Fixed Income Insights

MONTHLY REPORT – **JANUARY 2024 | US EDITION** FOR PROFESSIONAL INVESTORS ONLY

Fed pivot drives frenzy for rate cuts in 2024, despite soft landing

Markets now discount about 75bp more easing than the Fed in 2024, despite Fed caution, a soft landing and sticky core inflation. This increases risks of disappointment, barring early recession, given the inverted curve. Q4's rally means only JGBs show negative 2023 returns in US dollars, with HY credit and EM best performers.

Macro and policy backdrop – Fed pivot drives substantial re-pricing of 2024 rate outlook
Mind the gap! Markets discount 150bp of rate cuts in 2024, twice the easing implied by Fed dot plots, despite a US soft landing. (pages 2-3)

Yields, curves and spreads – Yield curves bull flattened in Q4, and US sovereign spreads tightened
Markets continue to front-run central bank easing, as in 2023, driving bull inversions. Treasury spreads tighten. (pages 4-5)

Credit and MBS analysis – Credit benefits from risk appetite recovery, led by HY
Recovery in risk appetite and low defaults helped credit spreads narrow. Convexity is a challenge for MBS investors after the US Treasury rally. (page 6)

Sovereign and climate bonds – Climate WGBI outperformed, helped by duration
Duration boosted Climate and adjusted-Climate WGBI, despite lower US weight, as curves bull flattened. (page 7)

Performance – Bunds and gilts performed best in Q4. After the Q4 rally, only JGBs show negative 2023 returns
The US dollar and European yields fell after the Fed pivot, boosting returns in non-US markets. (pages 9-10)

Appendix (from page 11)
Global bond market returns, historical bond yields, bond market durations and market values and foreign exchange returns.

Chart 1: 2023 proved a year of divergence and disinflation. European yields fell sharply relative to the US and Canada, despite the Q4 rally.

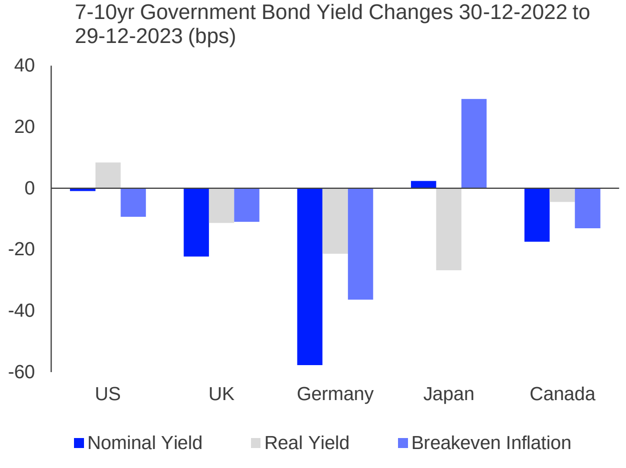
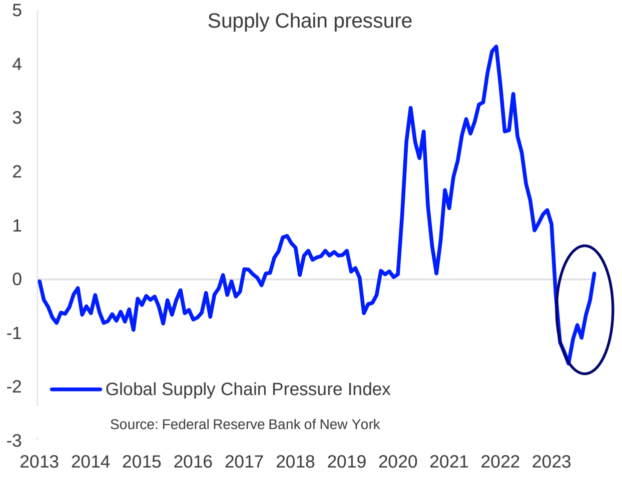


Chart 2: Evidence the 2022 inflation shock was supply-driven can be found in supply chain indices. The recent uptick is therefore of note.



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

The Fed pivot and Q4 disinflation fuelled expectations of aggressive easing in 2024, despite a soft landing for growth in 2023, and an economy near full employment. After a recession that never was, forecasters are reluctant to forecast one in 2024, despite lags in the impact of policy making 2024 higher risk. Squeezing inflation from 3% to 2% may prove challenging, given typical inflation inertia. US capex held up well, aided by AI and signs of transition to a knowledge-based economy.

Despite stronger US growth relative to Europe in 2023, consensus forecasts show the differential narrowing in 2024, with US growth falling back towards 1% but avoiding recession (Chart 1). These forecasts may not fully capture the positive impact on US growth of the easing in financial conditions since November (also see Chart 1, page 3). Risks to growth in Europe are skewed to the downside, according to the ECB, but the greatest uncertainty surrounds the Chinese outlook.

Headline inflation fell sharply in Q4, 2023 (see Chart 2) to 3.1% y/y in the US, though US core inflation is stickier. The theory that the last 1-2% of disinflation to 2% target levels has higher costs than earlier disinflation will now be tested in the US, Canada and Eurozone. Core inflation at 4%, unfavourable base effects and sticky shelter costs may delay Fed easing, and FOMC members have sought to cool expectations. Most central banks are not forecasting inflation at 2% targets until 2025, including the Fed, ECB & BoE.

There remains little evidence of an early US recession, even if growth slowed in Q4 (to 2% on the latest Atlanta Fed Nowcast). Apart from the inverted curve (see page 4), there are few outright recession signals. The labor market remains robust, with unemployment below 4%, and inflation gliding towards target (Chart 3). A clear risk in 2024 is that the full impact of 2022-23 tightening may be felt then, given the 12-18-month lags in previous cycles, but that is currently offset by the easing in financial conditions (see page 3).

Capex often collapses cyclically as recessions loom, and demand falters, but it held up well in 2022-23, despite higher rates, though it varies across sectors. Investment in manufacturing structures returned to above pre-pandemic levels (Chart 4), and warehousing demand has been strong, as retail moves online. Investment in office space has been hit hard by more working from home. Higher structural demand for information processing hardware and software continues as the economy becomes more knowledge-based.

Chart 1: Consensus forecasts show slower US growth vs Europe in 2024, reversing 2023's pattern, and no recessions. Greatest uncertainty surrounds Chinese forecasts given the property crash & consumer caution.

Latest Consensus Real GDP Forecasts (%, December 2023)			
	2022	**2023**	**2024**
US	2.1	**2.4**	**1.2**
UK	4.1	**0.5**	**0.4**
Eurozone	3.3	**0.5**	**0.6**
Japan	1.6	**1.6**	**0.8**
China	3.0	**5.0**	**4.5**
Canada	3.5	**1.1**	**0.7**

Chart 2: Regional inflation rates show some convergence towards 2% target levels in headline inflation, though core inflation remains stickier, at nearer 4%. The UK and China remain outliers globally.

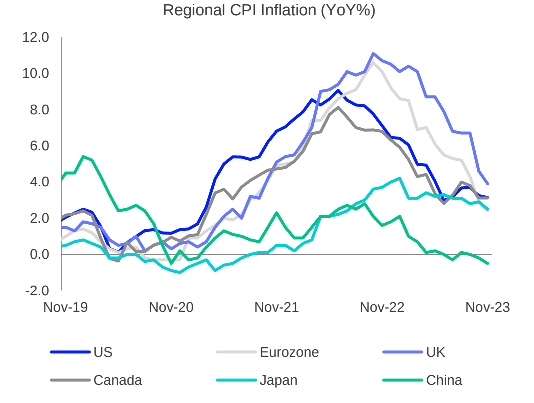


Chart 3: Immaculate US disinflation? Remarkably, US inflation has achieved a soft landing to date, around 3%, despite US unemployment remaining under 4%, near full employment, and wage growth near 4%.

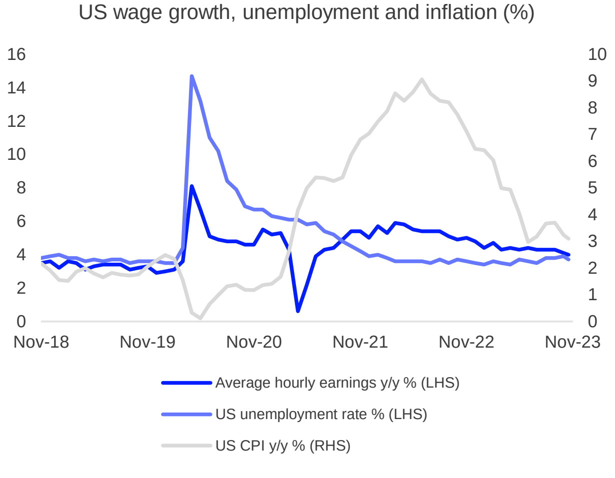
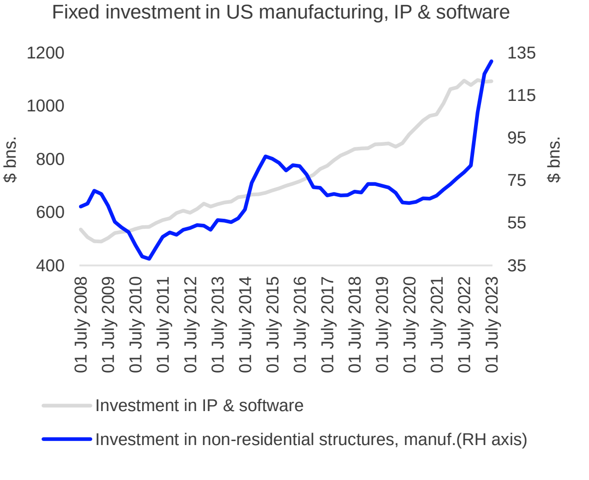


Chart 4: Investment rebounded from Covid, with manufacturing strongest and commercial real estate very weak. Evidence of a shift to a knowledge-based US economy is seen in IP & software investment.



Source: FTSE Russell and LSEG. Available data as of December 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.

Financial Conditions and Monetary Policy Settings

US financial conditions eased back to the levels when the Fed began raising rates (March 2022), after the Fed pivot and powerful Q4 market rally. Some FOMC members sought to cool easing expectations as a result. The dollar fell on expected narrowing in rate differentials, but weak growth in Europe and China restricted the sell-off. Previous cycles show 10-year yields falling before Fed easing, but these cycles were driven by exogenous deflationary shocks, not gradual disinflation.

Lower US yields, tighter credit spreads and higher equities drove significant easing in US financial conditions (FCs) in Q4, despite policy rates at cycle highs. FCs are close to Q1, 2022 levels, when the Fed began raising rates (Chart 1). Markets have eased significantly for the Fed, reinforced by Dec. dot plots showing median FOMC rate expectations falling 75bp in 2024.The risk now is that market expectations of more than 100-125bp in 2024 easing are disappointed, given the economy is not recessionary.

The US dollar fell in December (Chart 2) after the Fed pivot towards easing, on rate differentials likely shrinking against other G7 currencies. The yen's recovery gained momentum after the Fed pivot, as investors focused on the BoJ possibly ending negative rates in January. Sterling drew support from hawkish BoE signaling (see below), though weak UK growth tempered gains.

Further evidence of de-synchronized G7 policy cycles emerged in December. US disinflation enabled the Fed to pivot towards 2024 easing, with 75bp of easing implied in median FOMC dot plots, despite sticky core inflation. But European central banks did not discuss rate cuts, as they remain firmly on hold, as do the BoC. The BoJ moved closer to ending curve control, however.

In previous US policy cycles, Chart 4 show US 10Y yields generally fell before Fed easing. Front-running the Fed eventually paid off for investors, even if "false dawns" were common, where declines in 10Y yields were not validated at all, or for some months, e.g., 2005-07, 2018-19 & 2022-23. Recent easing cycles were driven by exogenous *deflationary* shocks, so differ from the current cycle.

Chart 1: When is a tightening not a tightening? Market anticipation of easing, tighter spreads and lower bond yields loosened financial conditions, so they are where they were when the Fed began raising rates in 2022.

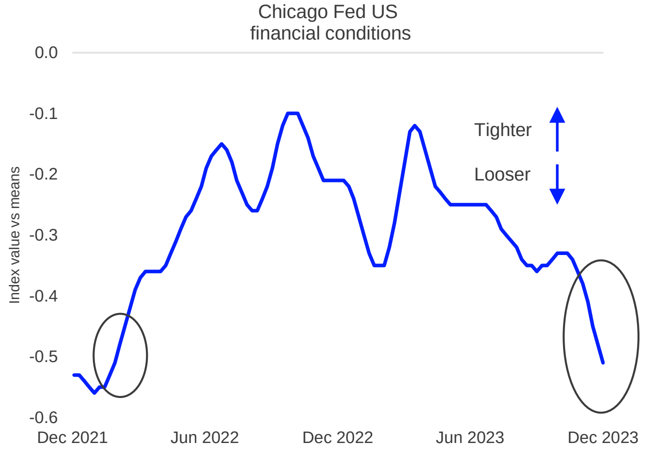


Chart 2: The dollar fell after the Fed pivot, though its fall was restricted by FOMC members cooling easing expectations and hopes for easier ECB policy. The yen rallied as investors mulled the end of curve control.

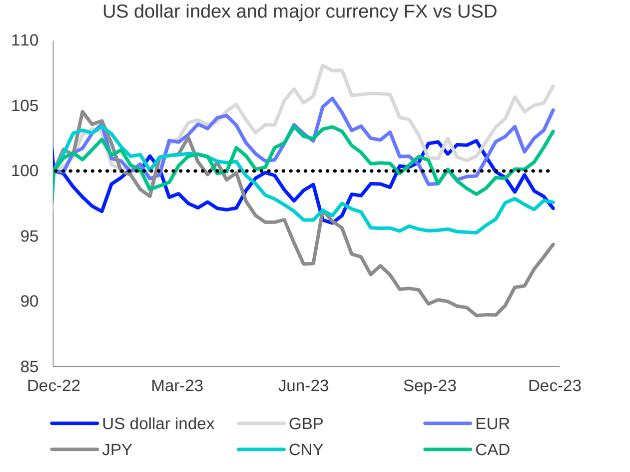


Chart 3: Further signs of an un-coordinated G7 monetary policy cycle emerged in December after the Fed pivoted towards easing, while European central banks and the BoC remained firmly on hold.

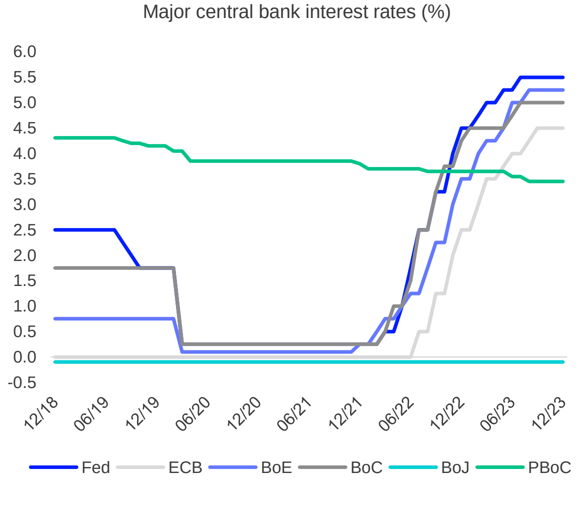
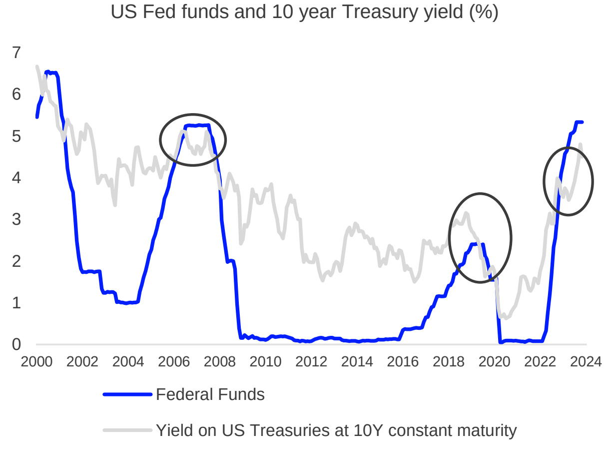


Chart 4: Front-running the Fed has generally paid, with some exceptions, notably mid-2023, when the Fed promptly raised rates again. The 10yr yield has dropped before Fed funds in previous cycles.



Global Yields, Curves and Spread Analysis

Chart 1: Q4, notably December, saw one of the fastest declines in bond yields, erasing 12 months of rises on expectation of aggressive cuts in 2024 following lower inflation and after Jay Powell's cut hints for 2024.

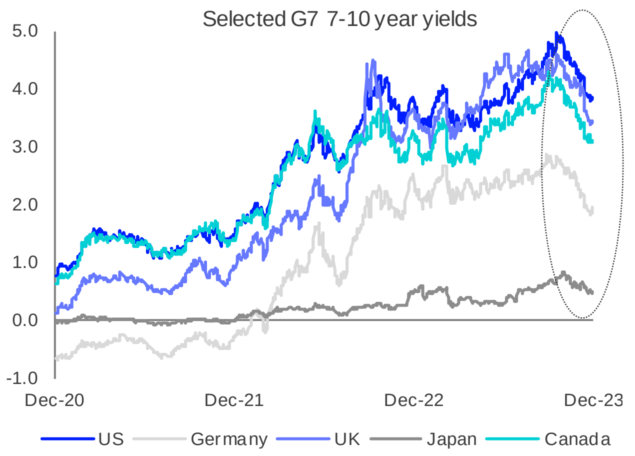


Chart 2: Except for Japan, real yields also fell sharply in Q4, reflecting weaker real growth as global economic activity feels the impact of the sharp rate rises during 2023.

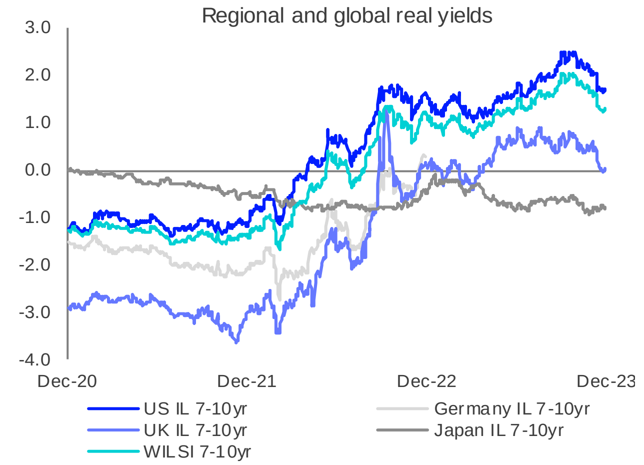


Chart 3: Yield curves have remained deeply inverted, after G7 curves bull flattened, with the Canadian yield curve the most inverted. Even the Japanese curve flattened, as the BoJ hinted at moving away from YCC.

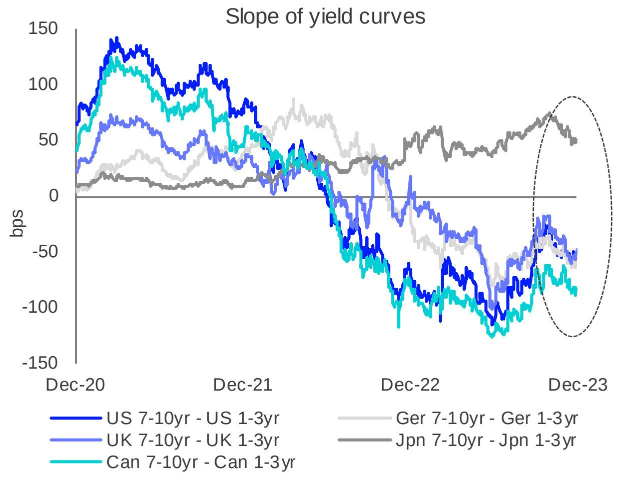


Chart 4: Longer G7 yield curves also inverted outright in Q4, with the UK curve returning close to zero. The Canadian curve has been more stable than equivalent peers but remains deeply negative.

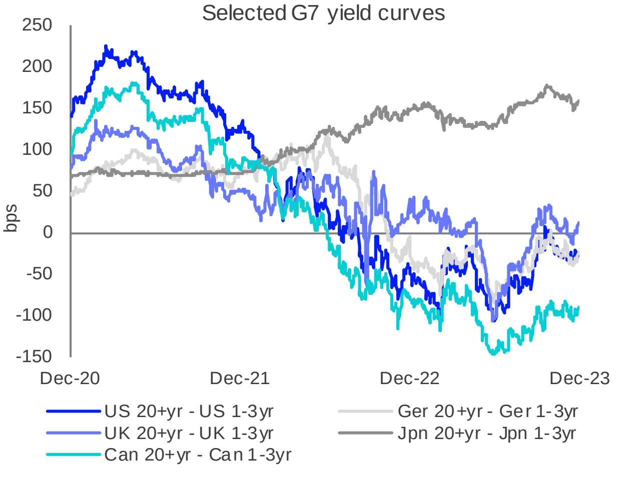


Chart 5: G7 inflation breakevens fell in Q4, remaining correlated with (lower) spot inflation. Japanese breakevens fell sharply, as the 2022-23 increase in inflation began to unwind and investors favored nominal bonds.

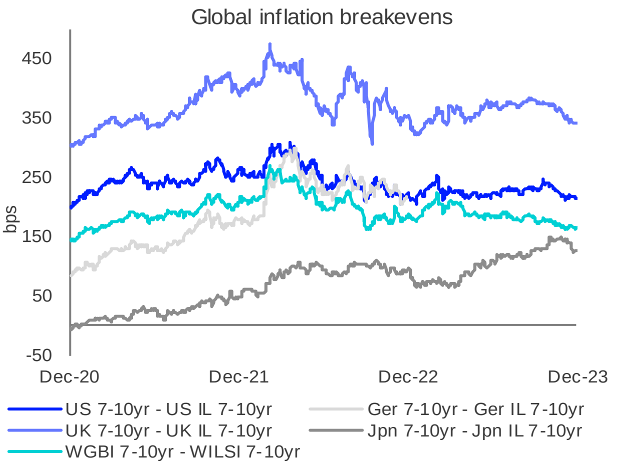
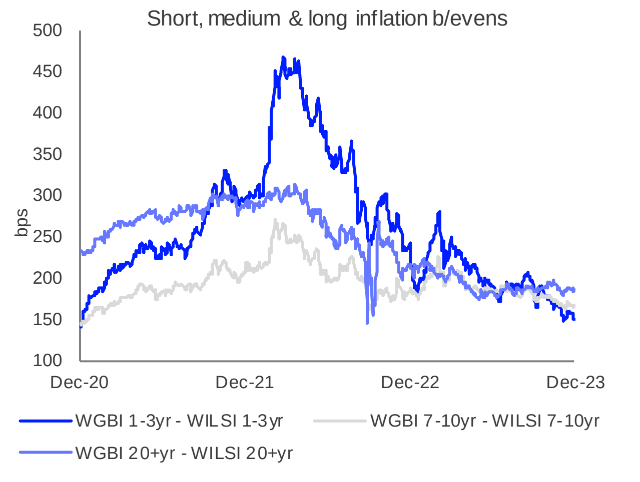


Chart 6: Global breakevens have fallen to pre-2020 levels, after global inflation eased on weaker economic growth and lower energy costs. Food inflation, while still high, has also eased.



Source: FTSE Russell and LSEG. All data as of December 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.

Yield Spread and Credit Spread Analysis

Chart 1: US sovereign spreads proved pro-cyclical in 2023, rising as yields increased until October, before falling in Q4, although the decline in spreads is less marked than during Covid, particularly versus UK gilts.

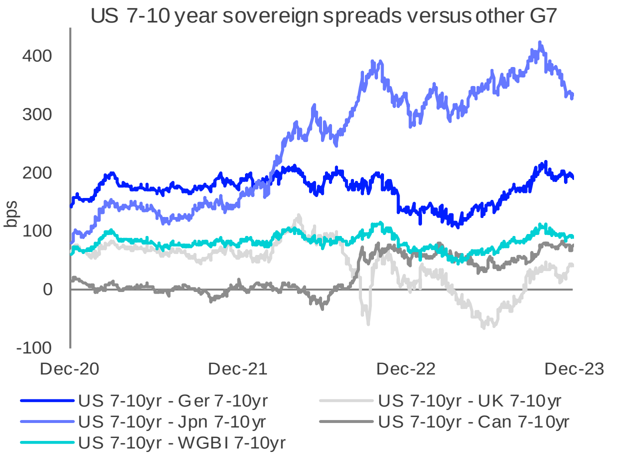


Chart 2: Italian spreads fell in Q4, though mostly versus JGBs. ECB President Lagarde stressed the ECB's commitment to successful policy transition at the December press conference, which helped BTP spreads.

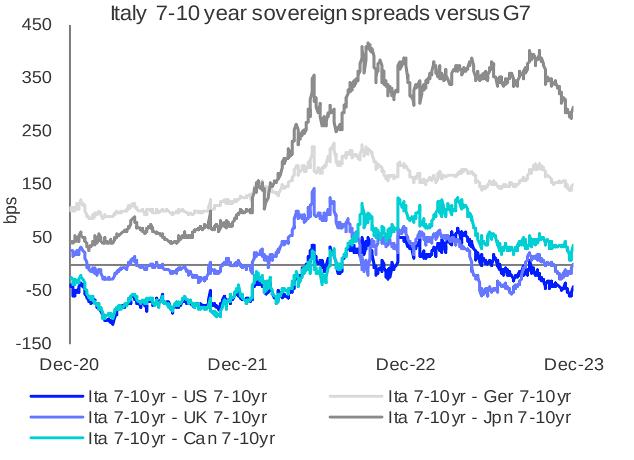


Chart 3: EM spreads widened in December, as the G7 bond market rally gathered momentum, excluding JGBs, where yields fell less. Spillover effects from lower US Treasury yields may help EM spreads in Q1.

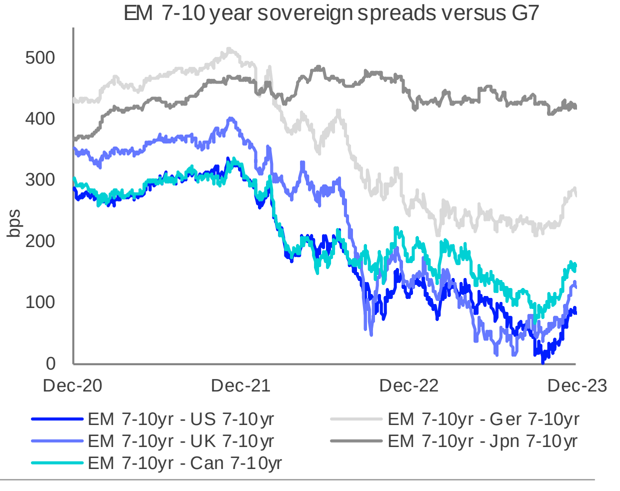


Chart 4: Chinese spreads versus the G7 have trended lower since 2020. They have generally been counter-cyclical, rising when G7 yields fall (Q4) and vice versa. This offers portfolio diversification benefits to investors.

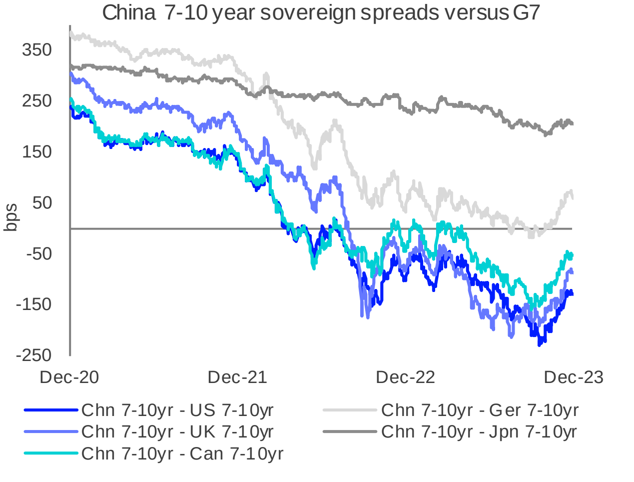


Chart 5: Credit spreads fell in Q4, led by High Yield, as the Fed pivot helped the G7 recovery in risk appetite, and risk assets rallied. High yield generally outperformed IG in 2023, despite near-recessions in Europe.

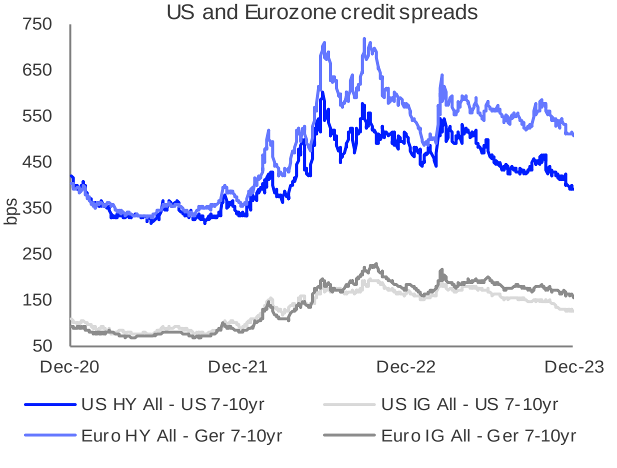
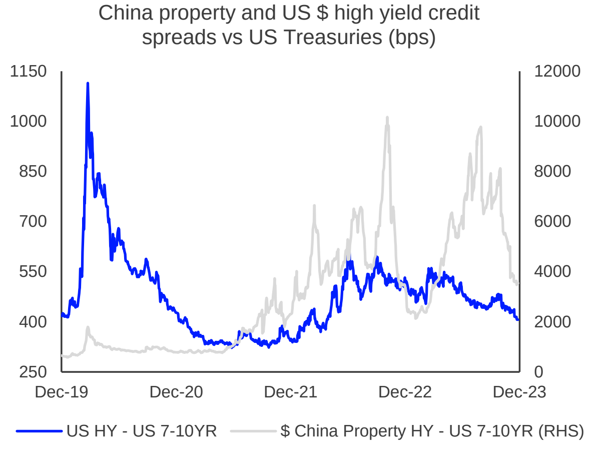


Chart 6: Chinese $ HY spreads eased further in December to 3500bps, a level last seen a year ago. US HY spreads tightened by about 120bps during 2023 as risk appetite recovered.



Source: FTSE Russell and LSEG. All data as of December 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. For professional investors only.

Credit sector and MBS analysis

Chart 1: US IG spreads tightened further in December, as the risk rally gathered momentum after the Fed pivot. Energy credits joined the rally, despite lower oil prices. Consumer spreads tightened most in 2022-23.

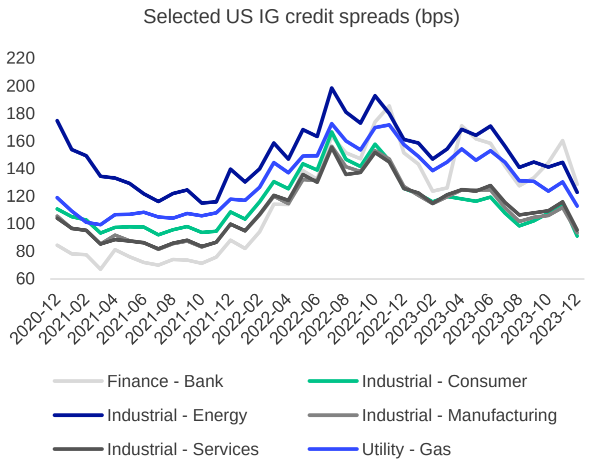


Chart 2: Eurozone IG spreads have broadly matched US IG spreads, and insurance sector spreads are getting close to pre-Ukraine shock levels. Like the US and UK, consumer credits have outperformed.

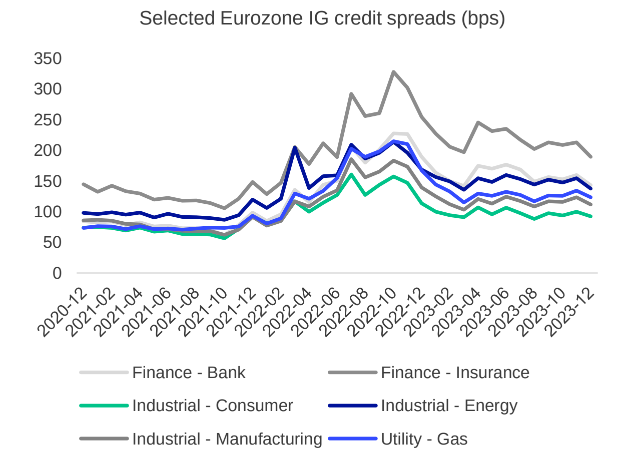


Chart 3: UK IG spreads also show outperformance by consumer credits, and volatile insurance sector spreads, after the Ukraine shock. Consumer spreads are now at post-Covid lows.

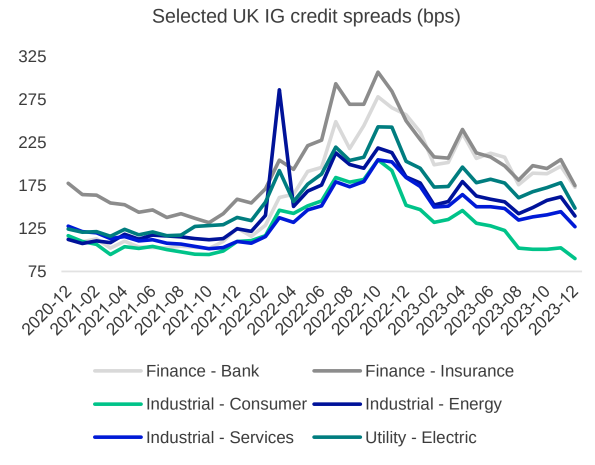


Chart 4: US IG real estate spreads have tightened, after mortgage rates fell, but remain well above 2021 levels, as retail moves online, and office space demand fell with more working from home, post-Covid.

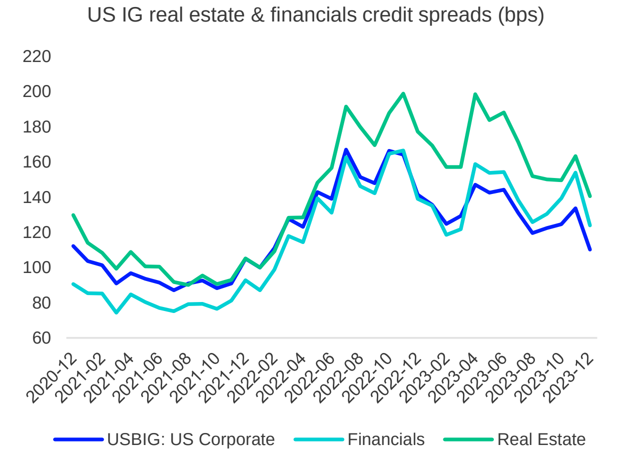


Chart 5: RMBS duration increased as prepayments collapsed in 2022. RMBS investors hedged duration risk by selling Treasuries. But this may reverse, if lower yields drive faster prepayments and lower RMBS duration.

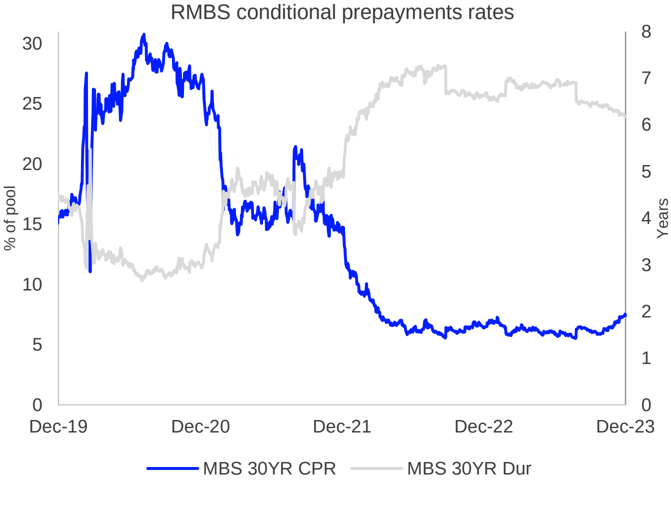
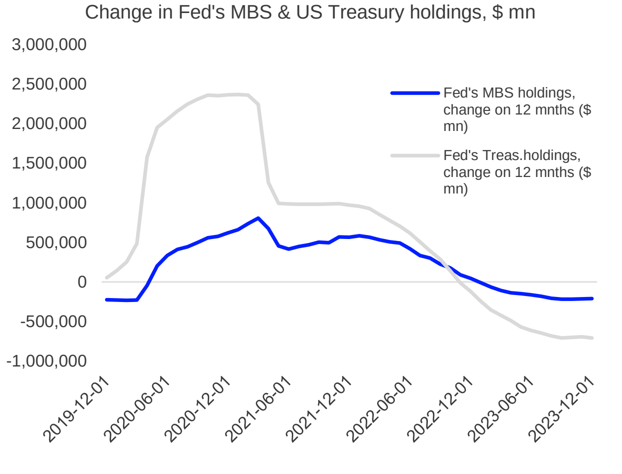


Chart 6: The reduction in the Fed's RMBS holdings slowed as higher mortgage rates drove lower prepayments, and RMBS run-offs, which averaged only $17 billion in the last four months (Fred data).



Source: FTSE Russell and LSEG. Data as of end-December 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. For professional investors only.

Sovereign and Climate Bonds Analysis

Chart 1: The recovery in Emerging Markets ESG is the most striking and reflects a high Eastern Europe weight. The re-balancing of the ACWGBI towards Europe helped it recover in 2023, as Bunds outperformed.

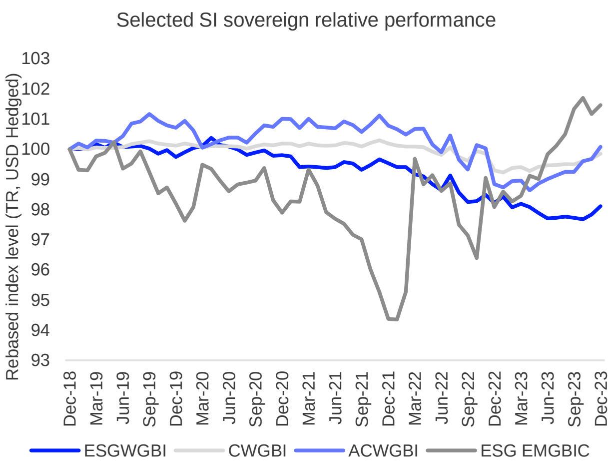


Chart 2: ESG WGBI has a higher US weighting, and big underweight in China, reflected in its spread widening in 2022-23. Outperformance by Eurozone bonds drove ACWGBI spreads tighter, after the re-weighting.

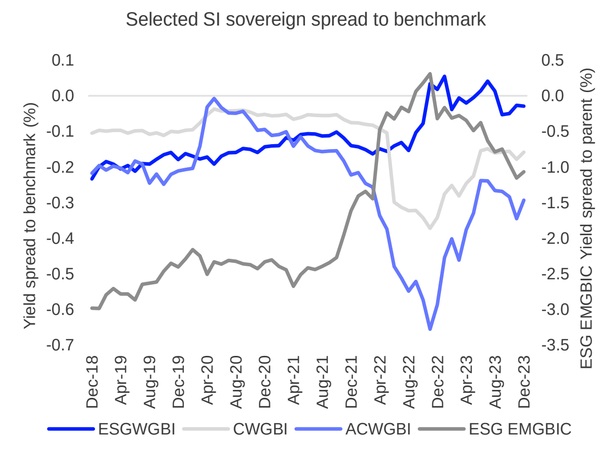


Chart 3: Paris-aligned PAB Corp outperformed strongly early in Covid, after oil prices collapsed, but has underperformed since. More subtly tilted indices, like Choice Corp, have been more stable.

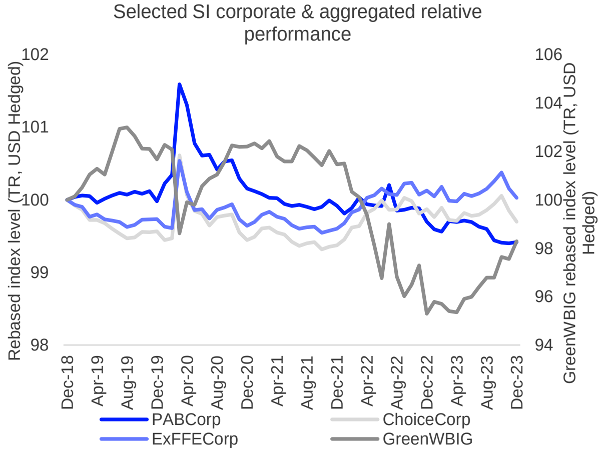


Chart 4: Spread widening in Green corporates in 2022/23 reflects heavy issuance but this reversed in 2023. The Paris-aligned PAB Corp is tilted away from fossil-fuels, so reflects energy price moves.

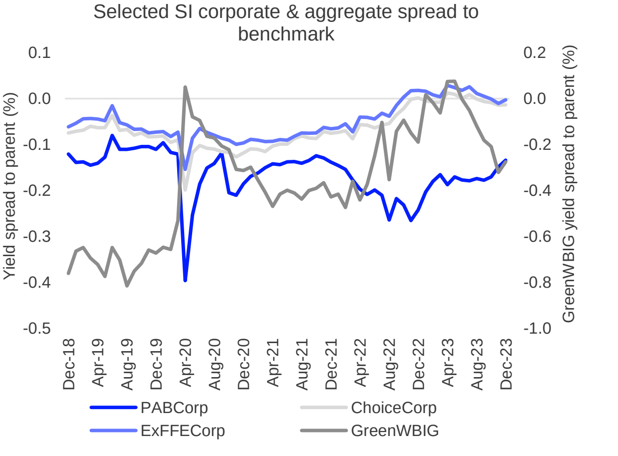


Chart 5: Extra duration in Climate WGBI helped it vs WGBI, as sovereign curves bull flattened in Bunds and JGBs in Q4. But this was offset by WGBI's heavier US weight and tighter US spreads.

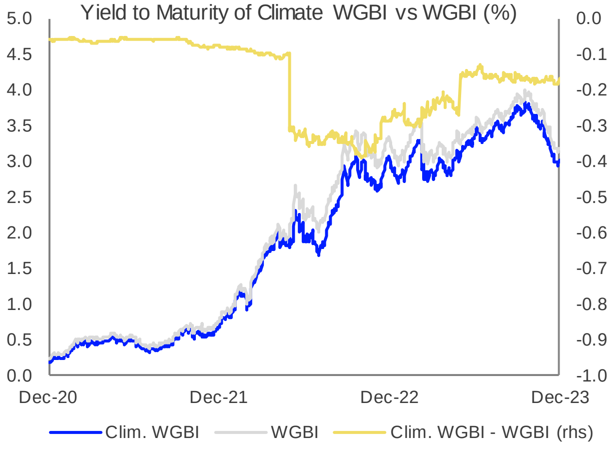
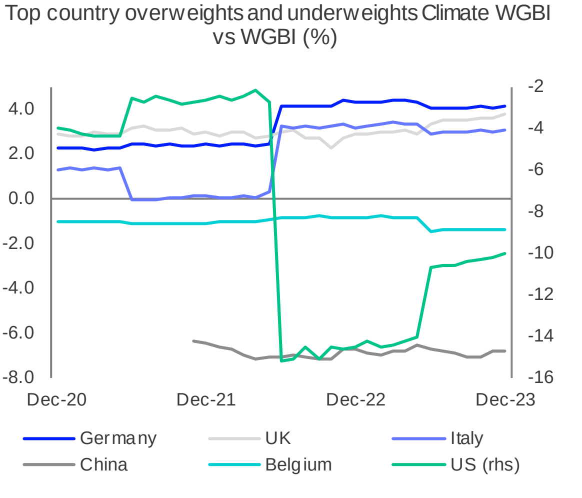


Chart 6: Changes in country weights in Climate WGBI (CW) impacted performance; the underweight in China & overweight in Europe caused the underperformance of CW vs WGBI in 2022-23.



Source: FTSE Russell and LSEG. All data as of December 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.

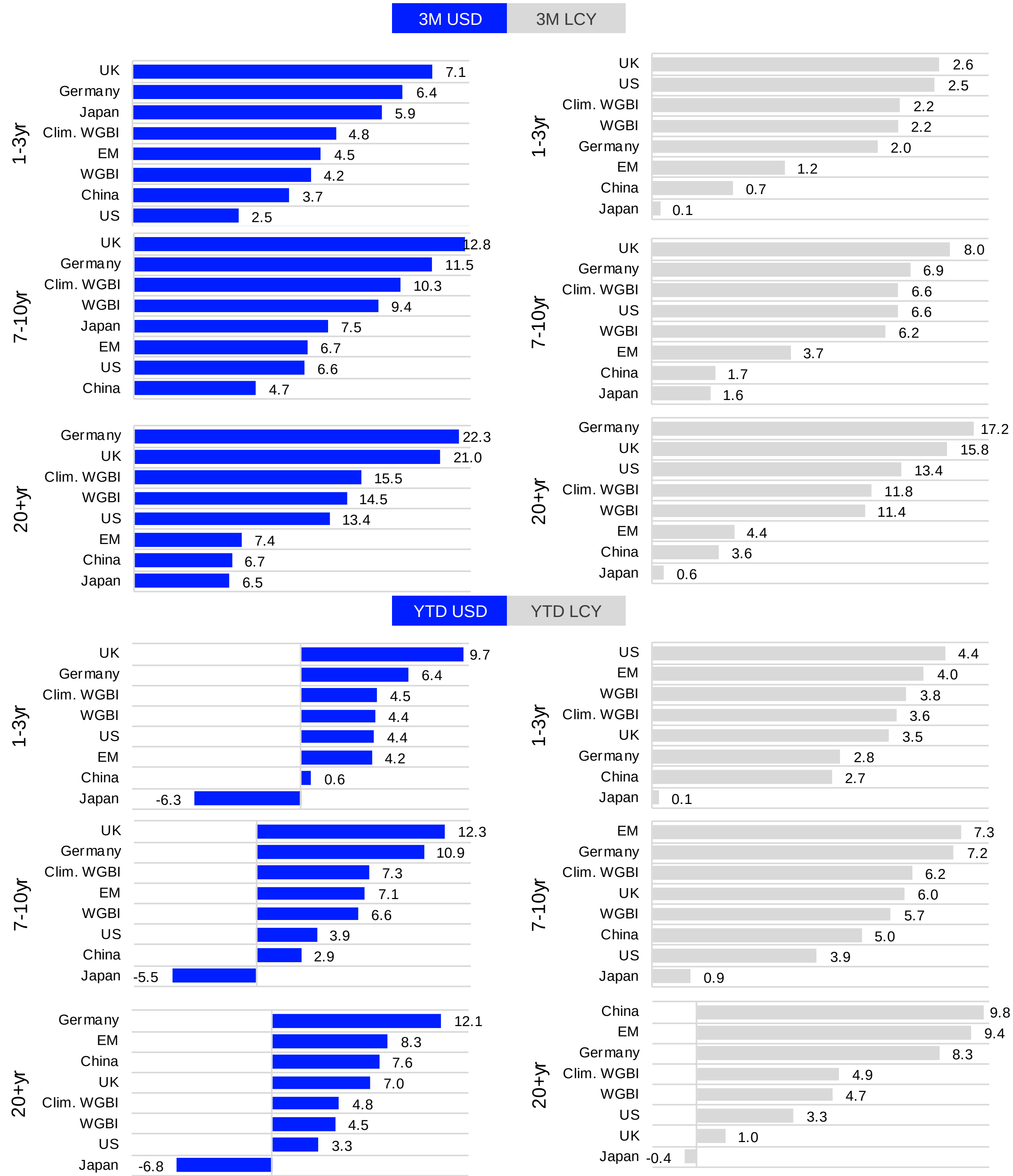
Global Sovereign Bond Returns − 3M and YTD % (USD & LC, TR)

After a volatile Q4, government bonds finished with strong positive returns, led by longs. Bunds and gilts performed best in US dollars, helped by strong currencies, as the Fed pivot pushed the USD lower. In 2023, only JGBs gave negative returns with losses of up to 7%, but Bunds and shorter dated gilts returned up to 12%.

Duration was very much the investor’s friend in Nov/December, after the Fed pivot. Investors anticipated similar easing pivots in Europe, and long European bonds, and WGBI offered dollar returns of up to 22%, in Q4, boosted by US dollar weakness.

China and EM lagged the Q4 rally, and remained less volatile, but still managed positive returns of 4-7% in dollars, as did JGBs, aided by the yen’s recovery from the Yen 150 level. Climate WGBI outperformed WGBI as extra duration helped returns in Q4.

CONVENTIONAL GOVT BONDS



Source: FTSE Russell. All data as of December 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.

Global Inflation-Linked Bond Returns − 3M & YTD % (USD, LC, TR)

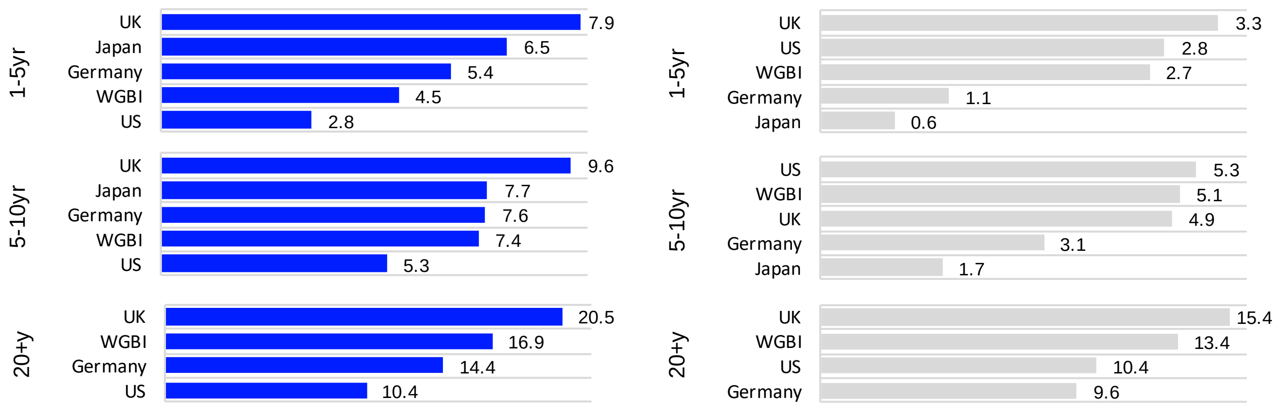
Inflation linked (IL) broadly matched gains in conventional bonds in Q4, led by longs, rallying on the Fed pivot, with 10-21% returns in the UK, WILSI and Tips. US dollar weakness boosted returns (ex US). Euro credit returned 10% in Q4, and led YTD returns, with HY gains of 17%. Apart from JGBs, the Q4 rally largely erased losses for the year, even in long UK IL.

The extra duration in long UK index linked bonds vs other markets boosted Q4 returns, as yields fell right through the curve. JGB IL performed well in US dollars, as the yen gained 6% in Q4, rebounding strongly from the Y150 level on hints of curve control ending.

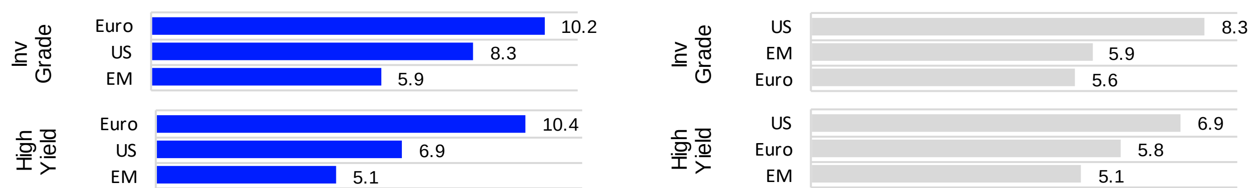
JGB linkers still lost up to 3% YTD, due to yen weakness. In contrast, shorter UK IL made 12-14**%,** boosted by sterling gains.

INFLATION LINKED BONDS

3M USD | 3M LCY

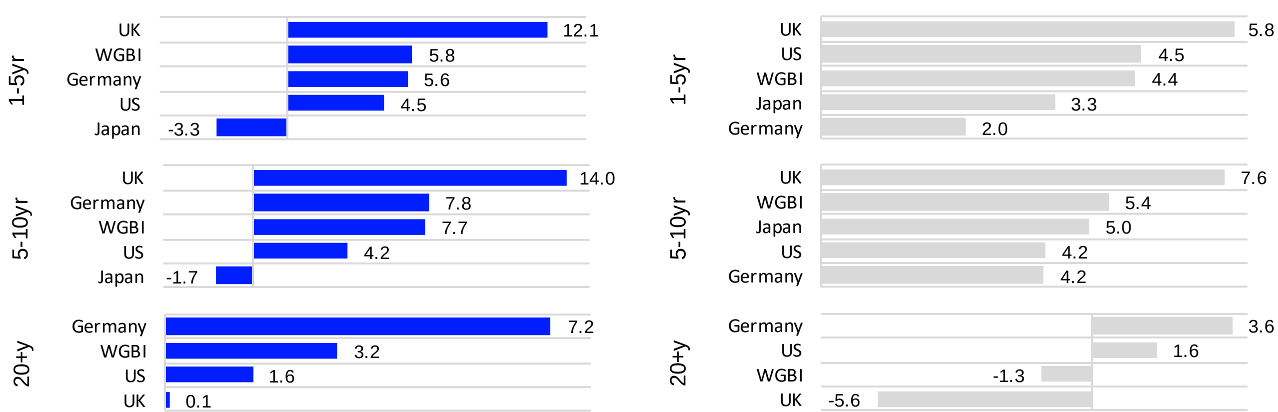


CORPORATE BONDS

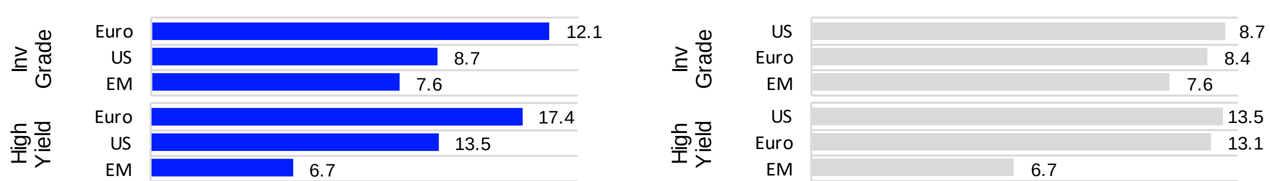


INFLATION LINKED BONDS

YTD USD | YTD LCY



CORPORATE BONDS



Source: FTSE Russell. All data as of December 31, 2023. This analysis is taken from 100+ 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.

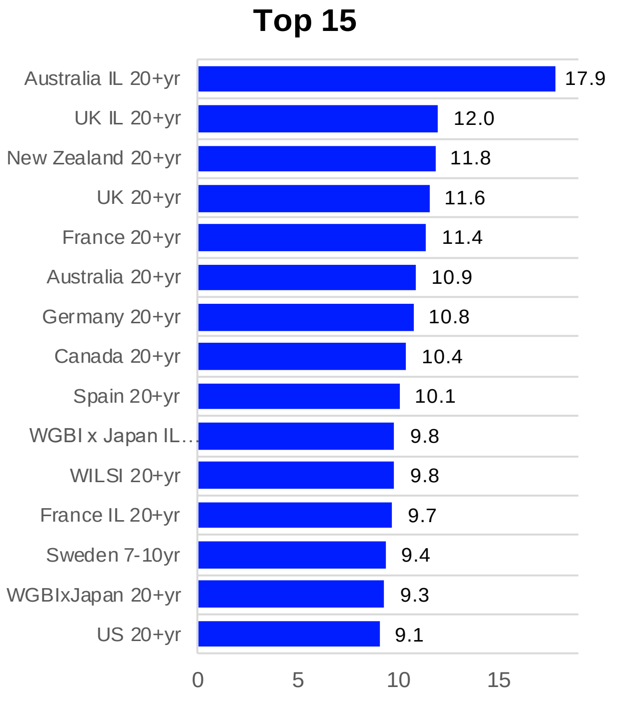
Top and Bottom Bond Returns – 1M & YTD % (USD, TR)

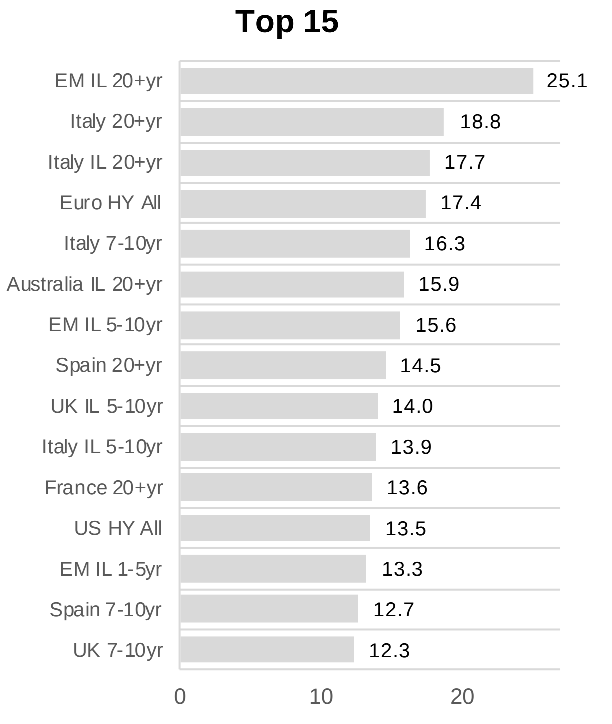
December returns show the impact of (1) the decline in yields on long duration govt bonds, and (2) dollar weakness after the Fed pivot. Nearly all of the Top 15 performers are long bonds, led by Australasian and UK linkers. YTD returns show long EM linkers outperformed with returns of 25% in dollar terms. Eurozone govts and HY also returned 16-19%.

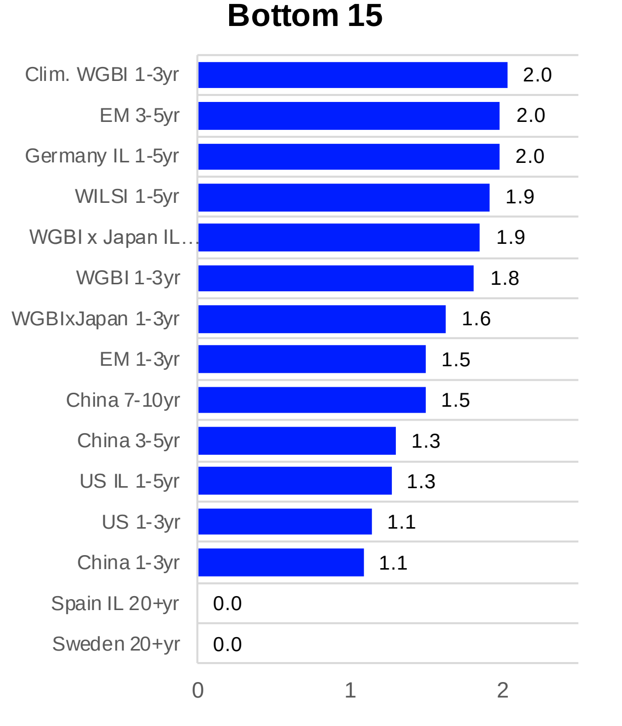
The Fed pivot drove expectations of similar moves by other central banks, and returns of 10-18% in European and Australasian bonds in dollar terms, on one month, as duration boosted returns.

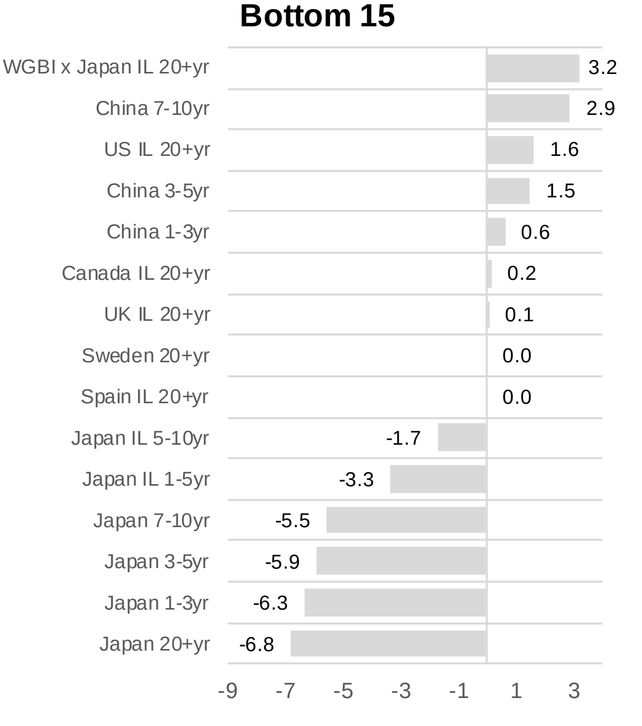
Only JGBs failed to show positive returns in dollars, in 2023, after the Q4 rally. Credit performed strongly, led by Eurozone HY.

1M USD | YTD USD









Source: FTSE Russell. All data as of December 31, 2023. This analysis is taken from 100+ 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 − Global Bond Market Returns % (USD & LC, TR) – December 29, 2023

Government Bond Returns

Top 15% | Bottom 15%

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

		3M		6M		YTD		12M	
		Local	USD	Local	USD	Local	USD	Local	USD
US	1-3yr	2.52	2.52	3.27	3.27	4.35	4.35	4.35	4.35
	7-10yr	6.58	6.58	1.88	1.88	3.92	3.92	3.92	3.92
	20+yr	13.36	13.36	-1.34	-1.34	3.32	3.32	3.32	3.32
	IG All	8.32	8.32	5.24	5.24	8.71	8.71	8.71	8.71
	HY All	6.94	6.94	7.51	7.51	13.50	13.50	13.50	13.50
UK	1-3yr	2.56	7.12	5.01	5.29	3.52	9.71	3.52	9.71
	7-10yr	7.99	12.79	9.40	9.70	6.00	12.34	6.00	12.34
	20+yr	15.81	20.96	7.61	7.90	0.98	7.01	0.98	7.01
Euro	IG All	5.58	10.16	5.90	7.23	8.35	12.15	8.35	12.15
	HY All	5.82	10.44	7.97	9.22	13.14	17.41	13.14	17.41
Japan	1-3yr	0.07	5.92	-0.13	2.39	0.10	-6.31	0.10	-6.31
	7-10yr	1.56	7.50	-1.07	1.42	0.92	-5.54	0.92	-5.54
	20+yr	0.63	6.52	-8.07	-5.75	-0.41	-6.79	-0.41	-6.79
China	1-3yr	0.72	3.73	1.07	3.52	2.67	0.64	2.67	0.64
	7-10yr	1.68	4.72	2.06	4.54	4.98	2.90	4.98	2.90
	20+yr	3.57	6.66	4.79	7.33	9.79	7.62	9.79	7.62
EM	1-3yr	1.18	4.48	1.80	3.79	4.04	4.22	4.04	4.22
	7-10yr	3.70	6.70	2.56	4.03	7.33	7.10	7.33	7.10
	20+yr	4.37	7.35	4.01	6.29	9.38	8.25	9.38	8.25
	IG All	5.93	5.93	4.28	4.28	7.56	7.56	7.56	7.56
	HY All	5.08	5.08	5.09	5.09	6.66	6.66	6.66	6.66
Germany	1-3yr	2.01	6.43	2.58	3.86	2.80	6.41	2.80	6.41
	7-10yr	6.90	11.54	4.54	5.85	7.17	10.93	7.17	10.93
	20+yr	17.18	22.26	3.84	5.14	8.29	12.08	8.29	12.08
Italy	1-3yr	2.72	7.17	3.34	4.64	4.35	8.01	4.35	8.01
	7-10yr	9.17	13.90	5.40	6.72	12.33	16.26	12.33	16.26
	20+yr	16.02	21.05	3.86	5.16	14.78	18.80	14.78	18.80
Spain	1-3yr	2.28	6.71	2.84	4.13	3.41	7.04	3.41	7.04
	7-10yr	8.20	12.89	5.50	6.82	8.84	12.66	8.84	12.66
	20+yr	16.96	22.03	5.97	7.30	10.67	14.55	10.67	14.55
France	1-3yr	2.36	6.80	2.95	4.24	3.48	7.10	3.48	7.10
	7-10yr	7.56	12.22	5.02	6.33	7.76	11.54	7.76	11.54
	20+yr	18.28	23.41	5.71	7.03	9.76	13.61	9.76	13.61
Sweden	1-3yr	2.14	10.11	2.91	10.30	3.16	6.66	3.16	6.66
	7-10yr	8.67	17.15	6.34	13.97	5.52	9.09	5.52	9.09
Australia	1-3yr	1.84	7.67	2.92	5.50	3.02	3.66	3.02	3.66
	7-10yr	5.24	11.27	3.09	5.68	5.10	5.75	5.10	5.75
	20+yr	10.79	17.14	2.67	5.24	5.07	5.72	5.07	5.72
New Zealand	1-3yr	3.11	8.65	3.24	6.70	4.73	4.84	4.73	4.84
	7-10yr	9.19	15.06	4.71	8.21	5.87	5.99	5.87	5.99
	20+yr	18.37	24.73	5.51	9.04	3.54	3.66	3.54	3.66
Canada	1-3yr	2.65	5.25	3.18	3.55	3.93	6.79	3.93	6.79
	7-10yr	8.35	11.10	3.32	3.68	4.51	7.39	4.51	7.39
	20+yr	18.15	21.15	3.35	3.71	8.03	11.01	8.03	11.01

Source: FTSE Russell. All data as of December 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 % (USD & LC, TR) – December 29, 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	2.83	2.83	3.11	3.11	4.51	4.51	4.51	4.51
	5-10yr	5.30	5.30	2.13	2.13	4.21	4.21	4.21	4.21
	20+yr	10.38	10.38	-3.73	-3.73	1.64	1.64	1.64	1.64
UK	1-5yr	3.27	7.86	5.94	6.22	5.82	12.15	5.82	12.15
	5-10yr	4.95	9.61	6.50	6.79	7.56	13.99	7.56	13.99
	20+yr	15.37	20.50	1.04	1.31	-5.56	0.08	-5.56	0.08
Japan	1-5yr	0.61	6.49	1.07	3.62	3.28	-3.34	3.28	-3.34
	5-10yr	1.72	7.67	1.10	3.65	5.02	-1.71	5.02	-1.71
EM	1-5yr	2.61	4.18	5.97	3.96	12.38	13.26	12.38	13.26
	5-10yr	5.13	7.29	5.10	3.93	12.11	15.64	12.11	15.64
	20+yr	9.82	13.03	5.13	4.90	15.31	25.14	15.31	25.14
Germany	1-5yr	1.06	5.44	1.71	2.98	2.03	5.60	2.03	5.60
	5-10yr	3.14	7.61	1.40	2.67	4.18	7.83	4.18	7.83
	20+yr	9.63	14.38	-3.52	-2.32	3.62	7.25	3.62	7.25
Italy	1-5yr	3.30	7.78	3.72	5.02	5.18	8.87	5.18	8.87
	5-10yr	6.91	11.55	3.06	4.35	10.03	13.89	10.03	13.89
	20+yr	17.17	22.25	-2.80	-1.59	13.71	17.69	13.71	17.69
Spain	1-5yr	1.99	6.41	2.44	3.72	3.24	6.85	3.24	6.85
	5-10yr	4.67	9.21	2.85	4.14	5.70	9.40	5.70	9.40
France	1-5yr	1.94	6.36	2.01	3.29	2.55	6.14	2.55	6.14
	5-10yr	3.96	8.47	2.24	3.52	4.93	8.61	4.93	8.61
	20+yr	14.05	19.00	-0.65	0.59	6.84	10.59	6.84	10.59
Sweden	1-5yr	2.20	10.18	3.18	10.59	3.74	7.26	3.74	7.26
	5-10yr	5.42	13.64	4.70	12.22	5.01	8.57	5.01	8.57
Australia	1-5yr	2.68	8.56	3.80	6.41	6.70	7.36	6.70	7.36
	5-10yr	5.32	11.35	4.98	7.61	9.45	10.13	9.45	10.13
	20+yr	17.21	23.92	9.22	11.96	15.14	15.86	15.14	15.86
New Zealand	5-10yr	6.80	12.54	3.87	7.35	8.18	8.30	8.18	8.30
Canada	20+yr	14.76	17.67	0.58	0.94	-2.52	0.17	-2.52	0.17

Source: FTSE Russell. All data as of December 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.

Global Bond Yields

Top 15% Bottom 15%

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

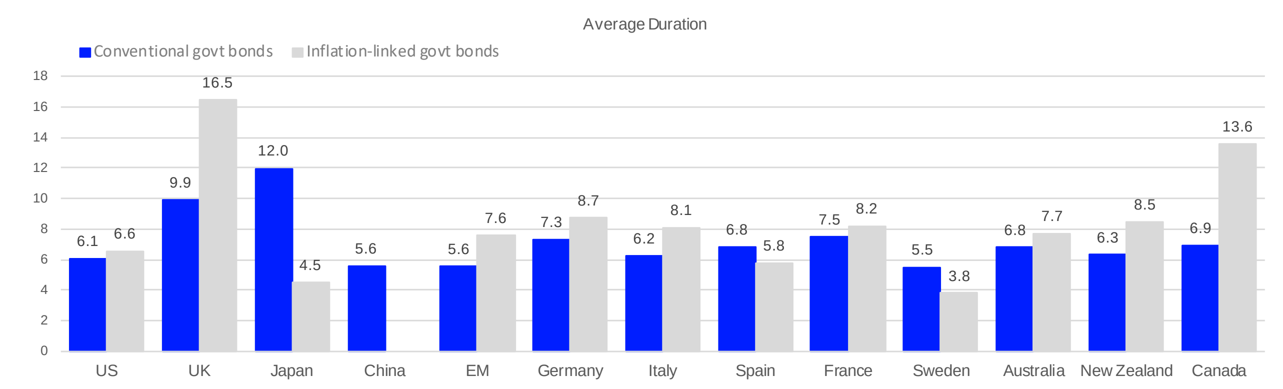
		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	4.37	3.92	3.87	4.14	2.20	1.72	1.96	5.11	7.79
	3M Ago	5.16	4.71	4.59	4.82	2.72	2.29	2.37	6.06	8.91
	6M Ago	5.01	4.31	3.85	3.95	2.45	1.72	1.68	5.53	8.58
	12M Ago	4.54	4.13	3.88	4.11	2.09	1.68	1.82	5.50	8.99
UK	Current	3.94	3.45	3.46	4.07	-0.02	-0.02	0.91		
	3M Ago	4.73	4.46	4.35	4.81	0.55	0.53	1.39		
	6M Ago	5.36	5.04	4.38	4.35	1.78	0.72	0.90		
	12M Ago	3.50	3.65	3.69	3.92	-0.68	0.15	0.49		
Japan	Current	0.00	0.13	0.50	1.60	-1.67	-0.81			
	3M Ago	0.01	0.21	0.66	1.61	-1.75	-0.70			
	6M Ago	-0.10	-0.01	0.29	1.21	-1.64	-0.87			
	12M Ago	0.03	0.15	0.48	1.50	-1.22	-0.54			
China	Current	2.18	2.33	2.58	2.90					
	3M Ago	2.24	2.42	2.70	3.06					
	6M Ago	2.09	2.33	2.66	3.08					
	12M Ago	2.28	2.53	2.85	3.26					
EM	Current					4.27	4.23	4.82	5.57	10.03
	3M Ago					3.27	4.48	5.32	6.43	11.01
	6M Ago					4.15	4.07	4.86	5.95	11.86
	12M Ago					2.79	3.04	5.15	5.92	11.40
Germany	Current	2.48	1.97	1.96	2.25	0.92	0.16	0.16		
	3M Ago	3.21	2.78	2.75	2.97	0.87	0.44	0.52		
	6M Ago	3.17	2.66	2.37	2.36	0.96	0.19	-0.06		
	12M Ago	2.56	2.53	2.54	2.51	0.40	0.34	0.18		
Italy	Current	2.99	2.88	3.45	4.17	1.23	1.62	1.88		
	3M Ago	3.94	4.03	4.50	5.02	1.68	2.31	2.43		
	6M Ago	3.79	3.71	3.87	4.25	1.74	1.78	1.70		
	12M Ago	3.34	3.72	4.38	4.72	1.16	2.19	2.18		
France	Current	2.49	2.23	2.43	3.00	0.56	0.32	0.64		
	3M Ago	3.33	3.14	3.26	3.79	0.82	0.75	1.12		
	6M Ago	3.21	2.94	2.85	3.19	0.88	0.47	0.55		
	12M Ago	2.85	2.82	2.97	3.30	0.15	0.44	0.77		
Sweden	Current	2.59	2.04	2.01		1.12	0.59			
	3M Ago	3.50	3.18	2.98		1.42	1.28			
	6M Ago	3.43	2.94	2.61		1.18	0.91			
	12M Ago	2.80	2.65	2.37		-0.24	0.25			
Australia	Current	3.71	3.63	3.90	4.30	0.85	1.27	1.61		
	3M Ago	4.14	4.10	4.43	4.86	1.30	1.78	2.24		
	6M Ago	4.17	3.99	4.02	4.36	1.04	1.47	1.85		
	12M Ago	3.43	3.62	4.01	4.37	0.60	1.45	1.88		
New Zealand	Current	4.71	4.24	4.31	4.60	1.45	2.12			
	3M Ago	5.63	5.35	5.32	5.54	2.50	2.89			
	6M Ago	5.08	4.67	4.61	4.77	1.53	2.15			
	12M Ago	5.00	4.62	4.46	4.54	1.54	2.06			
Canada	Current	3.94	3.26	3.10	3.04	1.31	1.35	1.51		
	3M Ago	4.88	4.37	4.07	3.85	2.35	2.29	2.13		
	6M Ago	4.60	3.84	3.35	3.12	1.90	1.57	1.43		
	12M Ago	4.04	3.50	3.28	3.26	1.53	1.39	1.18		

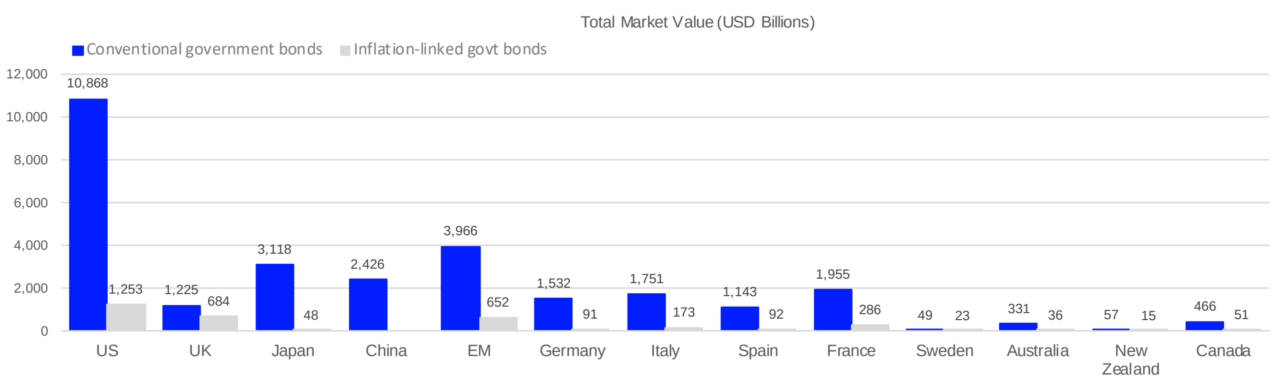
Source: FTSE Russell. All data as of December 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional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

Appendix – Duration and Market Value (USD, Bn) as of December 29, 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	**6.1**	2,522.9	1,098.8	1,336.4	**10,868.3**	7.0	21.2	**6.6**	423.2	126.7	**1,253.5**
UK	3.6	7.4	18.8	**9.9**	140.0	190.5	346.2	**1,225.4**	6.9	27.4	**16.5**	113.2	268.0	**684.3**
Japan	3.8	8.0	23.7	**12.0**	378.7	370.5	673.5	**3,117.7**	7.2		**4.5**	21.0		**48.1**
China	3.7	7.6	17.7	**5.6**	595.9	358.8	277.5	**2,426.4**						
EM	3.5	7.0	15.9	**5.6**	894.4	689.4	380.2	**3,966.2**	5.8	13.9	**7.6**	118.7	177.5	**651.7**
Germany	3.8	7.6	20.8	**7.3**	358.5	239.5	185.0	**1,532.5**	7.0	21.5	**8.7**	45.3	19.6	**90.9**
Italy	3.6	7.2	16.4	**6.2**	309.2	305.1	153.0	**1,750.6**	7.5	26.1	**8.1**	63.9	5.6	**173.0**
Spain	3.8	7.7	18.1	**6.8**	211.8	204.7	108.2	**1,143.4**	6.5		**5.8**	24.0		**91.8**
France	3.9	7.6	20.2	**7.5**	330.4	307.2	245.4	**1,954.8**	6.4	24.3	**8.2**	110.9	22.4	**286.4**
Sweden	4.2	7.8		**5.5**	7.1	14.3		**49.2**	5.6		**3.8**	10.7		**22.8**
Australia	3.7	7.5	17.2	**6.8**	48.8	106.8	21.7	**331.3**	6.9	22.3	**7.7**	10.6	2.9	**36.0**
New Zealand	3.6	7.4	17.2	**6.3**	11.1	16.0	2.9	**57.4**	6.0		**8.5**	3.3		**14.7**
Canada	3.7	7.4	20.1	**6.9**	61.5	117.5	69.7	**466.1**	6.7	20.7	**13.6**	8.5	21.1	**51.2**

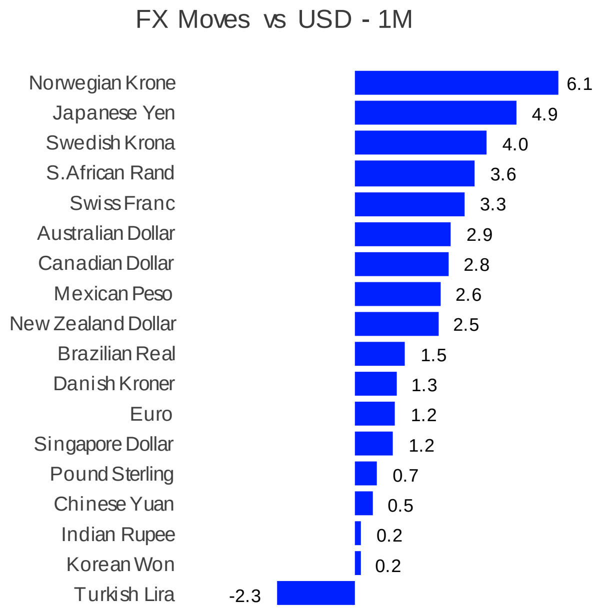
	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.7	8.6	7.3	6.7	7.1	77.6	459.8	2747.0	3470.9	6755.4	3.9	1034.5
Europe	5.7	4.8	4.6	4.2	4.4	11.2	205.4	1277.8	1553.0	3047.4		
EM		6.1	4.9	5.2	5.1		37.0	218.1	311.3	566.3	3.3	161.1

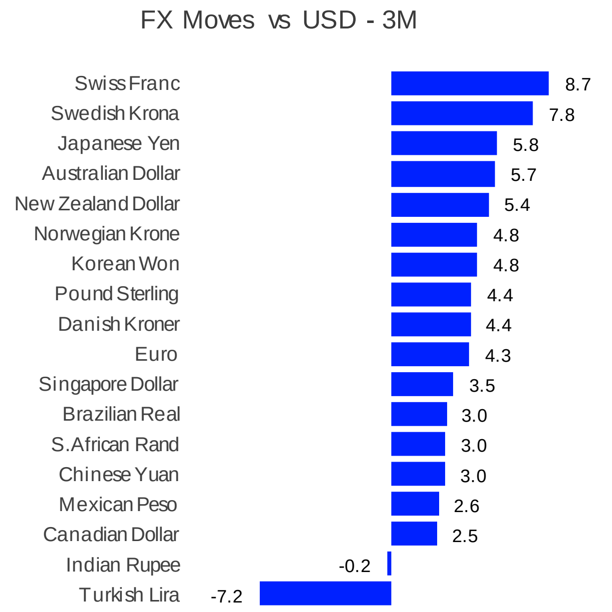


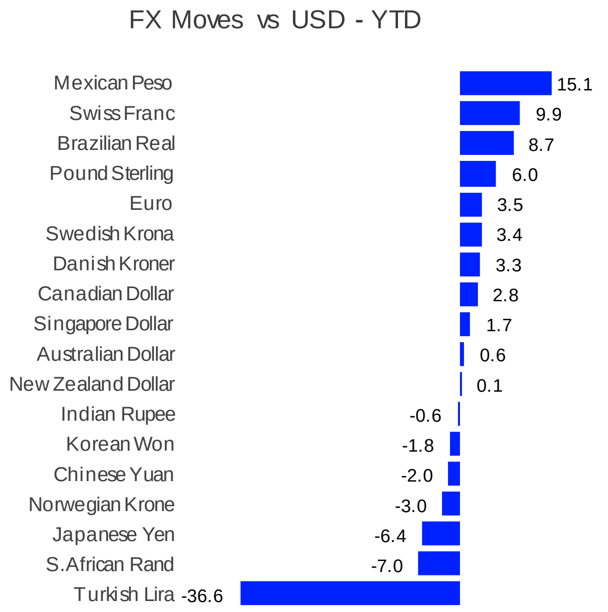


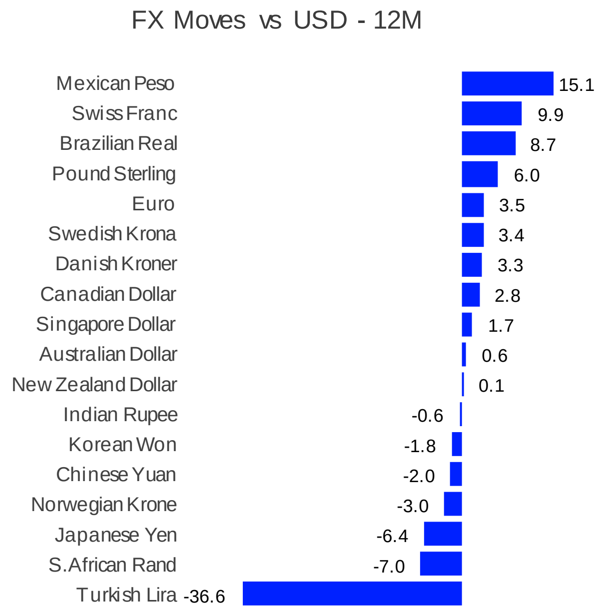
Source: FTSE Russell. All data as of December 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional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

Appendix – Foreign Exchange Returns % as of December 29, 2023









Source: FTSE Russell. All data as of December 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 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

Source: FTSE Russell. All data as of December 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.

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.

Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives. Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity.

For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

CONTACT US

To learn more, visit lseg.com/ftse-russell; email info@ftserussell.com; or call your regional Client Service team office:

EMEA +44 (0) 20 7866 1810
North America +1 877 503 6437

Asia-Pacific
Hong Kong +852 2164 3333
Tokyo +81 3 6441 1430
Sydney +61 (0) 2 7228 5659