Fixed Income Insights

MONTHLY REPORT – **AUGUST 2023 | UK EDITION**

FOR PROFESSIONAL INVESTORS ONLY

Temporary respite for gilts from lower inflation, but structural challenges remain

UK inflation fell in June but wage data suggests 2nd round effects from higher inflation are a risk, given labour shortages, and rapid UK disinflation is unlikely. Gilts have re-priced to a new normal of higher rates, and positive real yields. EM bonds continue to outperform, reflecting the benefits of early counter-inflation moves.

Macro and policy backdrop – Service sectors remain robust, but BoE faces ongoing labour market challenge

Europe most at risk of a hard landing but G7 growth held up well, helped by robust consumers. (pages 2-3)

Yields, curves and spreads – Curve inversions remain, ex in Japan, where rapid steepening follows BoJ move

Deep curve inversion and negative carry remains, reflecting re-investment risk, as tightening cycles near end. (pages 4-5)

Sovereign & climate bonds – "Greenium" stabilises after duration and country weight changes squeezed it in 2022

Higher country weights for long duration sovereign bond markets, notably Japan & UK, are key to spread moves. (page 6)

Performance – Longs fell in July after central bank caution. Strong sterling squeezed overseas returns YTD

Treasuries, Bunds and gilts gave up ground in late-July after policy rate increases. IG credit offers stronger relative value, after HY outperformed, led by Euro credits. (pages 7-8)

Appendix (from page 10)

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

Chart 1: After gilt yields rose in Q2, they fell a little in July, after better inflation data, but stagflation challenges remain for the BoE.

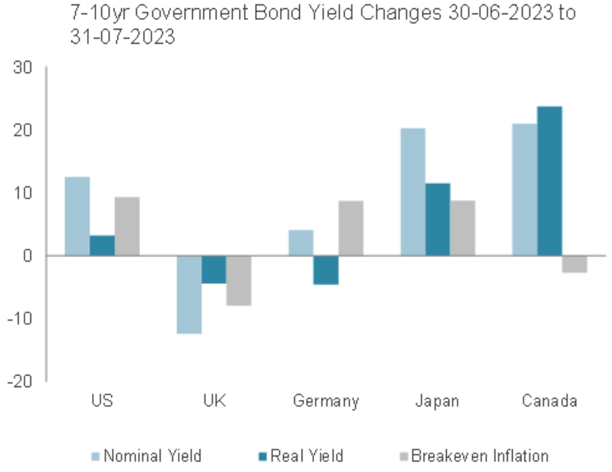
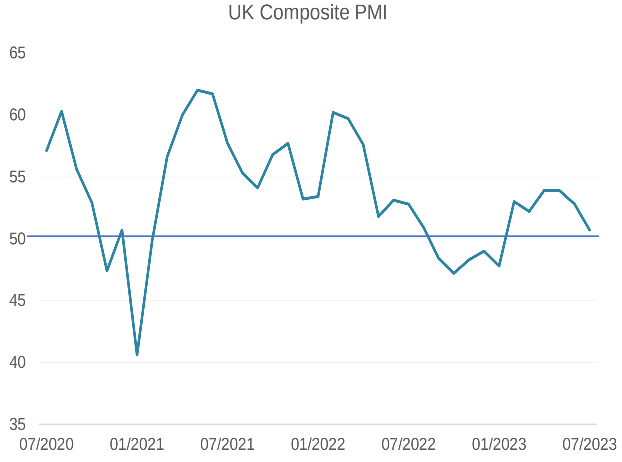


Chart 2:UK composite PMI is close to the 50 level, or zero growth, as positive services growth is offset by weak manufacturing.



Source: FTSE Russell. All data 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, but G7 growth has generally held up well. Europe is most at risk of a hard landing. China's policy of domestic-led growth continues. A bigger share of fixed rate mortgages has shielded UK consumers from higher short rates. Lower inflation may be more elusive in Q3, due to base effects, after inflation fell sharply in Q2. A tight UK labour market and 2nd round inflation effects remain a major challenge for the Bank of England.

Although growth slowed sharply, only the Eurozone is in recession, and the US has avoided one, buoyed by services, and resilient consumers (Chart 1), though interest rate sensitive sectors, like real estate, are weaker. The IMF increased its US forecasts again in late-July, for 2023, and Japan's service sector and tourism rebound may lead to further growth forecast upgrades.

UK inflation finally fell to below 8% y/y in June, but remains higher than the rest of the G7, as Chart 2 shows. Core inflation fell to 6.9% from the 31 year high of 7.1% in May, but base effects are less helpful in Q3, as the big increases in inflation in Q2 2022 drop out of indices. Ongoing wage inflation - see Chart 4 below - and the failure of UK inflation to fall further despite the strong exchange rate will both concern the BoE, so markets expect a further base rate increase at the August MPC.

Chart 3 shows oil and gold prices diverged since the Ukraine shock in February 2022, as energy prices first rose sharply, but then fell on the weak growth outlook, despite OPEC production cuts. Lower US inflation and the prospect of US rates peaking have helped the gold price recover in 2023, after Fed tightening and higher dollar interest rates drove it lower in 2022.

UK wage inflation shows little evidence of cooling and increased to above 7% y/y in the latest three months data, reflecting structural labour shortages. Although inflation expectations have not de-stabilised, there is some evidence of UK wage bargainers adapting to higher inflation rates, increasing the risk of second-round effects on inflation.

Chart 1:North American and Asian forecasts show no recessions, helped by the recovery in services, and Asian policy support. Eurozone and UK risks of a hard landing are higher, after a bigger energy shock.

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: Favourable base effects and lower energy prices drove inflation lower in 2022-23, led by the US and Canada. Core inflation fell less and is stickier. China and the UK remain global inflation outliers.

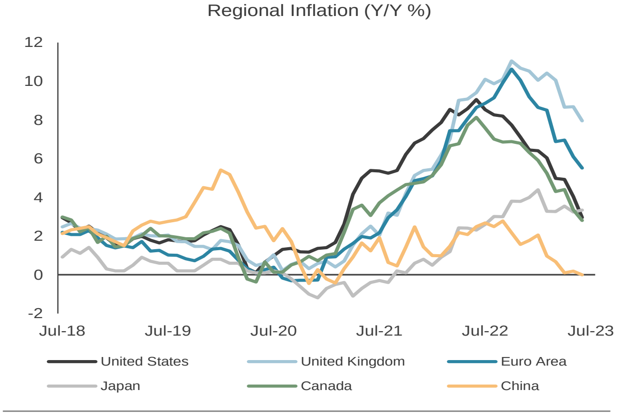


Chart 3: Gold has recovered since the Ukraine shock and Fed tightening began, as lower inflation drives expectations of lower rates in 2023-24. Oil prices fell on the weaker growth outlook.

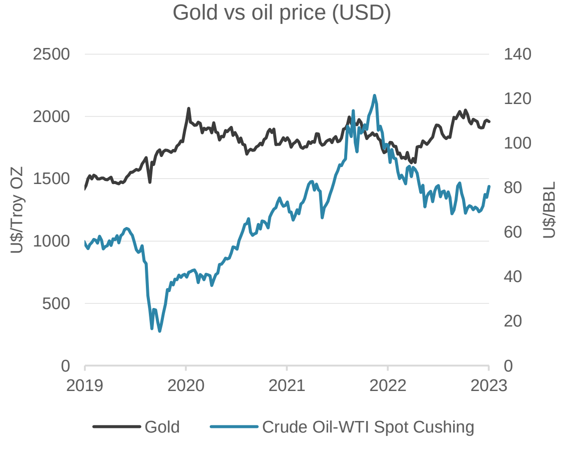
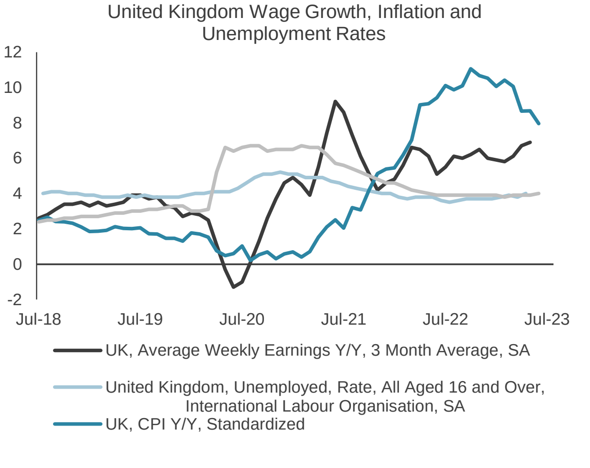


Chart 4: The challenge for the BoE is the labour market becoming a source of renewed inflationary pressure, with average earnings growth above 7%, even if headline inflation dipped to 7.9% in June.



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Financial Conditions and Monetary Policy Settings

UK financial conditions tightened, as UK base rates, sterling and gilt yields rose, and the curve inverted, but wage inflation accelerated, and inflation is falling only slowly, so a further base rate increase is likely. Fed caution continues, despite fast disinflation, and the BoJ signalled curve control may end soon. A harder Eurozone landing may limit ECB tightening.

Tightening in financial conditions is signalled in weak UK M2 growth (see Chart 1), higher policy rates, tighter UK loan conditions, and yield curve inversion (see Chart 3, page 4). But distress is not evident in UK equities, high yield credit spreads, or credit card delinquencies, so the picture is mixed, and unemployment remains near a 50 year low.

Exchange rates reflect disparate economic performance and policy settings in the post-Covid era (Chart 2). The BoJ decision to make yield curve control more flexible drove a strong yen rally at the end of July, and tightening rate differentials have weighed on the dollar since the high in Q4 2022. Sterling draws support from higher UK rates, but stagflation may limit gains.

Monetary policy diverges materially, both within the G7 and China, reflecting inflation dispersion, as Chart 3 shows. But the BoJ signalled greater "flexibility" in yield curve control, and that the end of zero rate policy may be near, after lifting the 10 year yield ceiling to 1%. The Fed left its options open, after raising rates 25bp at the July FOMC, but the ECB hinted at a pause in September, after the move to 4.25%. Markets expect a further 25bp increase in UK rates on Aug.4.

The BoE continues to shrink its balance sheet at a pace of about 10% per annum, but has made clear policy rates are the key instrument. The Fed's balance sheet has fallen to $8.27 trillion, unwinding the banking crisis impact (Chart 4), versus a peak of $8.97trn in April 2022, but the contraction slowed sharply. The ECB and BoC shrunk balance sheets most in 2022-23. BoJ balance sheet expansion may be coming to an end, after curve control was made more flexible (on July 28).

Chart 1: UK M2 growth has recovered from the lows but has not proved a reliable lead indicator for UK inflation, falling sharply in 2021-22, in advance of inflation accelerating.

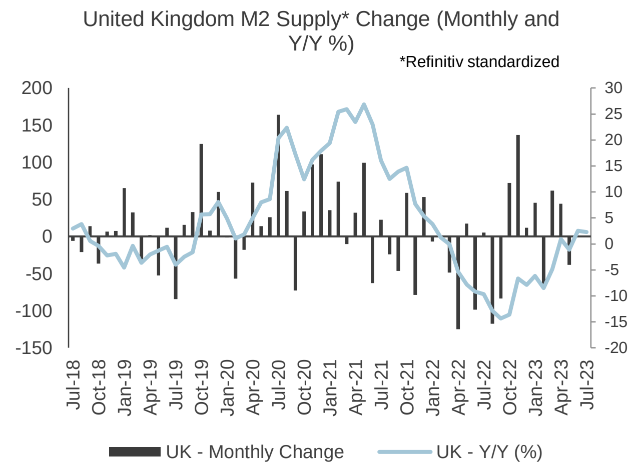


Chart 2: The yen recovered after the BoJ made yield curve control more flexible but remains relatively weak. Sterling drew support from higher UK rates but stagflation isn't helpful and may limit support.

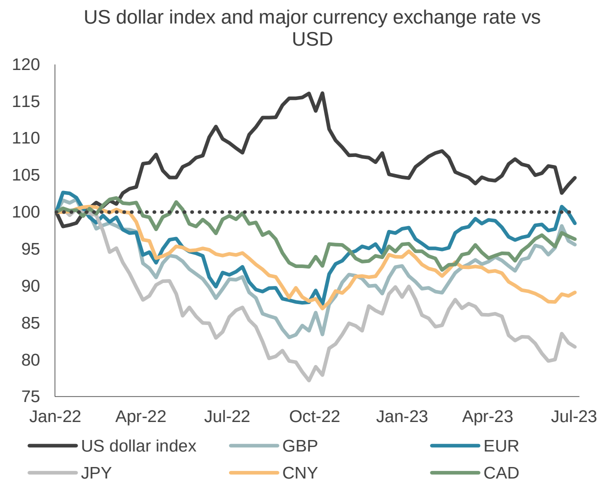


Chart 3: The Fed and ECB left options open after 25bp increases in July, though the ECB hinted at a pause. The UK's stagflation challenge makes another BoE tightening move likely on August 4th.

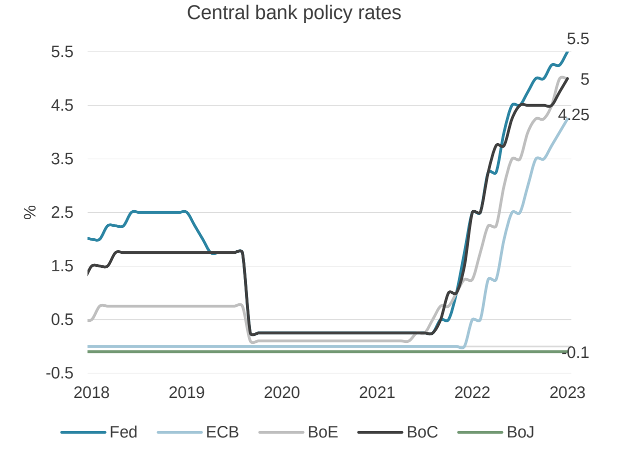
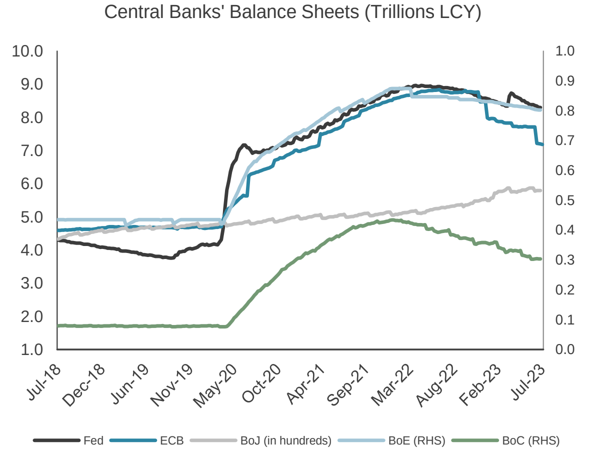


Chart 4: The BoE is unwinding about 10% of its gilt holdings per annum, much slower than the BoC or ECB. More flexible curve control suggests BoJ balance sheet expansion may be ending.



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Global Yields, Curves and Spread Analysis

Chart 1: G7 7-10-year yields remain rangebound, including Treasuries, reflecting the combination of lower inflation but stronger growth signals. Gilts have rallied after better UK inflation data.

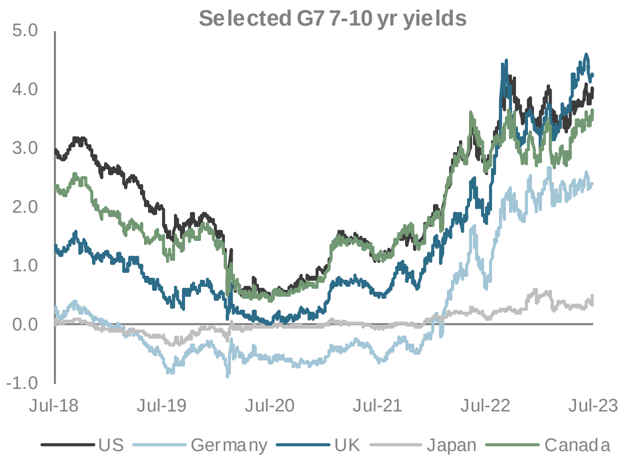

Chart 2: Real yields have tracked nominal yields in July, apart from Japan, where the combination of higher inflation accruals and zero rates helped demand for JGB inflation linked bonds.

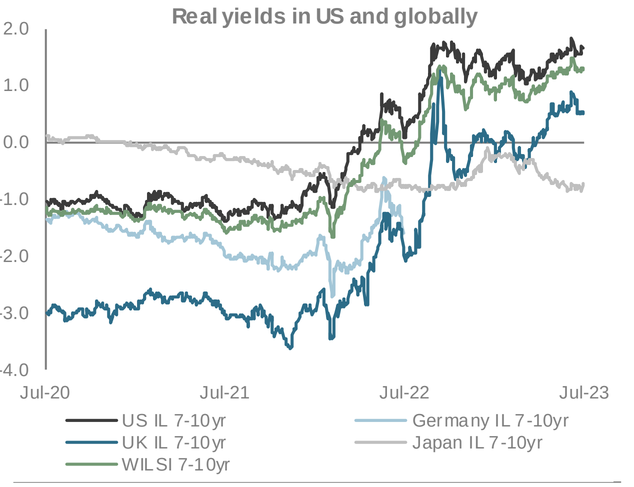

Chart 3: Yield curve inversion remains near cyclical lows, ex Japan, after further rate increases by the Fed and ECB. Canadian curve inversion deepened after the BoC's rate increases in June and July.

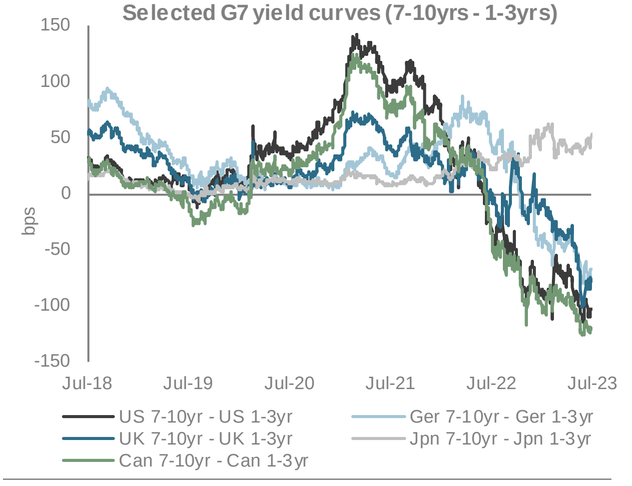

Chart 4: It is a similar story with inversion in long maturities, with Japan the exception. With yields near 15-year highs, investor concern over re-investment risks may be keeping curves inverted.

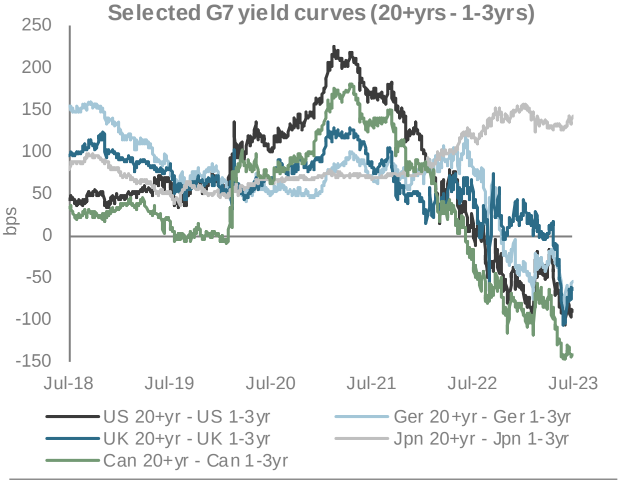

Chart 5: Inflation breakevens have moved most decisively higher in the UK and Japan, reflecting higher inflation (apart from the UK's June data), and the BoJ's more flexible yield curve control.

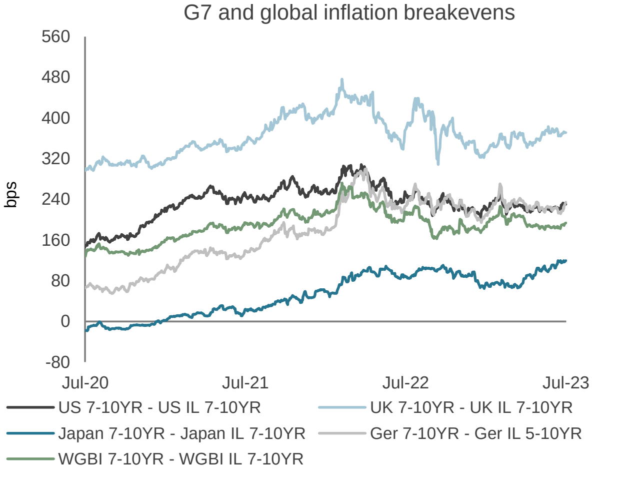

Chart 6: Global inflation breakevens of all tenors have converged near 2%, after a period of much higher short-dated breakevens. There is little evidence of inflation expectations de-stabilising.

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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 sharp break lower versus the UK, after gilt yields spiked in Q2 remains a feature.

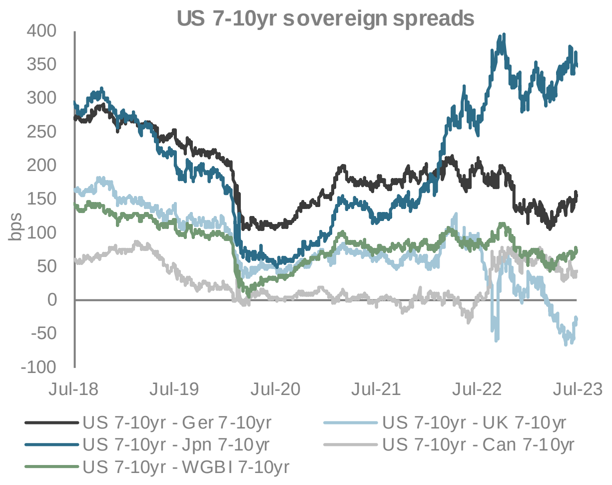


Chart 2: Italian spreads stabilised in July, though the risk rally drove them tighter since Q4 2022, supported by the ECB's transmission protection instrument (designed to protect peripheral spreads).

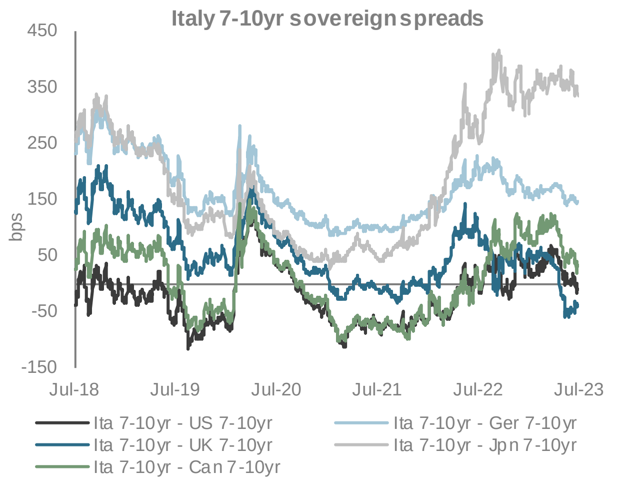


Chart 3: Despite predictions, an EM crisis failed to materialise after both Covid and Ukraine shocks and G7 tightening in 2022-23. Spreads are consolidating near cycle lows, apart from versus JGBs.

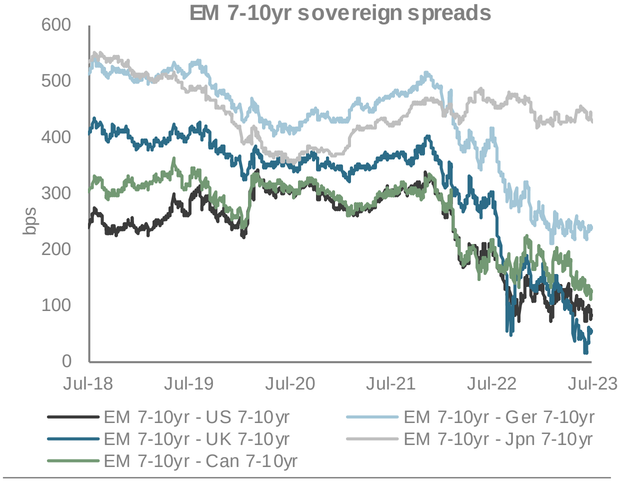
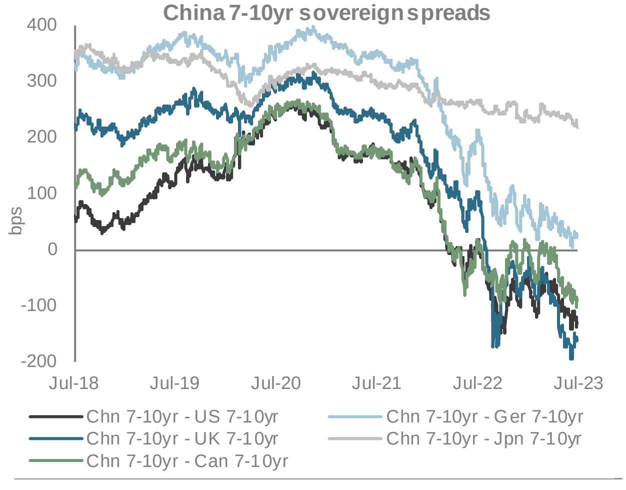


Chart 4: Low correlation of China with the G7 economic and policy cycle continues after different Covid policies and lockdown timings. Yield spreads have traded in wide ranges since the 2020 pandemic.



. 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.

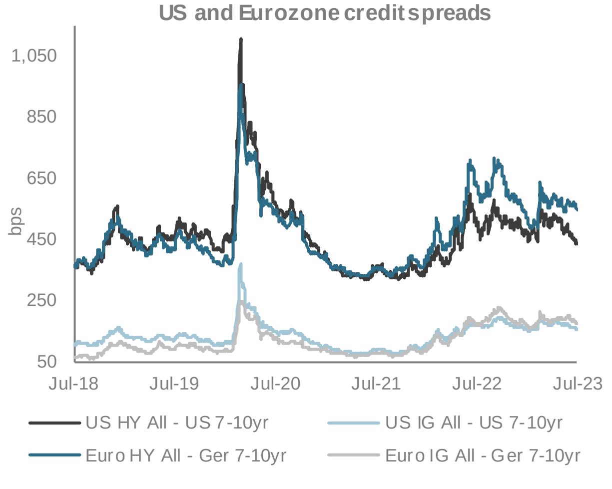


Chart 6: Chinese $ HY spreads widened above 8000bps in July, after Evergrande delayed its financial results and debt restructuring. US HY spreads narrowed, benefiting from the risk rally.

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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.

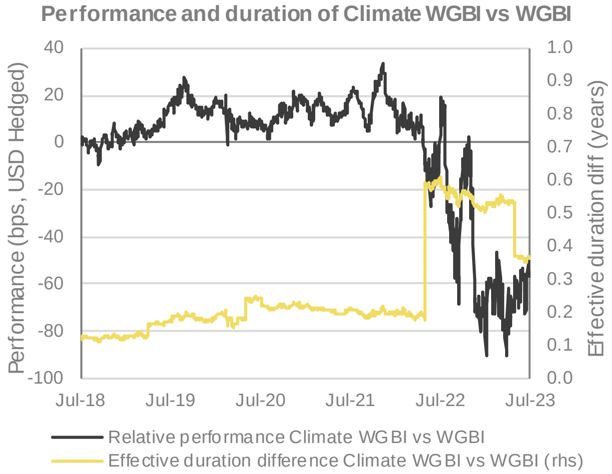


Chart 2: The US underweight in the climate WGBI fell sharply in the July re-weighting, which reduced the duration difference versus WGBI. The UK's weighting increased after more green gilt issuance.

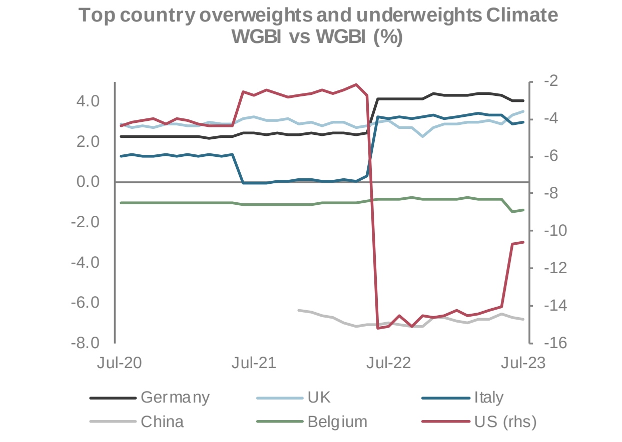


Chart 3: The increase in Japan's country weight in 2022 caused the yield on climate WGBI to drop sharply relative to WGBI. But this has fallen away with UK gilt yields rising sharply another factor in this.

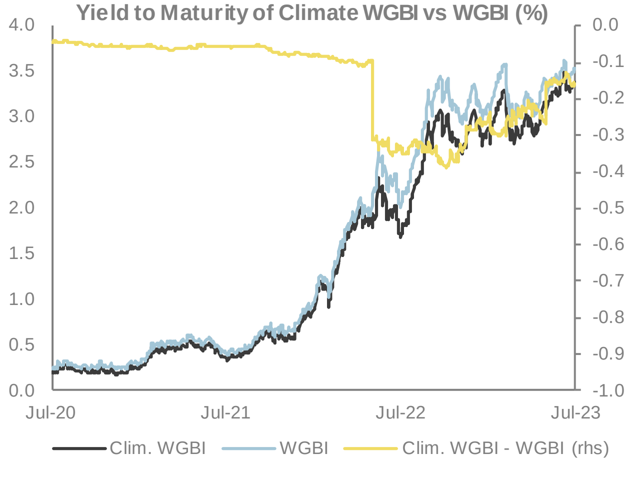


Chart 4: Climate WGBI's higher weighting in the Eurozone gives the index higher AAA weight, with Bunds rated AAA, but the lower US weighting in climate WGBI means the AA weight is notably lower.

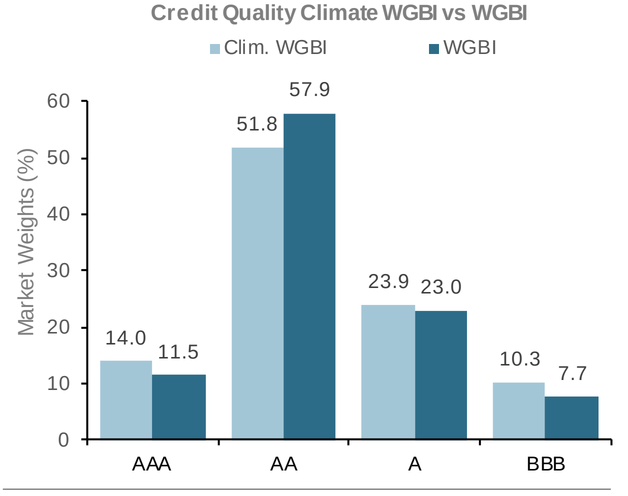


Chart 5: Yield curve flattening has caused yields to converge in the medium to long maturities at around 3% in both WGBI and climate WGBI in 2023, eliminating most of the "greenium" in climate WGBI.

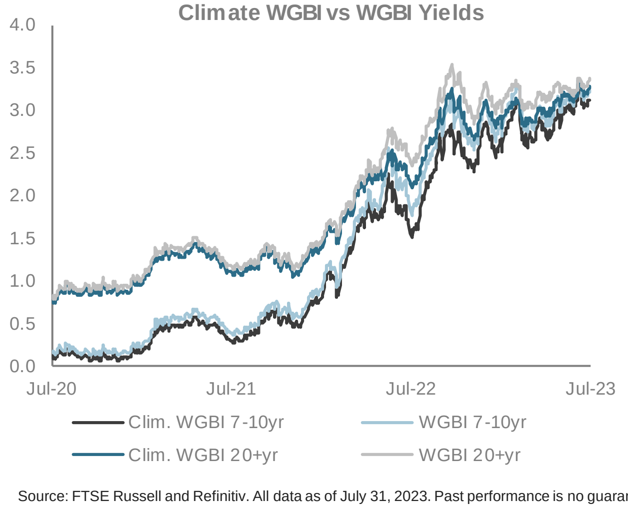
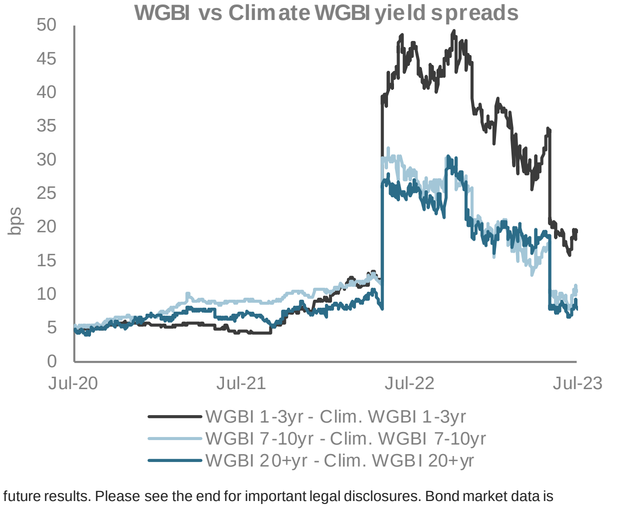


Chart 6: The "greenium" or yield discount on climate-WGBI versus WGBI has normalized in longer maturities, after increasing sharply when Japan's sovereign weight increased, and the US fell, in 2022.



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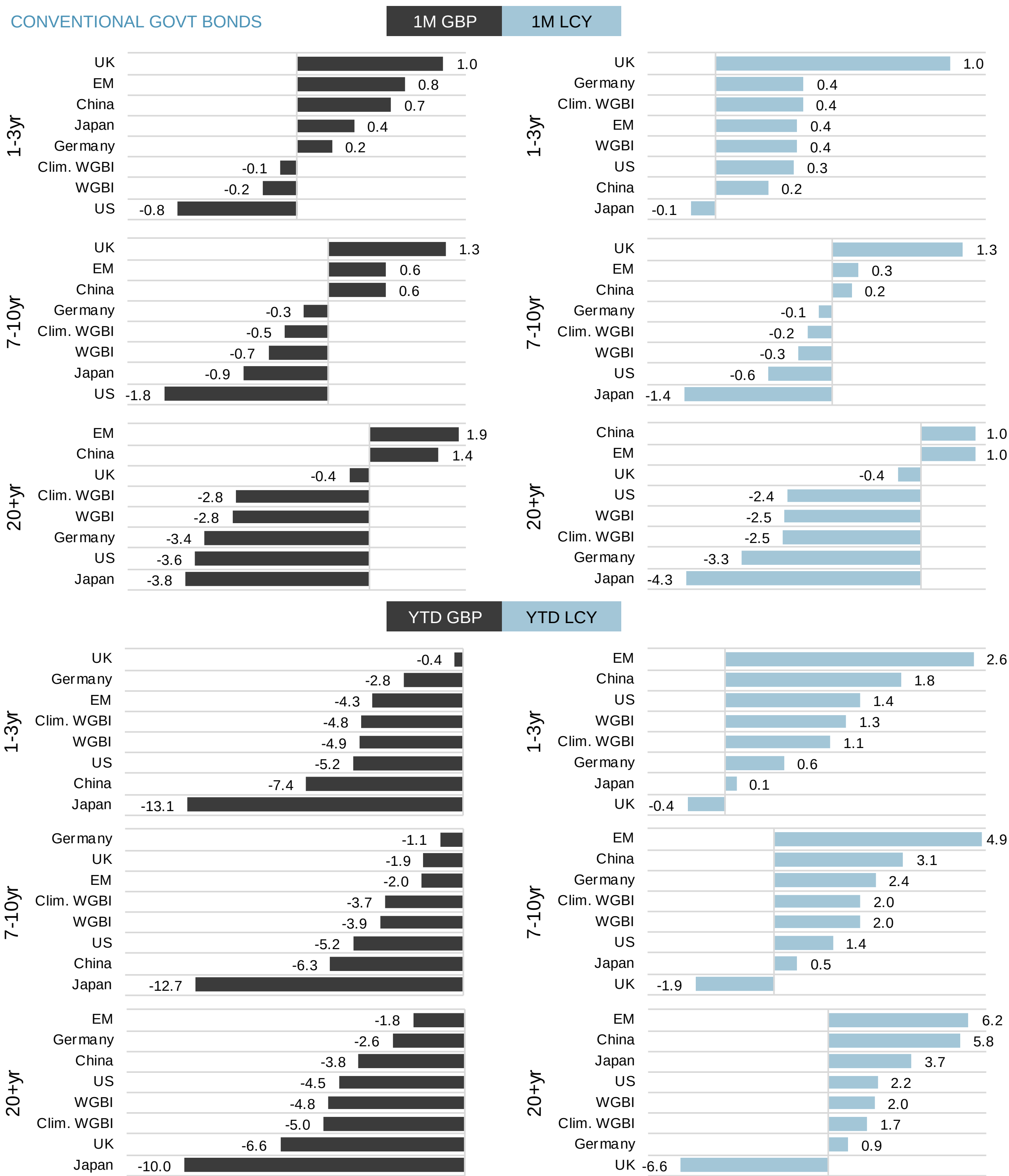
Global Bond Market Returns – 1M & YTD % (GBP, LC, TR)

Government bonds mostly traded in narrow ranges in July, although gilts recovered after better inflation data, with modest gains, and signs curve control may end helped the yen and made short JGB returns positive in sterling. YTD, sterling strength and the weak yen squeezed JGB returns, which lost 10-13%. All overseas bond returns were negative in sterling.

July central bank moves were priced in, though the BoJ surprised markets in signalling curve control may end soon. Bonds range-traded though longs fell back, led by Treasuries, and JGBs, losing up to 4% after the Fed raised rates, and the BoJ policy change.

YTD, G7 yields have fallen modestly, as curves inverted and inflation fell, apart from gilts. However, sterling's strong gains turned all overseas bond returns negative for a sterling investor, with short gilts, EM bonds and Bunds showing the smallest losses of 0-3%.



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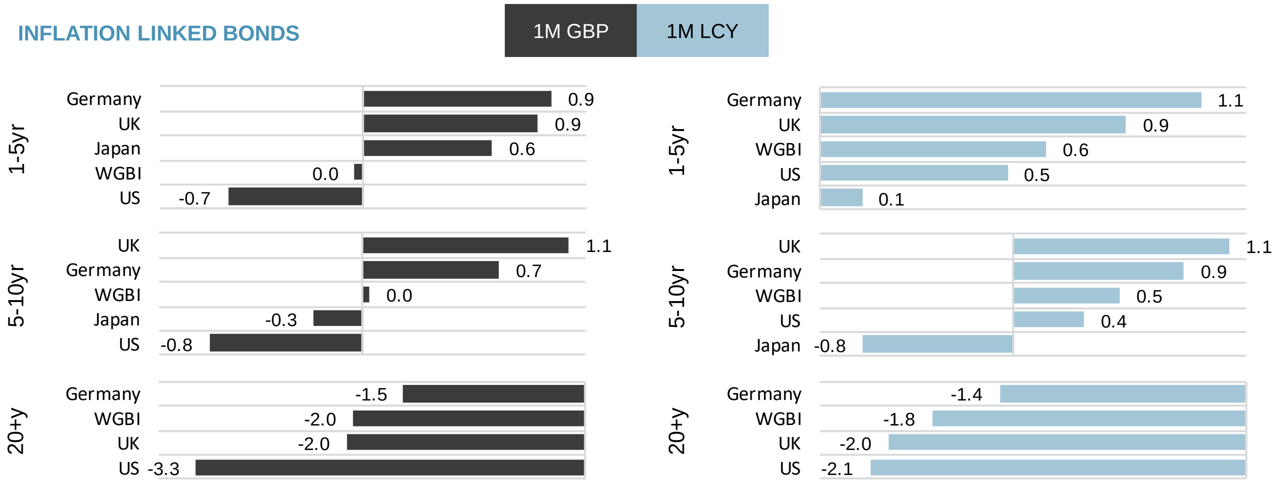
Global Inflation-Linked Bond Returns − 1M & YTD % (GBP, LC, TR)

Shorter inflation bonds rallied modestly in July, led by the UK and JGBs, after lower UK inflation data and the yen helped JGB returns for a sterling investor. Longer index-linked fell with conventionals after the rate rises. YTD, only long Bund and medium UK linkers, and Euro HY managed positive returns in sterling of 2-3%, while JGBs and long UK IL lost 8-11%

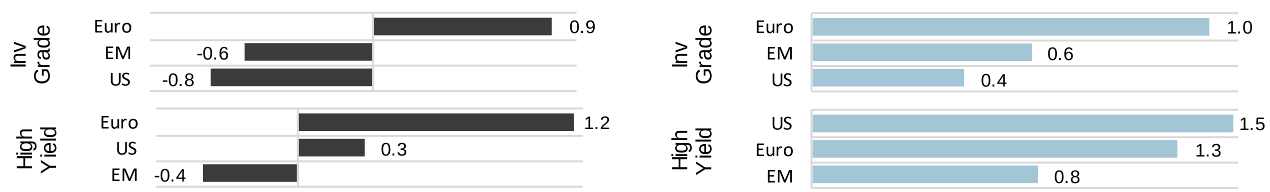
After a difficult Q2 of underperformance, medium dated UK index-linked bonds rallied a little in July, as yields fell, with returns of 1% in sterling terms. Yen gains also helped JGB inflation gain on the month, while long Tips and long UK linkers fell back 2-3%.

YTD, credit performed well, with HY outperforming, thanks to the correlation of HY credit to equity market performance. However, sterling strength meant that only Euro HY credits achieved positive returns of 3% in sterling terms, while EM HY credit lost 4%.

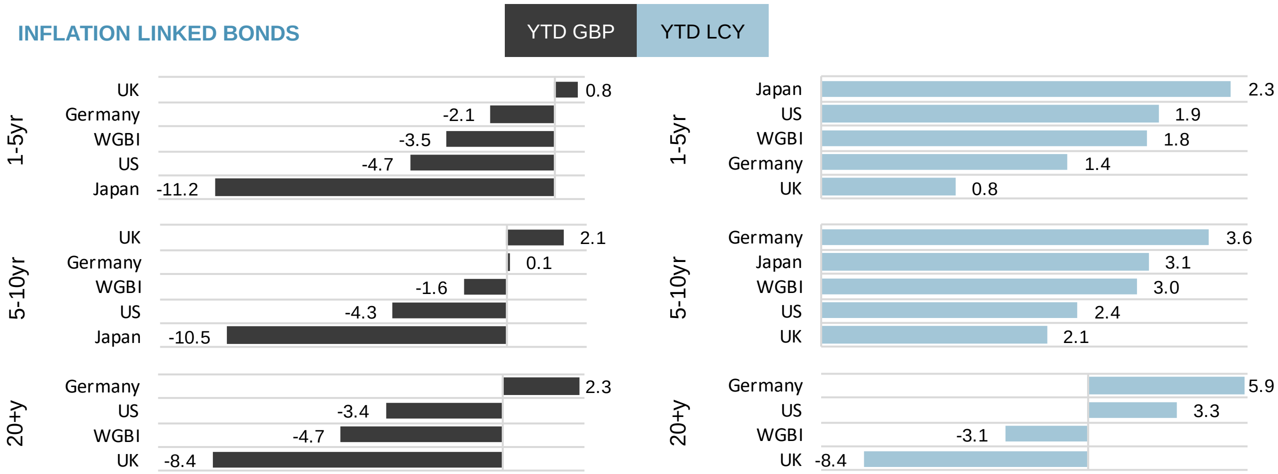
INFLATION LINKED BONDS



CORPORATE BONDS



INFLATION LINKED BONDS



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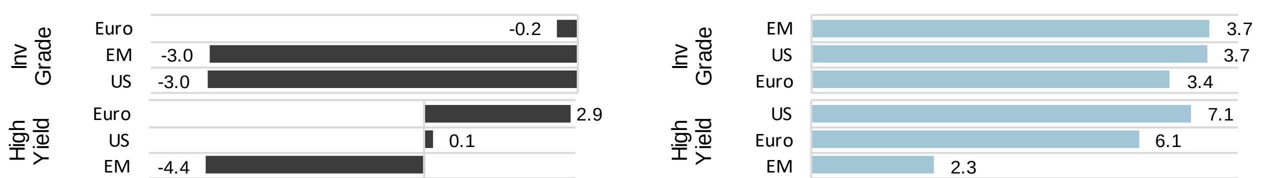

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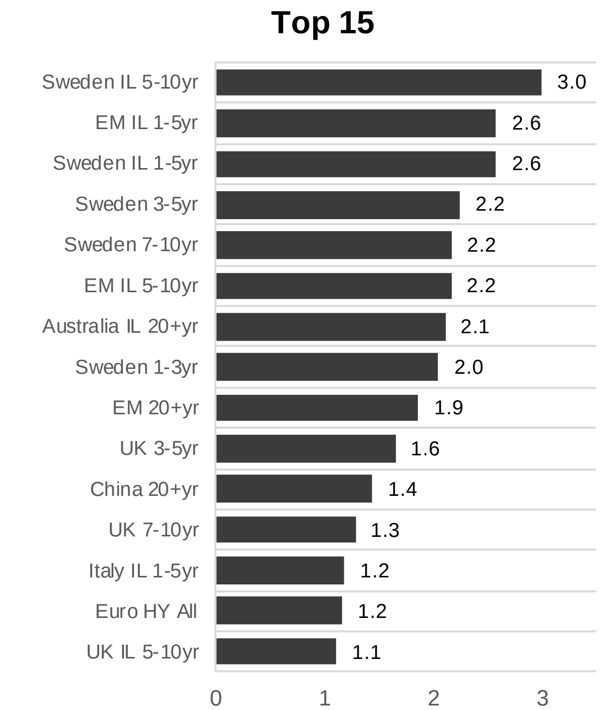
Top and Bottom Bond Returns – 1M & 12M % (GBP, TR)

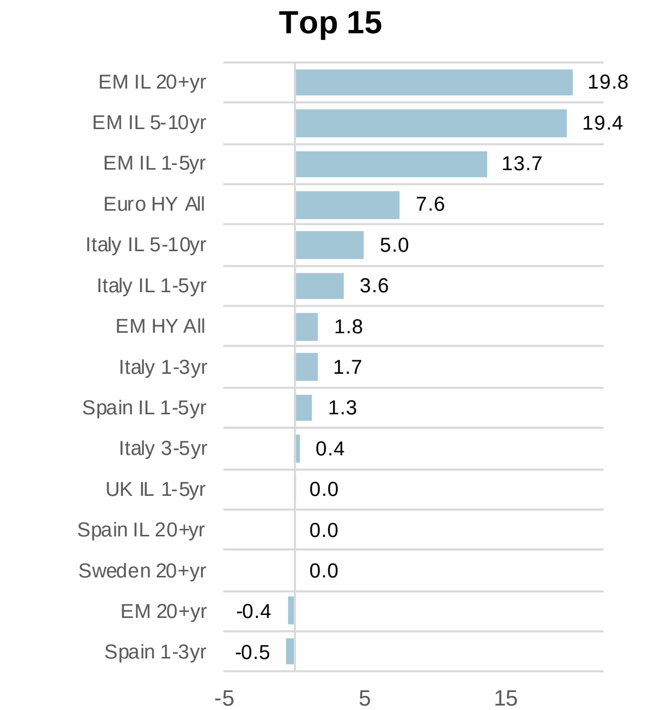
Shorter dated EM and Swedish govt bonds were the strongest performers on 1M, in sterling terms, returning 2-3%, aided by strong currencies. Longer Canadian, US and Eurozone bonds lost 3-5%, after policy rate increases. 12M returns were led by EM bonds, and euro FX gains helped long Italian linkers but losses on most long govts. remain sizeable.

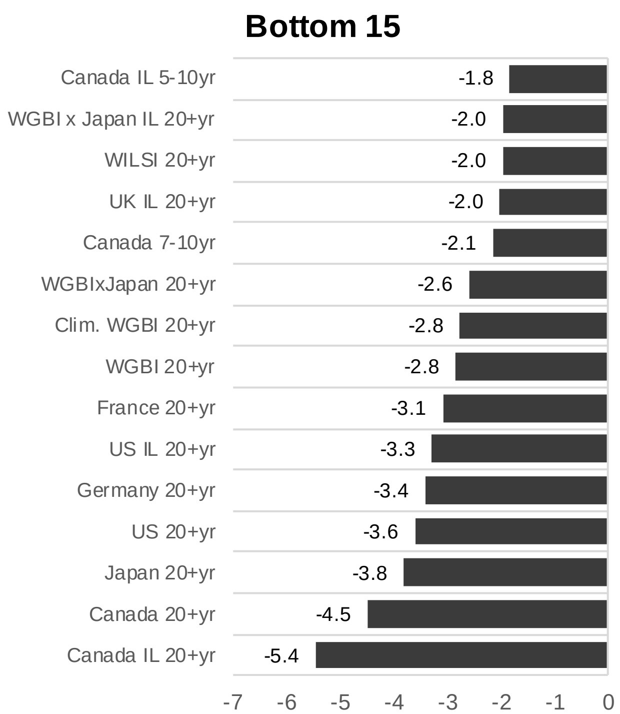
A stronger Swedish krone helped drive Swedish bond gains in July. EM bonds also benefitted from stronger currencies.

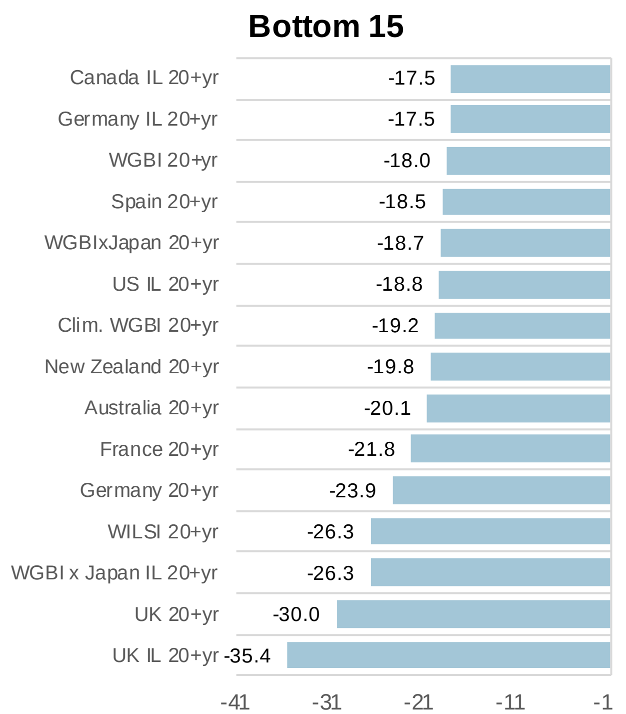
On 12M, shorter Italian govt bonds were boosted by spread convergence as risk rallied, and a stronger euro. EM inflation bonds returned up to 20%, continuing to outperform in 2022-23. But long duration govts lost 18-35%, led by gilts, Bunds, and WILSI.

1M GBP | 12M GBP









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Government Bond Returns

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

		3M		6M		YTD		12M	
		Local	GBP	Local	GBP	Local	GBP	Local	GBP
US	1-3yr	-0.47	-2.78	0.64	-3.70	1.40	-5.20	0.16	-5.27
	7-10yr	-3.29	-5.52	-2.10	-6.32	1.38	-5.22	-6.52	-11.59
	20+yr	-5.15	-7.34	-5.06	-9.16	2.17	-4.48	-12.19	-16.95
	IG All	-0.75	-3.04	-0.43	-4.73	3.71	-3.04	-1.18	-6.53
	HY All	2.33	-0.03	3.12	-1.33	7.12	0.15	4.22	-1.43
UK	1-3yr	-0.73	-0.73	-1.01	-1.01	-0.39	-0.39	-2.14	-2.14
	7-10yr	-3.45	-3.45	-4.83	-4.83	-1.87	-1.87	-14.26	-14.26
	20+yr	-5.52	-5.52	-10.47	-10.47	-6.56	-6.56	-30.03	-30.03
Euro	IG All	0.78	-1.68	1.09	-1.81	3.36	-0.17	-3.32	-1.13
	HY All	2.51	0.29	2.69	0.07	6.14	2.90	5.40	7.56
Japan	1-3yr	-0.08	-6.45	0.01	-12.41	0.12	-13.08	-0.12	-11.14
	7-10yr	-1.25	-7.55	0.78	-11.74	0.55	-12.70	-2.18	-12.97
	20+yr	-4.12	-10.24	4.38	-8.59	3.68	-9.98	-5.14	-15.60
China	1-3yr	1.01	-4.35	1.68	-8.02	1.82	-7.40	2.55	-8.57
	7-10yr	1.56	-3.82	2.97	-6.85	3.05	-6.28	3.79	-7.46
	20+yr	3.17	-2.30	6.43	-3.72	5.83	-3.76	7.97	-3.74
EM	1-3yr	0.36	-1.96	0.62	-3.72	2.58	-4.10	4.31	-1.35
	7-10yr	0.75	-1.58	0.06	-4.26	3.01	-3.69	2.68	-2.89
	IG All	0.36	-1.96	1.14	-3.23	3.73	-3.02	2.37	-3.18
	HY All	1.41	-0.94	-1.38	-5.63	2.30	-4.36	7.58	1.75
Germany	1-3yr	-0.05	-2.49	0.39	-2.48	0.61	-2.83	-2.74	-0.54
	7-10yr	-0.62	-3.05	-0.31	-3.16	2.39	-1.11	-10.83	-8.81
	20+yr	-2.67	-5.05	-5.26	-7.98	0.88	-2.57	-25.58	-23.89
Italy	1-3yr	0.47	-1.98	1.01	-1.88	1.67	-1.81	-0.57	1.68
	7-10yr	1.94	-0.54	2.90	-0.05	6.99	3.34	-2.93	-0.72
	20+yr	2.73	0.22	1.40	-1.50	9.10	5.37	-11.84	-9.84
Spain	1-3yr	0.02	-2.42	0.52	-2.36	0.94	-2.51	-2.72	-0.52
	7-10yr	-0.13	-2.57	0.27	-2.61	3.05	-0.47	-9.35	-7.29
	20+yr	-0.11	-2.55	-2.67	-5.46	2.84	-0.68	-20.28	-18.47
France	1-3yr	-0.06	-2.50	0.41	-2.47	0.92	-2.53	-3.00	-0.80
	7-10yr	-0.48	-2.91	-0.49	-3.34	2.44	-1.06	-10.51	-8.48
	20+yr	-1.61	-4.01	-5.32	-8.03	0.78	-2.66	-23.57	-21.84
Sweden	1-3yr	-0.03	-4.67	-0.17	-4.82	0.71	-6.63	-0.48	-8.68
	7-10yr	-1.44	-6.01	-2.91	-7.44	-0.19	-7.47	-7.43	-15.05
Australia	1-3yr	-1.00	-1.38	-0.12	-8.61	0.72	-6.43	0.19	-8.50
	7-10yr	-4.46	-4.84	-2.07	-10.39	2.22	-5.04	-3.98	-12.30
	20+yr	-7.85	-8.21	-5.69	-13.71	1.92	-5.32	-12.51	-20.09
New Zealand	1-3yr	-0.29	-1.86	0.58	-7.32	1.58	-6.55	0.01	-6.12
	7-10yr	-3.48	-4.99	-2.29	-9.97	0.82	-7.25	-5.96	-11.72
	20+yr	-9.57	-10.99	-5.70	-13.10	-3.15	-10.90	-14.52	-19.76
Canada	1-3yr	-0.82	-0.17	0.14	-2.87	0.75	-3.04	0.36	-7.59
	7-10yr	-4.80	-4.17	-3.45	-6.35	-0.36	-4.10	-4.30	-11.89
	20+yr	-6.99	-6.38	-5.03	-7.88	0.51	-3.27	-7.58	-14.90

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 Indexes. See Appendix Glossary for list of indexes used for each market. For professional investors only.

Appendix − Global Bond Market Returns % (GBP & LC, TR) – July 31, 2023

Inflation-Linked Bond Returns

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

		3M		6M		YTD		12M	
		Local	GBP	Local	GBP	Local	GBP	Local	GBP
US	1-5YR	-0.67	-2.96	1.06	-3.30	1.90	-4.74	-2.15	-7.46
	5-10YR	-1.92	-4.19	-0.16	-4.47	2.41	-4.26	-6.31	-11.39
	20+YR	-3.21	-5.44	-2.82	-7.01	3.34	-3.39	-14.15	-18.80
UK	1-5YR	0.05	0.05	1.23	1.23	0.76	0.76	0.01	0.01
	5-10YR	-0.38	-0.38	0.39	0.39	2.11	2.11	-6.92	-6.92
	20+YR	-6.94	-6.94	-13.88	-13.88	-8.41	-8.41	-35.37	-35.37
EUxUK	1-5YR	0.40	-2.05	1.33	-1.57	1.39	-2.08	-4.44	-2.27
	5-10YR	0.65	-1.81	2.11	-0.81	3.64	0.10	-6.59	-4.48
	20+YR	-1.07	-3.49	-0.42	-3.27	5.91	2.29	-19.32	-17.48
Japan	1-5YR	1.39	-5.08	1.81	-10.84	2.31	-11.17	3.48	-7.93
	5-10YR	1.71	-4.78	4.24	-8.71	3.07	-10.51	2.78	-8.56
EM	1-5YR	5.32	3.04	7.94	4.21	8.89	5.74	17.15	13.67
	5-10YR	4.91	4.69	8.74	7.42	8.50	7.56	19.59	19.39
	20+YR	5.77	8.84	10.71	13.40	10.16	14.03	14.10	19.76
Germany	1-5YR	0.40	-2.05	1.33	-1.57	1.39	-2.08	-4.44	-2.27
	5-10YR	0.65	-1.81	2.11	-0.81	3.64	0.10	-6.59	-4.48
	20+YR	-1.07	-3.49	-0.42	-3.27	5.91	2.29	-19.32	-17.48
Italy	1-5YR	1.26	-1.21	2.51	-0.42	2.76	-0.75	1.28	3.57
	5-10YR	3.33	0.81	5.46	2.44	8.07	4.38	2.67	5.00
	20+YR	6.13	3.54	7.30	4.23	17.65	13.63	-5.04	-2.88
Spain	1-5YR	0.55	-1.90	1.65	-1.26	1.76	-1.72	-0.92	1.32
	5-10YR	1.25	-1.22	2.71	-0.23	3.81	0.26	-4.33	-2.16
France	1-5YR	0.03	-2.41	1.30	-1.60	1.32	-2.14	-3.54	-1.35
	5-10YR	0.26	-2.19	2.02	-0.90	3.37	-0.16	-6.31	-4.18
	20+YR	1.13	-1.34	-0.08	-2.94	6.41	2.78	-17.32	-15.44
Sweden	1-5YR	0.95	-3.73	0.37	-4.31	1.53	-5.87	1.59	-6.78
	5-10YR	1.61	-3.10	-0.27	-4.92	1.70	-5.72	-4.97	-12.80
Australia	1-5YR	-0.80	-1.18	1.46	-7.16	3.52	-3.83	3.40	-5.56
	5-10YR	-2.55	-2.93	-0.01	-8.51	4.99	-2.46	2.29	-6.58
	20+YR	-4.43	-4.80	-5.28	-13.33	7.61	-0.03	-3.87	-12.20
NZ	5-10YR	-2.95	-4.47	0.45	-7.45	3.23	-5.03	-0.64	-6.73
	20+YR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada	20+YR	-3.76	-3.13	-4.86	-7.71	-3.21	-6.85	-7.17	-14.53

Appendix – Historical Bond Yields % as of July 31, 2023

Global Bond Yields

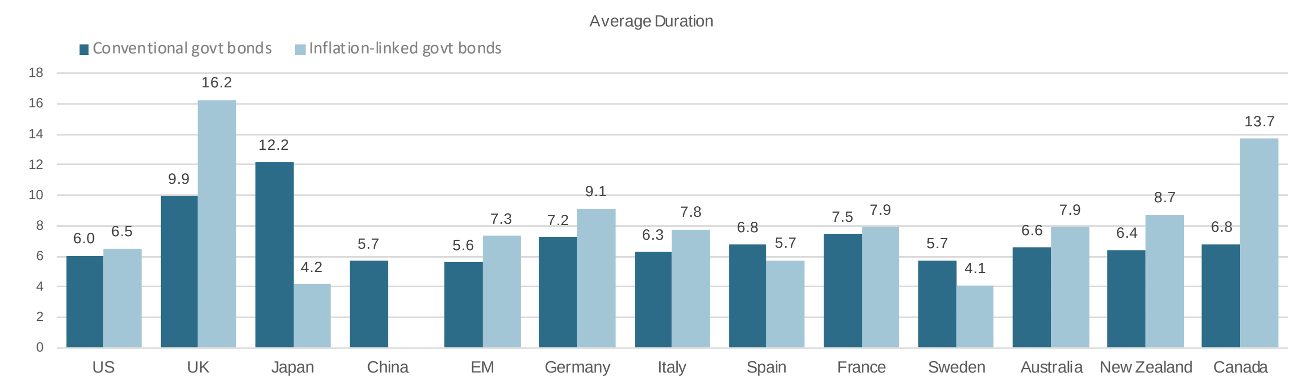
Green highlight indicates highest 15%, red indicates lowest 15%

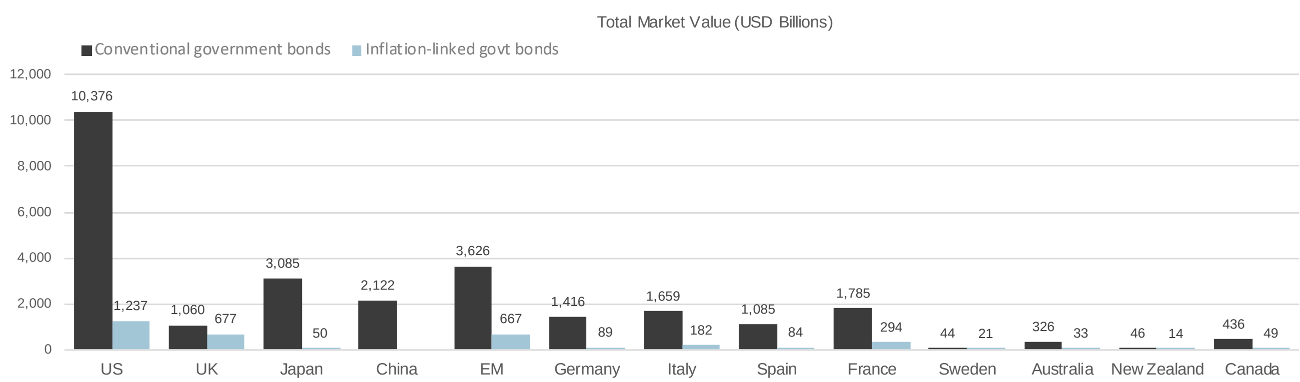
		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	5.01	4.33	3.97	4.11	2.44	1.72	1.80	5.50	8.36
	3M Ago	4.24	3.62	3.41	3.75	1.68	1.23	1.58	5.15	8.50
	6M Ago	4.35	3.74	3.46	3.71	1.85	1.32	1.54	5.01	8.23
	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	1.66	1.79	2.39	-3.22	-2.08	-0.92		
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	-0.07	0.11	1.09	-1.17	-0.80			
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	2.42	2.78	3.30					
EM	Current	8.62	6.78	6.47		3.05	4.07	4.88	5.93	11.51
	3M Ago	8.03	6.85	6.44		3.84	4.04	5.15	5.61	11.71
	6M Ago	7.54	6.61	6.18		3.11	3.37	5.25	5.52	10.25
	12M Ago	7.67	6.97	6.16		3.54	3.65	5.21	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	0.36	0.67	1.04	-2.37	-1.60	-1.16		
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	2.00	2.80	3.35	-2.34	0.45	1.23		
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	0.67	1.13	1.95	-3.30	-1.52	-0.38		
Sweden	Current	3.33	2.83	2.57		0.96	0.74			
	3M Ago	2.89	2.59	2.31		0.71	0.73			
	6M Ago	2.50	2.27	2.05		-0.17	0.14			
	12M Ago	1.71	1.57	1.39		-1.66	-1.45			
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	2.76	3.03	3.44	-0.75	0.40	1.24		
New Zealand	Current	5.21	4.80	4.70	4.87	1.94	2.39			
	3M Ago	4.89	4.15	4.08	4.23	0.95	1.61			
	6M Ago	4.67	4.18	4.11	4.41	1.28	1.79			
	12M Ago	3.28	3.28	3.40	3.75	0.07	1.03			
Canada	Current	4.76	4.02	3.56	3.33	2.11	1.80	1.69		
	3M Ago	3.81	3.09	2.82	2.93	1.12	1.06	1.32		
	6M Ago	3.92	3.14	2.91	3.00	1.29	1.13	1.16		
	12M Ago	2.96	2.71	2.61	2.79	0.48	0.51	0.97		

Appendix – Duration and Market Value (USD, Bn) as of July 31, 2023

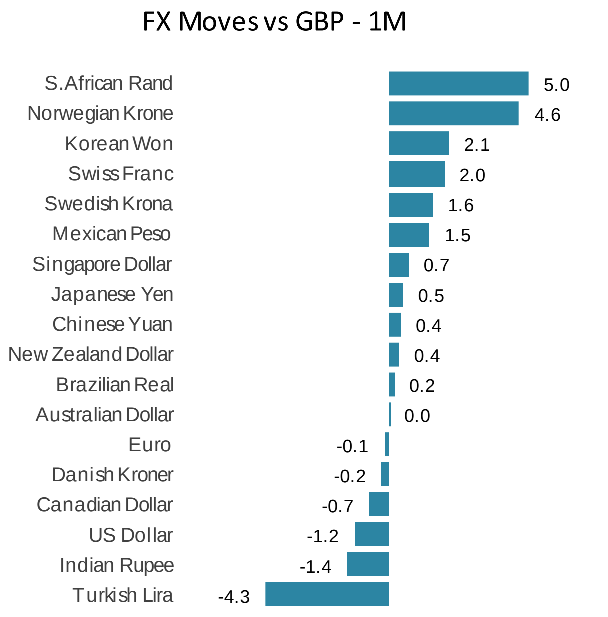
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.4	17.2	**6.0**	2,305.7	1,077.6	1,277.3	**10,376.1**	7.0	21.5	**6.5**	401.5	121.7	**1,237.2**
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**	769.0	652.8	352.5	**3,625.6**	5.5	13.9	**7.3**	141.7	172.8	**666.9**
Germany	3.8	7.6	20.5	**7.2**	297.7	236.8	161.0	**1,415.6**	7.3	21.9	**9.1**	43.3	19.4	**88.6**
Italy	3.7	7.3	16.2	**6.3**	286.4	262.9	155.6	**1,659.3**	8.0	26.4	**7.8**	56.5	5.8	**181.8**
Spain	3.7	7.4	17.2	**6.8**	205.1	192.1	108.5	**1,085.1**	6.8		**5.7**	23.0		**84.2**
France	3.8	7.7	20.2	**7.5**	314.1	305.3	210.1	**1,785.4**	6.8	24.6	**7.9**	105.2	22.0	**293.8**
Sweden	3.8	7.7		**5.7**	13.8	8.9		**43.7**	5.8		**4.1**	9.9		**21.1**
Australia	3.6	7.7	17.5	**6.6**	51.7	88.9	15.2	**326.4**	7.2	22.5	**7.9**	9.7	2.7	**33.5**
New Zealand	3.9	7.6	17.0	**6.4**	9.7	10.9	2.4	**46.4**	6.3		**8.7**	3.2		**13.9**
Canada	3.7	7.7	19.9	**6.8**	57.1	113.4	62.5	**436.1**	7.0	20.8	**13.7**	8.3	20.1	**49.4**

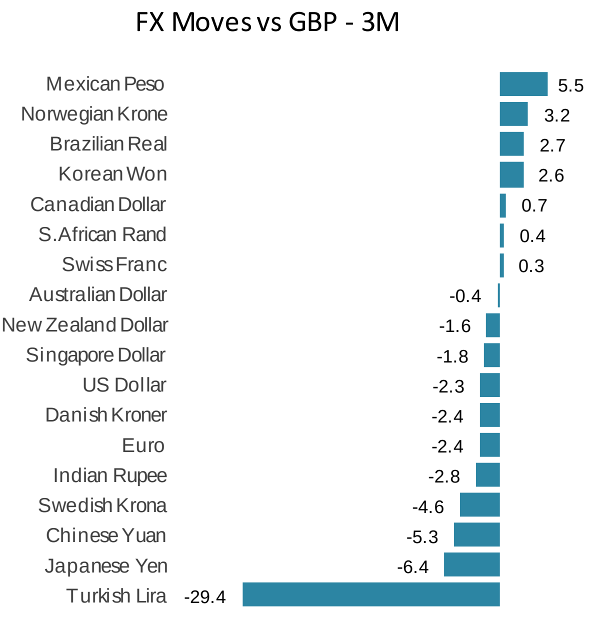
	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.9	8.6	7.3	6.7	7.1	73.4	453.7	2630.7	3284.4	6442.3	4.0	1036.7
Europe	6.3	4.9	4.7	4.3	4.5	9.7	187.7	1205.3	1457.2	2859.9		
EM		5.9	4.9	5.1	5.1		44.6	221.3	326.8	592.7	3.3	190.1

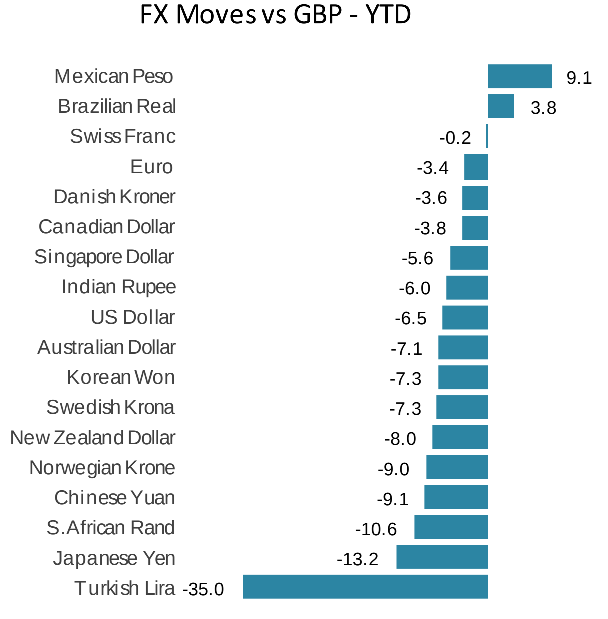


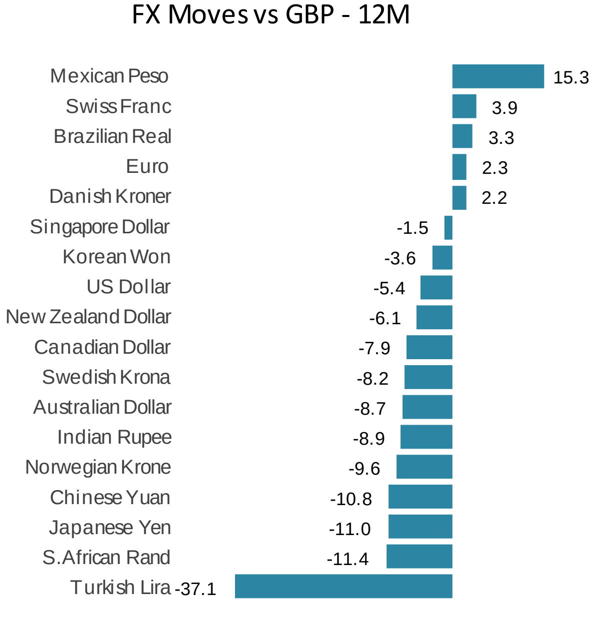


Appendix – Foreign Exchange Returns % as of July 31, 2023









Appendix - Glossary

Bond markets are based on the following indices:

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 Government Bond Index (EMGBI) for the emerging markets government bond market. Please note that over 50% of this index is invested in China

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

FTSE ESG World Government Bond Index for the global government bond markets with an ESG tilt

FTSE Climate Risk-Adjusted World Government Bond Index (Climate WGBI) and FTSE Advanced Climate Risk-Adjusted World Government Bond Index (Advanced Climate WGBI) for each country's relative exposure to climate risk, with respect to resilience and preparedness to the risks of climate change

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