Global Investment Research
Market Maps

FTSE RUSSELL
An LSEG Business

Fixed Income Insights

MONTHLY REPORT – **DECEMBER 2023 | GBP EDITION**

FOR PROFESSIONAL INVESTORS ONLY

Gilts join the November rally, but are constrained by BoE caution on rates

Long gilts enjoyed a strong November rally, but the BoE gave no indication of an early policy pivot, and modest easing in UK fiscal policy leaves the onus on monetary policy to deliver 2% inflation, suggesting 5% base rates may prove protracted. Yield levels helped IG credit rally in Q4, and it remains relatively cheap.

Macro and policy backdrop – Challenge of delivering 2% UK inflation without deep recession remains

UK inflation fell in October but remains near 5%. Marginal easing in fiscal policy leaves onus on monetary policy. (pages 2-3)

Yields, curves and spreads – Yield curves re-inverted as markets anticipate policy easing

A bull inversion in November reversed the bear steepening of October. US spreads remain pro-cyclical. (pages 4-5)

Credit and MBS analysis – IG credit and RMBS spreads narrowed in November rally

Having underperformed during the period of rising yields, IG attracted investors in November, and spreads narrowed. (page 6)

Sovereign and climate bonds – Green corporate spreads tightened, continuing outperformance

The “greenium” in green bond spreads has been restored in 2023. Adjusted-Climate WGBI outperformance trimmed. (page 7)

Performance – Long dated gilts, Bunds and Climate-WGBI led November rally

Long G7 govts enjoyed a strong month, but sterling gains reduced non-UK returns. IG and HY credits rallied. (pages 8-10)

Appendix (from page 11)

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

Chart 1: Increased divergence in nominal and real yields has been notable in 2023, particularly in Bunds vs Treasuries and gilts. Breakevens have moved little, apart from the increase in Japan.

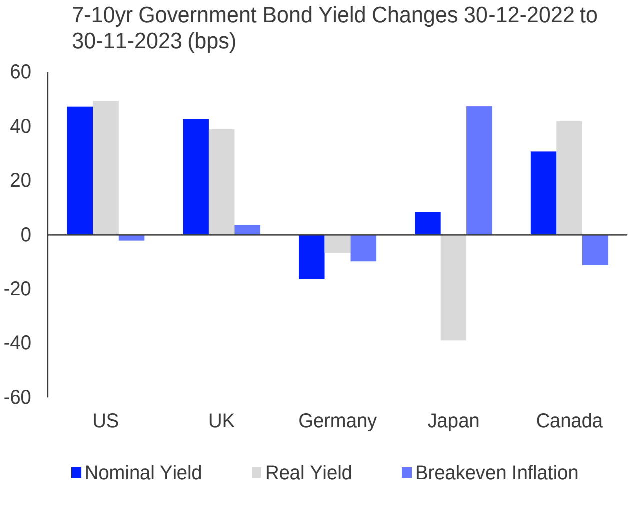
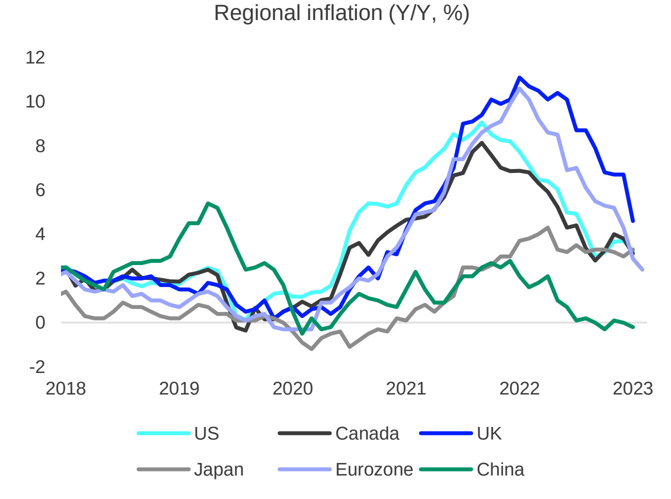


Chart 2: There is less dispersion in G7 inflation after the October data. But output costs of disinflation tend to be higher at lower inflation rates so squeezing inflation down to 2% targets remains a policy challenge.



Source: FTSE Russell and Lipper. Data available as of November 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

Despite the scale of tightening in 2022-23, Consensus forecasts show no G7 recessions in 2024. A marked narrowing in the positive US growth differential over the UK and Eurozone is forecast, but only because US growth is likely to slow to 1.1%. Inflation dispersion fell, with UK inflation declining sharply in October, but much depends on UK service inflation falling to achieve the 2% target, given the sector's size in GDP. The smaller UK manufacturing sector is in outright recession.

Consensus 2024 forecasts show faster US than European growth, but with the differential narrowing (Chart 1).There are no outright contractions forecast, despite growth flat-lining in Europe in Q3, and the constraints on easing Eurozone fiscal policy particularly. Uncertainties surrounding Chinese forecasts are also high, though the Chinese authorities do have scope to reflate demand further. Early US Q4 growth indications show a notable slowdown to 2.1% from 5.2% annualised growth in Q3 (Atlanta Fed Nowcast).

Headline inflation fell again in October, helped by weaker energy prices, and base effects. Chart 2 shows less dispersion in 2024 inflation forecasts, even if dispersion remains high by pre-Covid levels. US core inflation exceeded headline inflation rates since March 2023, but slowed to 4% in October y/y. Weaker demand may allow core inflation to fall further in Q4, but slower GDP growth may also put some upward pressure on US unit labour costs in Q4.

The UK labour market remains tight, though unemployment has edged above 4%, and wage inflation has fallen back a little from the cycle high of 7.9% (Chart 3). With inflation falling back to 4.6% y/y in October, and GDP growth close to zero, risks of a UK wage-price spiral may have eased, but the BoE is unlikely to risk 2nd round inflation effects by pivoting to ease policy quickly, particularly after the central bank criticism in 2021-22 for tightening too late to control inflation.

The global switch in demand away from goods towards services, post-Covid lockdowns, has taken its toll on manufacturing sectors, many of which are in outright recession, particularly in the Eurozone and UK, where the energy shock was more severe in 2022-23. This is shown in Chart 4 in manufacturing PMIs, with the PMI diffusion indices for the UK and Eurozone showing the deepest contractions, and only Canada signalling net expansion.

Chart 1: Consensus growth forecasts for 2024 show a continuation of US exceeding European growth, but by less than in 2023, as Fed tightening squeezes employment and demand. China remains most unpredictable.

Latest Consensus Real GDP Forecasts (%, November 2023)			
	2022	**2023**	**2024**
US	2.1	**2.3**	**1.1**
UK	4.1	**0.4**	**0.4**
Euro Area	3.5	**0.5**	**0.7**
Japan	1.6	**0.8**	**1.0**
China	2.8	**5.0**	**4.4**
Canada	3.5	**1.1**	**0.7**

Chart 2: Consensus inflation forecasts show notable revisions higher to both UK, US and Japanese inflation for 2023 and 2024, but sizeable revisions lower to Chinese and Eurozone inflation in 2023.

Consensus Inflation Forecasts (%, November 2023)				
	2023	*Change Since Jan-23 (Bps)*	**2024**	*Change Since Jan-23 (Bps)*
US	**4.2**	*50*	**2.7**	*20*
UK	**7.4**	*40*	**3.0**	*50*
Eurozone	**5.6**	*-40*	**2.7**	*20*
Japan	**2.9**	*110*	**2.2**	*90*
China	**0.5**	*-180*	**1.8**	*-50*
Canada	**3.9**	*20*	**2.5**	*30*

Chart 3: The UK labour market is showing some signs of slowdown, though labour force survey data is less complete than pre-Covid. Wage growth remains much higher than the BoE would like, raising further inflation risks.

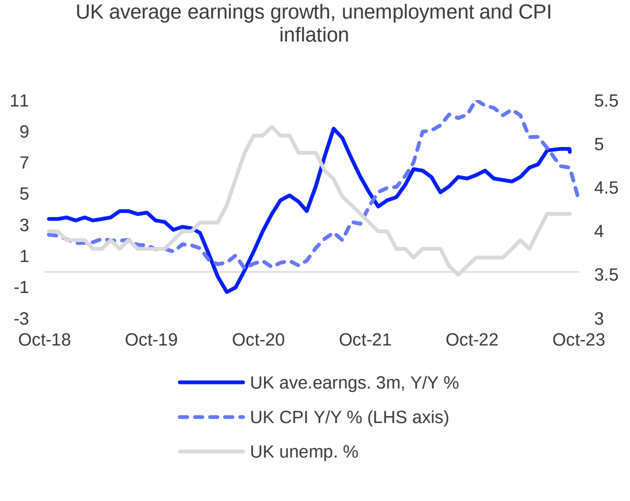
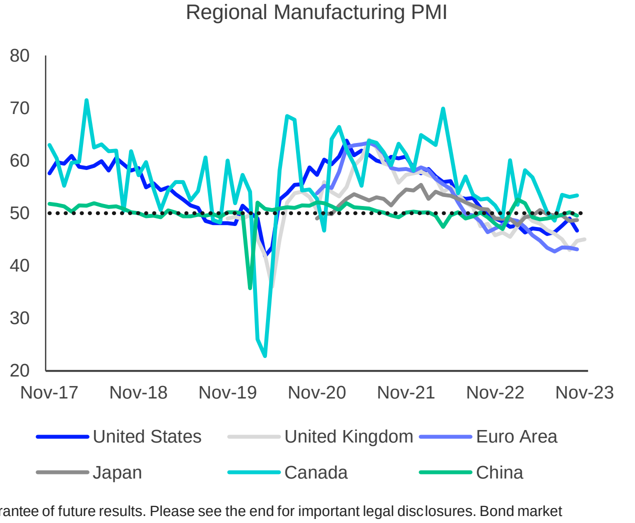


Chart 4: The UK and Eurozone have both taken a large hit in manufacturing, with PMIs falling below 50 for most of 2023, as new orders decline. The Canadian PMI has been the most robust in the G7 in 2023.



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Financial Conditions and Monetary Policy Settings

Financial market sentiment shifted sharply in November, as risk appetite recovered, and financial conditions eased, but the increases in UK real and nominal yields in 2022-23 have tightened financial conditions significantly. Sterling also rallied further after the dollar fell on US easing expectations. Divergent economies suggest less synchronised easing cycles. Pressure for fiscal activism may increase in 2024, but debt/GDP ratios impose important constraints, particularly in the UK.

Chart 1 shows levels of UK real, and nominal, yields are close to 10-year highs, after the BoE's 500bp of tightening in 2022-23. Evidence from UK growth stalling is that 5.25% policy rates and current yield levels give high risk of a recession, particularly as UK consumers have run down savings ratios, and the labour market may be easing. UK fiscal policy easing in the November Autumn statement was only marginal, set against the substantial tightening in 2022-23 (also see Chart 4).

The US dollar fell sharply in November, as markets priced in Fed easing by mid-2024, after lower US inflation and signs of weaker growth in Q4 (Chart 2). The risk rally also favoured the Euro. More hints from the BoJ about the end of curve control helped the yen recover from the Y150 level versus the dollar. Some easing in rate differentials also helped the renminbi.

The Fed, BoE and ECB were given a little more room for manoeuvre by lower October inflation data, signs labour markets are cooling, and inflation expectations remaining anchored (Chart 5 on page 4). This would suggest more extended policy pauses until Q1 2024 at least (Chart 3). After criticism for reacting too slowly to higher inflation in 2021-22, it seems likely central banks will be cautious about easing policy quickly, and particularly the Fed, with the economy still enjoying a relatively soft landing.

Yield levels in the UK are close to Goldilocks levels (see Chart 1), but a key difference for policy-makers is the higher level of public debt to GDP in 2023, as Chart 4 shows, particularly in the UK where debt service costs have already become a major element in public deficits, given low real growth. Infrastructure demands, and central bank counter-inflation policy suggest fiscal policy becoming more active, but UK debt levels and Eurozone fiscal rules may serve as a constraint.

Chart 1: Despite November's rally, UK real and nominal yields are close to post-GFC highs, tightening financial conditions as a result. A recession may be required to return UK inflation to the 2% target.

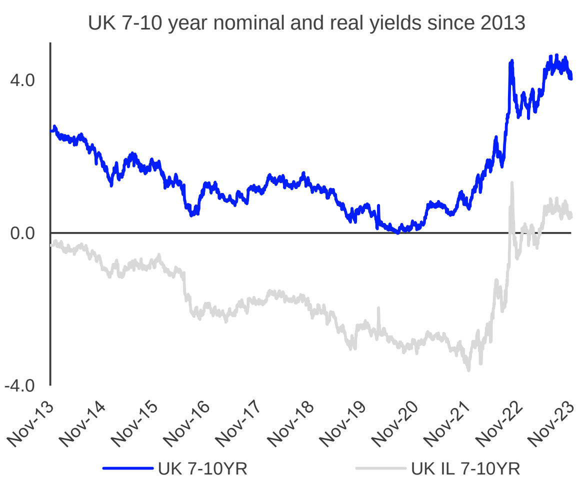


Chart 2: The US dollar fell back sharply in November, as markets rallied and brought forward Fed easing expectations to mid-2024. Even the yen recovered a little as the BoJ edged closer to ending curve closer.

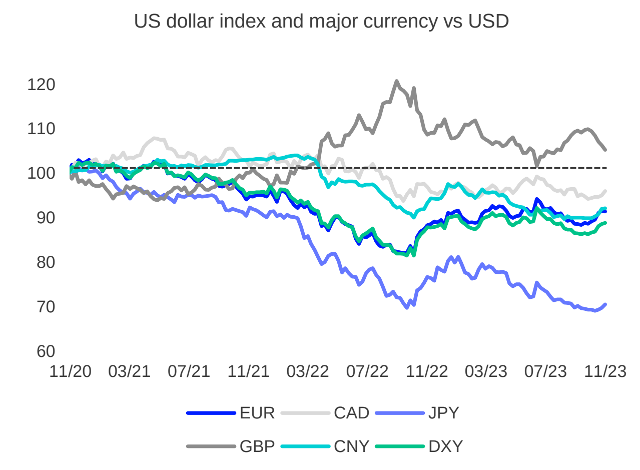


Chart 3: After lower October inflation numbers, and GDP growth near zero in Europe in Q3, G7 central banks are more firmly on hold, led by the US Fed. The PBoC faces a different deflationary challenge.

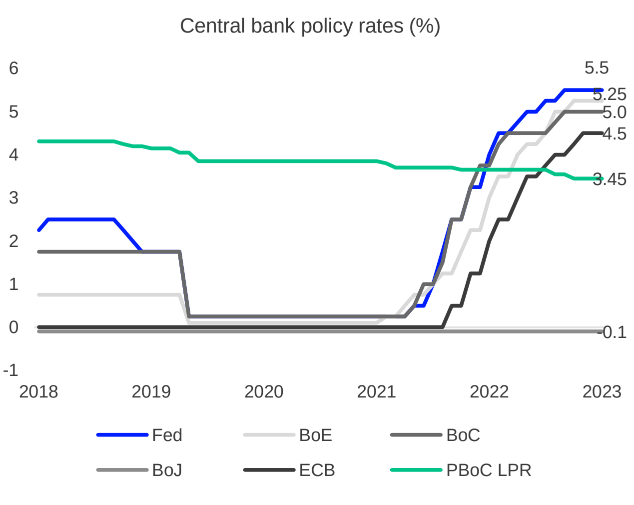
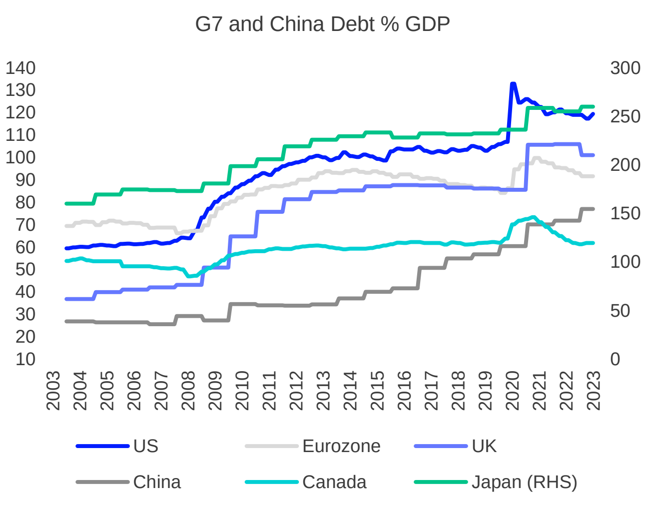


Chart 4: Although there are similarities with the Goldilocks era in 2023 – yield levels, policy rates and a possible IT driven productivity surge – a key difference for policy-makers is the level of public sector debt to GDP.



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Global Yields, Curves and Breakevens

Chart 1: 7-10 year yields fell by similar amounts across the G7 in November, after US yields rose a little more in October. All markets joined the November rally after lower inflation data and central bank policy pauses.

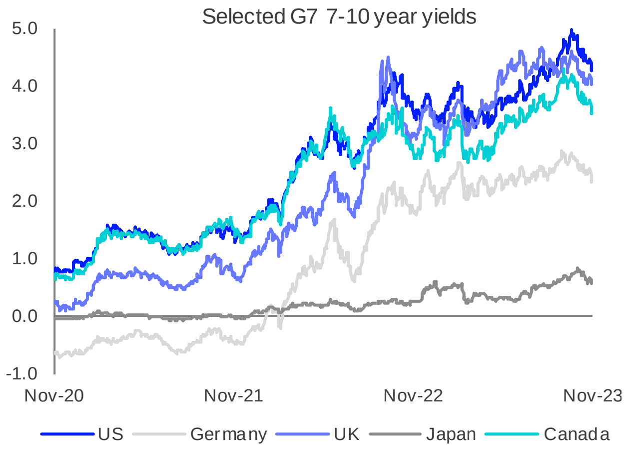


Chart 2: Real yields fell on linkers, as investors modestly revised down rate expectations for central bank policy rates in 2024. Lower inflation and weak growth in Europe helped keep real yields below Tips levels.

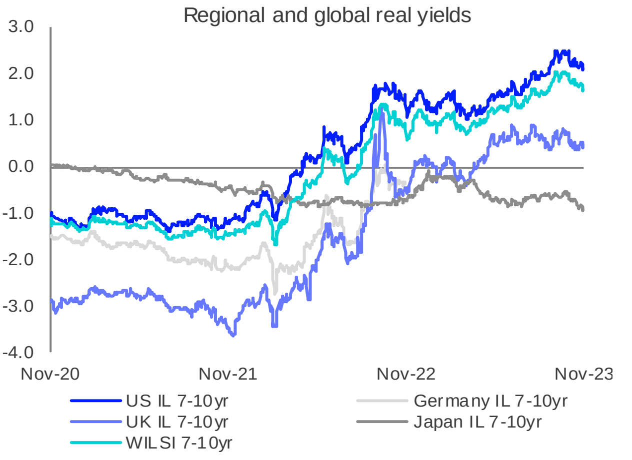


Chart 3: Yield curves re-inverted as 7-10yr yields fell sharply in the rally, and 1-3yr yields were constrained by central bank policy rates. The JGB curve flattened after several months of testing the BoJ 1% yield ceiling.

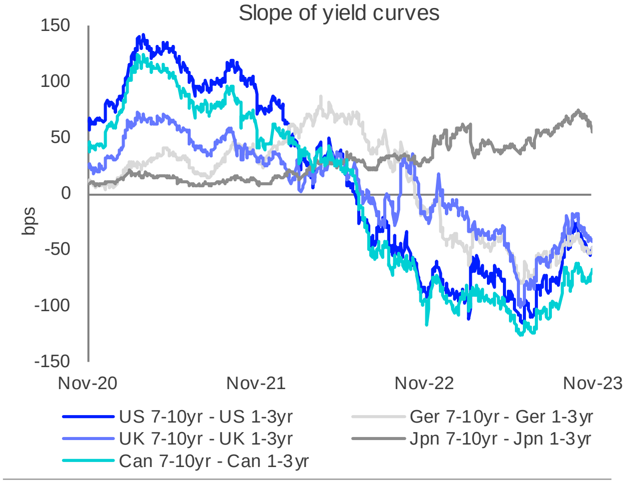


Chart 4: Long maturities also rallied, unwinding some of the recent dis-inversion, as investors began to re-focus on re-investment risks. The Canadian curve remains the most inverted in 20+yrs versus 1-3yrs.

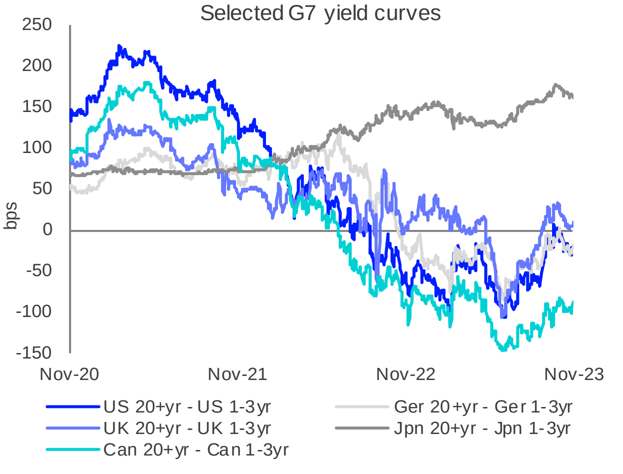


Chart 5: JGB breakevens continue to increase, relative to other G7 breakevens. US 7-10yr breakevens fell in November as nominal yields dropped relative to real yields, after lower inflation data, as in the UK.

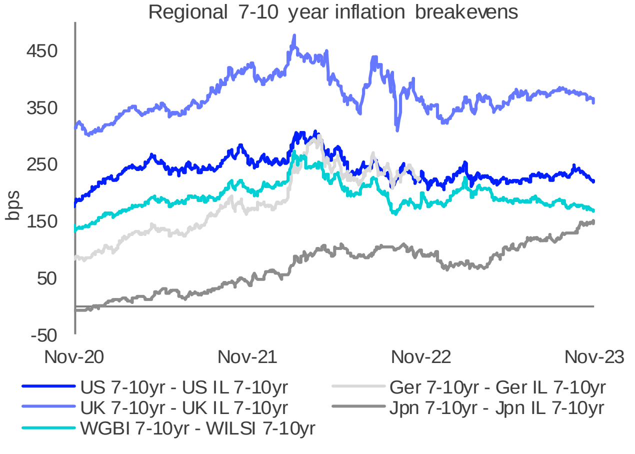
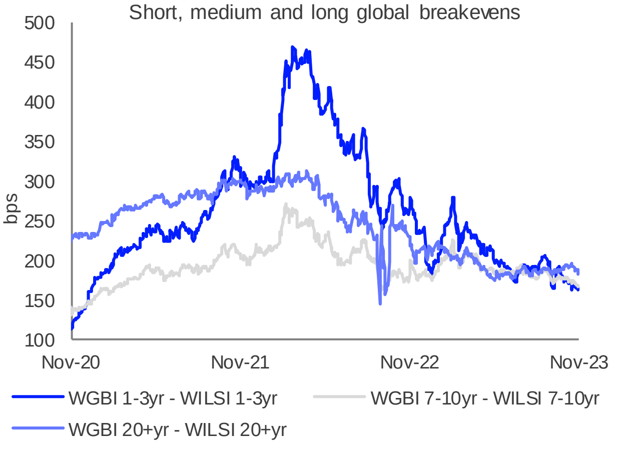


Chart 6: Short dated inflation breakevens fell sharply in November, after lower-than-expected inflation data, showing the normal strong correlation with spot inflation rates. 7-10yr breakevens also fell, to lows for the year.



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Yield Spread and Credit Spread Analysis

Chart 1: .US sovereign spreads narrowed in November, and repeated the normal pro-cyclical pattern, rising during periods of rising yields, and falling when yields decline. The biggest moves were versus Bunds & gilts.

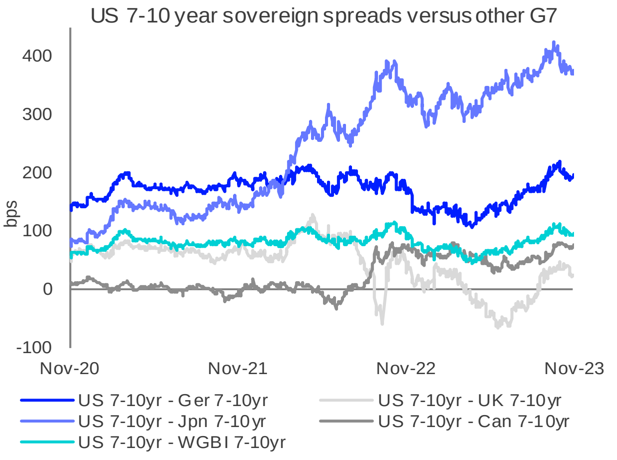

Chart 2:Italian sovereign spreads fell sharply in November, after the sharp decline in Eurozone inflation in October, though spreads barely moved versus the US, as Treasury yields fell significantly in the month.

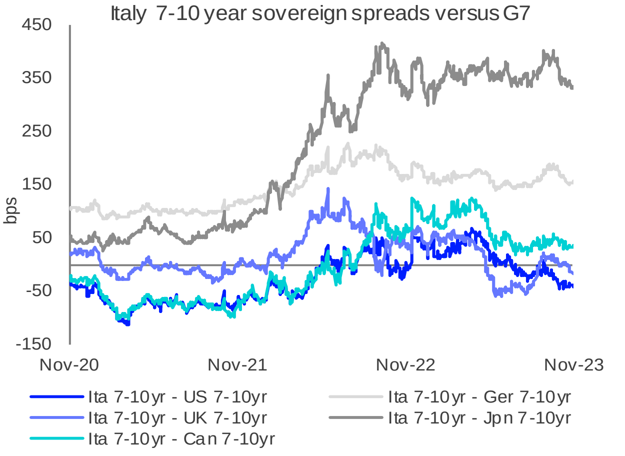

Chart 3:EM sovereign spreads widened a little in the 7-10 yr area, mainly because G7 yields fell sharply in the November rally, though this follows general spread tightening since 2021, apart from versus Japan.

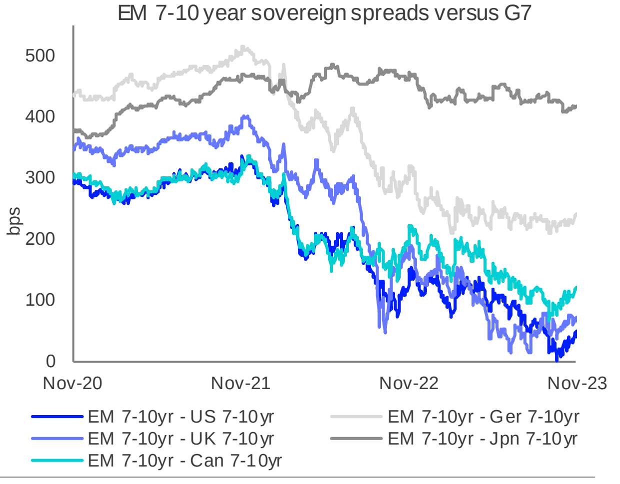

Chart 4: It is a similar story in China on sovereign spreads, which widened versus the G7 in November, following protracted tightening in 2023. Moves were limited versus Bunds, since yields fell less in Germany.

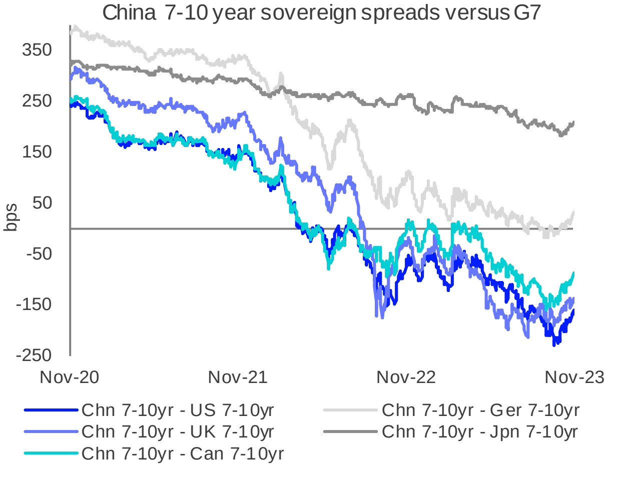

Chart 5: Credit spreads fell in November, despite the sharp drop in govt bond yields in the 7-10 year area. High yield joined the rally, reflecting a recovery in risk appetite, strong stock markets and correlation with HY.

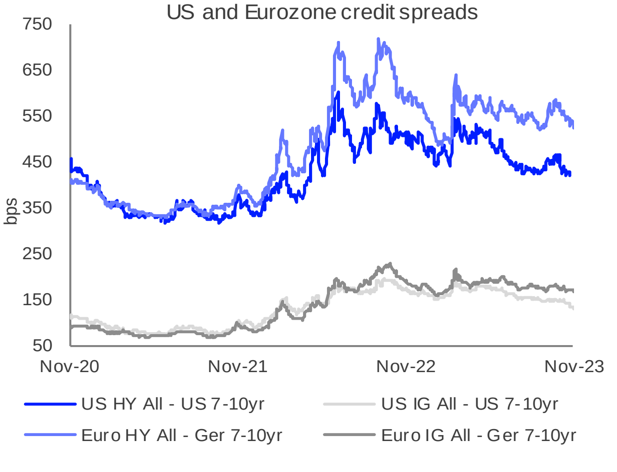

Chart 6: The HY rally extended to Chinese $ HY spreads, which eased to 4800bps in November, as regulators mulled supportive measures for property sector finance from the banking system.

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Credit sectors and RMBS analysis

Chart 1: UK credit spreads tightened in recent months, after a sharp widening in 2022, led by insurance after the Ukraine shock. IG yields of 5-5-6% are also attracting investor interest, led by consumer credits.

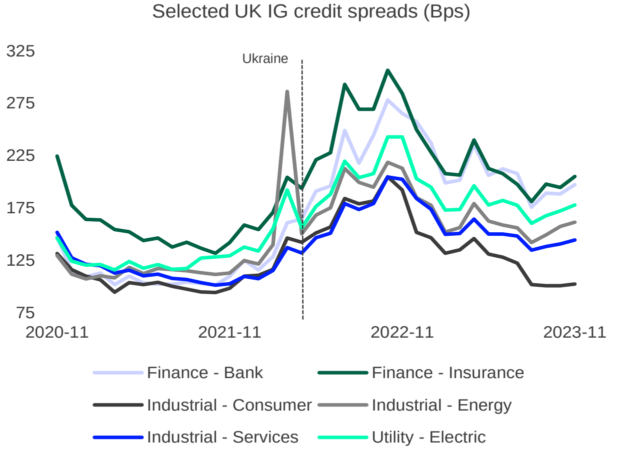


Chart 2: US energy spreads continue to show high volatility but tightened in November, with gas utilities. As in the UK, the level of yields on IG credits proved attractive to investors, back at pre-GFC levels.

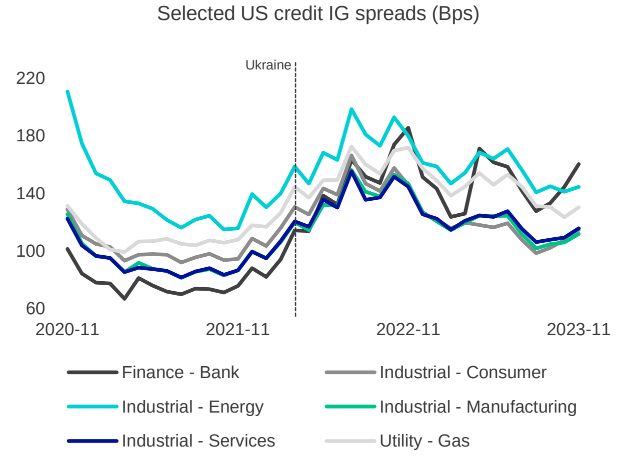


Chart 3: Eurozone credit spreads show some unwinding of the spike in insurance spreads after the Ukraine war shock.in 2022. But IG spreads are still above pre-Ukraine war levels, unlike high yield spreads.

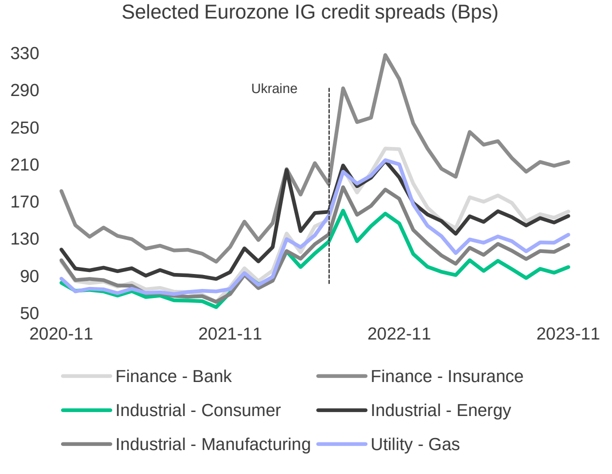


Chart 4: RMBS spreads have widened relative to IG spreads, as the Fed reduced its RMBS holdings by allowing balance sheet run-offs. RMBS's negative convexity has been an issue during the period of rising yields.

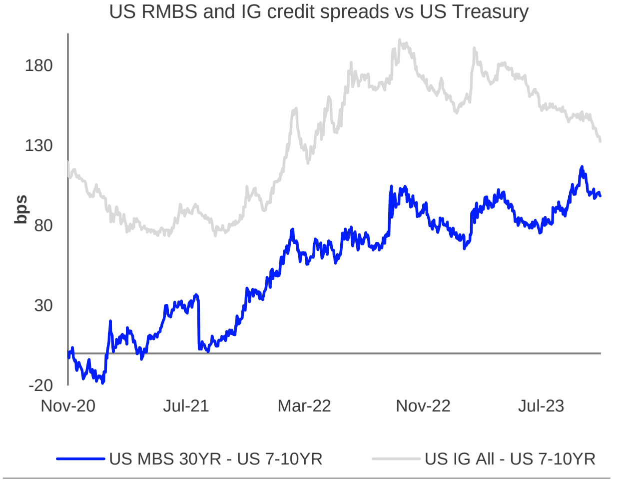


Chart 5: Mortgage refinancings remain depressed by high mortgage rates, as homeowners sit tight with low coupon mortgages from 2020-21. Thus, prepayment rate estimates remain very low for mortgage pools.

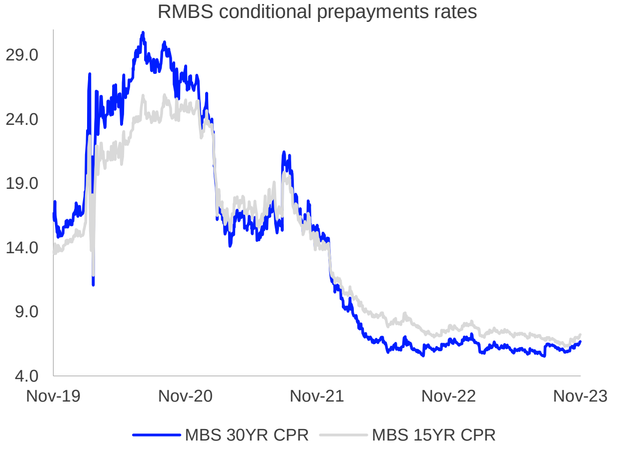
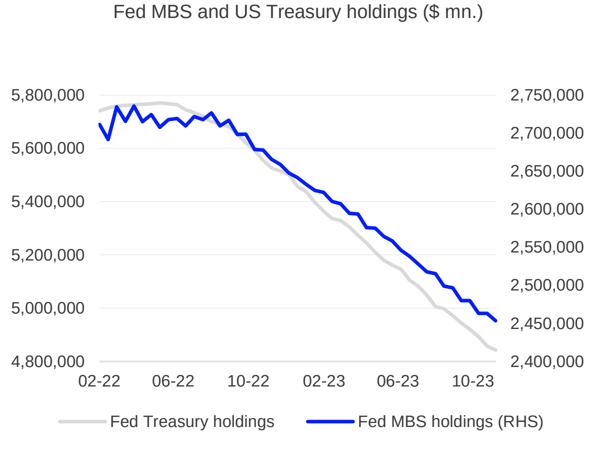


Chart 6: The Fed had projected faster reduction of its US Treasury holdings, relative to MBS holdings when QT began. Lower mortgage refinancings also slowed the pace of RMBS run-offs.



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Sovereign and Climate Bonds Analysis

Chart 1: Sustainable fixed income Investment has evolved into a multiple index methodology asset class. A wide range of benchmarks in ESG, climate and carbon, show different performance characteristics.

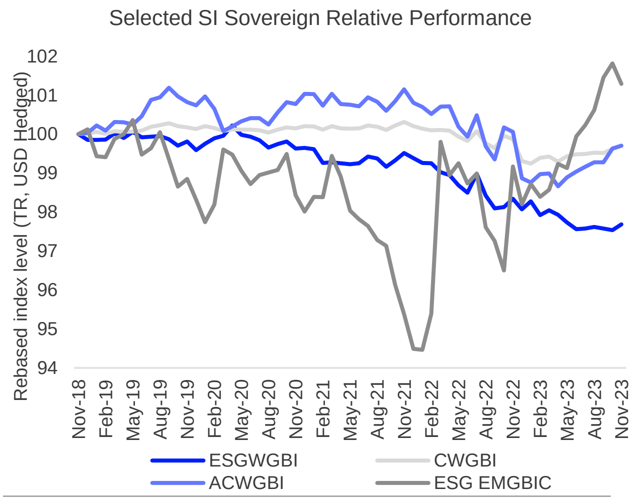


Chart 2. ESG WGBI has a higher US weighting, and big underweight in China, reflected in its underperformance in 2022-23. Adjusted Climate WGBI outperformed WGBI in 2023 after a re-weighting towards Europe.

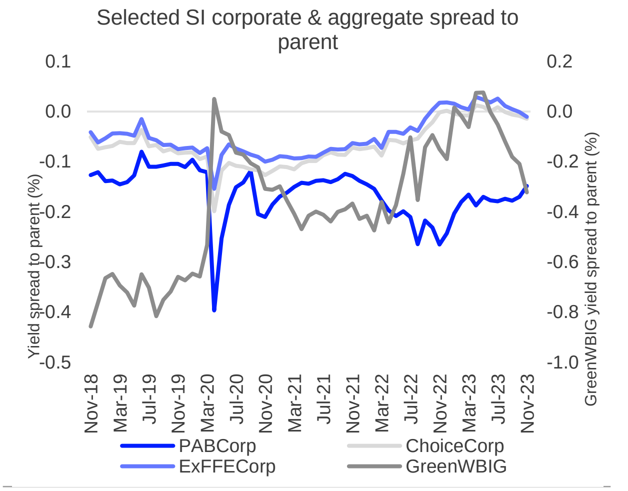


Chart 3: The Paris-aligned benchmark index (PAB Corp), with its heavy tilt away from carbon, outperformed strongly in the early Covid period, but underperformed since as energy recovered.

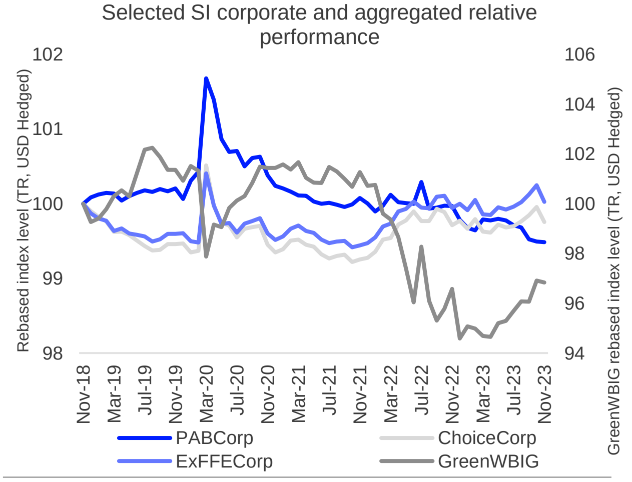


Chart 4: The "greenium" largely disappeared in Green corporates in 2022, after heavy issuance, as yields rose, as the Green WBIG spread move shows vs WBIG. But this has been restored in 2023.

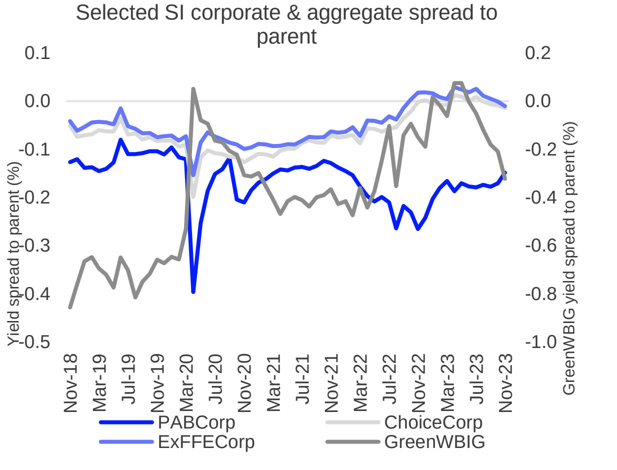


Chart 5: The November rally in govt bonds, and yield declines, favoured Climate WGBI over WGBI, due to the extra duration in lower yielding Bunds and JGBs, though the moves were modest.

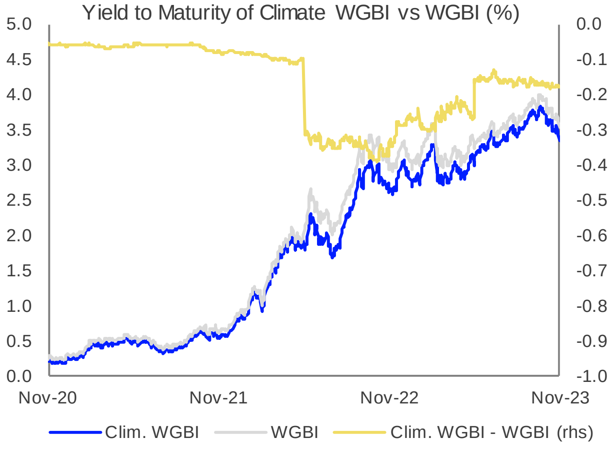
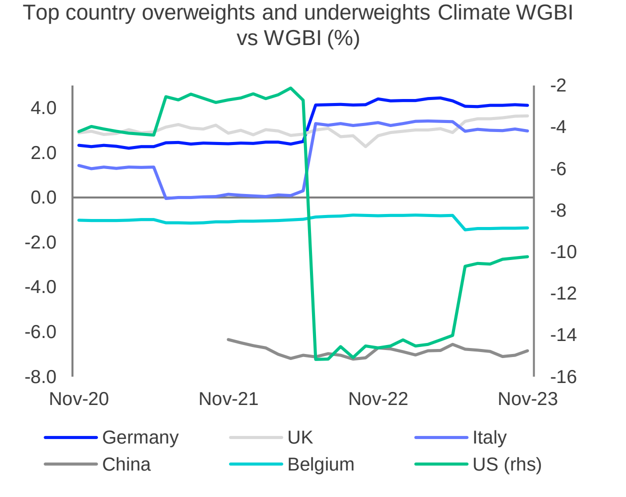


Chart 6: Changes in country weights in Climate WGBI impacted performance accordingly. The underweight in China, overweight in Europe caused underperformance of climate WGBI vs WGBI in 2022-23.



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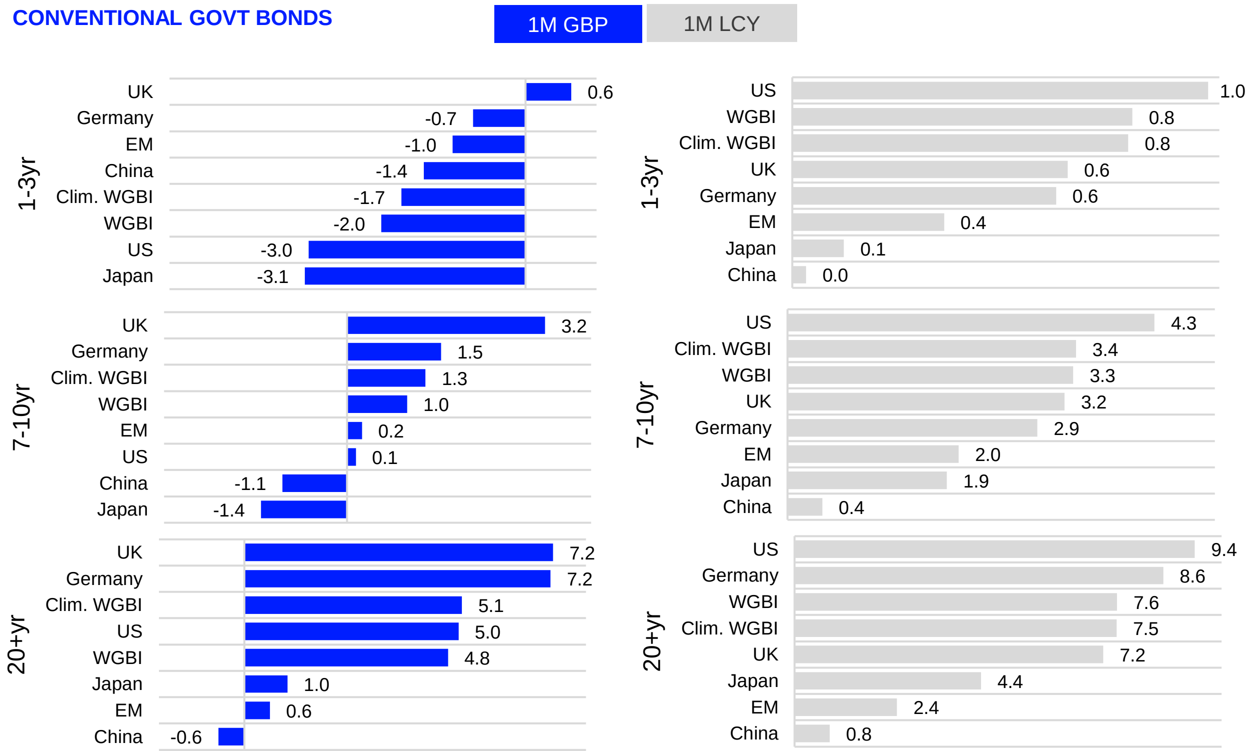
Global Bond Market Returns − 1M & YTD % (GBP, LC, TR)

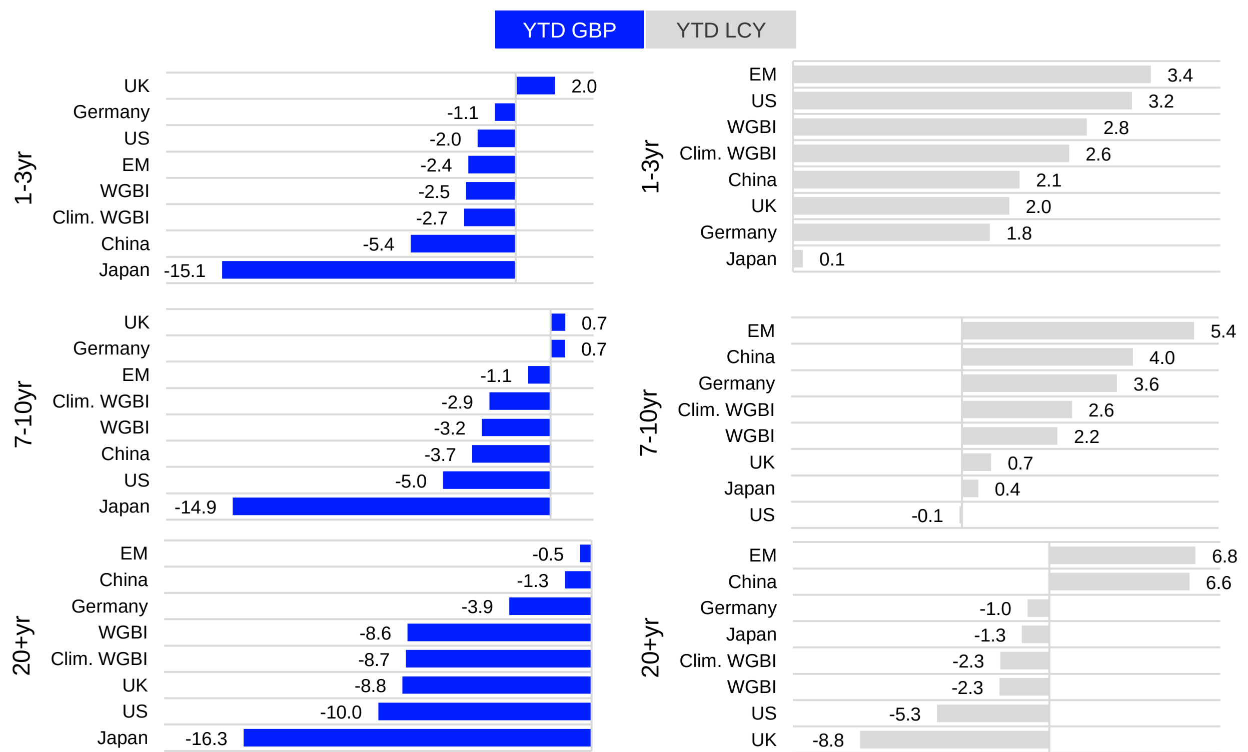
Long dated gilts, Bunds and WGBI led a strong rally in November, in a complete reversal of the early-October sell-off. Non-UK returns were squeezed by sterling strength, for a sterling investor. Long China and EM bonds lagged the November rally. YTD, JGBs remain the weakest performers with losses of 15-16%, reflecting pronounced yen weakness.

The strength of the November rally in longs suggests the October sell-off may have cleared out stale long positions, leaving the market technically ready for a powerful rally. Improved inflation data and signs of weaker US Q4 growth were fundamental drivers.

YTD, shorter gilts were the only positive performer, gaining 1-2% for a sterling investor. Although JGBs were the weakest performers, due to yen weakness, long gilts, US Treasuries and WGBI also lost 9-10%, as longer duration squeezed returns.

CONVENTIONAL GOVT BONDS





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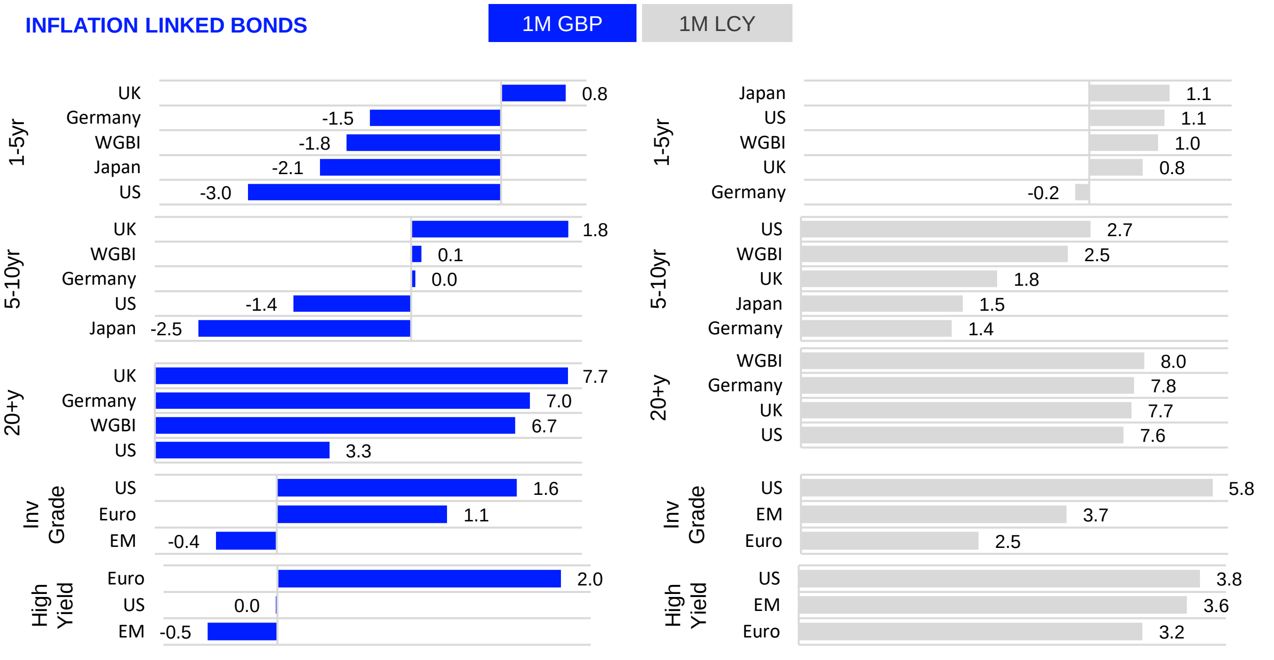
Global Inflation-Linked Bond Returns – 1M & YTD % (GBP, LC, TR)

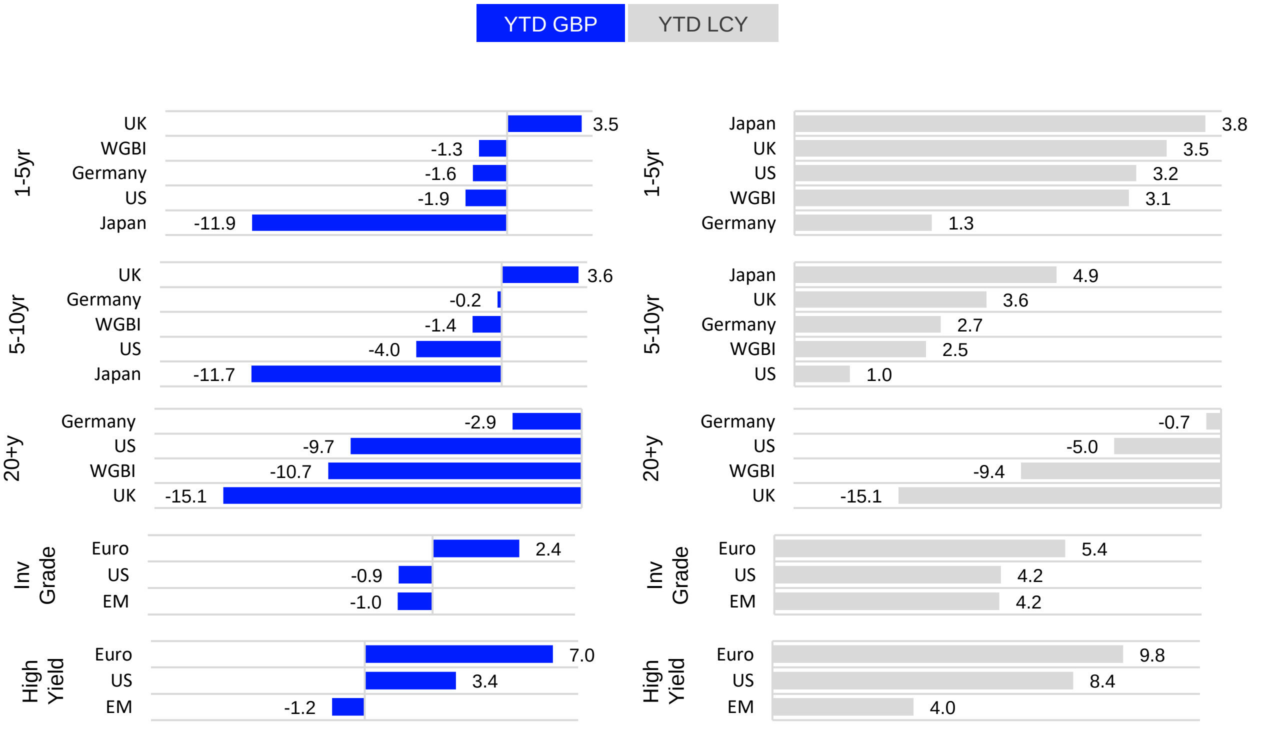
Longer inflation linked rallied in November, as markets reversed some of the YTD losses, with UK, Bund and WGBI the strongest performers. Credit also rallied, with modest gains of up to 2%. Euro HY remained the strongest performer both in November, and YTD with returns of up to 7%. Sterling strength squeezed overseas returns.

Linkers joined long conventional bonds in the November rally, with inflation breakevens broadly stable, and gains of 7-8% in Bunds and UK linkers, in sterling. Long Tips also gained over 3%. Credit joined the rally, as yields fell across the board, led by Euro HY.

YTD losses were pared to 10-15% in long Tips, JGBs and UK linkers. But shorter UK linkers have returned 4% in sterling terms, as the UK real yield curve dis-inverted YTD.

INFLATION LINKED BONDS





Source: FTSE Russell and LSEG. All data as of November 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 Indexes. See Appendix Glossary for list of indexes used for each market. For professional investors only.

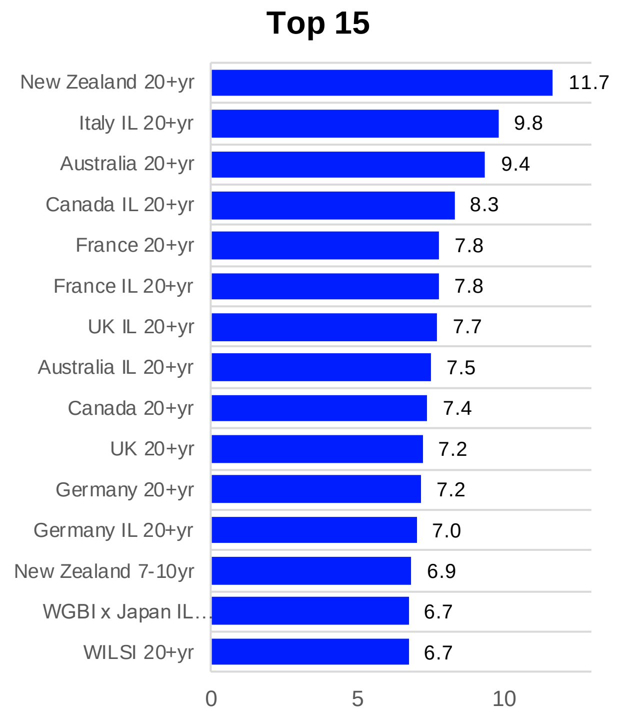
Top and Bottom Bond Returns – 1M & 12M % (GBP, TR)

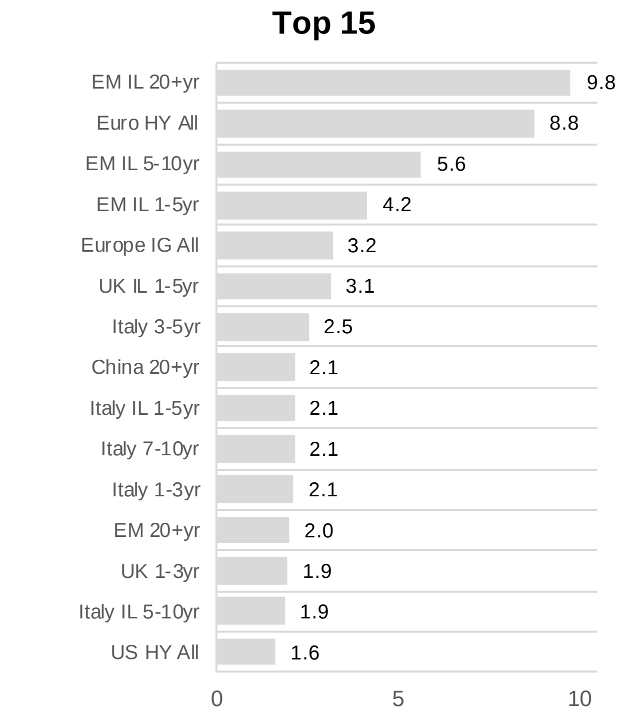
Long Australasian linkers returned a substantial 9-12% in November, for a sterling investor, as yields fell on the view the cyclical peak in rates is past. Long EM linkers remain strongest on 12M, returning 10%. 12M returns still show the impact of longer duration when yields rise, in long UK gilts, linkers, Australasian and WILSI with losses of 15-22%.

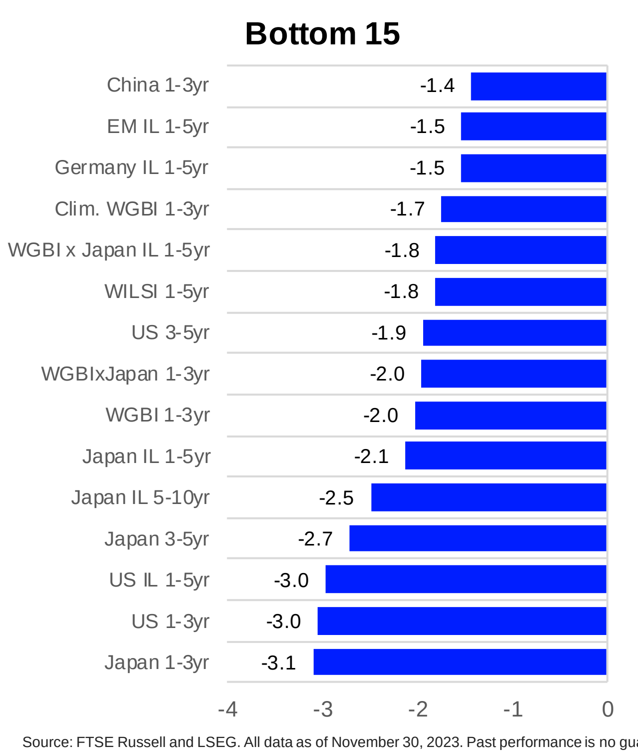
Long Euro, UK and Canadian bonds also returned 7-9% in November, in sterling terms. The rally pared 12M losses significantly in longer maturity bonds, in sterling terms, but the Bottom 15 returns are still completely dominated by long duration bonds.

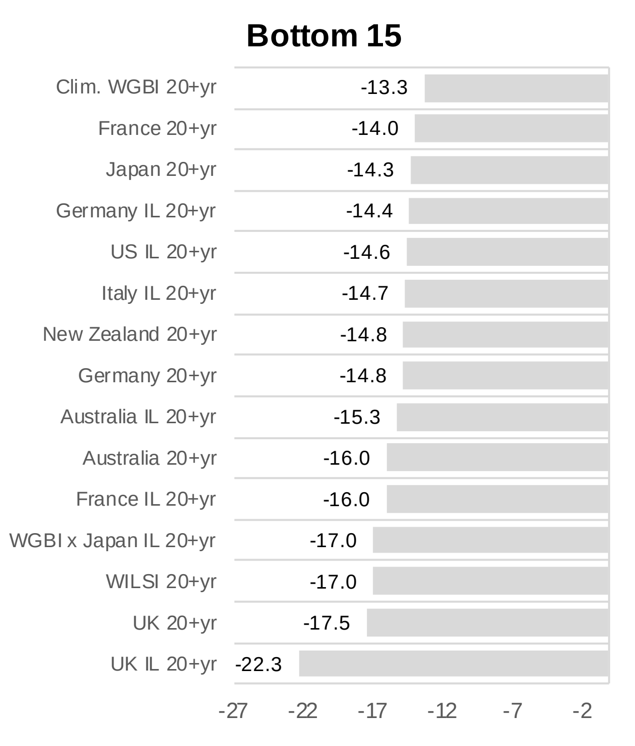
Credit features strongly in Top 15 returns on 12M, led by HY, with returns of up 9% in Euro HY, compared to only 3.2% in IG credit.

1M GBP | 12M GBP









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Appendix – Global Bond Market Returns % (GBP & LC, TR) – November 30, 2023

Government Bond Returns

Top 15% | Bottom 15%

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

		3M		6M		YTD		12M	
		Local	GBP	Local	GBP	Local	GBP	Local	GBP
US	1-3yr	1.42	1.96	1.72	-0.28	3.17	-1.97	3.34	-2.79
	7-10yr	-0.52	0.02	-2.90	-4.81	-0.06	-5.04	-1.51	-7.35
	20+yr	-3.88	-3.36	-8.53	-10.34	-5.26	-9.98	-7.69	-13.16
	IG All	1.45	1.99	1.53	-0.47	4.24	-0.95	3.76	-2.39
	HY All	1.12	2.03	4.47	2.79	8.45	3.42	7.62	1.61
UK	1-3yr	1.97	1.97	2.59	2.59	2.02	2.02	1.95	1.95
	7-10yr	3.13	3.13	2.79	2.79	0.68	0.68	-2.79	-2.79
	20+yr	0.80	0.80	0.96	0.96	-8.85	-8.85	-17.45	-17.45
Euro	IG All	2.25	2.63	2.95	2.64	5.45	2.43	3.51	3.18
	HY All	3.25	3.60	5.35	5.08	9.84	7.05	9.03	8.75
Japan	1-3yr	0.04	-0.78	-0.11	-7.40	0.09	-15.11	-0.02	-11.22
	7-10yr	0.06	-0.76	-1.16	-8.37	0.38	-14.87	-1.18	-12.26
	20+yr	-1.66	-2.46	-8.58	-15.25	-1.28	-16.28	-3.50	-14.31
China	1-3yr	0.11	2.92	0.85	-1.72	2.12	-5.40	2.34	-3.57
	7-10yr	0.13	2.94	1.83	-0.77	4.00	-3.67	4.57	-1.47
	20+yr	-1.46	1.35	3.03	0.45	6.55	-1.25	8.34	2.13
EM	1-3yr	0.51	2.48	1.58	-0.61	3.35	-2.43	3.78	-0.78
	7-10yr	0.32	1.63	1.62	-0.79	5.43	-1.05	6.17	0.48
	20+yr	-0.47	1.26	3.19	0.99	6.84	-0.54	8.37	1.99
	IG All	1.42	1.96	1.39	-0.61	4.21	-0.98	5.42	-0.83
	HY All	2.49	3.04	4.58	2.52	3.96	-1.22	7.53	1.16
Germany	1-3yr	1.02	1.40	1.12	0.83	1.84	-1.07	1.09	0.77
	7-10yr	1.38	1.76	0.60	0.31	3.62	0.66	-1.10	-1.41
	20+yr	-0.65	-0.27	-3.10	-3.39	-1.02	-3.85	-14.57	-14.84
Italy	1-3yr	1.38	1.76	1.90	1.61	3.28	0.33	2.44	2.11
	7-10yr	1.19	1.57	2.51	2.21	8.01	4.92	2.45	2.13
	20+yr	-0.96	-0.59	0.70	0.40	6.75	3.70	-7.12	-7.42
Spain	1-3yr	1.17	1.56	1.33	1.03	2.36	-0.57	1.41	1.10
	7-10yr	1.64	2.03	1.48	1.18	4.69	1.70	-0.38	-0.69
	20+yr	0.46	0.84	0.10	-0.20	1.79	-1.12	-10.23	-10.51
France	1-3yr	1.14	1.52	1.19	0.89	2.27	-0.66	1.23	0.91
	7-10yr	1.41	1.79	0.80	0.50	3.76	0.79	-1.58	-1.89
	20+yr	-0.02	0.36	-1.84	-2.12	-0.28	-3.12	-13.71	-13.98
Sweden	1-3yr	1.15	4.98	1.14	2.82	1.90	-3.72	1.32	-3.00
	7-10yr	2.23	6.10	-0.65	1.00	0.31	-5.23	-3.46	-7.58
Australia	1-3yr	0.60	3.25	0.85	0.59	1.87	-5.36	1.50	-5.46
	7-10yr	-1.35	1.24	-3.24	-3.49	1.15	-6.03	-2.57	-9.26
	20+yr	-3.54	-1.01	-7.53	-7.77	-2.50	-9.42	-9.83	-16.02
New Zealand	1-3yr	1.83	5.77	1.52	1.66	3.56	-3.90	3.40	-3.27
	7-10yr	1.76	5.69	-2.03	-1.89	1.04	-6.24	-1.34	-7.70
	20+yr	1.89	5.83	-8.01	-7.89	-5.09	-11.93	-8.93	-14.80
Canada	1-3yr	1.85	2.18	2.07	0.41	3.04	-2.16	3.08	-3.04
	7-10yr	1.24	1.57	-0.78	-2.39	0.61	-4.47	-1.65	-7.49
	20+yr	1.94	2.27	-1.10	-2.70	0.59	-4.48	-3.86	-9.57

Source: FTSE Russell and LSEG. All data as of November 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 Indexes. See Appendix Glossary for list of indexes used for each market. For professional investors only.

Appendix − Global Bond Market Returns % (GBP & LC, TR) – November 30, 2023

Inflation-Linked Bond Returns

Top 15% | Bottom 15%

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

		3M		6M		YTD		12M	
		Local	JPY	Local	JPY	Local	JPY	Local	JPY
US	1-5yr	1.32	1.87	1.53	-0.47	3.20	-1.94	2.81	-3.28
	5-10yr	-0.03	0.50	-1.54	-3.49	1.04	-3.99	-0.44	-6.34
	20+yr	-3.99	-3.48	-9.37	-11.15	-5.00	-9.73	-9.20	-14.58
UK	1-5yr	2.56	2.56	3.58	3.58	3.49	3.49	3.13	3.13
	5-10yr	2.01	2.01	3.42	3.42	3.59	3.59	0.79	0.79
	20+yr	-3.31	-3.31	-1.66	-1.66	-15.10	-15.10	-22.35	-22.35
Japan	1-5yr	1.34	0.51	2.36	-5.11	3.85	-11.93	3.71	-7.92
	5-10yr	1.53	-0.06	2.38	-5.81	4.91	-11.70	3.74	-8.58
EM	1-5yr	0.03	-1.78	6.40	1.30	10.51	4.47	11.50	4.15
	5-10yr	1.00	-1.13	5.39	1.38	9.31	5.22	11.06	5.65
	20+yr	0.56	-0.71	2.55	2.32	9.62	10.91	9.55	9.78
Germany	1-5yr	-0.14	0.24	0.09	-0.21	1.29	-1.61	-0.51	-0.82
	5-10yr	-0.35	0.02	-0.57	-0.86	2.74	-0.20	-1.21	-1.52
	20+yr	-3.86	-2.89	-7.89	-7.58	-0.69	-2.92	-14.65	-14.38
Italy	1-5yr	0.94	1.32	1.98	1.68	3.74	0.78	2.45	2.13
	5-10yr	-0.60	-0.22	1.38	1.08	6.88	3.83	2.19	1.87
	20+yr	-5.86	-5.50	-6.17	-6.44	5.68	2.66	-14.42	-14.69
Spain	1-5yr	0.35	0.73	0.67	0.37	2.19	-0.73	1.33	1.01
	5-10yr	0.04	0.41	0.50	0.21	3.50	0.54	-0.03	-0.34
France	1-5yr	-0.01	0.37	0.02	-0.27	1.46	-1.44	-0.31	-0.62
	5-10yr	-0.60	-0.23	-0.83	-1.12	2.67	-0.26	-1.98	-2.29
	20+yr	-4.39	-4.03	-8.07	-8.34	-1.40	-4.22	-15.77	-16.03
Sweden	1-5yr	1.17	5.01	1.42	3.11	2.73	-2.94	2.76	-1.63
	5-10yr	1.14	4.97	-0.49	1.17	1.37	-4.23	-1.67	-5.87
Australia	1-5yr	0.81	3.46	1.08	0.83	4.98	-2.47	4.37	-2.79
	5-10yr	-0.62	1.99	-1.64	-1.89	4.82	-2.62	2.47	-4.56
	20+yr	-4.85	-2.35	-8.84	-9.07	0.51	-6.63	-9.03	-15.27
New Zealand	5-10yr	1.80	5.74	-0.63	-0.49	4.46	-3.06	4.58	-2.17
Canada	20+yr	4.57	4.91	-2.46	-4.04	-6.38	-11.10	-5.97	-11.55

Appendix – Historical Bond Yields % as of November 30, 2023

Global Bond Yields

Top 15% | Bottom 15%

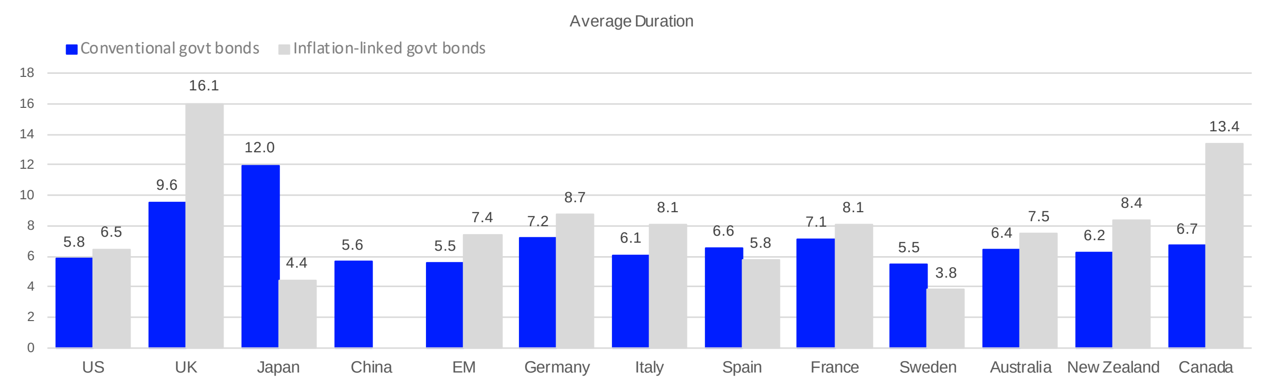
Green highlight indicates highest 15%, red indicates lowest 15%

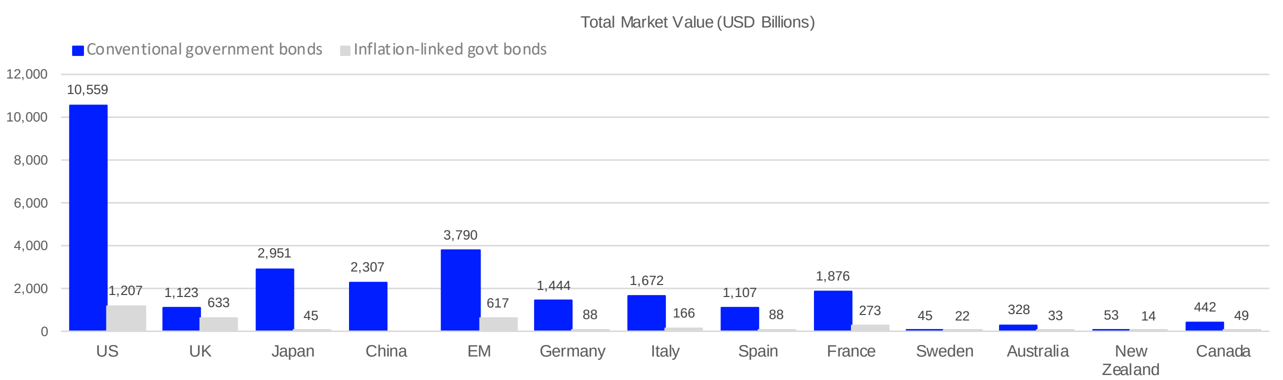
		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	4.82	4.39	4.35	4.63	2.57	2.14	2.27	5.64	8.71
	3M Ago	5.01	4.43	4.14	4.34	2.53	1.95	2.02	5.68	8.44
	6M Ago	4.66	3.98	3.69	4.00	2.09	1.54	1.68	5.47	8.82
	12M Ago	4.47	3.97	3.64	3.95	1.76	1.40	1.59	5.38	8.80
UK	Current	4.52	4.16	4.11	4.61	0.62	0.53	1.30		
	3M Ago	4.98	4.71	4.37	4.59	1.21	0.76	1.16		
	6M Ago	4.66	4.44	4.18	4.53	1.25	0.60	1.12		
	12M Ago	3.36	3.26	3.20	3.39	-1.95	-0.58	0.10		
Japan	Current	0.00	0.17	0.57	1.63	-2.08	-0.87			
	3M Ago	-0.01	0.15	0.53	1.54	-1.81	-0.77			
	6M Ago	-0.08	0.01	0.34	1.22	-1.53	-0.77			
	12M Ago	-0.04	0.05	0.28	1.40	-1.44	-0.76			
China	Current	2.37	2.47	2.66	3.05					
	3M Ago	2.08	2.30	2.59	2.93					
	6M Ago	2.16	2.39	2.72	3.14					
	12M Ago	2.26	2.54	2.87	3.34					
EM	Current					4.42	4.45	5.10	6.08	10.41
	3M Ago					2.83	4.26	4.99	6.17	11.42
	6M Ago					4.31	4.24	5.00	5.83	12.19
	12M Ago					2.45	3.14	5.10	6.08	12.18
Germany	Current	2.86	2.41	2.37	2.67	1.16	0.34	0.34		
	3M Ago	3.11	2.62	2.46	2.60	0.69	0.17	0.13		
	6M Ago	2.79	2.39	2.28	2.45	0.38	0.02	-0.10		
	12M Ago	2.04	1.95	1.91	1.81	-0.59	-0.41	-0.54		
Italy	Current	3.39	3.40	3.93	4.59	1.60	1.97	2.15		
	3M Ago	3.64	3.61	3.94	4.45	1.40	1.75	1.88		
	6M Ago	3.44	3.52	3.97	4.48	1.16	1.69	1.81		
	12M Ago	2.73	3.09	3.59	3.86	0.12	1.32	1.35		
France	Current	3.01	2.73	2.87	3.46	0.84	0.63	0.95		
	3M Ago	3.18	2.94	2.95	3.41	0.53	0.41	0.73		
	6M Ago	2.90	2.71	2.76	3.28	0.22	0.23	0.54		
	12M Ago	2.25	2.19	2.27	2.59	-0.94	-0.39	0.09		
Sweden	Current	3.27	2.70	2.61		1.30	1.12			
	3M Ago	3.48	3.07	2.81		1.34	1.15			
	6M Ago	3.01	2.66	2.37		0.71	0.57			
	12M Ago	2.52	2.21	1.93		-0.29	-0.26			
Australia	Current	4.15	4.04	4.36	4.73	1.28	1.81	2.19		
	3M Ago	3.91	3.80	4.03	4.47	1.02	1.49	1.90		
	6M Ago	3.55	3.44	3.65	4.17	0.46	1.08	1.62		
	12M Ago	3.12	3.22	3.49	3.92	-0.08	0.90	1.43		
New Zealand	Current	5.07	4.78	4.89	5.09	1.91	2.59			
	3M Ago	5.35	5.02	4.95	5.13	2.17	2.58			
	6M Ago	5.08	4.36	4.30	4.46	1.28	1.90			
	12M Ago	4.67	4.39	4.12	4.28	1.49	1.97			
Canada	Current	4.27	3.71	3.58	3.38	1.80	1.81	1.69		
	3M Ago	4.74	4.05	3.63	3.44	2.09	1.88	1.84		
	6M Ago	4.32	3.62	3.27	3.25	1.64	1.42	1.44		
	12M Ago	3.90	3.33	2.95	3.03	1.33	1.10	1.16		

Appendix – Duration and Market Value (USD, Bn) as of November 30, 2023

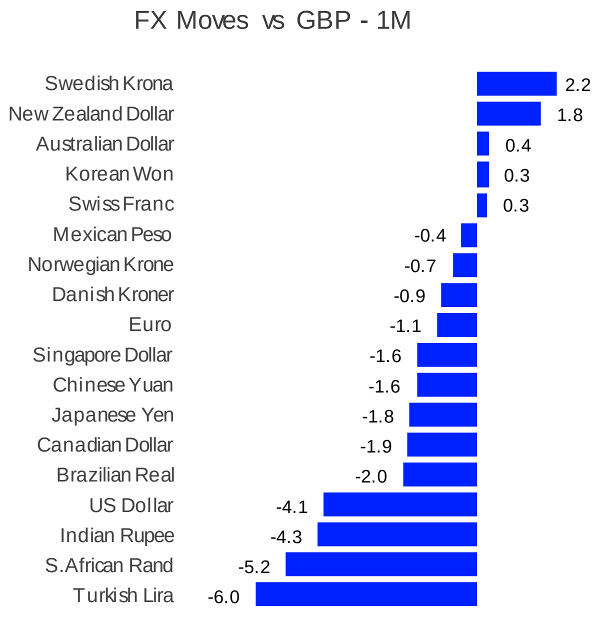
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.3	16.7	**5.8**	2,428.2	1,102.6	1,219.7	**10,559.2**	7.0	21.1	**6.5**	396.0	118.4	**1,207.2**
UK	3.6	7.5	18.2	**9.6**	128.7	179.5	309.5	**1,122.5**	6.8	27.1	**16.1**	101.8	238.1	**632.8**
Japan	3.9	8.0	23.7	**12.0**	354.7	348.3	632.9	**2,951.4**	7.1		**4.4**	18.4		**44.8**
China	3.7	7.5	17.6	**5.6**	548.0	387.3	260.5	**2,307.4**						
EM	3.6	6.9	15.8	**5.5**	836.6	695.8	361.2	**3,790.4**	5.8	13.6	**7.4**	112.3	169.9	**616.9**
Germany	3.8	7.5	20.5	**7.2**	317.4	235.3	163.8	**1,443.7**	7.0	21.5	**8.7**	44.2	18.6	**88.5**
Italy	3.6	7.1	16.1	**6.1**	312.9	273.5	139.2	**1,672.4**	7.6	26.1	**8.1**	61.1	5.2	**165.7**
Spain	3.6	7.4	17.6	**6.6**	210.4	189.8	96.9	**1,106.6**	6.6		**5.8**	23.2		**88.2**
France	3.6	7.5	19.7	**7.1**	297.5	327.4	214.9	**1,876.4**	6.4	24.2	**8.1**	106.3	20.2	**272.8**
Sweden	3.5	7.4		**5.5**	14.2	9.1		**45.3**	5.5		**3.8**	10.0		**21.6**
Australia	3.6	7.5	16.7	**6.4**	36.9	86.3	19.8	**327.5**	6.9	22.1	**7.5**	9.8	2.5	**33.3**
New Zealand	3.7	7.5	16.8	**6.2**	10.4	14.5	2.5	**52.5**	6.0		**8.4**	3.1		**13.8**
Canada	3.8	7.3	19.5	**6.7**	58.7	111.1	63.2	**442.0**	6.7	20.6	**13.4**	8.2	19.8	**48.7**

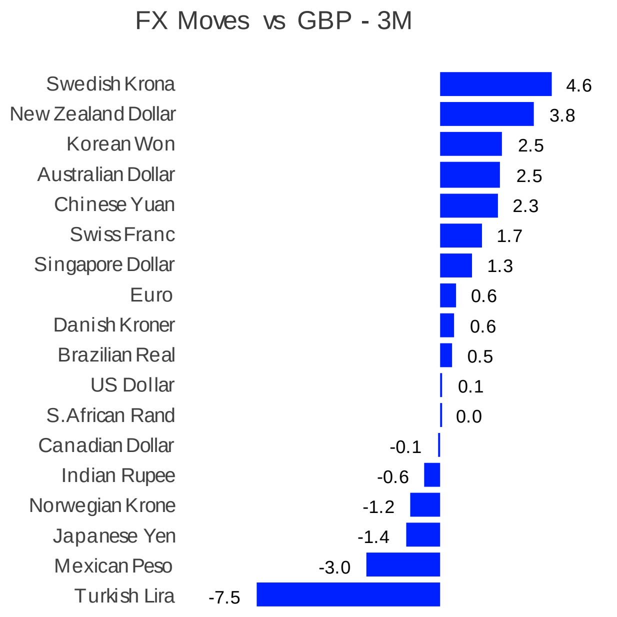
	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.4	8.3	7.1	6.5	6.9	71.5	445.0	2587.7	3328.5	6432.7	3.9	1029.3
Europe	5.7	4.8	4.6	4.2	4.4	10.8	195.0	1216.0	1472.0	2893.8		
EM		5.8	4.7	5.0	4.9		37.1	220.7	309.7	567.5	3.3	182.7

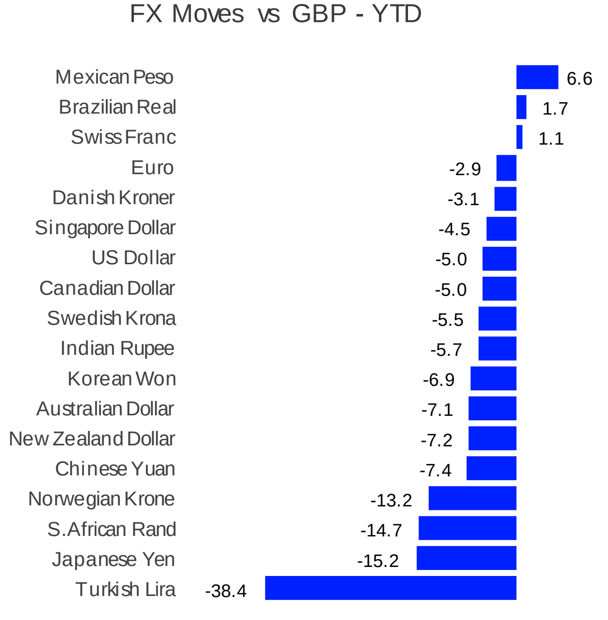


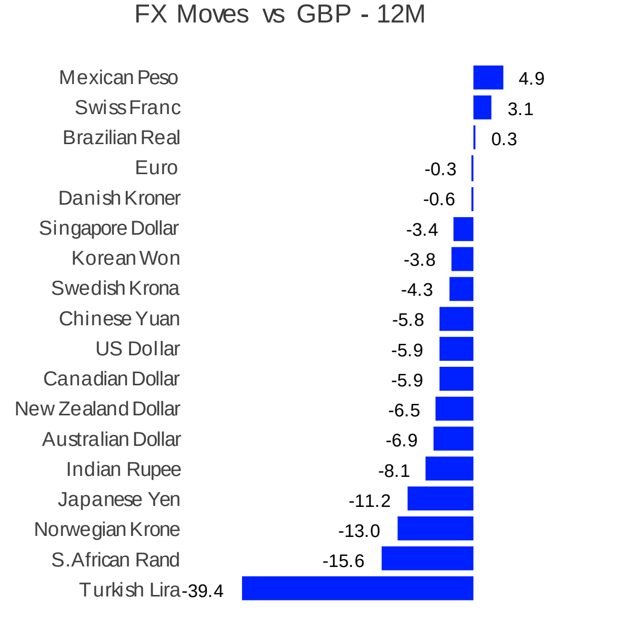


Appendix – Foreign Exchange Returns % as of November 30, 2023









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

ABOUT FTSE RUSSELL

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner we help investors make better-informed investment decisions, manage risk, and seize opportunities.

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