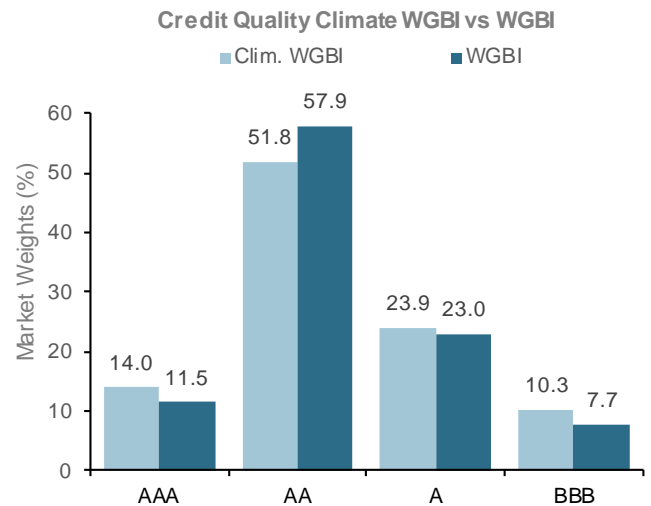


Chart 5: Yield curve flattening has caused yields to converge in the medium to long maturities at around 3% in both WGBI and climate WGBI in 2023, eliminating most of the "greenium" in climate WGBI.

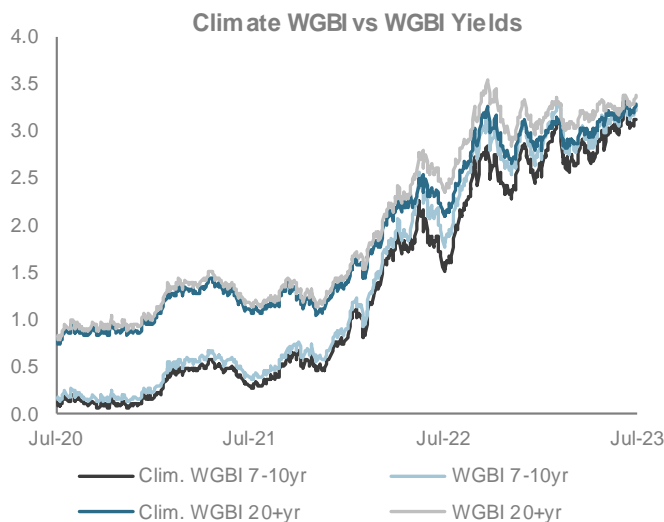
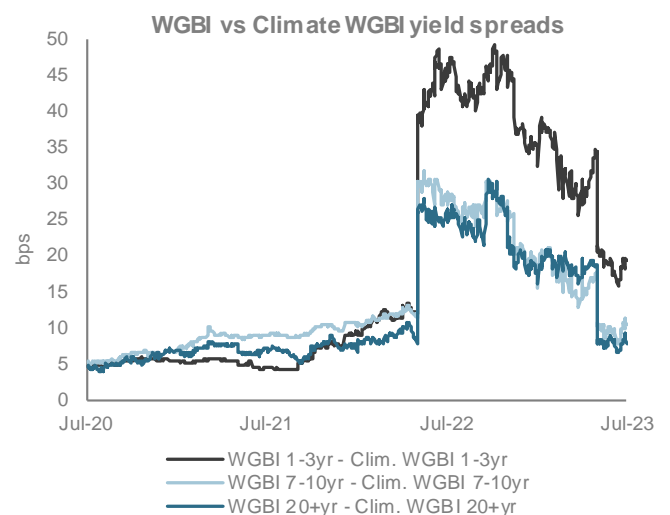


Chart 6: The "greenium" or yield discount on climate-WGBI versus WGBI has normalised in longer maturities, after increasing sharply when Japan's sovereign weight increased, and the US fell, in 2022.



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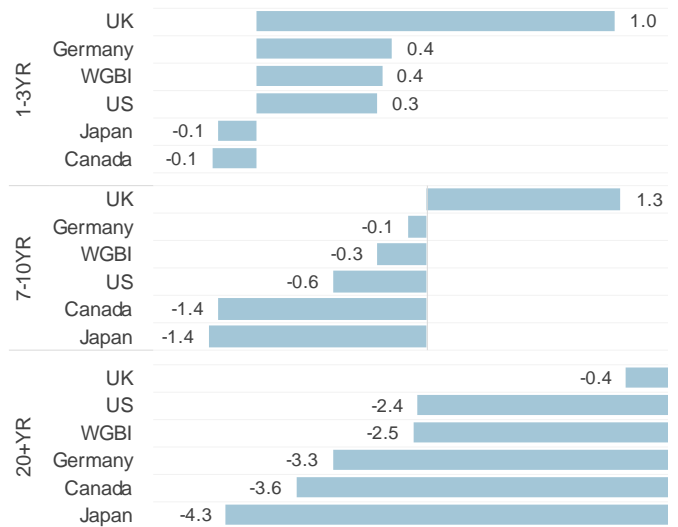
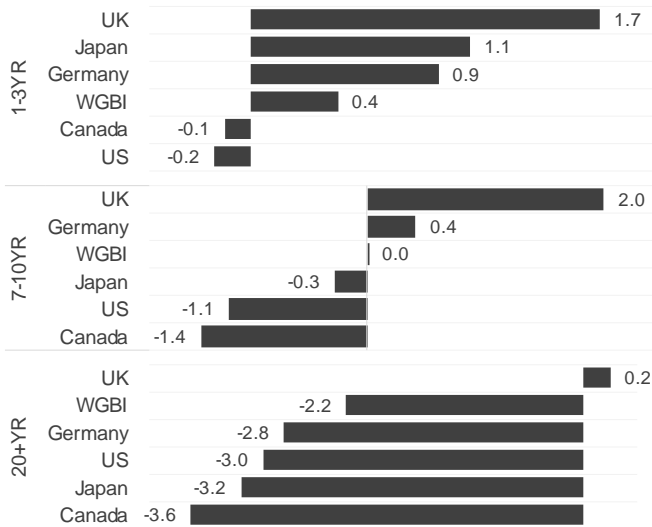
Global Bond Market Returns – 1M & YTD % (CAD, LC, TR) as of July 31, 2023

Global government bonds were either modestly lower or higher, except longer conventional and real return bonds, which lost the most in July. Short and mid Bunds and gilts made modest gains. Canadian govts lost 4%, followed closely by JGBs.

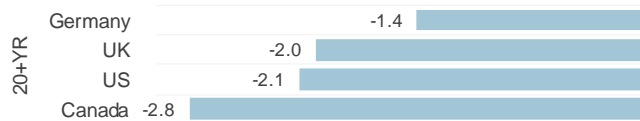
Both long Canadian real return and conventional bonds were down 3-4% in July as the Bank of Canada raised rates higher despite lower inflation. The underperformance of JGBs is notable since January as a weak yen erased gains in Canadian dollar terms.

CONVENTIONAL BONDS

1M CAD 1M LCY

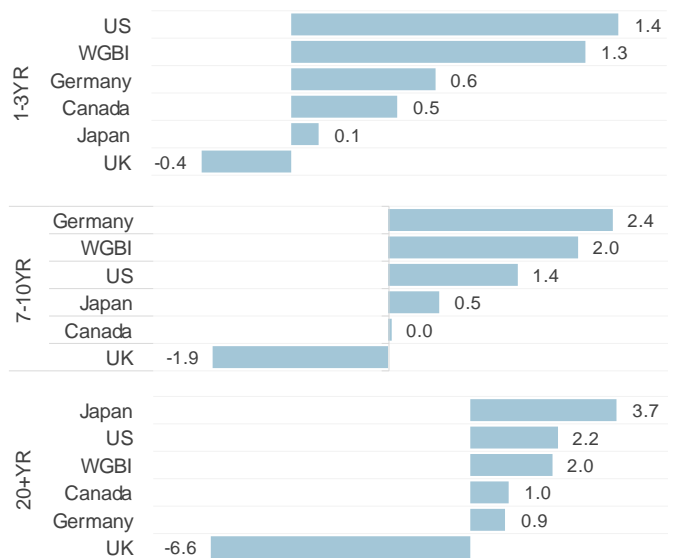
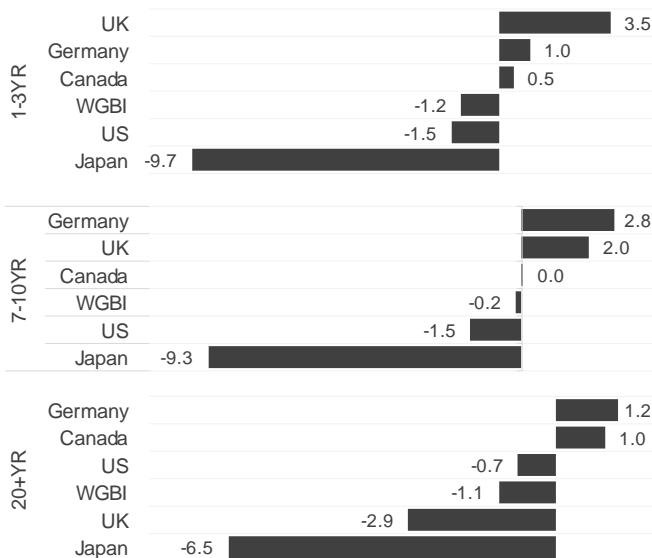


INFLATION LINKED BONDS

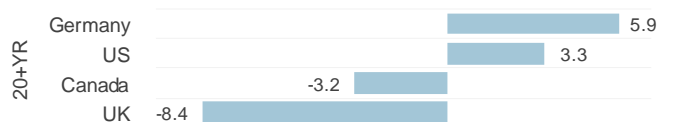


CONVENTIONAL BONDS

YTD CAD YTD LCY



INFLATION LINKED BONDS



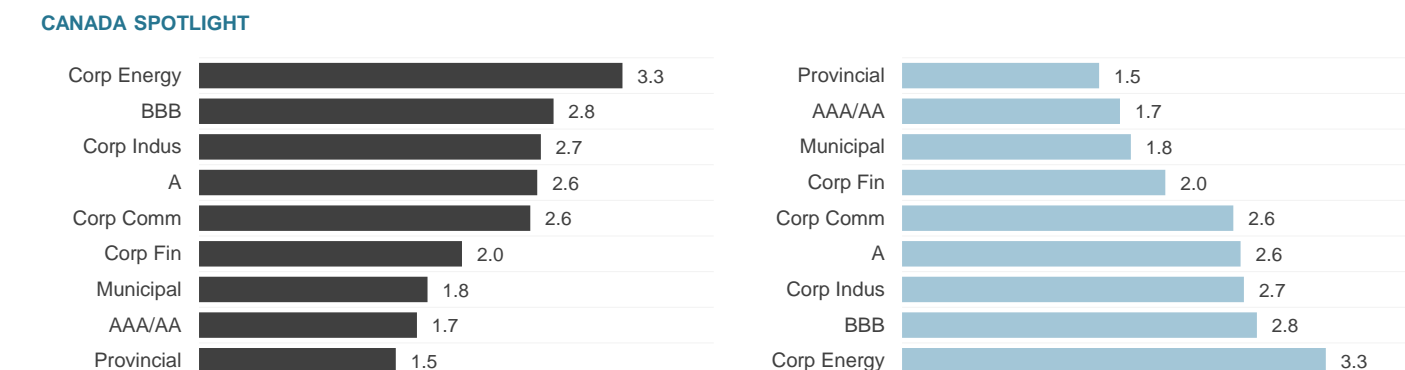
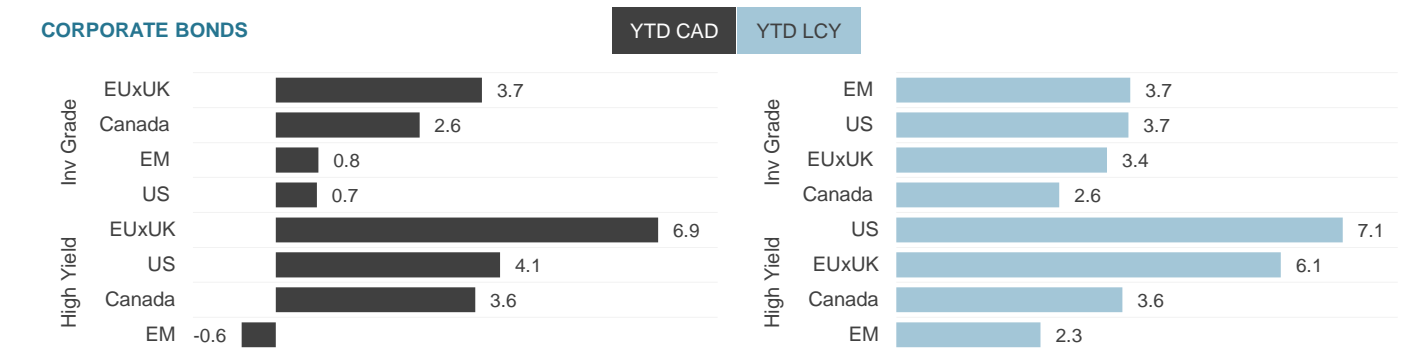
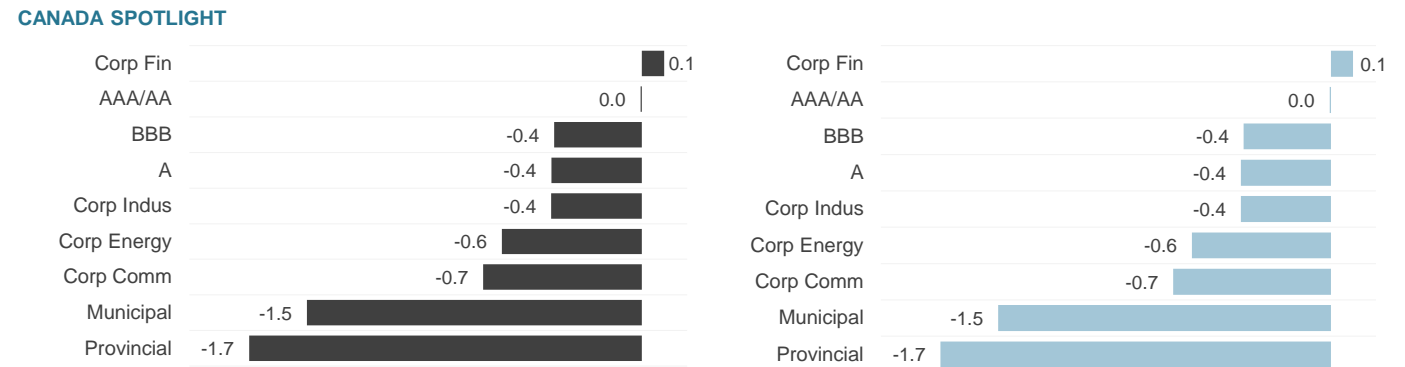
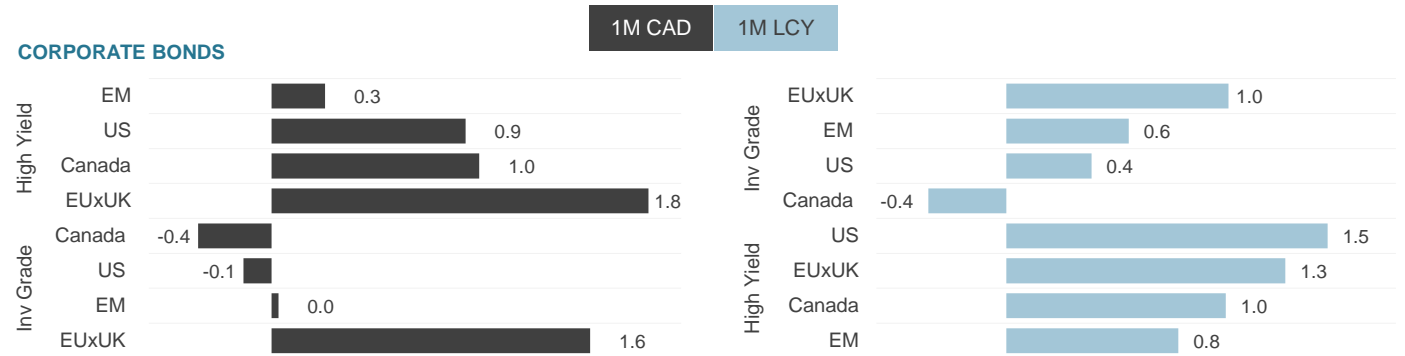
Source: FTSE Russell. All data as of July 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

Corporate Bond Returns – 1M & YTD % (CAD, LCY) as of July 31, 2023

European credits outperformed in July, while in Canada, investment grade corporates made modest losses, but returns for their sub-IG equivalents were positive. Provis and munis underperformed once again in July, while the performance for AAA-rated corporates was flat. Credit returns have been mostly positive across regions since January.

Provincials and municipals lost about 2% in January and underperformed other Canadian credits.

Since January, corporate bond returns have been strong, especially in Europe, where both investment and high yield credits have registered returns of 4-7% in Canadian dollar. US high yield returned 4% in Canadian dollar terms and despite US dollar weakness.



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 – 1M & 12M % (CAD, TR) as of July 31, 2023

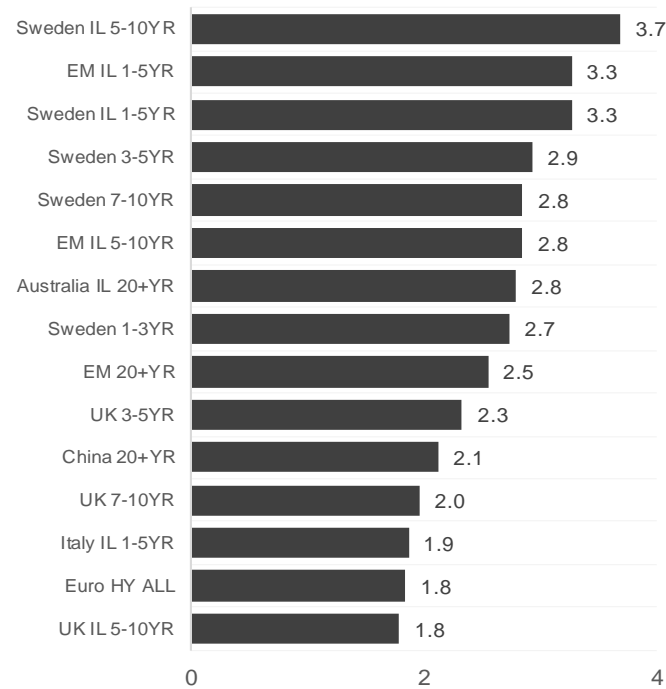
Swedish government bonds and long Australian bonds including inflation linked (IL) bonds, were the best performers in July. EM also continued to hold up well, while by contrast, Canadian long government, corporates and provinces, underperformed. 12M returns were dominated by EM IL bonds and Eurozone government bonds gains. UK gilts have remained the worst performers over 12M.

The stronger Swedish krone helped drive Swedish government bond gains in July, while lower yields boosted longer conventional and index-linked gilts.

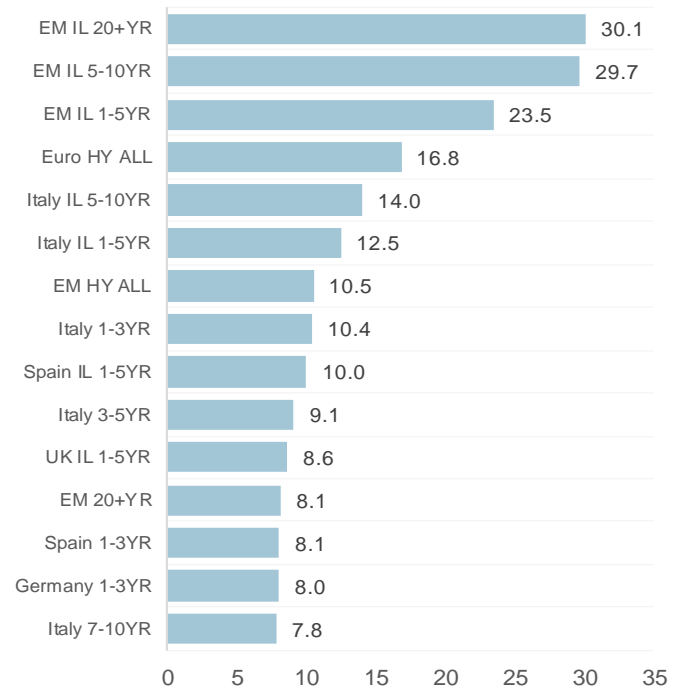
On 12M, long Eurozone govts benefited from spread convergence as risk rallied, and the stronger euro, despite higher ECB rates. EM inflation linked also returned 24-30%, continuing the outperformance in 2022-23. Long WGBI IL and gilts lost 20-30% in CAD.

1M CAD 12M CAD

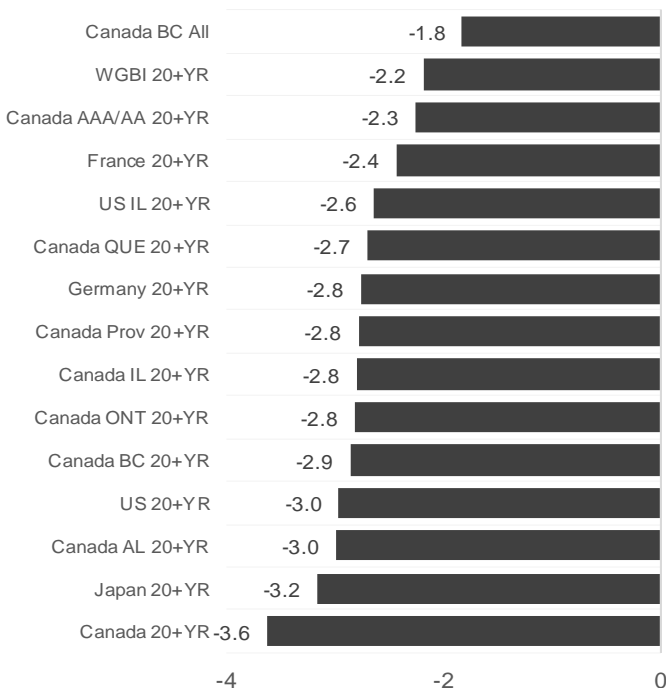
Top 15



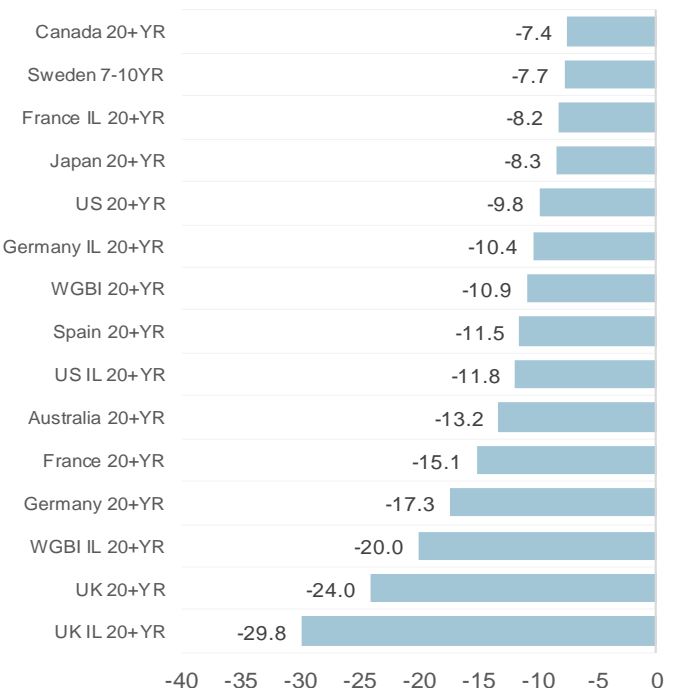
Top 15



Bottom 15



Bottom 15



Source: FTSE Russell. All data as of July 31, 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
Government	1-3YR	-1.41	1.59	-0.51	0.85	0.45	3.41	-0.48	-3.12
	7-10YR	-4.45	-1.54	-3.12	-1.79	0.03	2.97	-3.95	-6.50
	20+YR	-6.10	-3.24	-4.77	-3.46	0.96	3.93	-7.42	-9.88
Inflation-Linked	20+YR	-3.76	-0.83	-4.86	-3.55	-3.21	-0.37	-7.17	-9.63
Corporate	1-3YR	-0.89	2.13	0.12	1.50	1.82	4.81	1.31	-1.38
	7-10YR	-2.52	0.44	-1.28	0.07	2.04	5.04	-0.28	-2.93
	20+YR	-2.20	0.77	-0.74	0.62	4.69	7.76	-0.02	-2.67
AAA/AA	1-3YR	-0.97	2.05	0.21	1.59	1.57	4.55	0.99	-1.69
	7-10YR	-3.00	-0.04	-1.69	-0.34	0.95	3.92	-1.33	-3.95
	20+YR	-3.26	-0.32	-1.98	-0.63	4.64	7.72	-2.10	-4.70
	All	-1.16	1.84	-0.09	1.29	1.69	4.68	0.58	-2.09
A	1-3YR	-0.90	2.12	0.03	1.40	1.77	4.76	1.23	-1.45
	7-10YR	-2.62	0.34	-1.36	-0.01	2.01	5.01	-0.56	-3.19
	20+YR	-2.42	0.54	-0.96	0.40	4.49	7.57	-0.74	-3.37
	All	-1.58	1.42	-0.39	0.98	2.63	5.65	0.40	-2.27
BBB	1-3YR	-0.84	2.18	0.24	1.62	1.97	4.96	1.51	-1.18
	7-10YR	-2.44	0.53	-1.23	0.13	2.15	5.15	-0.06	-2.71
	20+YR	-1.85	1.13	-0.41	0.96	4.97	8.05	1.07	-1.61
	All	-1.53	1.47	-0.35	1.03	2.76	5.78	0.93	-1.75
Sectors	Comm	-2.10	0.88	-0.83	0.53	2.57	5.59	0.76	-1.91
	Energy	-1.86	1.13	-0.60	0.77	3.29	6.33	0.63	-2.04
	Fin	-0.94	2.08	0.04	1.42	2.04	5.04	1.11	-1.57
	Indus	-1.49	1.50	-0.35	1.02	2.65	5.67	1.14	-1.54
	Infra	-2.43	0.54	-0.92	0.45	3.44	6.48	-0.89	-3.52
	RE	-1.26	1.74	-0.37	1.00	1.86	4.85	0.40	-2.26
	Secur	-0.76	2.26	0.24	1.62	1.79	4.78	1.25	-1.44
Provinces (All)	1-3YR	-1.63	1.37	-0.83	0.53	0.53	3.48	-0.43	-3.07
	7-10YR	-3.56	-0.63	-2.34	-1.00	0.84	3.81	-2.28	-4.87
	20+YR	-3.88	-0.95	-2.78	-1.44	2.40	5.41	-4.29	-6.82
	All	-3.27	-0.32	-2.20	-0.86	1.53	4.51	-2.82	-5.40
Ontario	1-3YR	-1.61	1.38	-0.77	0.59	0.53	3.49	-0.42	-3.06
	7-10YR	-3.55	-0.61	-2.26	-0.91	0.90	3.87	-2.15	-4.74
	20+YR	-3.94	-1.02	-2.65	-1.31	2.52	5.54	-3.96	-6.51
	All	-3.19	-0.25	-2.04	-0.69	1.55	4.53	-2.50	-5.09
Alberta	1-3YR	-1.74	1.25	-1.02	0.34	0.42	3.37	-0.71	-3.34
	7-10YR	-3.63	-0.70	-2.49	-1.15	0.69	3.65	-2.68	-5.26
	20+YR	-4.17	-1.25	-3.65	-2.32	1.62	4.61	-6.32	-8.80
	All	-3.39	-0.45	-2.64	-1.30	1.00	3.97	-3.75	-6.30
Quebec	1-3YR	-1.58	1.42	-0.79	0.57	0.62	3.58	-0.10	-2.75
	7-10YR	-3.60	-0.66	-2.40	-1.05	0.84	3.80	-2.30	-4.89
	20+YR	-3.74	-0.82	-2.65	-1.31	2.52	5.54	-4.07	-6.61
	All	-3.32	-0.37	-2.22	-0.88	1.69	4.68	-2.83	-5.40
BC	1-3YR	-1.54	1.46	-0.85	0.51	0.56	3.52	-0.57	-3.21
	7-10YR	-3.57	-0.63	-2.47	-1.13	0.78	3.75	-2.51	-5.09
	20+YR	-3.84	-0.92	-3.08	-1.75	2.19	5.20	-4.67	-7.20
	All	-3.38	-0.44	-2.51	-1.17	1.44	4.43	-3.22	-5.79

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 July 31, 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	0.35	-0.18	-0.47	-3.41	1.40	-1.50	0.16	2.89
	7-10YR	-0.62	-1.14	-3.29	-6.14	1.38	-1.52	-6.52	-3.98
	20+YR	-2.44	-2.96	-5.15	-7.95	2.17	-0.75	-12.19	-9.80
	IG All	0.39	-0.14	-0.75	-3.68	3.71	0.74	-1.18	1.51
	HY All	1.48	0.95	2.33	-0.69	7.12	4.06	4.22	7.06
UK	1-3YR	1.04	1.72	-0.73	-1.38	-0.39	3.50	-2.14	6.29
	7-10YR	1.28	1.96	-3.45	-4.08	-1.87	1.97	-14.26	-6.88
	20+YR	-0.42	0.25	-5.52	-6.14	-6.56	-2.91	-30.03	-24.01
EUR	IG All	1.03	1.56	0.78	-2.33	3.36	3.73	-3.32	7.38
	HY All	1.29	1.84	2.51	-0.37	6.14	6.92	5.40	16.82
Japan	1-3YR	-0.11	1.08	-0.08	-7.06	0.12	-9.68	-0.12	-3.49
	7-10YR	-1.44	-0.27	-1.25	-8.16	0.55	-9.29	-2.18	-5.48
	20+YR	-4.30	-3.16	-4.12	-10.82	3.68	-6.47	-5.14	-8.33
China	1-3YR	0.24	1.34	1.01	-4.97	1.82	-3.79	2.55	-0.69
	7-10YR	0.19	1.30	1.56	-4.45	3.05	-2.62	3.79	0.51
	20+YR	1.00	2.12	3.17	-2.94	5.83	0.00	7.97	4.55
EM	1-3YR	0.36	1.44	1.42	-3.07	2.57	-0.53	3.97	4.90
	7-10YR	0.26	1.31	2.05	-2.10	4.92	1.86	6.29	7.02
	20+YR	1.00	2.55	2.97	-1.58	6.22	1.99	8.57	8.14
	IG All	0.57	0.03	0.36	-2.60	3.73	0.77	2.37	5.16
	HY All	0.79	0.26	1.41	-1.59	2.30	-0.62	7.58	10.51
Germany	1-3YR	0.39	0.92	-0.05	-3.13	0.61	0.97	-2.74	8.03
	7-10YR	-0.12	0.40	-0.62	-3.68	2.39	2.76	-10.83	-0.96
	20+YR	-3.27	-2.76	-2.67	-5.67	0.88	1.24	-25.58	-17.33
Italy	1-3YR	0.68	1.21	0.47	-2.63	1.67	2.03	-0.57	10.44
	7-10YR	0.40	0.92	1.94	-1.20	6.99	7.37	-2.93	7.82
	20+YR	-1.28	-0.77	2.73	-0.44	9.10	9.48	-11.84	-2.07
Spain	1-3YR	0.38	0.91	0.02	-3.06	0.94	1.30	-2.72	8.05
	7-10YR	-0.11	0.41	-0.13	-3.21	3.05	3.42	-9.35	0.69
	20+YR	-1.52	-1.01	-0.11	-3.19	2.84	3.21	-20.28	-11.45
France	1-3YR	0.41	0.94	-0.06	-3.14	0.92	1.28	-3.00	7.75
	7-10YR	-0.17	0.35	-0.48	-3.55	2.44	2.81	-10.51	-0.60
	20+YR	-2.94	-2.43	-1.61	-4.64	0.78	1.14	-23.57	-15.10
Sweden	1-3YR	0.47	2.73	-0.03	-5.30	0.71	-2.98	-0.48	-0.81
	7-10YR	0.58	2.85	-1.44	-6.63	-0.19	-3.86	-7.43	-7.73
	20+YR					0.00	0.00	0.00	0.00
Australia	1-3YR	0.62	1.32	-1.00	-2.03	0.72	-2.78	0.19	-0.62
	7-10YR	0.27	0.97	-4.46	-5.46	2.22	-1.33	-3.98	-4.75
	20+YR	-0.41	0.28	-7.85	-8.81	1.92	-1.62	-12.51	-13.21
NZ	1-3YR	0.14	1.19	-0.29	-2.50	1.58	-2.90	0.01	1.97
	7-10YR	-0.29	0.75	-3.48	-5.62	0.82	-3.63	-5.96	-4.12
Canada	1-3YR	-0.13	-0.13	-1.41	-1.41	0.45	0.45	-0.48	-0.48
	7-10YR	-1.38	-1.38	-4.45	-4.45	0.03	0.03	-3.95	-3.95
	20+YR	-3.62	-3.62	-6.10	-6.10	0.96	0.96	-7.42	-7.42

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

Source: FTSE Russell. All data as of July 31, 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	0.53	0.00	-0.67	-3.60	1.90	-1.01	-2.15	0.51
	5-10YR	0.36	-0.17	-1.92	-4.82	2.41	-0.52	-6.31	-3.76
	20+YR	-2.12	-2.64	-3.21	-6.06	3.34	0.39	-14.15	-11.81
UK	1-5YR	0.86	1.54	0.05	-0.61	0.76	4.69	0.01	8.63
	5-10YR	1.11	1.79	-0.38	-1.03	2.11	6.10	-6.92	1.09
	20+YR	-2.02	-1.36	-6.94	-7.55	-8.41	-4.84	-35.37	-29.81
EUxUK	1-5YR	1.07	1.60	0.40	-2.69	1.39	1.75	-4.44	6.14
	5-10YR	0.88	1.41	0.65	-2.45	3.64	4.01	-6.59	3.75
	20+YR	-1.39	-0.87	-1.07	-4.12	5.91	6.29	-19.32	-10.38
Japan	1-5YR	0.12	1.31	1.39	-5.70	2.31	-7.70	3.48	0.00
	5-10YR	-0.78	0.40	1.71	-5.40	3.07	-7.02	2.78	-0.68
EM	1-5YR	2.67	3.27	5.32	2.36	8.89	9.87	17.15	23.46
	5-10YR	1.72	2.85	4.91	4.00	8.50	11.76	19.59	29.67
	20+YR	0.43	1.70	5.77	8.13	10.16	18.49	14.10	30.08
Germany	1-5YR	1.07	1.60	0.40	-2.69	1.39	1.75	-4.44	6.14
	5-10YR	0.88	1.41	0.65	-2.45	3.64	4.01	-6.59	3.75
	20+YR	-1.39	-0.87	-1.07	-4.12	5.91	6.29	-19.32	-10.38
Italy	1-5YR	1.33	1.86	1.26	-1.86	2.76	3.13	1.28	12.49
	5-10YR	1.22	1.76	3.33	0.15	8.07	8.45	2.67	14.04
	20+YR	0.57	1.09	6.13	2.86	17.65	18.07	-5.04	5.48
Spain	1-5YR	0.97	1.50	0.55	-2.55	1.76	2.12	-0.92	10.05
	5-10YR	1.02	1.54	1.25	-1.87	3.81	4.18	-4.33	6.27
France	1-5YR	0.79	1.31	0.03	-3.05	1.32	1.68	-3.54	7.14
	5-10YR	0.72	1.25	0.26	-2.83	3.37	3.74	-6.31	4.07
	20+YR	-1.05	-0.53	1.13	-1.98	6.41	6.79	-17.32	-8.16
Sweden	1-5YR	0.99	3.27	0.95	-4.36	1.53	-2.19	1.59	1.25
	5-10YR	1.40	3.68	1.61	-3.74	1.70	-2.03	-4.97	-5.29
Australia	1-5YR	0.71	1.41	-0.80	-1.83	3.52	-0.08	3.40	2.57
	5-10YR	0.70	1.40	-2.55	-3.57	4.99	1.35	2.29	1.47
	20+YR	2.08	2.79	-4.43	-5.42	7.61	3.88	-3.87	-4.64
NZ	5-10YR	-0.88	0.15	-2.95	-5.10	3.23	-1.32	-0.64	1.30
	20+YR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada	20+YR	-2.80	-2.80	-3.76	-3.76	-3.21	-3.21	-7.17	-7.17

Indices used: FTSE Canada RRB Canada Bond Index.

Source: FTSE Russell. All data as of July 31, 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 July 31, 2023

Canadian Bond Yields

Top 15% Bottom 15%

		1-3YR	7-10YR	20+YR	All Mat
Canada	Current	4.55	3.58	3.34	
	3M Ago	3.55	2.83	2.94	
	6M Ago	3.68	2.91	3.00	
	12M Ago	2.87	2.60	2.77	
IL	Current			1.78	
	3M Ago			1.26	
	6M Ago			1.20	
	12M Ago			0.80	
Provincial	Current	4.64	4.22	4.32	4.37
	3M Ago	3.72	3.48	3.97	3.77
	6M Ago	3.70	3.53	3.99	3.80
	12M Ago	3.13	3.25	3.76	3.47
Ontario	Current	4.63	4.22	4.32	4.38
	3M Ago	3.74	3.48	3.96	3.77
	6M Ago	3.74	3.53	3.99	3.80
	12M Ago	3.14	3.25	3.77	3.46
Quebec	Current	4.68	4.20	4.27	4.33
	3M Ago	3.68	3.47	3.93	3.75
	6M Ago	3.65	3.52	3.96	3.78
	12M Ago	3.13	3.22	3.72	3.47
Alberta	Current	4.63	4.22	4.35	4.38
	3M Ago	3.70	3.46	4.00	3.76
	6M Ago	3.66	3.51	3.98	3.76
	12M Ago	3.11	3.23	3.68	3.40
BC	Current	4.72	4.20	4.30	4.33
	3M Ago	3.68	3.46	3.96	3.75
	6M Ago	3.62	3.50	3.96	3.75
	12M Ago	3.12	3.24	3.73	3.45
Municipal	Current	4.71	4.29	4.56	4.52
	3M Ago	3.77	3.55	4.19	3.90
	6M Ago	3.75	3.62	4.24	3.93
	12M Ago	3.19	3.31	3.99	3.58
Corporate	Current	5.65	5.39	5.20	5.49
	3M Ago	4.86	4.71	4.90	4.84
	6M Ago	4.84	4.69	4.92	4.83
	12M Ago	4.29	4.45	4.75	4.44
High Yield	Current				7.60
	3M Ago				7.37
	6M Ago				6.99
	12M Ago				6.84

		1-5YR	5-10YR	20+YR	All Mat
AAA/AA	Current	5.35	5.17	4.66	5.32
	3M Ago	4.53	4.34	4.38	4.51
	6M Ago	4.59	4.25	4.40	4.52
	12M Ago	3.90	3.90	4.25	3.91
A	Current	5.58	5.08	4.93	5.33
	3M Ago	4.77	4.40	4.62	4.67
	6M Ago	4.71	4.45	4.66	4.66
	12M Ago	4.22	4.14	4.47	4.29
BBB	Current	5.86	5.57	5.60	5.72
	3M Ago	1.68	1.23	1.58	5.12
	6M Ago	1.85	1.32	1.54	5.10
	12M Ago	0.34	0.37	0.99	4.72
Comm	Current	5.36	5.65	5.74	5.50
	3M Ago	4.67	5.34	4.93	4.99
	6M Ago	4.69	5.37	4.87	4.98
	12M Ago	4.41	5.32	4.27	4.71
Energy	Current	5.74	5.47	5.29	5.48
	3M Ago	4.93	4.81	4.98	4.92
	6M Ago	4.87	4.86	5.01	4.93
	12M Ago	4.27	4.68	4.86	4.65
Financial	Current	5.64	5.48	5.26	5.62
	3M Ago	4.84	4.75	5.07	4.84
	6M Ago	4.80	4.60	5.03	4.79
	12M Ago	4.28	4.37	4.75	4.31
Industrial	Current	5.56	5.25	5.25	5.40
	3M Ago	4.78	4.64	5.04	4.81
	6M Ago	4.87	4.60	5.03	4.84
	12M Ago	4.29	4.30	4.94	4.45
Infrastructure	Current	5.17	5.04	4.99	5.02
	3M Ago	4.37	4.35	4.66	4.57
	6M Ago	4.45	4.35	4.71	4.61
	12M Ago	3.79	4.03	4.47	4.32
Securitization	Current	5.70			5.71
	3M Ago	4.79			4.79
	6M Ago	4.82			4.82
	12M Ago	4.14			4.14

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.

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Appendix – Historical Bond Yields % as of July 31, 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	4.33	3.97	4.11	2.44	1.72	1.80	5.50	8.36
	3M Ago	4.24	3.62	3.41	3.75	1.68	1.23	1.58	5.15	8.50
	6M Ago	4.35	3.74	3.46	3.71	1.85	1.32	1.54	5.01	8.23
	12M Ago	2.93	2.78	2.66	3.19	-0.23	0.06	0.87	4.39	7.63
UK	Current	5.04	4.69	4.25	4.39	1.86	0.65	1.00		
	3M Ago	4.05	3.77	3.64	4.02	0.39	0.14	0.63		
	6M Ago	3.42	3.26	3.33	3.70	0.31	0.00	0.30		
	12M Ago	1.78	1.76	1.83	2.25	-3.27	-2.17	-1.01		
Japan	Current	-0.04	0.08	0.50	1.40	-1.70	-0.74			
	3M Ago	-0.07	0.02	0.30	1.20	-1.31	-0.63			
	6M Ago	-0.02	0.11	0.52	1.55	-1.33	-0.34			
	12M Ago	-0.11	-0.05	0.12	1.02	-1.06	-0.73			
China	Current	2.08	2.34	2.66	3.04					
	3M Ago	2.28	2.51	2.78	3.17					
	6M Ago	2.30	2.57	2.87	3.31					
	12M Ago	2.05	2.30	2.68	3.22					
EM	Current	3.58	4.17	4.80	4.41	3.05	4.07	4.88	5.93	11.51
	3M Ago	3.74	4.37	4.66	4.46	3.84	4.04	5.15	5.61	11.71
	6M Ago	3.59	4.30	4.76	4.57	3.11	3.37	5.25	5.52	10.25
	12M Ago	3.45	4.13	4.71	4.63	2.31	3.43	5.12	4.99	12.42
Germany	Current	3.09	2.60	2.41	2.53	0.60	0.07	0.01		
	3M Ago	2.72	2.35	2.25	2.37	0.16	-0.06	-0.11		
	6M Ago	2.59	2.31	2.21	2.22	0.38	0.13	-0.09		
	12M Ago	0.20	1.03	1.25	1.52	-2.09	-1.34	-0.84		
Italy	Current	3.60	3.55	3.86	4.35	1.30	1.64	1.69		
	3M Ago	3.36	3.49	3.97	4.45	0.80	1.65	1.83		
	6M Ago	3.17	3.42	3.92	4.29	1.18	1.87	1.85		
	12M Ago	1.37	2.85	3.62	4.03	-1.72	1.17	1.80		
France	Current	3.15	2.90	2.90	3.35	0.58	0.37	0.60		
	3M Ago	2.84	2.66	2.73	3.23	-0.06	0.17	0.58		
	6M Ago	2.71	2.58	2.64	3.01	0.24	0.30	0.52		
	12M Ago	0.40	1.46	1.87	2.52	-1.44	-0.53	0.15		
Sweden	Current	3.33	2.83	2.57	0.00	0.96	0.74			
	3M Ago	2.89	2.59	2.31	0.00	0.71	0.73			
	6M Ago	2.50	2.27	2.05	0.00	-0.17	0.14			
	12M Ago	1.71	2.27	2.01	0.00	-1.11	-0.83			
Australia	Current	4.02	3.86	4.03	4.40	1.03	1.47	1.79		
	3M Ago	3.13	3.05	3.30	3.88	0.09	0.84	1.50		
	6M Ago	3.17	3.24	3.51	3.96	0.23	0.92	1.37		
	12M Ago	2.56	3.45	3.65	3.98	0.76	1.31	1.88		
NZ	Current	5.21	4.80	4.70	4.87	1.94	2.39	0.00	0.00	0.00
	3M Ago	4.89	4.15	4.08	4.23	0.95	1.61	0.00	0.00	0.00
	6M Ago	4.67	4.18	4.11	4.41	1.28	1.79	0.00	0.00	0.00
	12M Ago	3.28	4.14	4.15	4.45	1.07	2.10	0.00	0.00	0.00
Canada	Current	4.55		3.58	3.34			1.78	5.49	7.60
	3M Ago	3.55		2.83	2.94			1.26	4.84	7.37
	6M Ago	3.68		2.91	3.00			1.20	4.83	6.99
	12M Ago	2.87		2.60	2.77			0.80	4.44	6.84

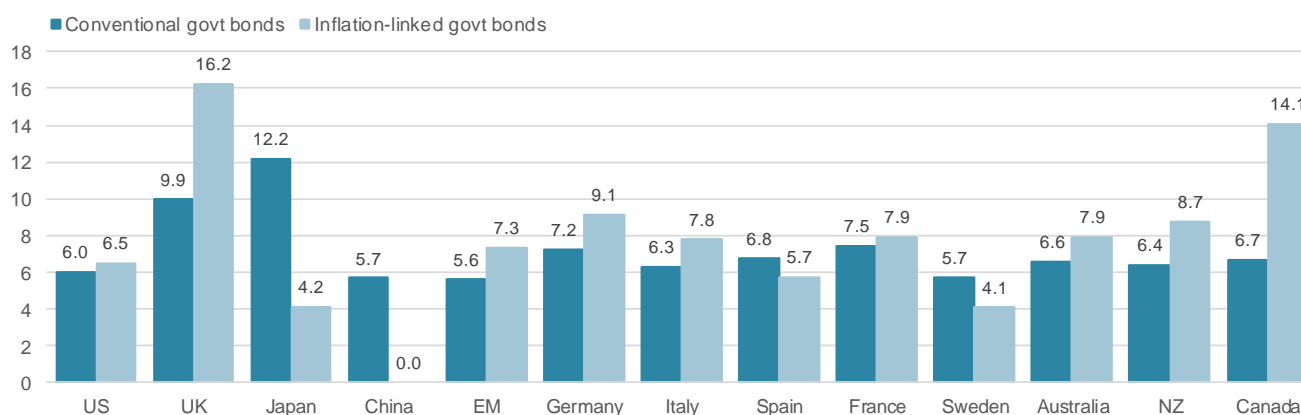
Source: FTSE Russell. All data as of July 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

Appendix – Duration and Market Value (USD, Bn)

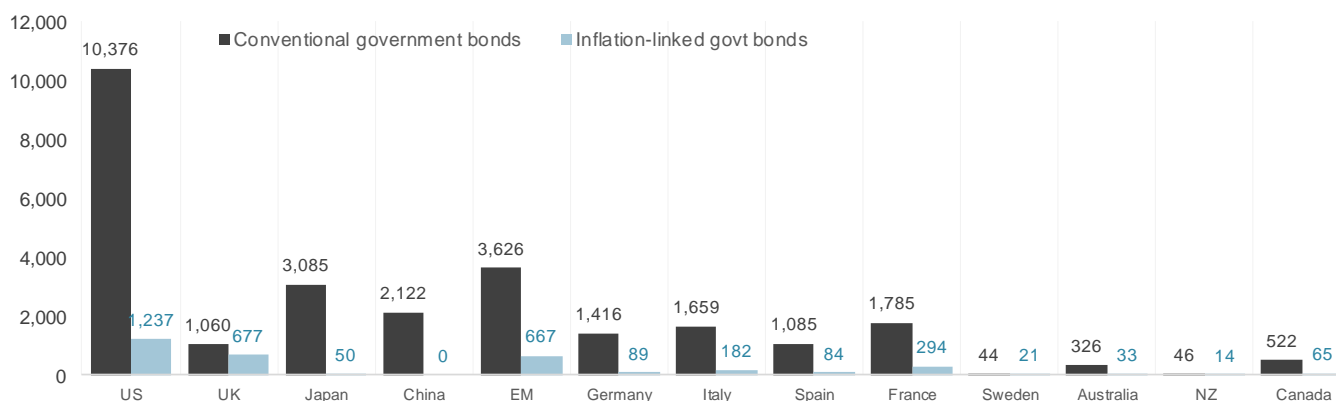
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.4	17.2	6.0	2,305.7	1,077.6	1,277.3	10,376.1	7.0	21.5	6.5	401.5	121.7	1237.2
UK	3.5	7.4	18.6	9.9	147.2	158.9	300.9	1,060.0	6.6	27.9	16.2	132.3	256.2	676.7
Japan	4.0	8.1	23.9	12.2	353.4	357.0	677.2	3,085.2	7.1		4.2	17.7		50.2
China	3.7	7.5	17.6	5.7	474.9	329.7	252.5	2,121.6						
EM	3.5	6.9	15.9	5.6	769.04	652.75	352.49	3,625.6	5.5	13.9	7.3	141.7	172.8	666.9
Germany	3.8	7.6	20.5	7.2	297.75	236.82	160.96	1,415.6	7.3	21.9	9.1	43.3	19.4	88.6
Italy	3.7	7.3	16.2	6.3	286.43	262.92	155.58	1,659.3	8.0	26.4	7.8	56.5	5.8	181.8
Spain	3.7	7.4	17.2	6.8	205.12	192.14	108.46	1,085.1	6.8		5.7	23.0		84.2
France	3.8	7.7	20.2	7.5	314.09	305.27	210.14	1,785.4	6.8	24.6	7.9	105.2	22.0	293.8
Sweden	3.8	7.7		5.7	13.79	8.90		43.7	5.8		4.1	9.9		21.1
Australia	3.6	7.7	17.5	6.6	51.70	88.87	15.24	326.4	7.2	22.5	7.9	9.7	2.7	33.5
NZ	3.9	7.6	17.0	6.4	9.67	10.85	2.36	46.4	6.3		8.7	3.2		13.9
Canada		7.1	18.6	6.7		188.40	85.90	522.0		14.1	14.1		65.1	65.1

	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.9	8.6	7.3	6.7	7.1	73.4	453.7	2,630.7	3,284.4	6,442.3	4.0	1,176.1
Euro	6.3	4.9	4.7	4.3	4.5	9.7	187.7	1,205.3	1,457.2	2,859.9	3.1	426.3
EM		5.9	4.9	5.1	5.1		44.61	221.28	326.8	592.7	3.3	190.1

Average Duration



Total Market Value (USD Billions)

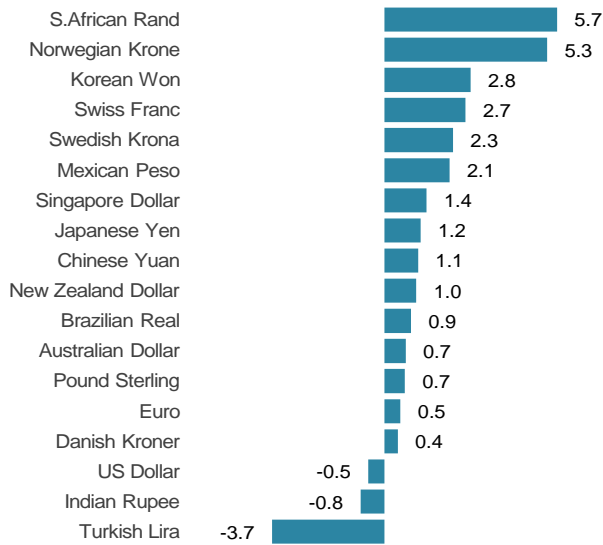


Indices used: FTSE Canada Non-Agency Bond Index (Mid, Long, Overall), FTSE Canada RRB Canada Bond Index.

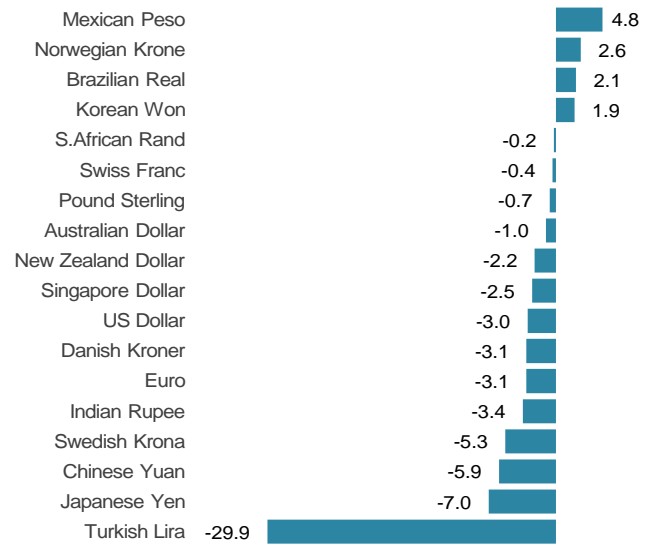
Source: FTSE Russell. All data as of July 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indexes used for each market. For professional investors only.

Appendix – Foreign Exchange Returns % as of July 31, 2023

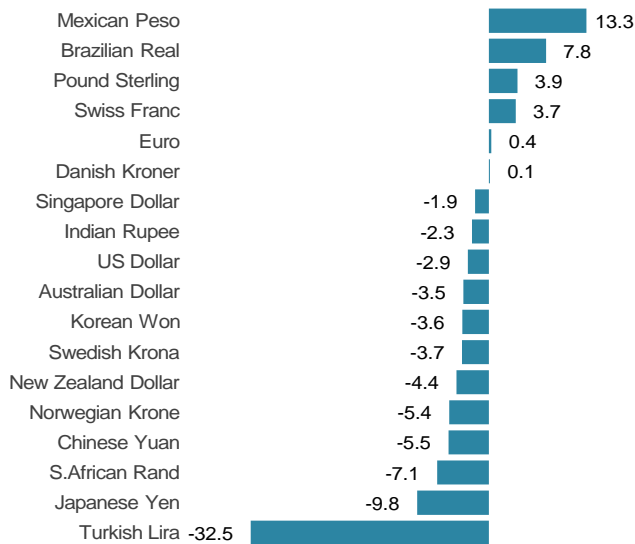
FX Moves vs CAD - 1M



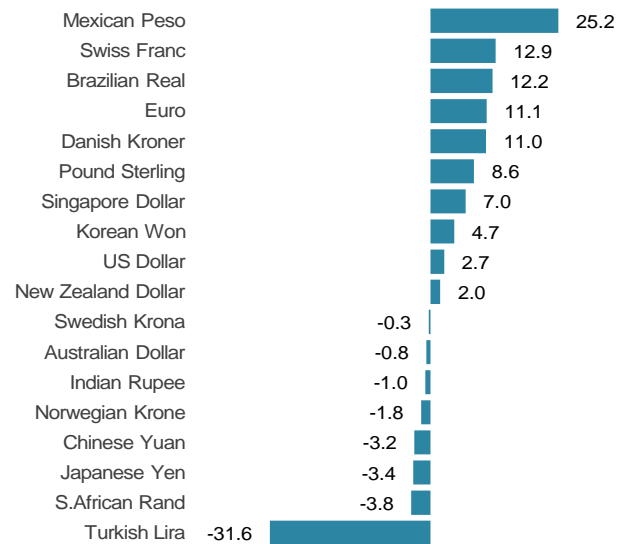
FX Moves vs CAD - 3M



FX Moves vs CAD - YTD



FX Moves vs CAD - 12M



Source: FTSE Russell and Refinitiv. All data as of July 31, 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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