

Fixed Income Insights

MONTHLY REPORT – NOVEMBER 2023 | EUROZONE EDITION

FOR PROFESSIONAL INVESTORS ONLY

Eurozone bonds de-couple from Treasuries as G7 growth divergences increase

Weaker Eurozone growth and lower inflation enabled Bunds to de-couple from the October Treasury sell-off. Global economic fragmentation may be a factor in increased growth and inflation dispersion in this cycle. Treasuries, gilts and JGBs were the weakest markets in October, as short Bunds, China and EM outperformed.

Macro and policy backdrop – Q3 GDP contraction and disinflation raise doubts about further ECB tightening

In contrast to 4.9% US Q3 GDP growth near 5%, contraction in Eurozone GDP and inflation below 3% y/y reduces pressure for further ECB tightening, after the October policy pause. (pages 2-3)

Yields, curves and spreads – Signs of capitulation in long Treasury sell-off, as US sovereign spreads widen

Stronger US growth reflected in widening US sovereign spreads. Little evidence of safe haven buying (pages 4-5)

Credit and MBS analysis – European IG spreads stable, but US IG and RMBS spreads widened, led by financials.

UK and Eurozone IG spreads resilient in October. Weaker US equities and risk appetite drove US sector spreads wider. (page 6)

Sovereign and climate bonds – US underperformance narrowed performance gap between climate WGBI and WGBI

Treasury weakness counterbalanced losses in JGBs, causing climate WGBI to close performance gap (page 7)

Performance – Another weak month for longs in October led by the US, gilts and JGBs. Bunds outperform

Long Treasuries lost 5% in October, as the curve disinverted. China and EM remained safe havens (pages 9-10)

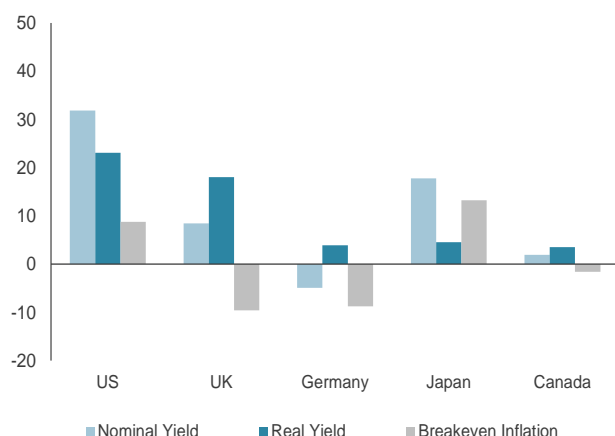
Appendix (from page 11)

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

Chart 1: Sharp divergence in growth was reflected in bond yields in October, as Bund yields fell, but Treasury yields rose sharply.

Chart 2: There was a modest safe haven effect in the gold price increasing relative to copper, in October, but the move was modest.

7-10yr Government Bond Yield Changes 29-09-2023 to 31-10-2023



Gold Bullion LBM \$/t oz vs Copper US\$/MT ratio



Source: FTSE Russel and LSEG. All data as of October 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

IMF forecasts reflect dispersion in GDP growth globally, with stronger US growth in Q3 driven by strong consumer spending, as the savings ratio fell to a post-Covid low of 3.8%. Eurozone disinflation accelerated in October and outright deflation fears continue in China. The US economy remains near full employment, despite the Fed's 525bp of tightening. Evidence of global economic and geo-political fragmentation may be a factor in dispersion of growth and inflation rates.

Overall, stronger North American growth but weaker European and Asian continued in Q3, due to the greater severity of the energy shock in Europe. Latest IMF forecasts reflect this (Chart 1). The provisional Q3 estimate for the Eurozone showed a contraction of 0.1% in GDP, and also in Germany, though growth rates diverged widely from a contraction of 1.8% in Ireland, to +0.6% in Latvia.

G7 September inflation data was again mixed, with disinflation stalling in the US and UK, but resuming elsewhere, including the Eurozone (Chart 2). The provisional Eurozone October number shows a sharp drop to 2.9% y/y, from 4.3% in September, and the lowest since 2021, helped by lower food inflation, and weaker consumer demand. Even if core Eurozone inflation remains at 4.2% y/y, this will be a welcome reduction to the ECB.

The Eurozone labour market has cooled off, with the economy contracting in Q3, and unemployment stabilising at 6.5% (Chart 3). Wage growth may turn positive again, in real terms, when the October number is released, after the steep drop in headline inflation to 2.9% y/y. The wide variation in GDP growth rates and labour markets around the Eurozone is a complication for the ECB, but the case for further tightening is now much more evenly balanced than earlier in the year, as the October 26 policy pause revealed.

Globalisation has stalled since the GFC, defined as import shares in global GDP, as Chart 4 shows, after a period of rapid growth between 1990 and 2008, helped by trade tariff reductions and EM economies supplying cheaper tradeable goods. Forecasts of a rapid decline in global trade post-Covid have not materialized, but evidence of policy-induced global economic fragmentation (eg, Brexit, Ukraine war) may be a factor in the higher dispersion of growth and inflation rates in this cycle.

Chart 1: The IMF lowered its 2023 growth projections for Europe ex UK, China and Canada in October, but revised upward that of the US, after the economy expanded by 4.9% y/y in Q3.

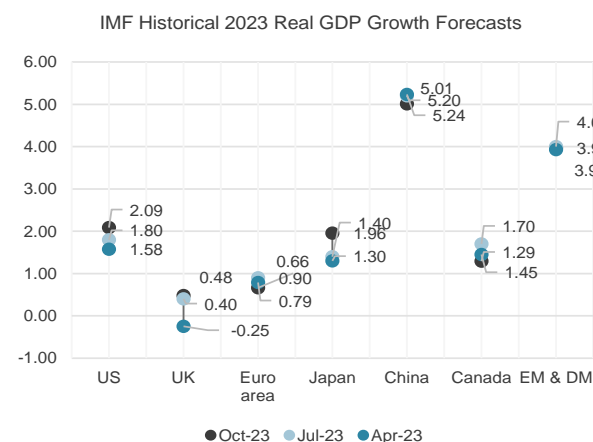


Chart 2: G7 Inflation fell again in October, with CPIs converging near 4%. Eurozone CPI dropped to 4.3% in September, and then 2.9% in October y/y. Despite easing, UK inflation remained high, at 6.7% y/y.

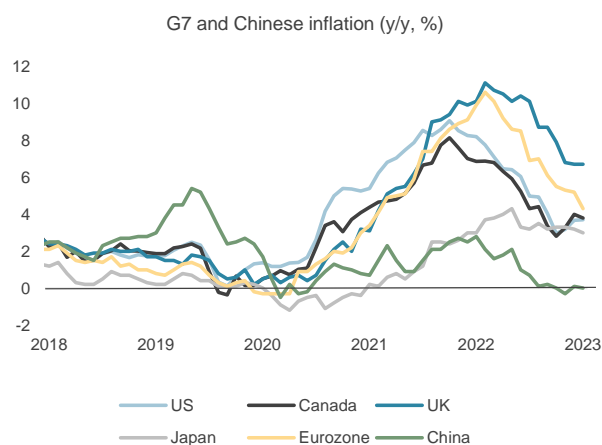


Chart 3: Real wage growth may turn positive again when the October number is released, after the steep drop in the CPI to 2.9% y/y. This helps to explain the ECB policy pause in October.

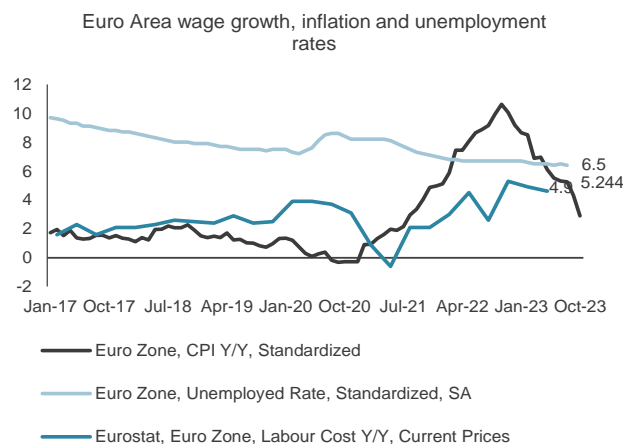


Chart 4: A golden era for globalization, helped by trade deals, ended in the GFC, when growth collapsed. More recent economic fragmentation may have contributed to higher dispersion in growth rates and inflation.



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Financial Conditions and Monetary Policy Settings

The collapse in Eurozone M2 growth, weaker consumer spending, disinflation and 0.1% contraction in real GDP in Q3 suggest ECB tightening is gaining real traction, reducing the probability of more tightening in 2023-24. FOMC and BoE pauses reflect the rise in yields since their last tightening moves. The US dollar stabilised after Q3's rally, though yen and renminbi remain vulnerable. Foreign holdings of US Treasuries increased in 2023, despite fears of a buyer's strike.

Eurozone M2 growth shows contraction y/y, as Chart 1 shows, and remains a more closely monitored economic indicator by the ECB (particularly at the Bundesbank) than in other central banks, where velocity has become unstable. The October pause suggests the tightening cycle is near completion, though a further move cannot be ruled out, given core inflation is still above 4% y/y.

After the surge in Q3, the US dollar stabilised in October, even if the yen and RMB remained close to 2023 lows, as rate differentials remained adverse. Higher ECB rates in September may have also helped the Euro, though weaker growth and inflation are less helpful. Sterling's rally in H1, 2023 reversed in Q3/4, after the BoE paused tightening and stagflation risks weigh on the currency.

The Fed left rates unchanged on November 1, despite strong Q3 growth, after a 100bp increase in bond yields since the tightening move in July, so markets have tightened a little for the Fed, with a weaker equity market as well in Q3. The ECB decision to pause tightening on October 26 follows strong evidence of weaker demand growth, falling inflation and GDP contraction in Q3.

Foreign holdings of US Treasuries increased in 2022-23, despite fears higher US Treasury yields reflect overseas selling (Chart 4). Declines in Chinese and Japanese holdings may be due to dollar sales to support the yen and RMB. Increases in European holdings are marked since Covid, and may reflect yield differentials in favour of US Treasuries (also see Chart 1, page 5).

Chart 1: Monetarists within the ECB may be concerned by recent contraction in M2, and negative y/y growth, with inflation now falling sharply. So the November rate decision is more finely balanced.

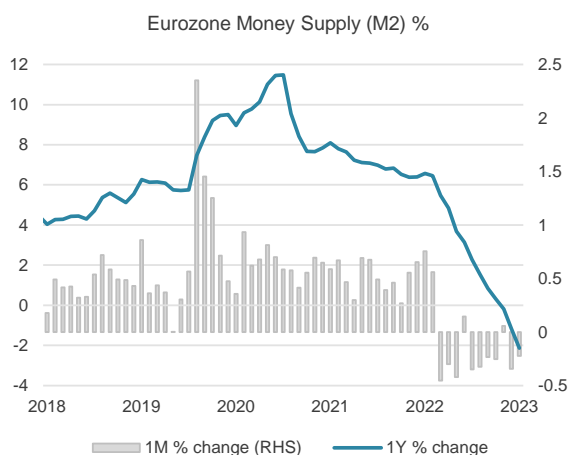


Chart 2: The US dollar stabilised in October, after Q3's rally, despite stronger growth. Lower inflation weighed on the yen and renminbi, while the Euro broadly traded sideways, and sterling eased.

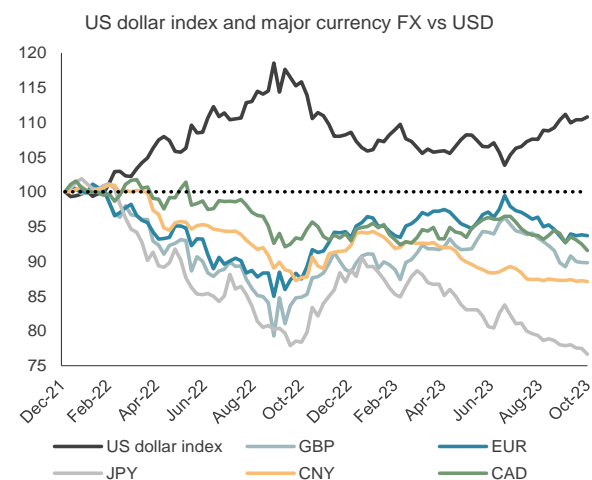
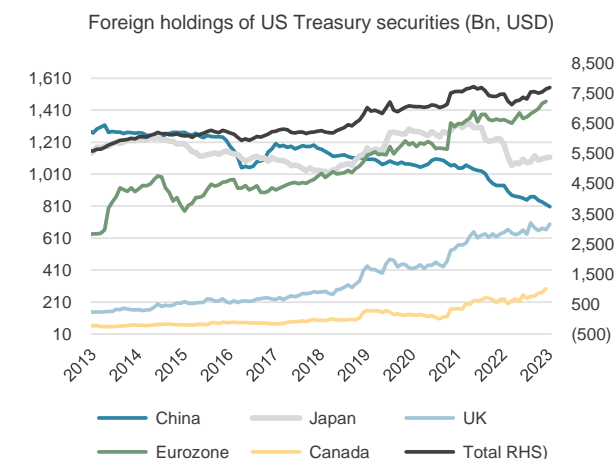
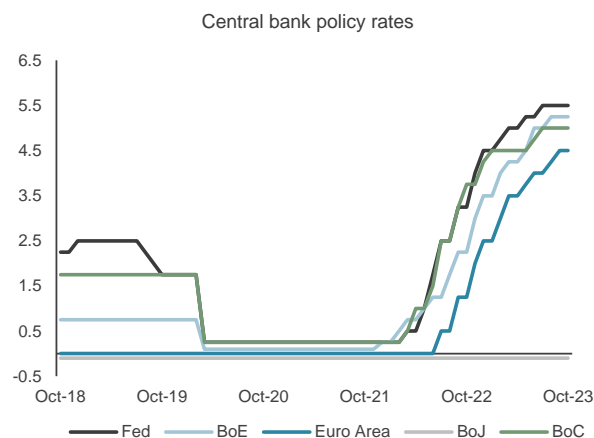


Chart 3: The FOMC policy pause reflects the rise in bond yields since Q2 and weak equities. The drop in Eurozone inflation and contraction in GDP in Q3 make further ECB tightening less likely, after October's policy pause.

Chart 4: Foreign holdings of US Treasuries increased in 2022-23 with foreign holdings now about 33% of issuance. Chinese holdings fell sharply suggesting official sales to support the RMB.



Source: FTSE Russell and LSEG. Latest data available as of October 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 Yields, Curves and Spread Analysis

Chart 1: The US led yields higher in October, with 10 yr yields above 5%, with little evidence of safe haven buying of gov bonds, but Bunds resisted the upward pressure on yields.

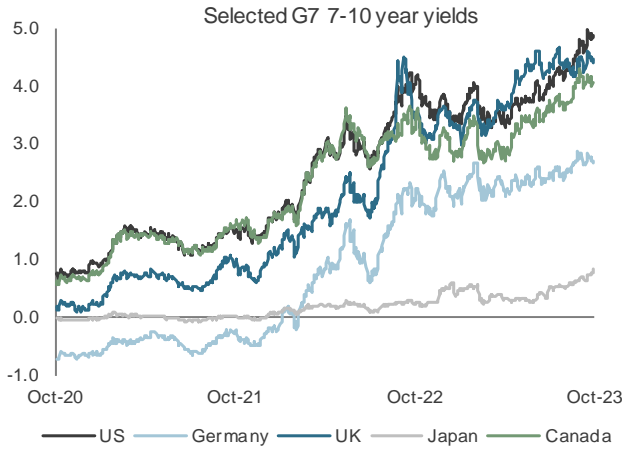


Chart 2: US Tips led other real yields higher, though US moves were more marked. JGB real yields largely resisted upward pressure even if nominal yields did not.

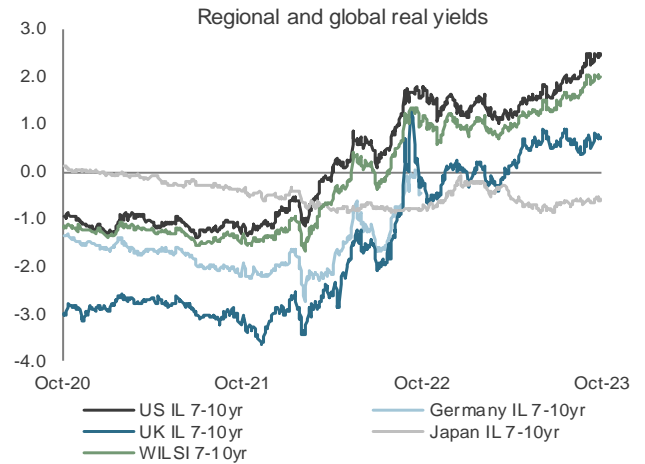


Chart 3: Curves oscillated, awaiting central bank policy decisions, with a bias to dis-invert, as 7-10 yr yields rose in October. The JGB curve steepened as markets mulled the end of curve control.

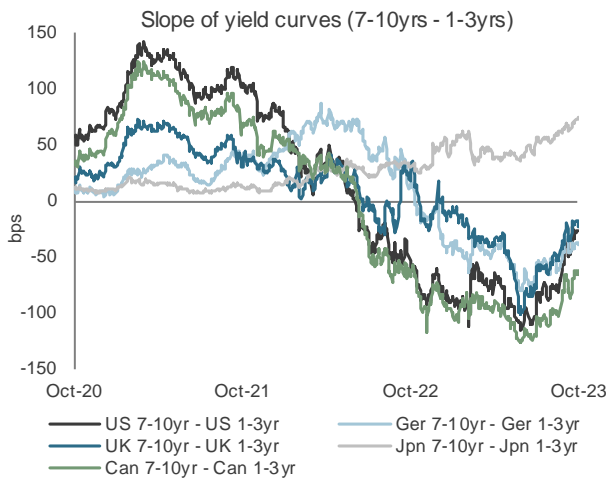


Chart 4: Apart from Canada, long yields have risen steadily versus short in recent months, as the higher for longer narrative has taken a grip of markets, and re-investment concerns have eased.

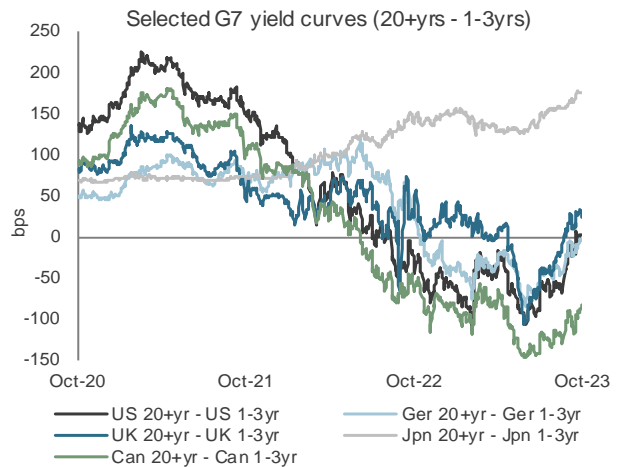


Chart 5: Breakevens edged higher in some markets in Q4, though moves are modest compared to the Ukraine spike in 2022. JGB breakevens are at post-Covid highs, but well below the 2% inflation target.

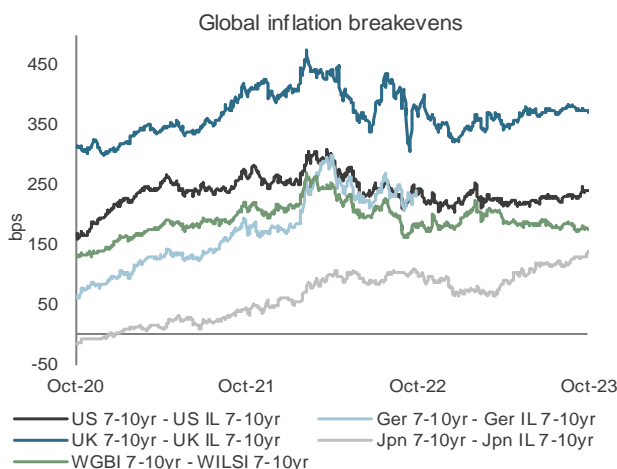
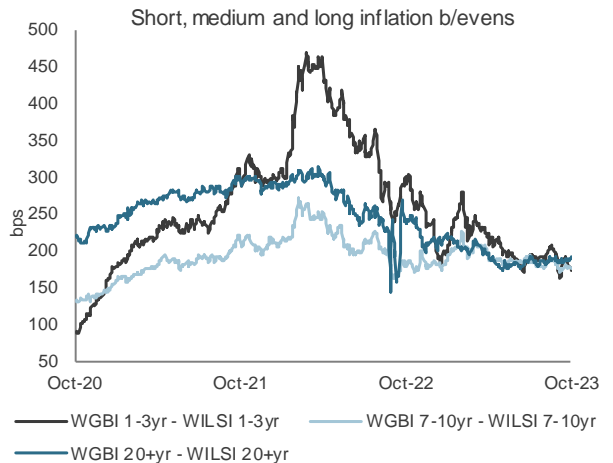


Chart 6: Global inflation breakevens of all tenors remain stable at around 2%. Neither the rebound in oil prices in Q3 nor the recent conflagration in the middle east de-stabilised inflation expectations.



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Yield Spread and Credit Spread Analysis

Chart 1: The spike in Treasury yields in October, caused sovereign spreads to widen, as other markets moved less. US Treasuries trade above gilt yields again, as they did in most of the post-GFC period..

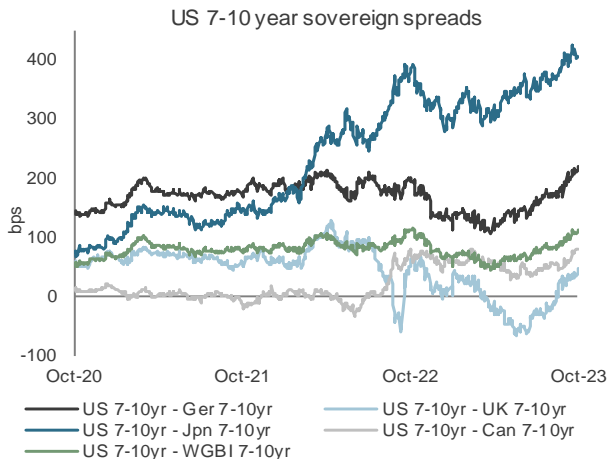


Chart 2: 7-10-year Italian sovereigns now trade through Treasuries again, after the US yield spike in October, but spreads moved out versus Bunds and other markets, showing the normal pro-cyclicality.

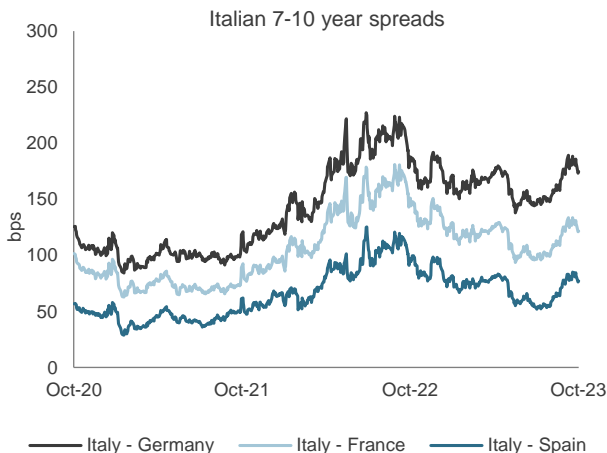


Chart 3: Helped by lower Chinese spreads, EM spreads remain at, or near post-Covid lows, benefitting from earlier counter-inflation policy than the G7. EM 7-10 yr spreads versus the US are now close to zero.

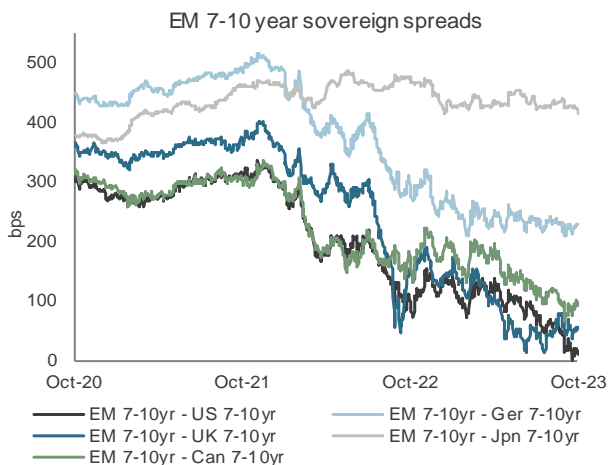


Chart 4: Chinese govt bonds now trade well through Treasuries and other G7 markets, apart from JGBs and Bunds. Divergence in policy rates and inflation performance are the main drivers.

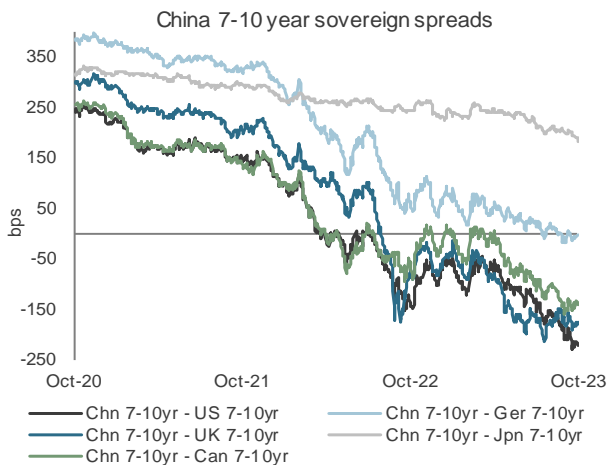


Chart 5: After a long period of tightening, HY spreads moved higher in October, with Eurozone HY spreads moving more. IG spreads moved less in October, and remain relatively cheaper.

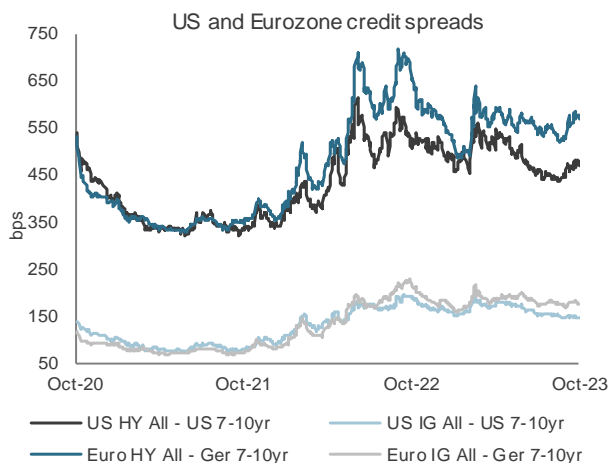
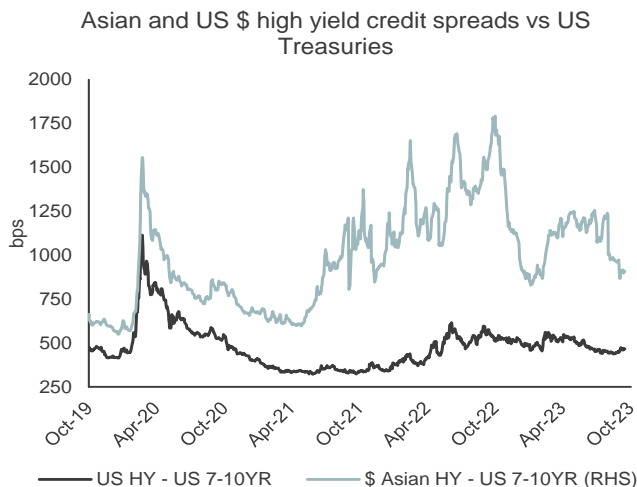


Chart 6: Asian dollar HY spreads largely reflect developments in the Chinese property sector, given the high proportion of property sector issuers. US dollar HY spreads remain much more stable.



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Credit sector and MBS analysis

Chart 1: Eurozone credit sector spreads show the impact of the Ukraine war on the insurance sector. Consumer credits have outperformed, and bank spreads have narrowed on higher rates.

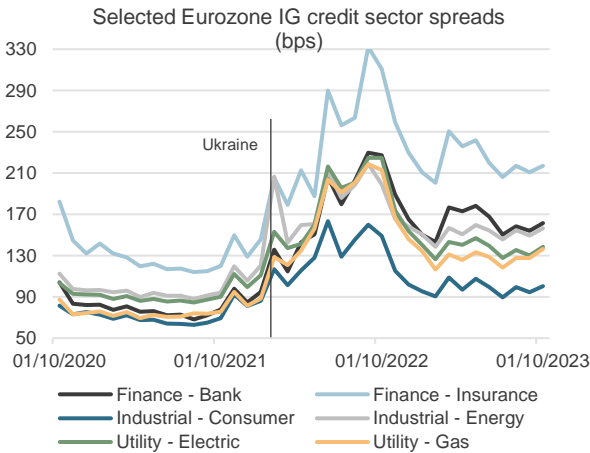


Chart 3: UK IG credit spreads rose with gilt yields in 2022, but unwound some of this in 2023, as has the spike in insurance sector spreads on the Ukraine war. Consumer credits trended lower in 2023.

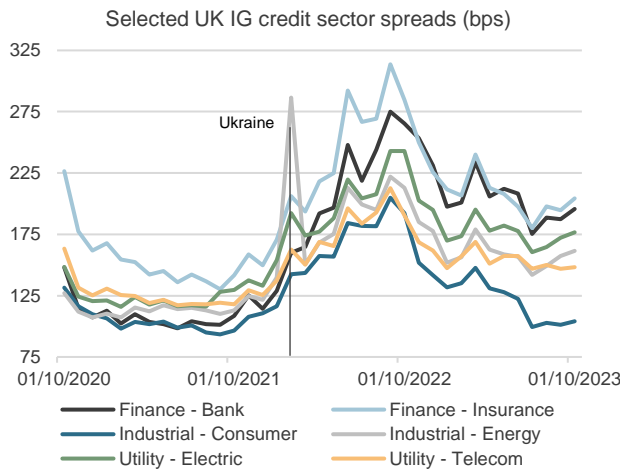


Chart 5: Mortgage refinancings and prepayments have collapsed in 2022-23, as the Fed raised rates steadily, leaving mortgage holders on lower borrowing rates no incentive to refinance mortgages.

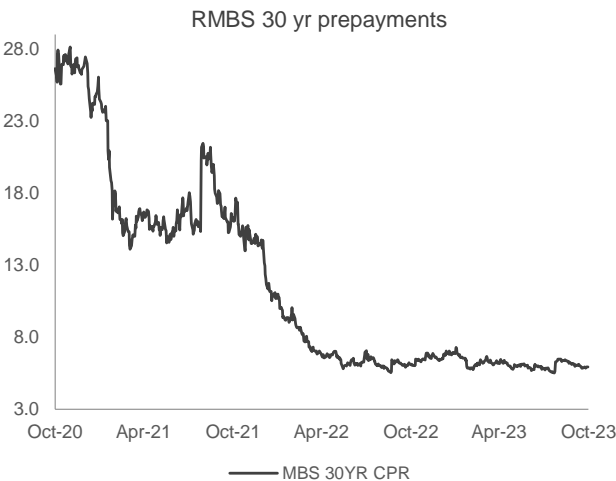


Chart 2: US credit sector spreads show signs of a recovery in commercial real estate, since the Q1 banking crisis, and technology outperformance on AI. Industrials benefited from the growth pick-up.

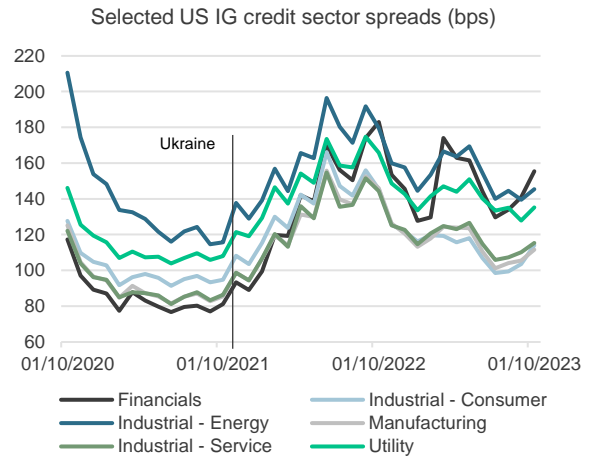


Chart 4: US agency-MBS traded through 7-10-year Treasuries in the early Covid period, driven by aggressive Fed QE. RMBS spreads widened further in October, despite the sharp rise in Treasury yields.

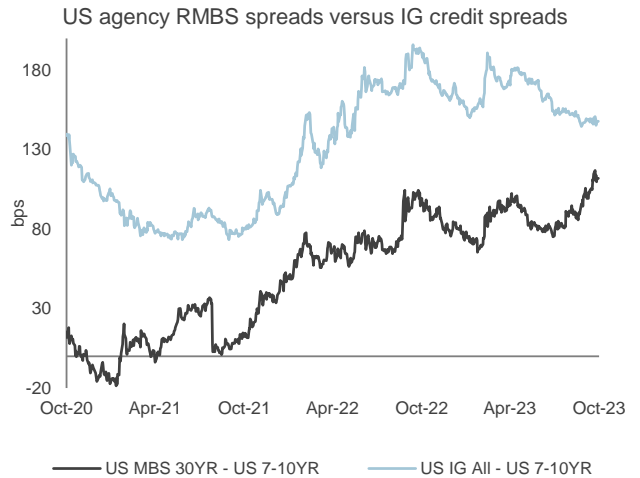
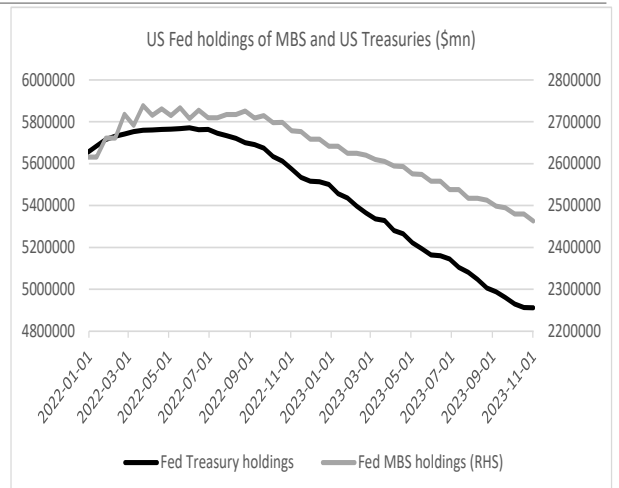


Chart 6: Fed holdings of MBS have fallen at a slower pace than US Treasuries, since QT began in 2022. This partly reflects slow MBS prepayments for low coupons, and the Fed's coupon stack.



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Sovereign and Climate Bonds Analysis

Chart 1: Since the bear market in bonds developed in early 2022, climate WGBI has underperformed WGBI, due to the extra duration US underperformance of late has narrowed the performance gap..

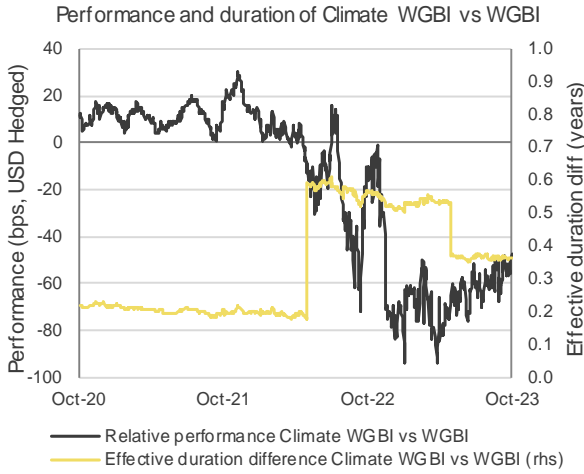


Chart 2: US underweight in the Climate WGBI fell in July's re-weighting, reducing the duration difference vs WGBI. China's 15% underweight prevented lower Chinese yields impacting Climate-WGBI significantly.

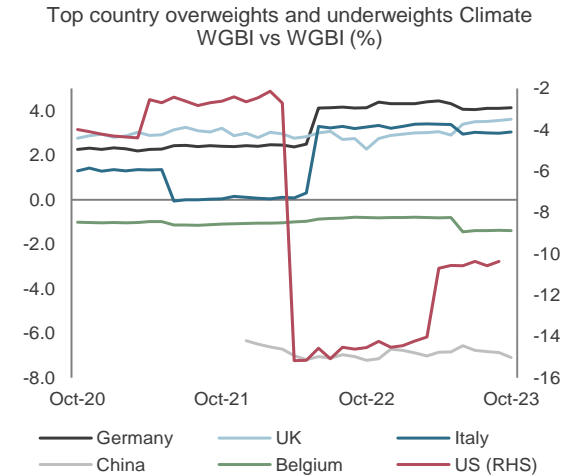


Chart 3: The increase in JGB yields in 2023 and high Japan country weight drove Climate-WGBI yields higher, versus WGBI, though climate-WBI yields remain lower, even if the 'greenium' is modest.

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

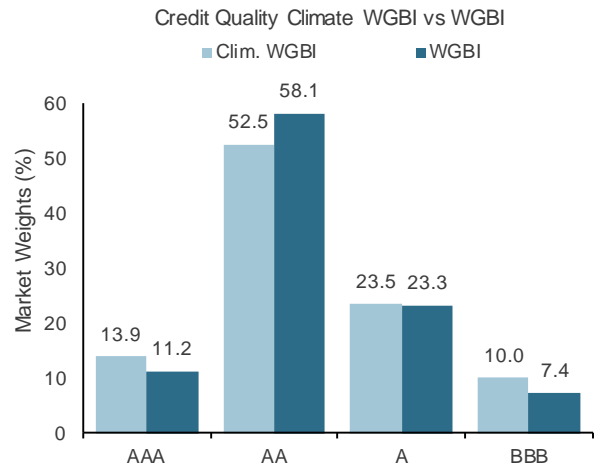
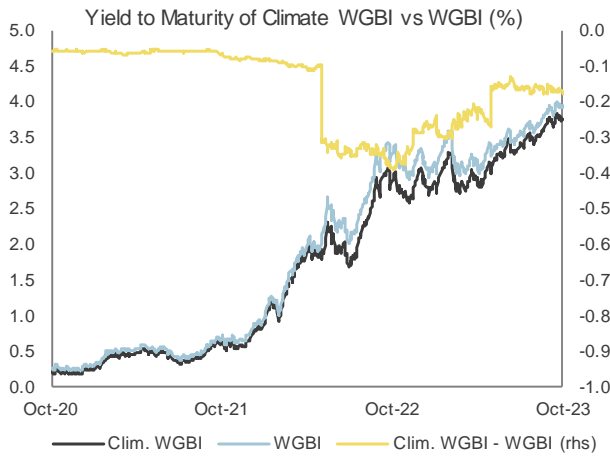
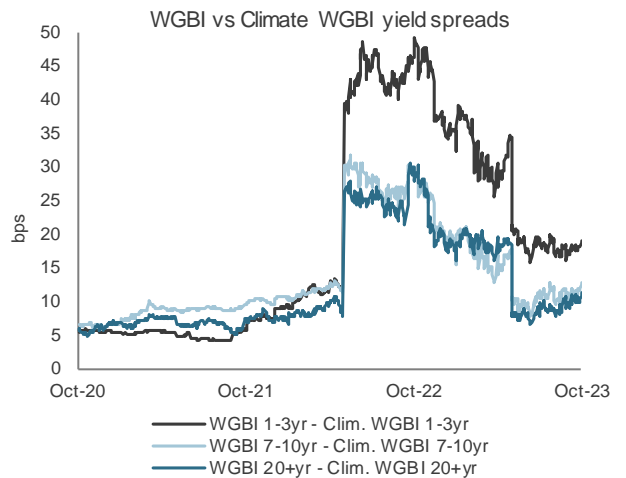
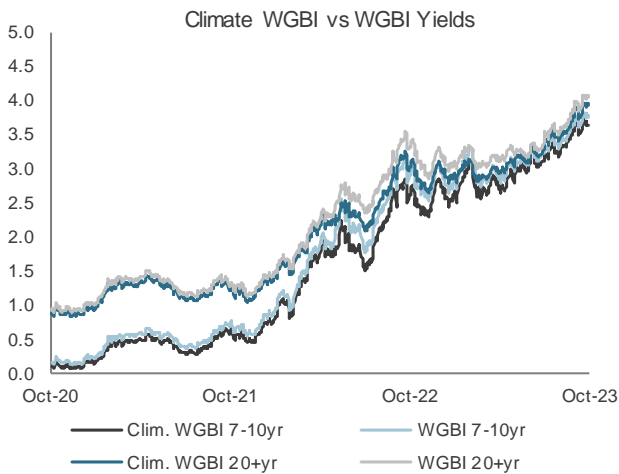


Chart 5: Yield curves in climate WGBI and WGBI remain extremely flat, with yields converging at about 3.5% for both medium maturities and longs, squeezing out most of the 'greenium' in Climate WGBI.

Chart 6: Unlike mediums and longs, where spreads are tight, WGBI short yields are further above the climate WGBI, reflecting Japan's zero rate policy and high weighting in the climate WGBI.



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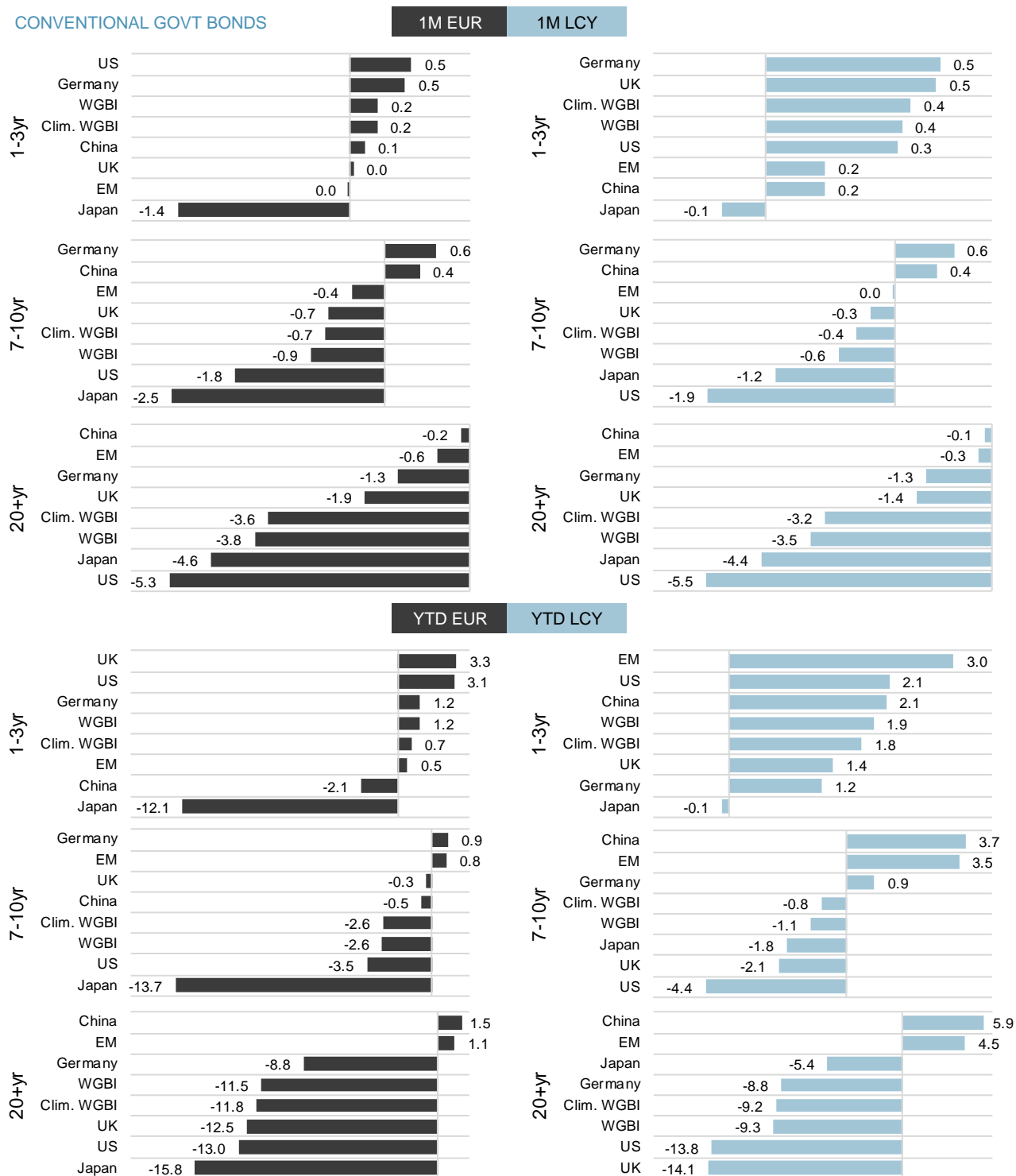
Global Bond Market Returns – 1M &YTD % (EUR, LC, TR)

Longer maturity governments bore the brunt of the October sell-off, led by US Treasuries, gilts and JGBs, where losses reached 5%, for a Euro investor. Speculation about less BoJ curve control hit long JGBs. Chinese and EM bonds proved safe havens, and most currencies stabilized versus the dollar. YTD, long gilts, Treasuries and JGBs have lost 13-16%.

Signs of a capitulation trade emerged in US Treasuries at one point in October, as 10 year yields spiked above 5%, though the market rallied, to leave 7-10 yr losses at 2.4% for the month, for a Euro investor, about in line with gilts.

Only short Treasuries and gilts, and longer Chinese govts. managed small positive returns of 1-2.3%, YTD, in Euro terms. Higher running yields have bolstered short dated returns. JGBs losses dwarf all other markets, apart from long gilts and Treasuries.

CONVENTIONAL GOVT BONDS



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

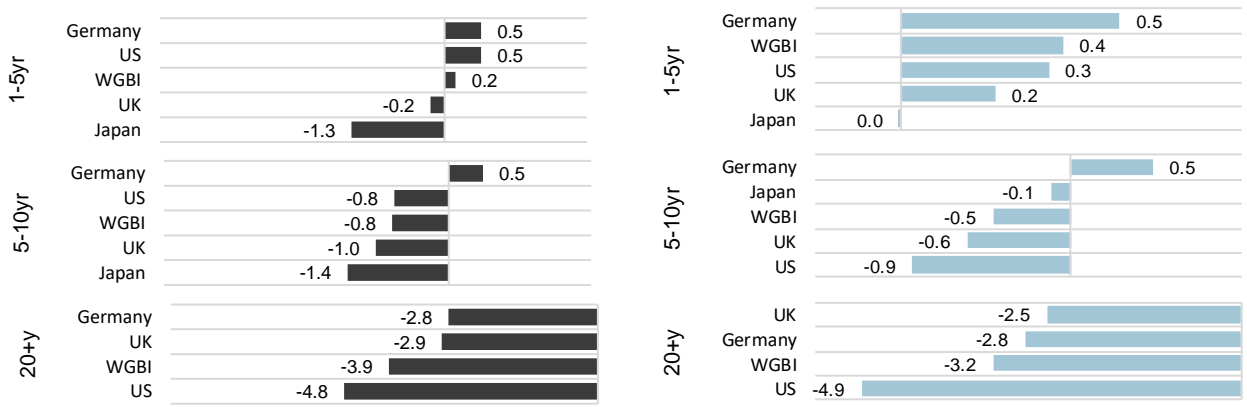
Longer inflation-linked fell further in October, with losses of 3-5% for a Euro-based investor in Bunds, Tips and UK linkers. Short maturities were broadly stable. Like 2022, duration has been the investor's enemy in 2023, and UK linkers lost 19%. Credit also lost ground in October, but outperformed linkers YTD, with Euro HY credits gaining up to 6%.

Only short Tips avoided losses in October, amidst signs of capitulation in longs to the higher for longer rates narrative, as central banks left further tightening options open. Credits lost 1-2%, with high yield largely matching IG losses, despite shorter duration.

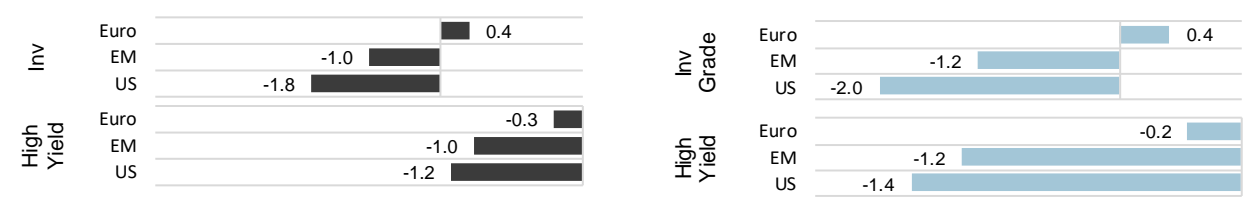
YTD yen weakness drove losses of 9-10% in shorter JGB linkers, in Euro terms, although longer US Tips lost 12%.

INFLATION LINKED BONDS

1M EUR | 1M LCY

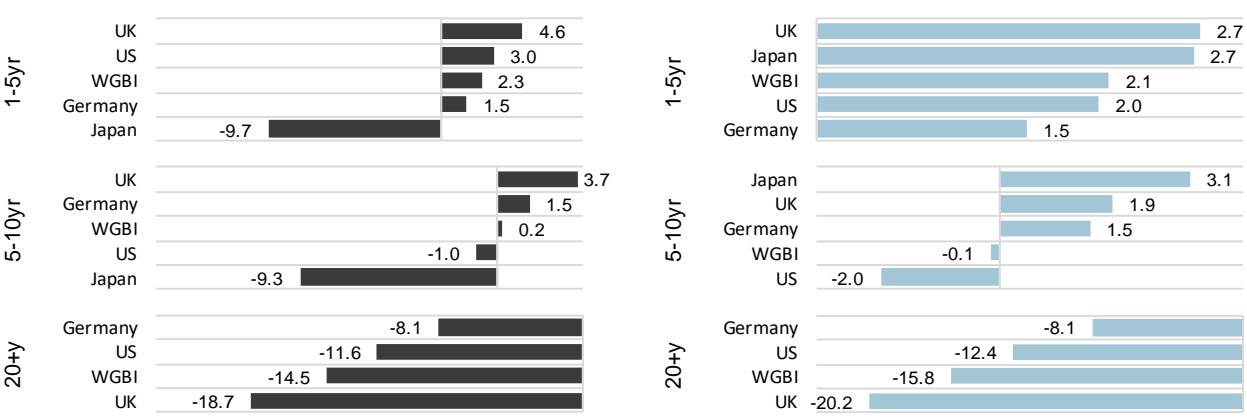


CORPORATE BONDS

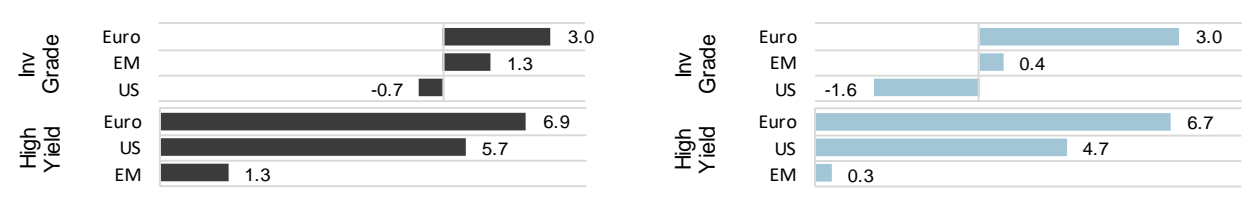


INFLATION LINKED BONDS

YTD EUR | YTD LCY



CORPORATE BONDS



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

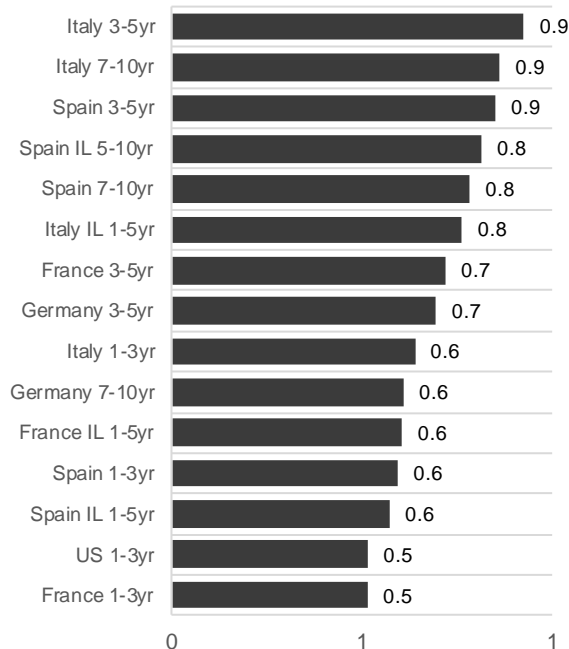
Shorter dated Euro govts, linkers, and Treasuries escaped the sell-off in longs in October and showed tiny gains in Euros. 12 month returns capture the Euro recovery, with the dollar peaking in October 2022, and strong performance of Euro HY and EM linkers. Long gilts, UK linkers and Australasian bonds fell further in 2023, losing 20-25% in Euro terms.

The de-coupling of credit, particularly HY, from losses in govt bonds over the last 12M is shown in the top 15, with EM and Euro HY gaining 5-10% in euro terms, in contrast to sizeable losses in long government bonds. All bottom 15 performers are 20+ yr issues.

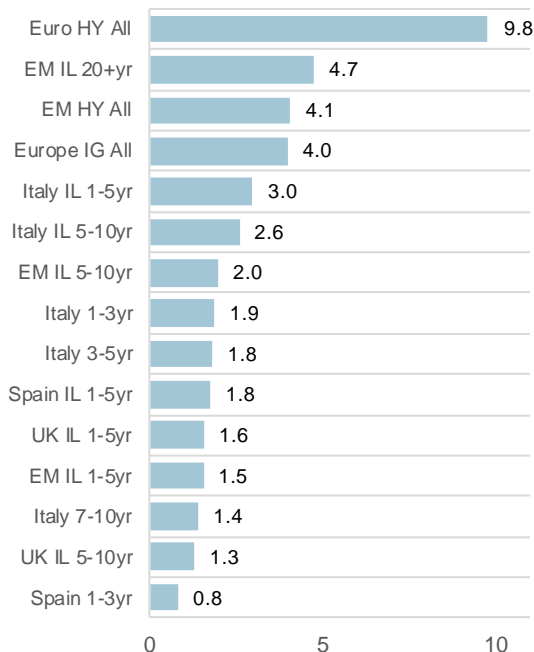
Euro HY returns eclipsed other credits on 12 months, though European IG credits also returned 4%.

1M EUR 12M EUR

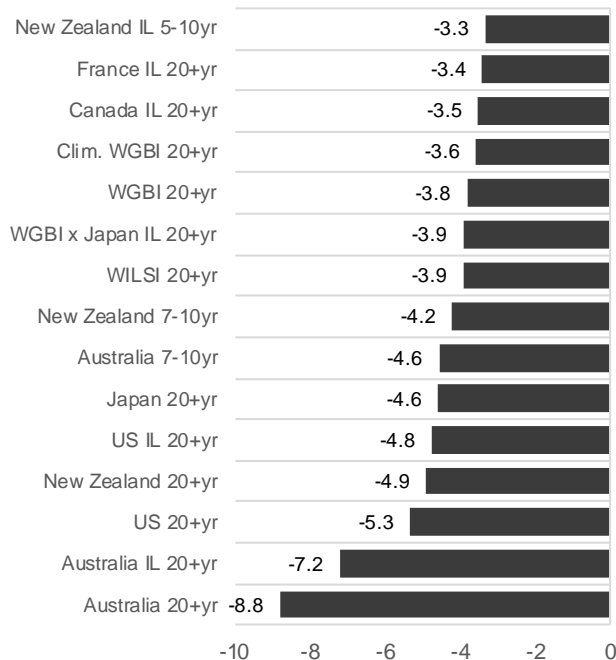
Top 15



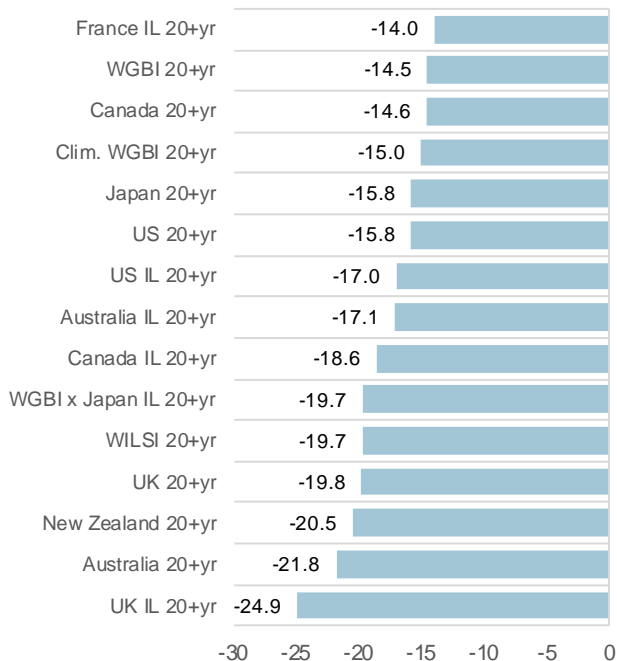
Top 15



Bottom 15



Bottom 15



Source: FTSE Russell. All data as of October 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) – October 31, 2023

Government Bond Returns

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

		3M		6M		YTD		12M	
		Local	EUR	Local	EUR	Local	EUR	Local	EUR
Australia	1-3yr	0.13	-1.87	-0.87	-0.80	0.85	-4.93	0.95	-6.54
	7-10yr	-5.12	-7.01	-9.35	-9.29	-3.01	-8.57	-4.76	-11.82
	20+yr	-13.63	-15.34	-20.40	-20.35	-11.97	-17.01	-15.56	-21.83
Canada	1-3yr	1.14	0.02	0.31	2.36	1.90	0.42	2.41	-5.91
	7-10yr	-3.02	-4.09	-7.67	-5.79	-3.36	-4.77	-2.71	-10.62
	20+yr	-9.36	-10.36	-15.70	-13.97	-8.89	-10.22	-7.00	-14.56
China	1-3yr	0.27	2.14	1.28	0.15	2.10	-2.08	1.98	-4.90
	7-10yr	0.62	2.49	2.19	1.04	3.69	-0.55	2.97	-3.98
	20+yr	0.03	1.90	3.20	2.05	5.87	1.54	4.36	-2.67
Germany	1-3yr	0.63	0.63	0.57	0.57	1.24	1.24	0.46	0.46
	7-10yr	-1.49	-1.49	-2.10	-2.10	0.86	0.86	-2.32	-2.32
	20+yr	-9.55	-9.55	-11.97	-11.97	-8.76	-8.76	-13.86	-13.86
Spain	1-3yr	0.76	0.76	0.79	0.79	1.71	1.71	0.81	0.81
	7-10yr	-1.62	-1.62	-1.74	-1.74	1.39	1.39	-1.44	-1.44
	20+yr	-8.45	-8.45	-8.55	-8.55	-5.85	-5.85	-10.00	-10.00
France	1-3yr	0.68	0.68	0.62	0.62	1.61	1.61	0.58	0.58
	7-10yr	-1.72	-1.72	-2.19	-2.19	0.68	0.68	-2.72	-2.72
	20+yr	-9.32	-9.32	-10.78	-10.78	-8.61	-8.61	-13.29	-13.29
UK	1-3yr	1.79	0.13	1.04	1.89	1.39	3.27	1.67	0.19
	7-10yr	-0.23	-1.85	-3.68	-2.87	-2.10	-0.28	-2.53	-3.94
	20+yr	-8.04	-9.53	-13.12	-12.39	-14.07	-12.48	-18.59	-19.77
Italy	1-3yr	0.57	0.57	1.04	1.04	2.24	2.24	1.87	1.87
	7-10yr	-3.00	-3.00	-1.11	-1.11	3.78	3.78	1.40	1.40
	20+yr	-9.50	-9.50	-7.03	-7.03	-1.27	-1.27	-6.16	-6.16
Japan	1-3yr	-0.20	-2.34	-0.27	-6.35	-0.08	-12.10	-0.23	-8.44
	7-10yr	-2.38	-4.47	-3.61	-9.48	-1.85	-13.66	-3.62	-11.55
	20+yr	-8.77	-9.69	-12.53	-16.91	-5.41	-15.83	-9.28	-15.79
New Zealand	1-3yr	0.69	-1.84	0.40	-1.25	2.28	-5.02	1.84	-4.66
	7-10yr	-4.99	-7.37	-8.29	-9.80	-4.21	-11.05	-5.65	-11.67
	20+yr	-11.42	-13.64	-19.89	-21.21	-14.20	-20.33	-15.05	-20.47
Sweden	1-3yr	0.67	-1.24	0.64	-3.50	1.39	-4.53	0.82	-6.76
	7-10yr	-2.20	-4.06	-3.61	-7.57	-2.39	-8.09	-3.53	-10.78
US	1-3yr	0.73	5.07	0.25	4.71	2.14	3.13	2.94	-3.74
	7-10yr	-5.68	-1.61	-8.78	-4.72	-4.38	-3.45	-2.40	-8.74
	20+yr	-15.68	-12.05	-20.02	-16.46	-13.85	-13.01	-9.95	-15.80
	IG All	-5.13	-1.04	-5.84	-1.65	-1.61	-0.66	2.80	-3.88
	HY All	-2.17	2.04	-0.04	4.41	4.71	5.73	5.66	-1.20
Euro	IG All	-0.30	-0.30	0.47	0.47	3.05	3.05	3.98	3.98
	HY All	0.51	0.32	3.03	3.13	6.67	6.88	9.95	9.79
EM	1-3yr	0.20	4.52	0.57	5.04	2.79	3.78	7.27	0.31
	7-10yr	-5.25	-1.17	-4.54	-0.30	-2.40	-1.45	7.08	0.12
	HY All	-1.95	2.28	-0.57	3.85	0.31	1.28	11.30	4.07
	IG All	-3.25	0.91	-2.90	1.42	0.36	1.33	6.09	-0.80

Source: FTSE Russell. All data as of October 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) – October 31, 2023

Inflation-Linked Bond Returns

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

		3M		6M		YTD		12M	
		Local	JPY	Local	JPY	Local	JPY	Local	JPY
US	1-5yr	0.09	4.40	-0.58	3.84	1.99	2.98	2.16	-4.47
	5-10yr	-4.26	-0.13	-6.10	-1.92	-1.95	-1.00	-1.29	-7.70
	20+yr	-15.27	-11.62	-17.98	-14.34	-12.44	-11.59	-11.25	-17.02
UK	1-5yr	1.93	0.27	1.98	2.83	2.70	4.60	3.06	1.56
	5-10yr	-0.25	-1.87	-0.62	0.21	1.86	3.75	2.78	1.29
	20+yr	-12.87	-14.29	-18.92	-18.24	-20.20	-18.72	-23.80	-24.91
Japan	1-5yr	0.33	-1.81	1.72	-4.47	2.65	-9.70	2.83	-5.63
	5-10yr	0.06	-2.08	1.77	-4.43	3.13	-9.28	2.03	-6.36
EM	1-5yr	0.55	-1.29	5.90	4.25	9.49	8.07	10.13	1.54
	5-10yr	-2.02	-4.58	2.79	2.39	6.30	6.26	8.85	1.97
	20+yr	-5.71	-7.77	-0.26	2.90	3.88	8.89	6.18	4.74
Germany	1-5yr	0.09	0.09	0.49	0.49	1.48	1.48	0.24	0.24
	5-10yr	-2.08	-2.08	-1.44	-1.44	1.49	1.49	-0.83	-0.83
	20+yr	-13.26	-13.26	-14.19	-14.19	-8.13	-8.13	-13.06	-13.06
Italy	1-5yr	-0.16	-0.16	1.10	1.10	2.60	2.60	2.98	2.98
	5-10yr	-4.39	-4.39	-1.21	-1.21	3.32	3.32	2.58	2.58
	20+yr	-19.19	-19.19	-14.23	-14.23	-4.93	-4.93	-10.68	-10.68
Spain	1-5yr	0.04	0.04	0.59	0.59	1.81	1.81	1.76	1.76
	5-10yr	-1.93	-1.93	-0.70	-0.70	1.80	1.80	0.37	0.37
France	1-5yr	-0.11	-0.11	-0.08	-0.08	1.20	1.20	0.32	0.32
	5-10yr	-1.89	-1.89	-1.63	-1.63	1.42	1.42	-1.05	-1.05
	20+yr	-14.96	-14.96	-13.99	-13.99	-9.50	-9.50	-13.97	-13.97
Sweden	1-5yr	0.35	-1.56	1.30	-2.86	1.89	-4.06	2.46	-5.24
	5-10yr	-2.04	-3.90	-0.46	-4.55	-0.38	-6.19	-1.29	-8.71
Australia	1-5yr	0.39	-1.61	-0.41	-0.35	3.92	-2.04	4.20	-3.52
	5-10yr	-2.35	-4.29	-4.84	-4.77	2.53	-3.35	1.94	-5.62
	20+yr	-13.79	-15.51	-17.60	-17.55	-7.22	-12.54	-10.44	-17.08
New Zealand	5-10yr	-2.17	-4.63	-5.05	-6.61	0.99	-6.22	2.40	-4.14
Canada	20+yr	-8.92	-9.92	-14.09	-12.33	-15.98	-17.20	-11.37	-18.58

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

Global Bond Yields

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

		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	5.17	4.87	4.90	5.19	2.82	2.50	2.64	6.38	9.62
	3M Ago	5.01	4.33	3.97	4.11	2.44	1.72	1.80	5.50	8.51
	6M Ago	4.24	3.62	3.41	3.75	1.68	1.23	1.58	5.15	8.63
	12M Ago	4.58	4.37	4.05	4.34	1.76	1.65	1.84	5.97	9.17
UK	Current	4.67	4.45	4.43	4.91	0.65	0.71	1.51		
	3M Ago	5.04	4.69	4.25	4.39	1.86	0.65	1.00		
	6M Ago	4.05	3.77	3.64	4.02	0.39	0.14	0.63		
	12M Ago	3.38	3.55	3.56	3.62	-2.33	-0.13	0.24		
Japan	Current	0.09	0.34	0.83	1.81	-1.55	-0.65			
	3M Ago	-0.04	0.08	0.50	1.40	-1.70	-0.74			
	6M Ago	-0.07	0.02	0.30	1.20	-1.31	-0.63			
	12M Ago	-0.06	0.02	0.24	1.31	-1.37	-0.81			
China	Current	2.27	2.42	2.67	3.08					
	3M Ago	2.08	2.34	2.66	3.04					
	6M Ago	2.28	2.51	2.78	3.17					
	12M Ago	1.93	2.30	2.68	3.15					
EM	Current	8.36	7.47	7.52		4.20	4.73	5.46	6.68	11.30
	3M Ago	8.62	6.78	6.47		3.05	4.07	4.88	5.93	11.51
	6M Ago	8.03	6.85	6.44		3.84	4.04	5.15	5.61	11.71
	12M Ago	9.53	8.48	7.72		1.66	3.00	5.23	6.70	13.96
Germany	Current	3.09	2.66	2.70	3.05	0.90	0.45	0.68		
	3M Ago	3.09	2.60	2.41	2.53	0.60	0.07	0.01		
	6M Ago	2.72	2.35	2.25	2.37	0.16	-0.06	-0.11		
	12M Ago	1.94	1.95	2.07	2.22	-0.76	-0.35	-0.17		
Italy	Current	3.77	3.88	4.45	5.06	1.77	2.35	2.53		
	3M Ago	3.60	3.55	3.86	4.35	1.30	1.64	1.69		
	6M Ago	3.36	3.49	3.97	4.45	0.80	1.65	1.83		
	12M Ago	2.82	3.30	3.95	4.36	0.25	1.64	1.84		
France	Current	3.21	3.01	3.23	3.88	0.93	0.78	1.28		
	3M Ago	3.15	2.90	2.90	3.35	0.58	0.37	0.60		
	6M Ago	2.84	2.66	2.73	3.23	-0.06	0.17	0.58		
	12M Ago	2.15	2.20	2.44	3.02	-0.91	-0.16	0.46		
Sweden	Current	3.43	3.05	2.94		1.34	1.30			
	3M Ago	3.33	2.83	2.57		0.96	0.74			
	6M Ago	2.89	2.59	2.31		0.71	0.73			
	12M Ago	2.34	2.38	2.25		-0.59	-0.17			
Australia	Current	4.49	4.48	4.87	5.33	1.47	2.04	2.53		
	3M Ago	4.02	3.86	4.03	4.40	1.03	1.47	1.79		
	6M Ago	3.13	3.05	3.30	3.88	0.09	0.84	1.50		
	12M Ago	3.21	3.35	3.70	4.10	-0.01	1.05	1.67		
New Zealand	Current	5.49	5.37	5.55	5.69	2.47	3.05			
	3M Ago	5.21	4.80	4.70	4.87	1.94	2.39			
	6M Ago	4.89	4.15	4.08	4.23	0.95	1.61			
	12M Ago	4.31	4.28	4.18	4.44	1.43	2.04			
Canada	Current	4.70	4.18	4.09	3.88	2.25	2.32	2.21		
	3M Ago	4.76	4.02	3.56	3.33	2.11	1.80	1.69		
	6M Ago	3.81	3.09	2.82	2.93	1.12	1.06	1.32		
	12M Ago	3.95	3.56	3.29	3.34	1.43	1.32	1.38		

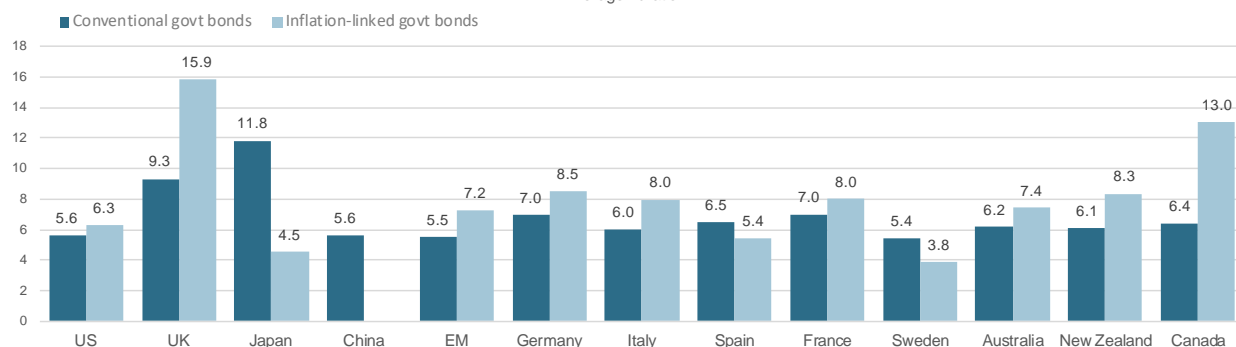
Source: FTSE Russell. All data as of October 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors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

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

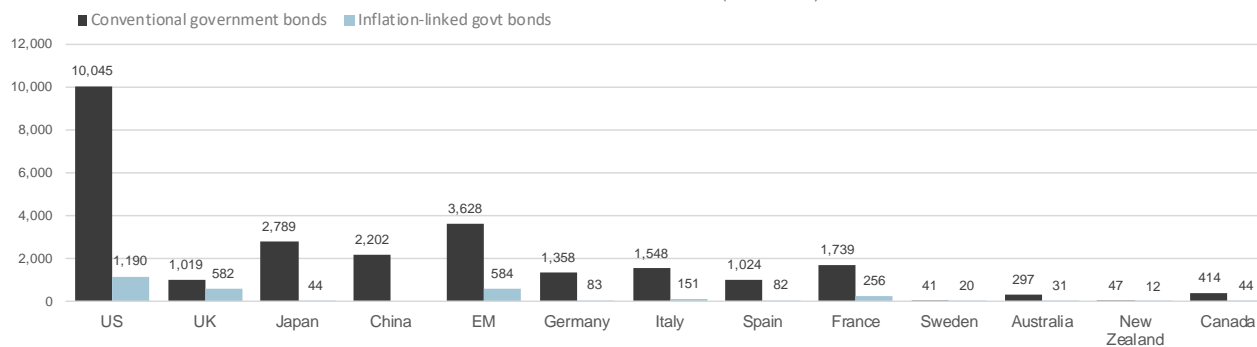
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.3	16.1	5.6	2,348.7	1,029.4	1,101.9	10,044.9	7.0	21.0	6.3	384.3	109.1	1,190.4
UK	3.4	7.4	17.7	9.3	135.3	182.2	274.1	1,019.0	6.8	27.0	15.9	96.1	214.7	582.4
Japan	3.9	8.1	23.6	11.8	338.1	332.8	592.8	2,788.9	7.2		4.5	18.3		43.6
China	3.7	7.5	17.6	5.6	479.1	364.1	253.0	2,202.3						
EM	3.5	6.9	15.9	5.5	754.1	655.5	345.6	3,628.4	5.7	13.2	7.2	104.9	156.9	584.2
Germany	3.7	7.5	20.2	7.0	299.9	210.3	144.9	1,358.1	7.0	21.5	8.5	41.8	16.4	83.0
Italy	3.7	7.2	15.8	6.0	298.3	251.5	126.5	1,548.0	7.7	26.0	8.0	54.8	4.5	151.2
Spain	3.7	7.5	17.2	6.5	199.2	175.2	86.9	1,023.8	6.6		5.4	22.3		81.7
France	3.7	7.5	19.2	7.0	281.5	308.8	189.1	1,739.1	6.5	24.1	8.0	100.9	17.9	256.4
Sweden	3.5	7.4		5.4	13.1	8.3		41.2	5.6		3.8	9.2		19.9
Australia	3.6	7.5	16.6	6.2	33.9	79.3	12.3	297.1	7.0	21.9	7.4	9.1	2.2	30.9
New Zealand	3.7	7.4	15.9	6.1	9.5	12.8	2.1	46.7	6.1		8.3	2.9		12.4
Canada	3.8	7.4	19.0	6.4	56.2	104.3	55.9	414.0	6.7	20.3	13.0	7.7	17.3	44.4

	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	9.8	7.8	6.7	6.2	6.6	66.5	419.2	2458.4	3156.0	6100.0	3.8	1130.4
Europe	5.4	4.7	4.5	4.2	4.4	12.2	179.1	1147.6	1398.3	2737.2		
EM		5.3	4.5	4.8	4.7		44.5	212.6	304.6	561.7	3.2	178.9

Average Duration



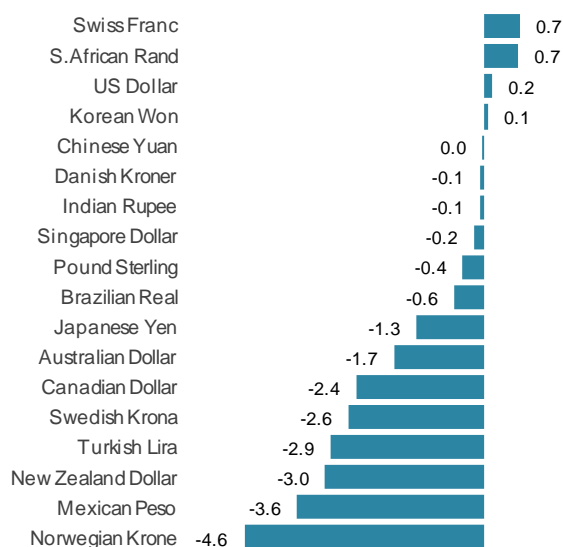
Total Market Value (USD Billions)



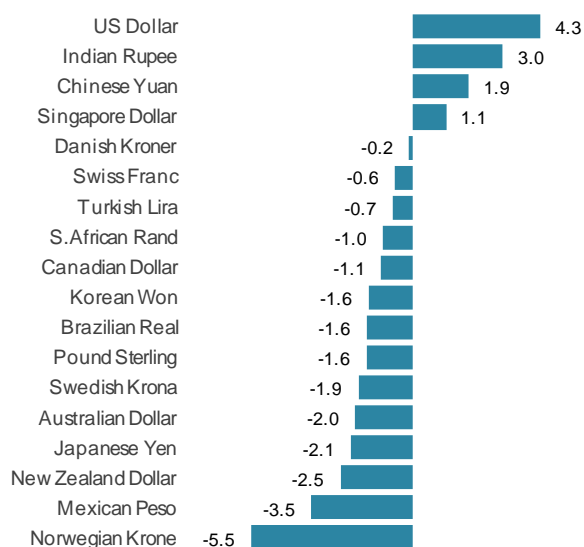
Source: FTSE Russell. All data as of October 31, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors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

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

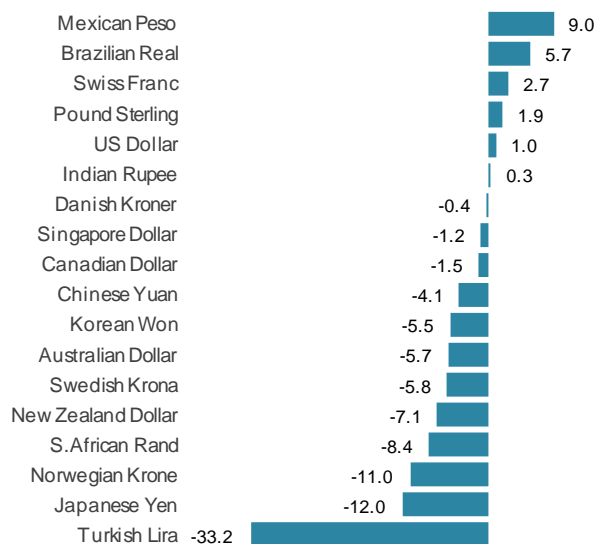
FX Moves vs EUR - 1M



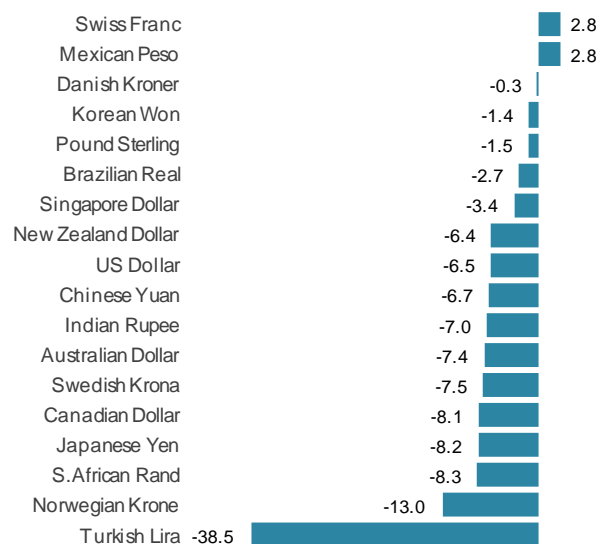
FX Moves vs EUR - 3M



FX Moves vs EUR - YTD



FX Moves vs EUR - 12M



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