

Fixed Income Insights

MONTHLY REPORT – JANUARY 2024 | EUROZONE EDITION

FOR PROFESSIONAL INVESTORS ONLY

Long duration eventually becomes the investor’s friend again in 2023

Long duration bonds eventually became the investor’s friend in 2023, after lower inflation and a Fed pivot reversed the direction of G7 yields in Q4. Bund yields de-coupled from Treasuries in 2023, reflecting growth divergences. Long Eurozone sovereigns and HY credit returned 10-13% in 2023 after strong Q4 gains.

Macro and policy backdrop – The Fed pivot and Q4 disinflation fuelled expectations of aggressive easing in 2024

The ECB does not expect a recession in the Eurozone in 2024, despite lags in the impact of policy, making 2024 a higher risk. (pages 2-3)

Yields, curves and spreads – Yield curves remained deeply inverted, after G7 curves bull flattened

Q4 saw a rapid decline in bond yields, reversing a long period of increases, on expectations of policy easing. (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 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 – Long bond rally in Q4 erases 12 months of negative performance

The strength of the bond market rally in Q4 2023 means most long bond returns were positive in 2023. (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: Breakeven inflation has collapsed in Germany over the last 12 months, and is negative elsewhere, except in Japan. Real yields are only positive in the US.

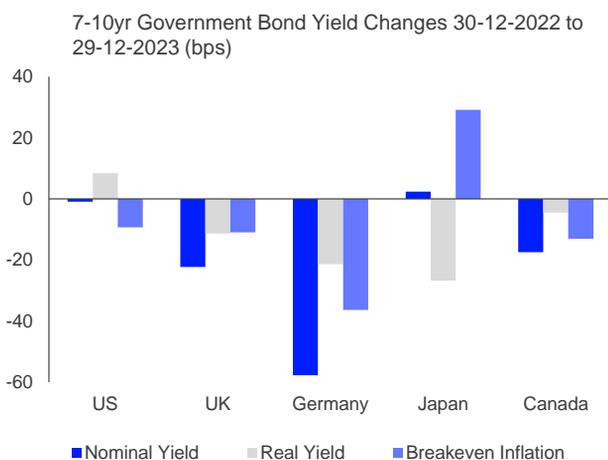


Chart 2: Evidence the 2022 inflation shock was supply-driven can be found in supply chain indices. The recent uptick is therefore of note.



Source: FTSE Russel and LSEG. All data 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 close to full employment. The ECB does not expect a recession in the Eurozone in 2024, despite lags in the impact of policy, making 2024 a higher recession risk. Lowering inflation from 3% to 2% may prove challenging.

The Eurozone economy is expected to avoid recession in 2024, according to the ECB and Consensus forecasts (see also Chart 3). The ECB expects the region to grow by “an average of 0.6% in 2023, 0.8% in 2024, and 1.5% in both 2025 and 2026”. Despite the US growing faster than the Eurozone in 2023, consensus forecasts show the differential narrowing in 2024, with US growth falling back towards 1% but avoiding recession (Chart 1).

Inflation levels have eased sharply in most G7 countries, as Chart 2 shows, alongside much weaker growth. The theory that the last 1-2% of disinflation to 2% target levels has higher growth and employment costs than earlier disinflation, will now be tested in the US, Eurozone and Canada.

A strong labour market continues to support the Eurozone economy: the unemployment rate of 6.5% in October remains close to its historic lows, underpinning wage growth, which remains strong, despite a lag effect, and is higher than the latest inflation rate of 2.4% y/y (Chart 3). Furthermore, with very weak output growth, and strong wage gains, unit labour costs are growing sharply.

Easing in oil prices has provided welcome relief to the ECB in its attempts to reduce inflation, as Chart 4 shows. Prices have trended lower since the Ukraine shock in Q1, 2022, reflecting weaker global demand, as growth has slowed after OECD policy tightening, and the higher share of US production. A correspondingly lower share of OPEC production in global supply has made it more difficult for OPEC to exert price control as well. However, geopolitical risks in the middle east remain a risk to the oil price.

Chart 1: 2023 saw better economic growth than expected, with recessions being averted. Forecasts for 2024 also suggest a soft landing, despite modest growth in Europe.

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 3: Robust wage growth remains a concern for the ECB and a reason for not committing to a Fed-style policy-pivot in 2024, despite expectations of slowing growth and further falls in inflation.



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Chart 2: Inflation levels moved in the 2-3% territory, though the ‘last mile’ to 2% is expected to be more challenging than it looks. Central banks are also watching core inflation, which remains high.

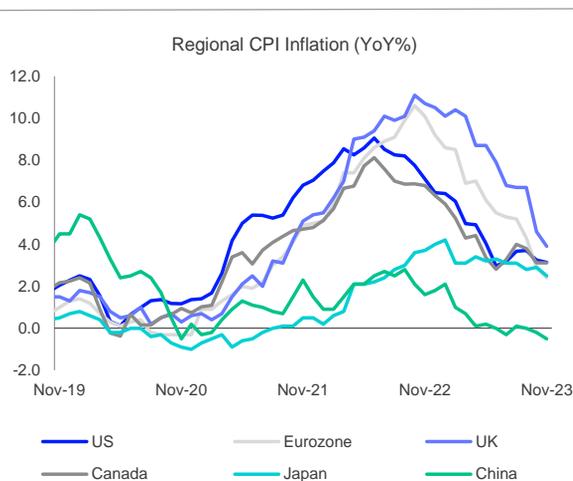
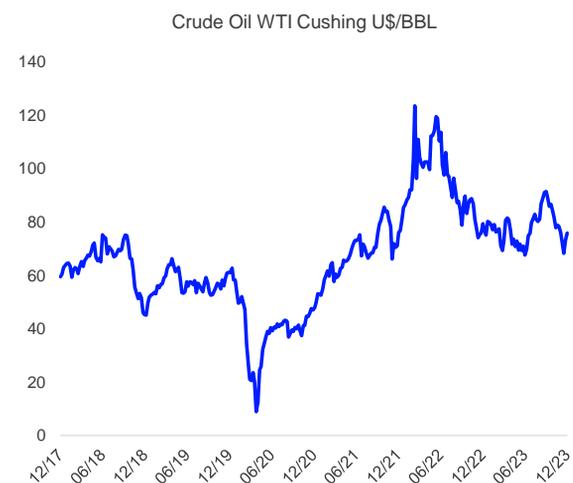


Chart 4: The sharp drop in the oil price is a key factor for lower inflation in G7. Despite a modest rebound in December, it remains close to recent lows, despite wars in Europe and the Middle East, and OPEC+ cuts.



Financial Conditions and Monetary Policy Settings

ECB tightening caused a sharp tightening in financial conditions, evidenced by weaker money supply and a collapse in Eurozone loans. But Q4 declines in bond yields and credit spreads, and stronger equities have offset this tightening. The US dollar fell on narrower rate differentials, but weak growth in Europe and China restricted the sell-off. The ECB signalled its intent to retain its current policy stance, while wage growth remains high, and inflation above the 2% target.

Charts 1 and 4 show liquidity is drying up as M2 plateaued and Eurozone loans to other residents in the region collapsed, after the 450bp rate hikes and 'higher for longer' rates. In addition, the ECB's PEPP programme will be cut further (in addition to not reinvesting the principal), by €7.5 billion each month from the middle of 2024, and will discontinue reinvestments by the end of 2024. The ECB's challenge will be to avoid deflation in 2024, as it balances reaching its inflation target with avoiding a recession.

The US dollar fell in December (Chart 2) after the Fed pivot towards easing, resulting in euro gains of about 1% for the month (see page 15). The yen's recovery gained momentum after the Fed pivot, as investors focused on the BoJ possibly moving away from negative rates in January. Sterling drew support from hawkish BoE signalling (see below), though weak growth tempered gains.

Central banks left rates unchanged in December at their last meeting for 2023 (Chart 3), but only the Fed hinted at a pivot in 2024. The ECB made no such claims and President Lagarde stressed it will be "data-dependent" and not "time-dependent", as it watches for a softening of wage growth (see also page 2) and core inflation, which at 3.6% y/y in November remains too high.

Chart 1: The impact of higher ECB policy rates on liquidity is evident in weak M2 growth, which has turned negative again y/y, after the monthly declines in September and October.

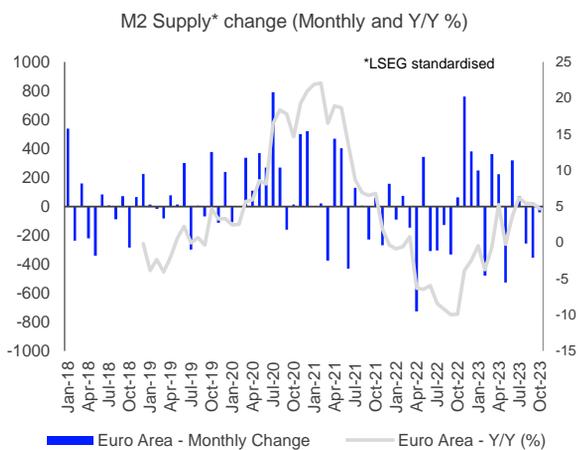


Chart 2: The US dollar retreated against most currencies in Q4 2023, on expectations of Fed easing policy from mid-2024 after Jay Powell hinted at 75bp cuts.

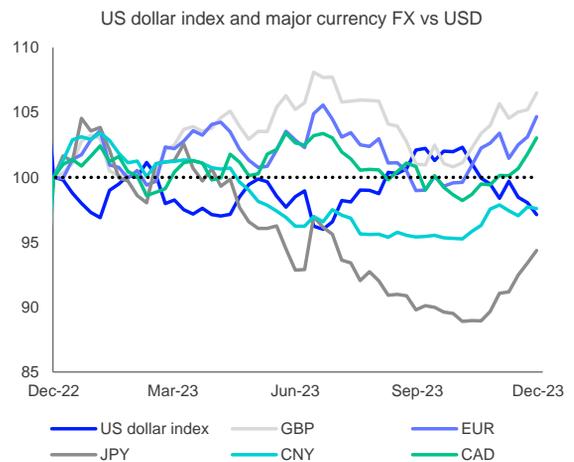


Chart 3: Further signs of an uncoordinated G7 monetary policy cycle emerged in December after the Fed pivoted towards easing, while the ECB and the BoC remained firmly on hold.

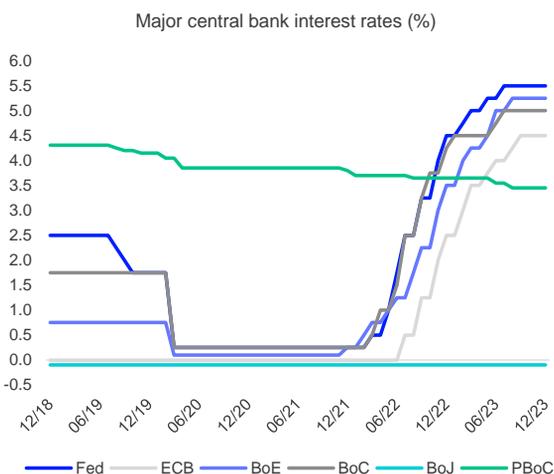


Chart 4: Eurozone loans to other residents in the region fell sharply in 2023 as the ECB increased rates by 450bp and signalled no urgency about reducing rates, in contrast to the Fed pivot in December.



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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.

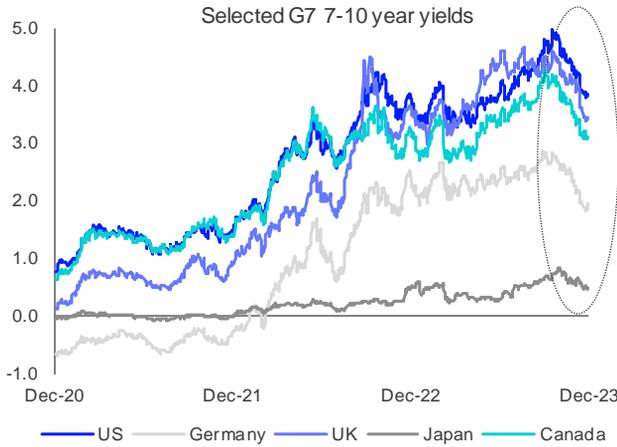


Chart 2: Except for Japan, real yields also fell sharply in Q4, reflecting weaker real growth as global economic activity feels the impact of the sharp rate rises during 2023.

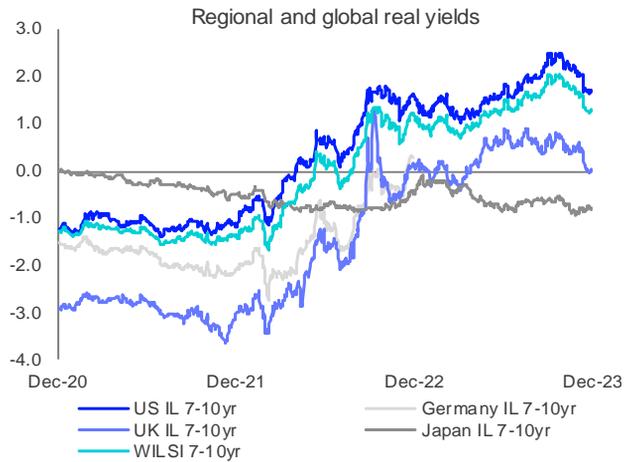


Chart 3: Yield curves have remained deeply inverted, after G7 curves bull flattened, with the Canadian yield curve the most inverted. Even the Japanese curve flattened, after lower Japanese inflation.

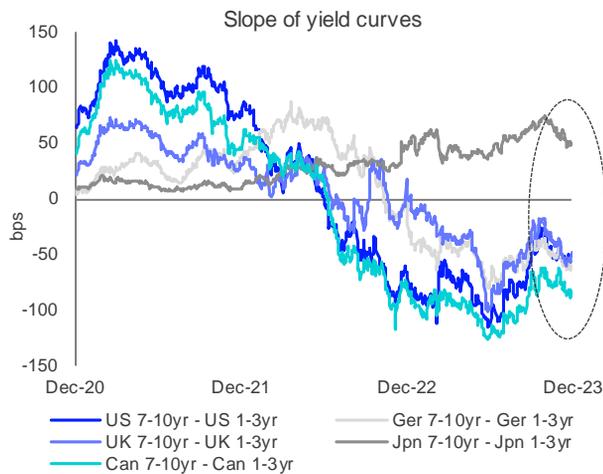


Chart 4: Longer G7 yield curves also inverted outright in Q4, with the UK curve returning close to zero. The Canadian curve has been more stable than equivalent peers but remains deeply inverted.

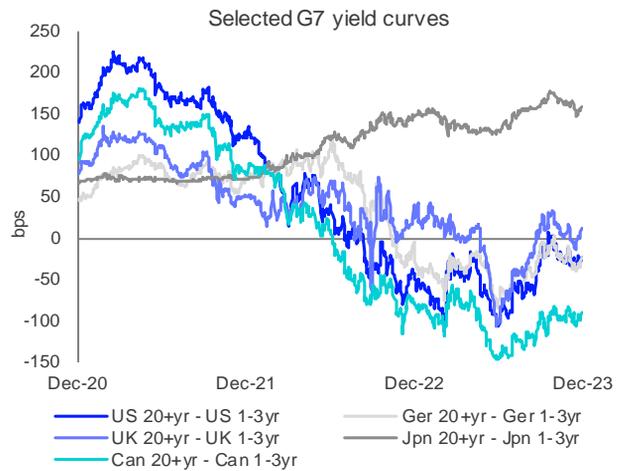


Chart 5: G7 inflation breakevens fell in Q4, remaining correlated with (lower) spot inflation. Japanese breakevens fell sharply, as the 2022-23 increase in inflation began to unwind and investors favoured nominal bonds.

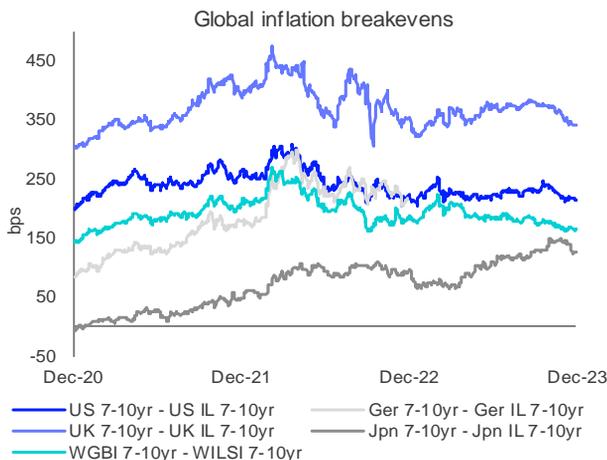


Chart 6: Global breakevens have fallen to pre-2020 levels, after global inflation eased on weaker economic growth and lower energy costs. Food inflation, while still high, has also eased.



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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.

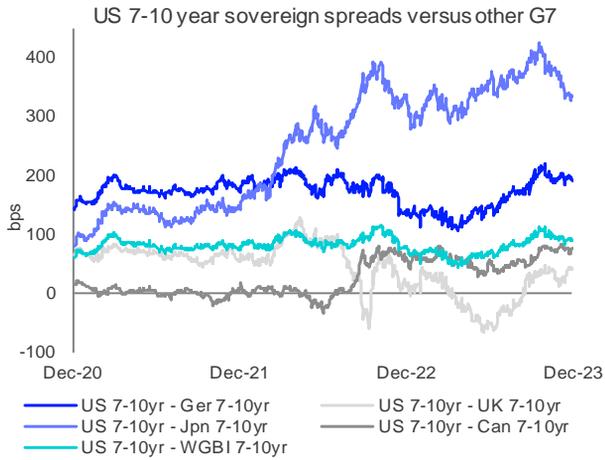


Chart 2: Italian 7-10yr spreads have fallen sharply in Q4 in anticipation of aggressive cuts and after Lagarde stressed the ECB commitment to successful policy transmission, despite caution on easing rates in 2024.

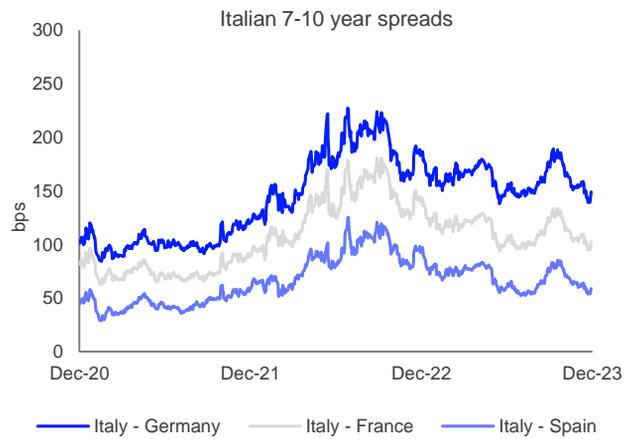


Chart 3: EM spreads widened in December, as the G7 bond market rally gathered momentum, excluding JGBs, where yields fell less. Spillover effects from lower US Treasury yields may help EM spreads in Q1.

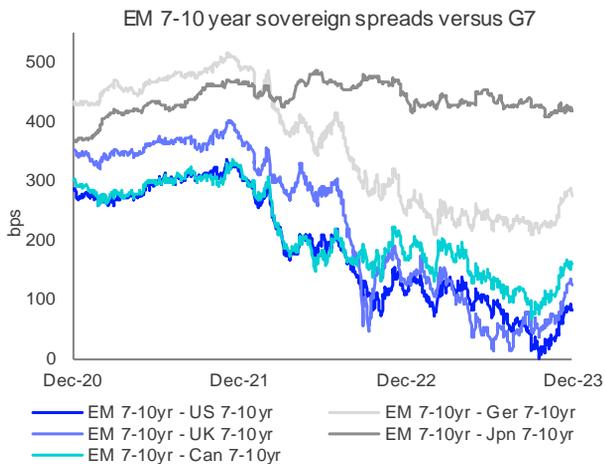


Chart 4: Chinese spreads vs the G7 have trended lower since 2020. They have generally been counter-cyclical, rising when G7 yields fall (Q4) and vice versa. This offers diversification benefits to investors.

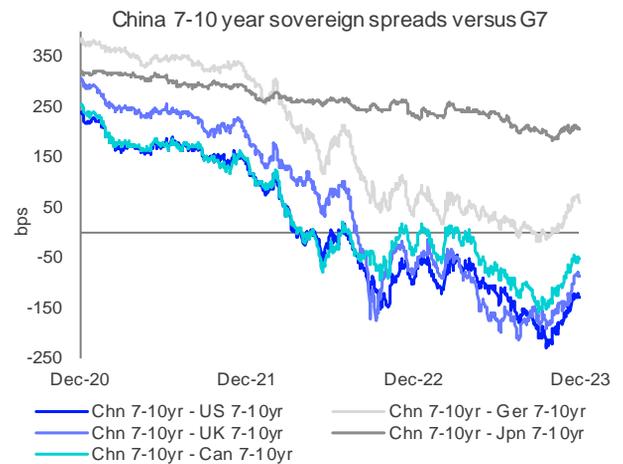


Chart 5: Credit spreads fell in Q4, led by high yield, as the Fed pivot helped the G7 recovery in risk appetite, and risk assets rallied. HY generally outperformed IG in 2023, despite near recession in Europe.

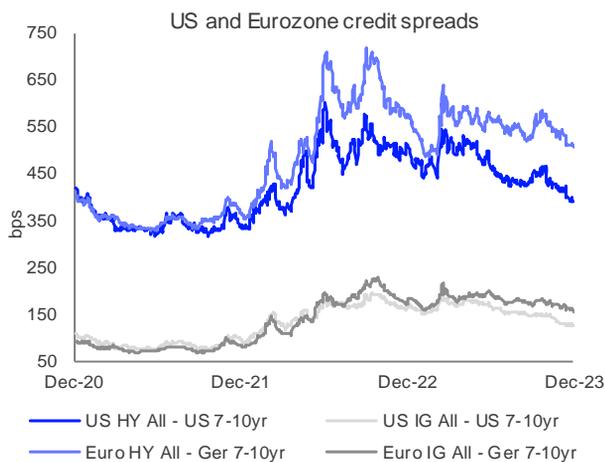
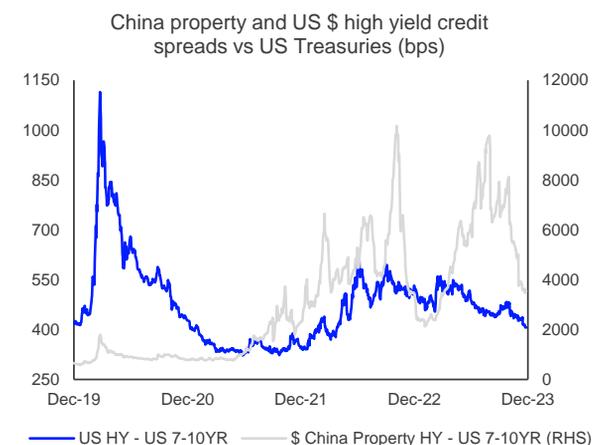


Chart 6: Chinese \$ HY spreads eased further in December to 3500bps, a level last seen a year ago. US HY spreads tightened by about 120bps during 2023 as risk appetite recovered.



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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.

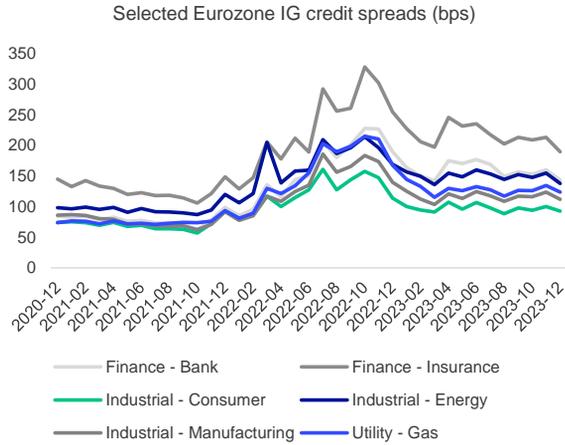


Chart 2: Eurozone IG spreads have broadly matched US IG spreads, and insurance sector spreads are getting close to pre-Ukraine shock levels. Like the US and UK, consumer credits have outperformed.

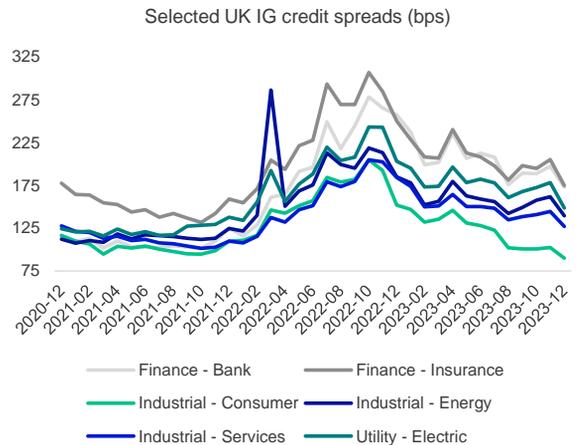


Chart 3: UK IG spreads also show outperformance by consumer credits, and volatile insurance sector spreads, after the Ukraine shock. Consumer spreads are now at post-Covid lows.

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.

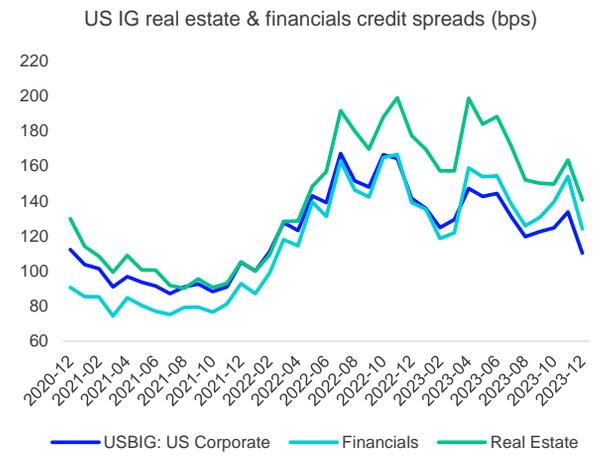
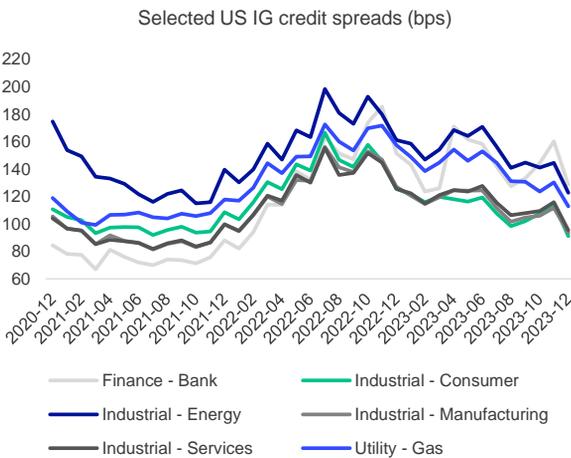
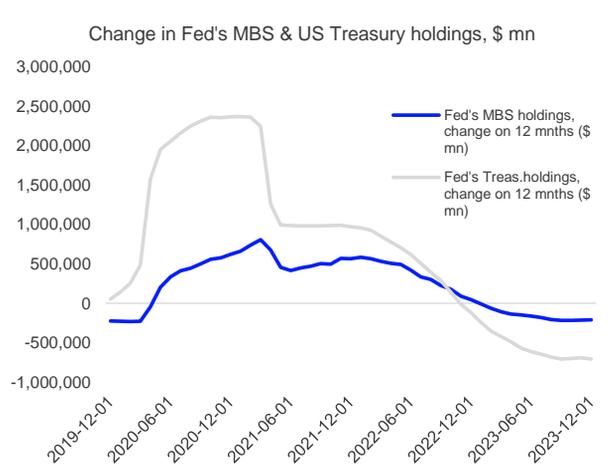
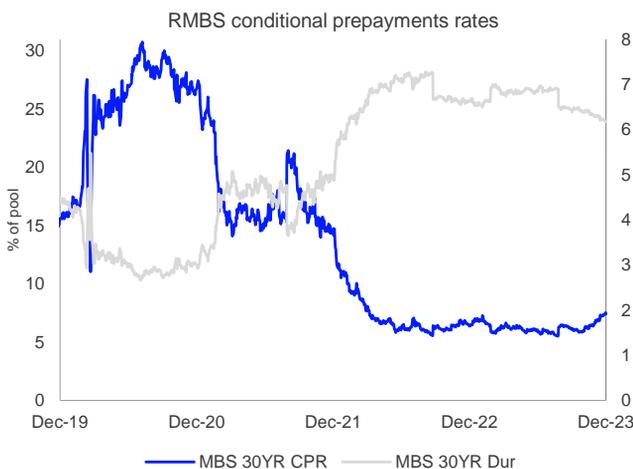


Chart 5: RMBS duration increased as prepayments collapsed in 2022. RMBS investors hedged duration risk by selling Treasuries. But this may reverse, if lower yields drive faster prepayments and lower RMBS duration.

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).



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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 to recover in 2023, as Bunds outperformed.

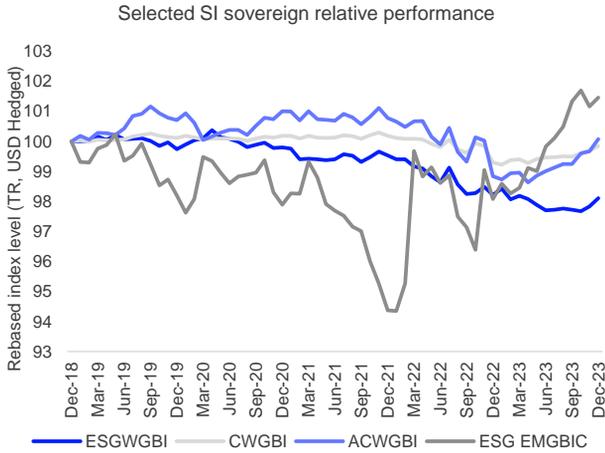


Chart 2. ESG WGBI has a higher US weighting, and big underweight in China, reflected in its spread widening in 2022-23. Outperformance by Eurozone bonds drove ACWGBI spreads tighter, after the re-weighting.

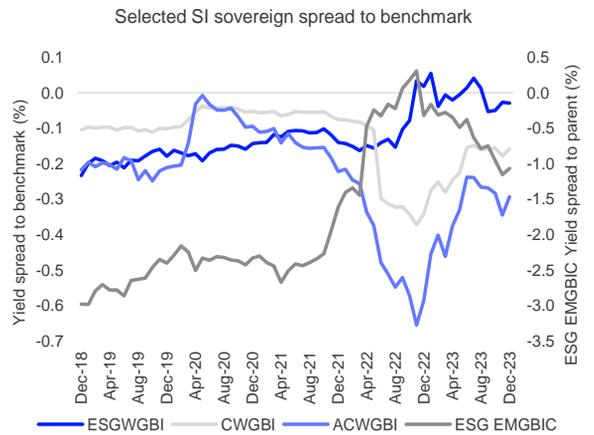


Chart 3: Paris-aligned PAB Corp outperformed strongly early in Covid, after oil prices collapsed, but has underperformed since. More subtly tilted indices, like Choice Corp, have been more stable.

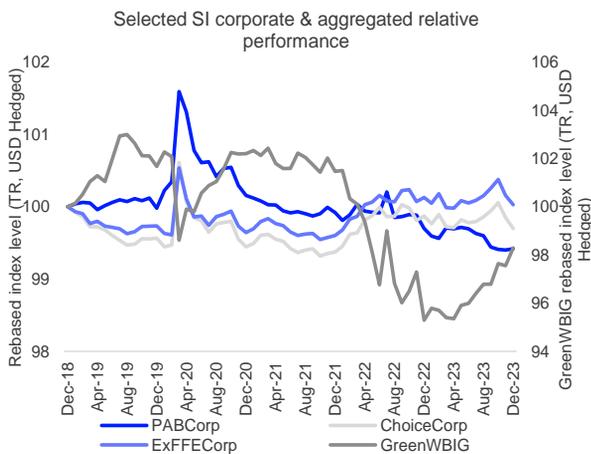


Chart 4: Spread widening in Green corporates in 2022/23 reflects heavy issuance but this reversed in 2023. The Paris-aligned PAB Corp is tilted away from fossil-fuels, so reflects energy price moves.

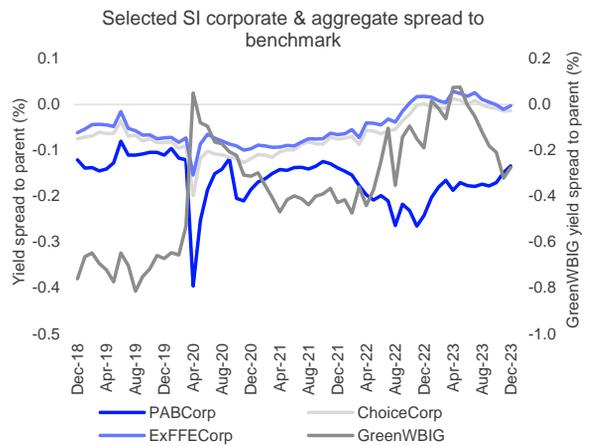


Chart 5: Extra duration in Climate WGBI helped it vs WGBI, as sovereign curves bull flattened in Bunds and JGBs in Q4. But this was offset by WGBI's heavier US weight and tighter US spreads.

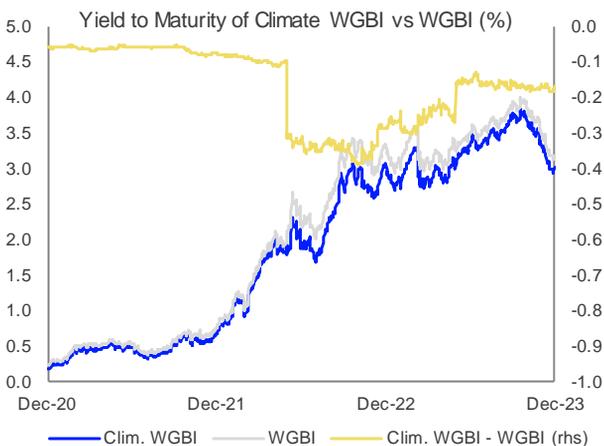
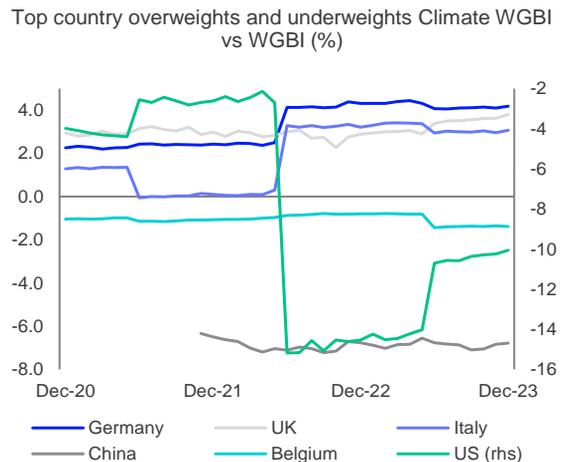


Chart 6: Changes in country weights in Climate WGBI (CW) impacted performance; the underweight in China & overweight in Europe caused the underperformance of CW vs WGBI in 2022-23.



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Global Bond Market Returns – 3M &YTD % (EUR, LC, TR) 29 Dec

After a volatile Q4, government bonds finished with strong positive returns, led by longs, despite the October's sell-off. Bunds and gilts performed best in euros, helped by strong currencies, while the Fed pivot pushed the USD lower, significantly reducing Treasury returns in euros. For the year, JGBs gave negative returns, with losses of up to 10%.

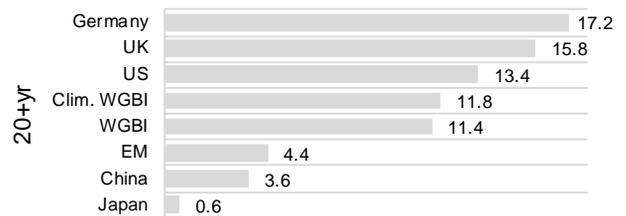
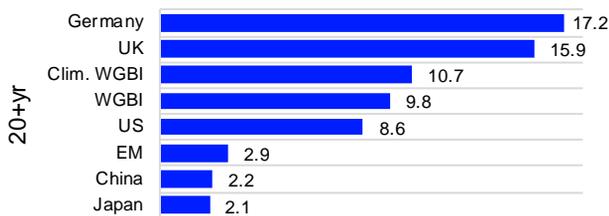
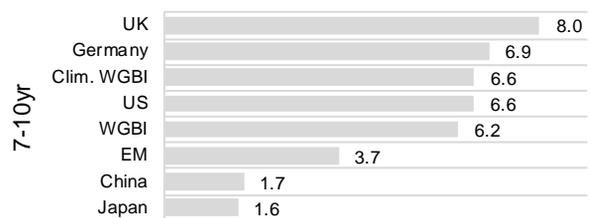
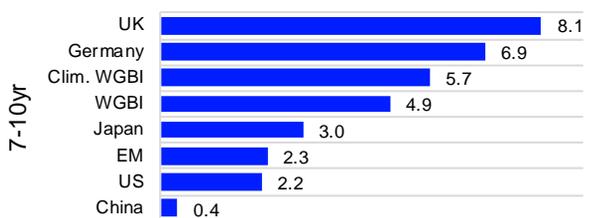
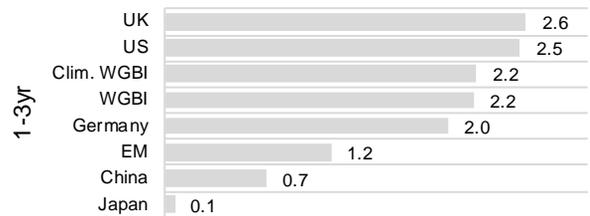
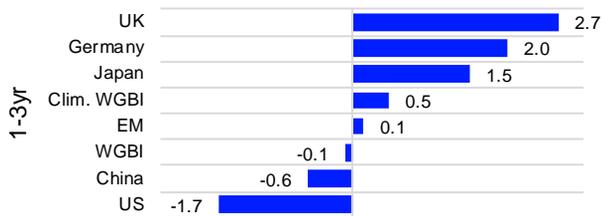
Duration was very much the investor's friend in November/December, after the Fed pivot. Investors anticipated similar easing pivots in Europe, and long German, UK and WGBI bonds delivered euro returns of 10-17%, in Q4 overall.

China and EM lagged in the Q4 rally, and remained less volatile, but still managed positive returns of 2% in longs in euro terms, as did JGBs, aided by the yen's recovery. Climate WGBI outperformed WGBI as extra duration helped returns in Q4.

CONVENTIONAL GOVT BONDS

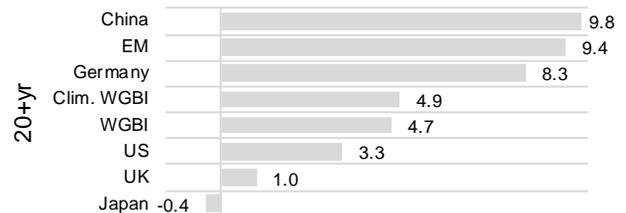
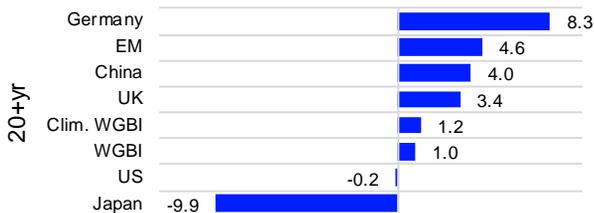
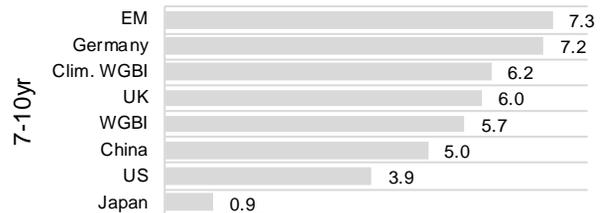
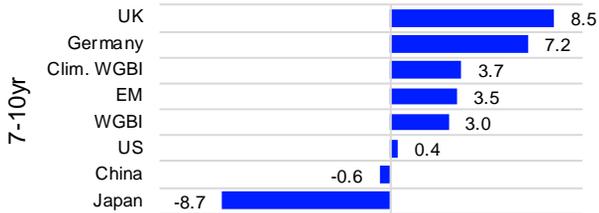
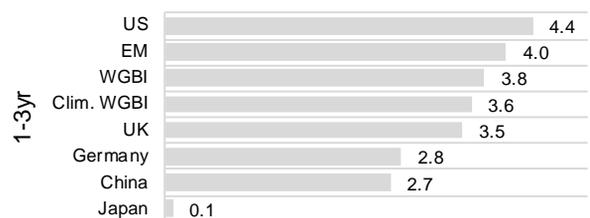
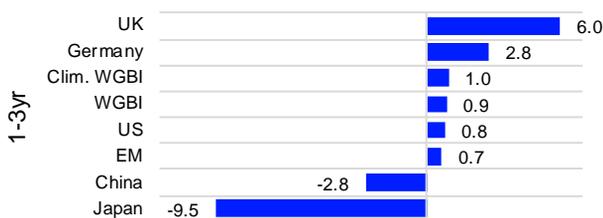
3M EUR

3M LCY



YTD EUR

YTD LCY



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

Inflation linked matched gains in conventional bonds in Q4, led by longs, rallying on the Fed pivot towards easing, with 6-16% returns in the UK, WILSI, Bunds and Tips in euros. Dollar weakness reduced returns in US Treasuries. Euro credit gained 6% in Q4, and led YTD returns, with HY up 13%. Apart from JGBs, the Q4 rally mostly erased losses for the year.

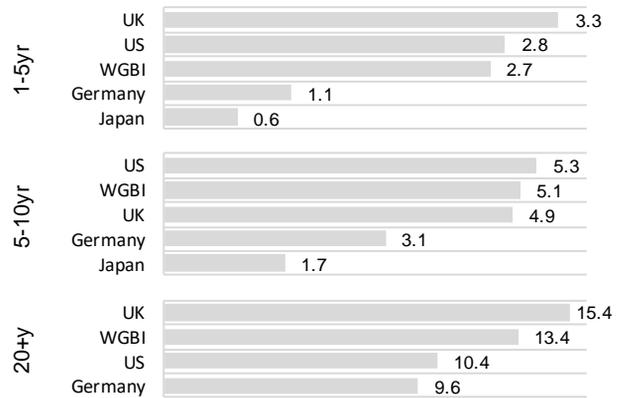
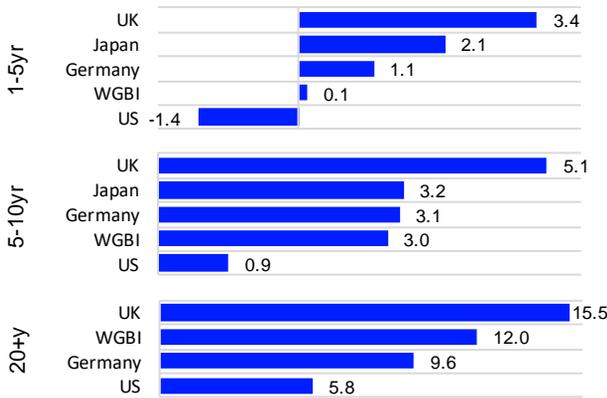
The extra duration in long UK linkers versus other markets boosted Q4 returns, as yields fell across the curve. JGB inflation linked (IL) bonds performed well in euros, as the yen gained 1.5% in Q4, rebounding on hints of curve control ending.

YTD, JGB IL still lost up to 7%, due to yen weakness. In contrast, shorter UK index linked made 8-10%, boosted by sterling gains.

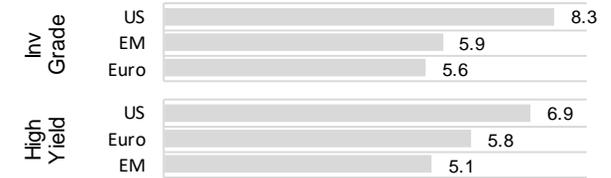
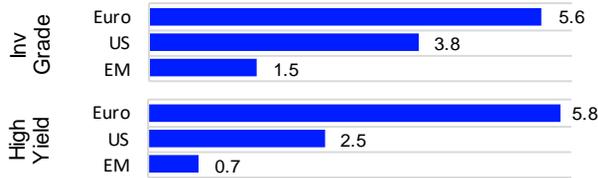
INFLATION LINKED BONDS

3M EUR

3M LCY



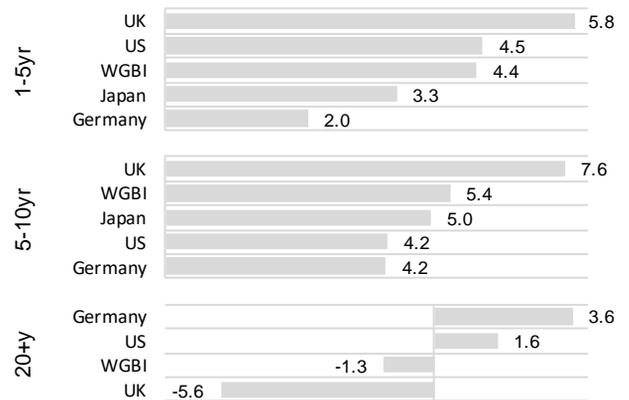
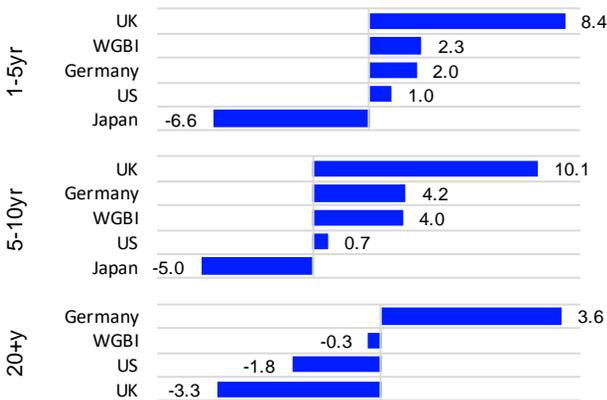
CORPORATE BONDS



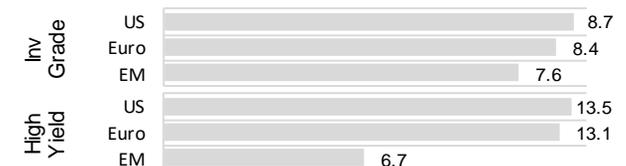
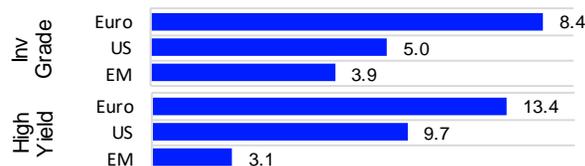
INFLATION LINKED BONDS

YTD EUR

YTD LCY



CORPORATE 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.

Top and Bottom Bond Returns – 1M & YTD % (EUR, TR) 29 Dec

Duration eventually proved the investor’s friend in December after both inflation linked and conventional Australasian, UK, Canadian and Eurozone sovereigns rallied and registered returns of 8-17% in euro terms. China and short US Treasuries delivered the weakest performance in December.

The strength of the bond market rally in Q4 2023 means that most long dated bond returns are no longer negative for 2024, finishing the year with robust positive returns. Long EM inflation bonds have retained their leadership over 12 months, followed closely by long peripheral Eurozone bonds and Euro high yield credits, with returns of 10-21%.

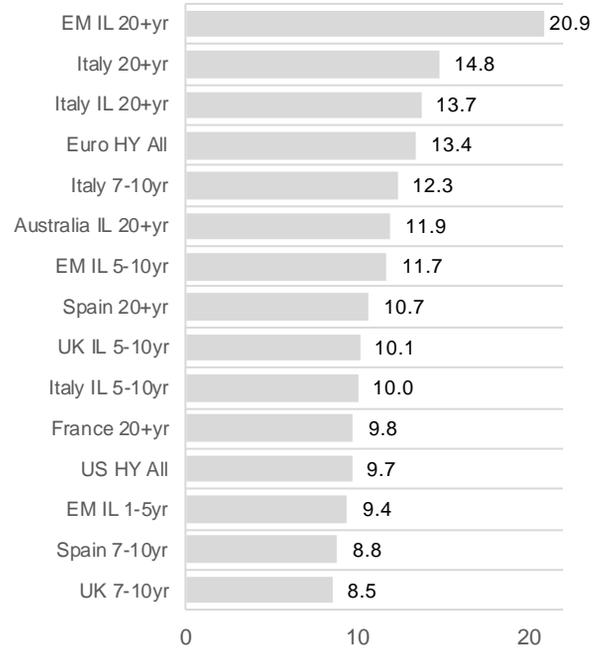
JGBs have underperformed during the year, with yen weakness accounting for much of the negative performance in euro terms.

1M EUR YTD EUR

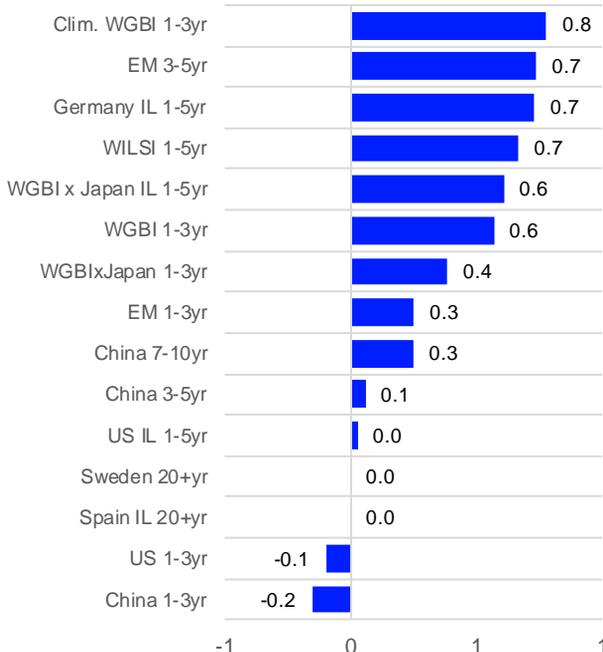
Top 15



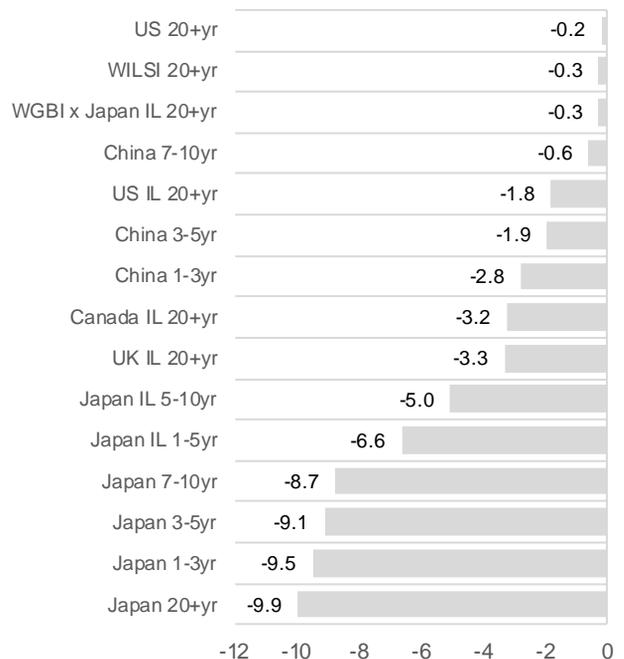
Top 15



Bottom 15



Bottom 15



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 % (EUR & 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	EUR	Local	EUR	Local	EUR	Local	EUR
US	1-3yr	2.52	-1.74	3.27	2.00	4.35	0.82	4.35	0.82
	7-10yr	6.58	2.16	1.88	0.62	3.92	0.40	3.92	0.40
	20+yr	13.36	8.65	-1.34	-2.56	3.32	-0.18	3.32	-0.18
	IG All	8.32	3.81	5.24	3.94	8.71	5.03	8.71	5.03
	HY All	6.94	2.50	7.51	6.18	13.50	9.66	13.50	9.66
UK	1-3yr	2.56	2.67	5.01	3.99	3.52	6.00	3.52	6.00
	7-10yr	7.99	8.11	9.40	8.34	6.00	8.53	6.00	8.53
	20+yr	15.81	15.93	7.61	6.57	0.98	3.39	0.98	3.39
Euro	IG All	5.58	5.58	5.90	5.90	8.35	8.35	8.35	8.35
	HY All	5.82	5.85	7.97	7.87	13.14	13.44	13.14	13.44
Japan	1-3yr	0.07	1.52	-0.13	1.13	0.10	-9.49	0.10	-9.49
	7-10yr	1.56	3.03	-1.07	0.17	0.92	-8.74	0.92	-8.74
	20+yr	0.63	2.09	-8.07	-6.92	-0.41	-9.94	-0.41	-9.94
China	1-3yr	0.72	-0.58	1.07	2.24	2.67	-2.77	2.67	-2.77
	7-10yr	1.68	0.37	2.06	3.24	4.98	-0.59	4.98	-0.59
	20+yr	3.57	2.23	4.79	6.00	9.79	3.97	9.79	3.97
EM	1-3yr	1.18	0.14	1.80	2.51	4.04	0.69	4.04	0.69
	7-10yr	3.70	2.27	2.56	2.75	7.33	3.48	7.33	3.48
	20+yr	4.37	2.89	4.01	4.98	9.38	4.59	9.38	4.59
	IG All	5.93	1.53	4.28	2.99	7.56	3.92	7.56	3.92
	HY All	5.08	0.71	5.09	3.79	6.66	3.05	6.66	3.05
Germany	1-3yr	2.01	2.01	2.58	2.58	2.80	2.80	2.80	2.80
	7-10yr	6.90	6.90	4.54	4.54	7.17	7.17	7.17	7.17
	20+yr	17.18	17.18	3.84	3.84	8.29	8.29	8.29	8.29
Italy	1-3yr	2.72	2.72	3.34	3.34	4.35	4.35	4.35	4.35
	7-10yr	9.17	9.17	5.40	5.40	12.33	12.33	12.33	12.33
	20+yr	16.02	16.02	3.86	3.86	14.78	14.78	14.78	14.78
Spain	1-3yr	2.28	2.28	2.84	2.84	3.41	3.41	3.41	3.41
	7-10yr	8.20	8.20	5.50	5.50	8.84	8.84	8.84	8.84
	20+yr	16.96	16.96	5.97	5.97	10.67	10.67	10.67	10.67
France	1-3yr	2.36	2.36	2.95	2.95	3.48	3.48	3.48	3.48
	7-10yr	7.56	7.56	5.02	5.02	7.76	7.76	7.76	7.76
	20+yr	18.28	18.28	5.71	5.71	9.76	9.76	9.76	9.76
Sweden	1-3yr	2.14	5.53	2.91	8.93	3.16	3.04	3.16	3.04
	7-10yr	8.67	12.28	6.34	12.56	5.52	5.40	5.52	5.40
Australia	1-3yr	1.84	3.19	2.92	4.20	3.02	0.15	3.02	0.15
	7-10yr	5.24	6.65	3.09	4.37	5.10	2.17	5.10	2.17
	20+yr	10.79	12.27	2.67	3.94	5.07	2.14	5.07	2.14
New Zealand	1-3yr	3.11	4.14	3.24	5.38	4.73	1.29	4.73	1.29
	7-10yr	9.19	10.28	4.71	6.87	5.87	2.40	5.87	2.40
	20+yr	18.37	19.55	5.51	7.69	3.54	0.15	3.54	0.15
Canada	1-3yr	2.65	0.87	3.18	2.27	3.93	3.18	3.93	3.18
	7-10yr	8.35	6.48	3.32	2.40	4.51	3.75	4.51	3.75
	20+yr	18.15	16.11	3.35	2.43	8.03	7.25	8.03	7.25

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 % (EUR & 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	-1.44	3.11	1.83	4.51	0.97	4.51	0.97
	5-10yr	5.30	0.92	2.13	0.87	4.21	0.68	4.21	0.68
	20+yr	10.38	5.79	-3.73	-4.92	1.64	-1.80	1.64	-1.80
UK	1-5yr	3.27	3.38	5.94	4.91	5.82	8.35	5.82	8.35
	5-10yr	4.95	5.06	6.50	5.47	7.56	10.13	7.56	10.13
	20+yr	15.37	15.49	1.04	0.06	-5.56	-3.30	-5.56	-3.30
Japan	1-5yr	0.61	2.07	1.07	2.34	3.28	-6.61	3.28	-6.61
	5-10yr	1.72	3.19	1.10	2.37	5.02	-5.04	5.02	-5.04
EM	1-5yr	2.61	-0.15	5.97	2.67	12.38	9.43	12.38	9.43
	5-10yr	5.13	2.83	5.10	2.65	12.11	11.73	12.11	11.73
	20+yr	9.82	8.34	5.13	3.60	15.31	20.90	15.31	20.90
Germany	1-5yr	1.06	1.06	1.71	1.71	2.03	2.03	2.03	2.03
	5-10yr	3.14	3.14	1.40	1.40	4.18	4.18	4.18	4.18
	20+yr	9.63	9.63	-3.52	-3.52	3.62	3.62	3.62	3.62
Italy	1-5yr	3.30	3.30	3.72	3.72	5.18	5.18	5.18	5.18
	5-10yr	6.91	6.91	3.06	3.06	10.03	10.03	10.03	10.03
	20+yr	17.17	17.17	-2.80	-2.80	13.71	13.71	13.71	13.71
Spain	1-5yr	1.99	1.99	2.44	2.44	3.24	3.24	3.24	3.24
	5-10yr	4.67	4.67	2.85	2.85	5.70	5.70	5.70	5.70
France	1-5yr	1.94	1.94	2.01	2.01	2.55	2.55	2.55	2.55
	5-10yr	3.96	3.96	2.24	2.24	4.93	4.93	4.93	4.93
	20+yr	14.05	14.05	-0.65	-0.65	6.84	6.84	6.84	6.84
Sweden	1-5yr	2.20	5.60	3.18	9.22	3.74	3.62	3.74	3.62
	5-10yr	5.42	8.92	4.70	10.83	5.01	4.90	5.01	4.90
Australia	1-5yr	2.68	4.05	3.80	5.09	6.70	3.73	6.70	3.73
	5-10yr	5.32	6.72	4.98	6.28	9.45	6.40	9.45	6.40
	20+yr	17.21	18.78	9.22	10.58	15.14	11.93	15.14	11.93
New Zealand	5-10yr	6.80	7.86	3.87	6.02	8.18	4.63	8.18	4.63
Canada	20+yr	14.76	12.78	0.58	-0.31	-2.52	-3.23	-2.52	-3.23

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

Appendix – Historical Bond Yields % as of December 29, 2023

Global Bond Yields

Top 15% Bottom 15%

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

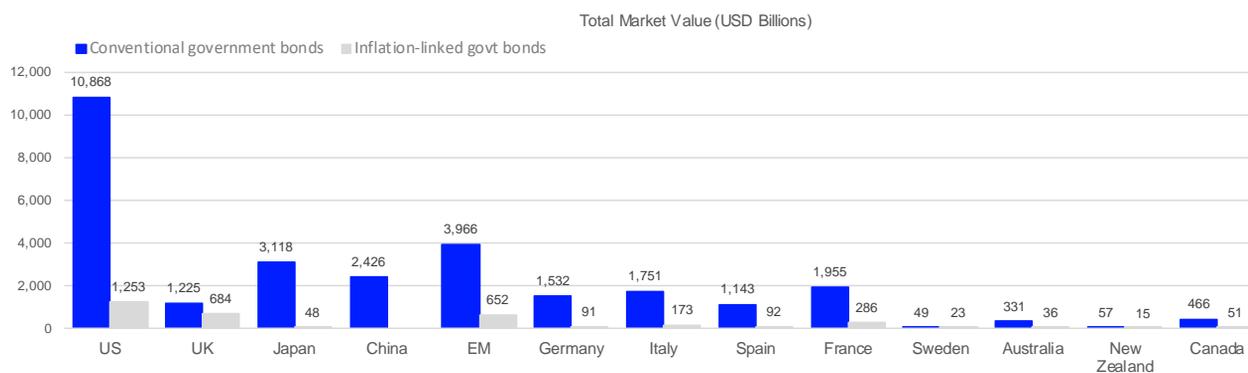
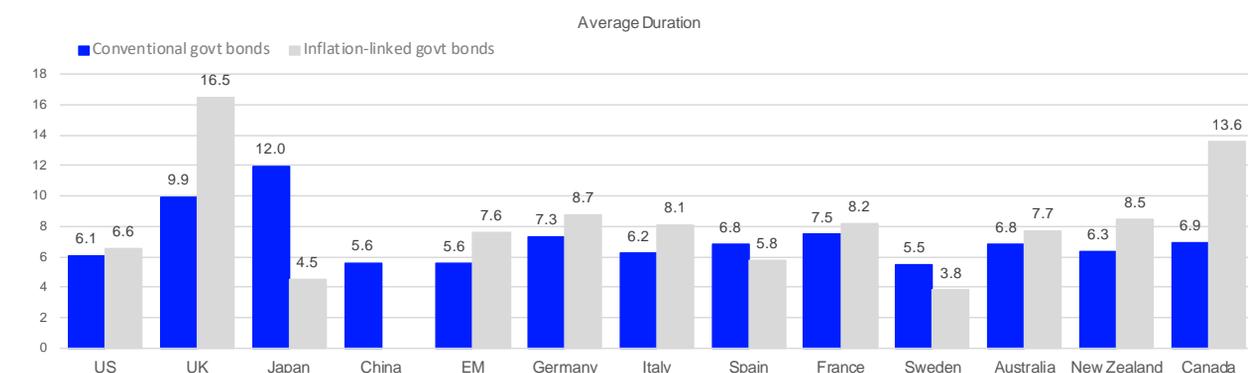
		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	4.37	3.92	3.87	4.14	2.20	1.72	1.96	5.11	7.79
	3M Ago	5.16	4.71	4.59	4.82	2.72	2.29	2.37	6.06	8.91
	6M Ago	5.01	4.31	3.85	3.95	2.45	1.72	1.68	5.53	8.58
	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

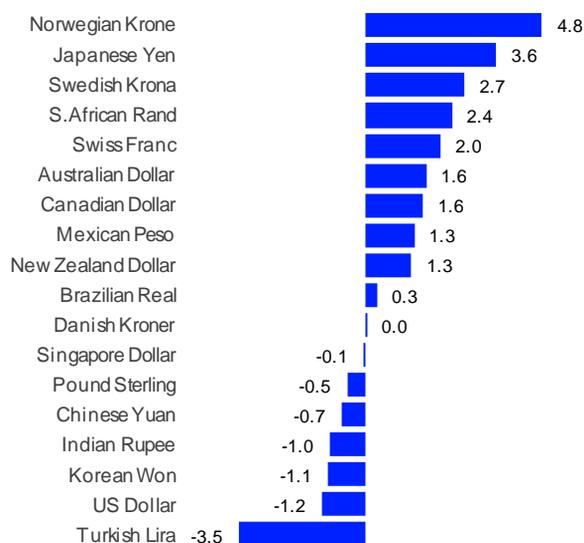
	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.7	8.6	7.3	6.7	7.1	77.6	459.8	2747.0	3470.9	6755.4	3.9	1034.5
Europe	5.7	4.8	4.6	4.2	4.4	11.2	205.4	1277.8	1553.0	3047.4		
EM		6.1	4.9	5.2	5.1		37.0	218.1	311.3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



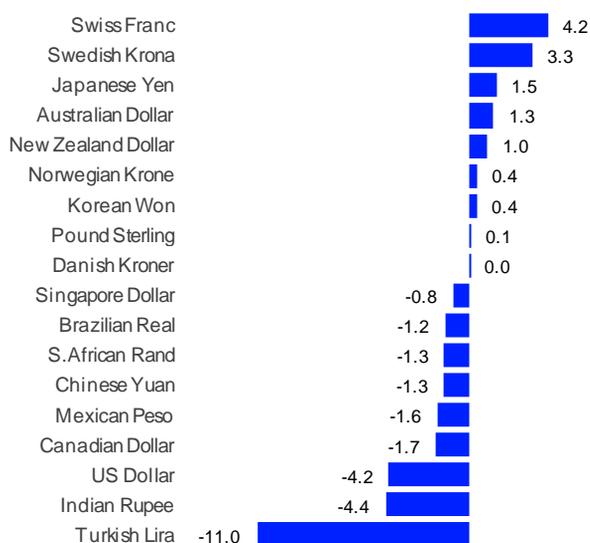
Source: FTSE Russell. All data as of December 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional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

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

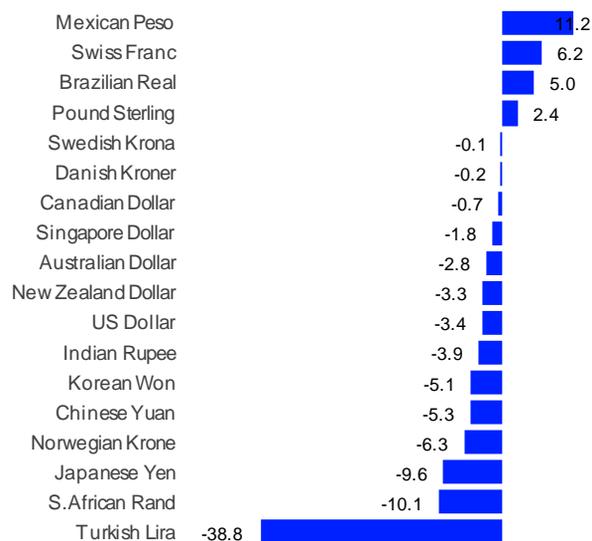
FX Moves vs EUR - 1M



FX Moves vs EUR - 3M



FX Moves vs EUR - YTD



FX Moves vs EUR - 12M



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.

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



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