GLOBAL INVESTMENT RESEARCH
MARKET MAPS

FTSE Russell
An LSEG Business

Fixed Income Insights

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

FOR PROFESSIONAL INVESTORS ONLY

Gilts trapped by higher for longer rates narrative, despite policy pause

Signs of capitulation in long Treasuries to a 'higher for longer' narrative, and the return of Goldilocks' yields, caused more curve dis-inversion. Gilts survived the worst of the US sell-off in September, as shorts gained from a policy pause, but long gilts and JGBs are weakest performers YTD. PBoC easing helped Chinese bonds.

Macro and policy backdrop – Soft landings for growth give central banks room to retain tight policy settings
Policy paused in September, but higher energy prices & economies near full employment extend inflation risks. (pages 2-3)

Yields, curves and spreads – Curve dis-inversion in long bonds as some long G7 yields reach new cycle highs
Longs led yield curve dis-inversion in September, suggesting some capitulation, as Treasury spreads widened. (pages 4-5)

Credit and MBS analysis – UK credit spreads tightened, and signs of recovery in US real estate
US real estate spreads tightened notably since Q1 banking crisis. European insurance spreads also tightened. (page 6)

Sovereign and climate bonds – High Japan & Euro weight in Climate-WGBI continues to squeeze returns vs WGBI
The underperformance by JGBs has continued to weigh on Climate-WGBI returns. (page 7)

Performance – Long maturities suffered more losses in Q3. HY credit, China and EM bonds outperformed
Duration again proved the investor's enemy in Q3, with JGB returns squeezed further by yen weakness. (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: Real and nominal yields rose sharply in the G7 (ex UK), as markets showed acceptance of the 'higher for longer' narrative.

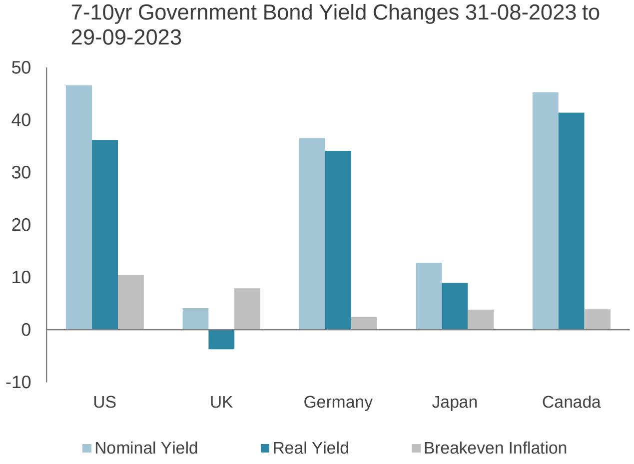
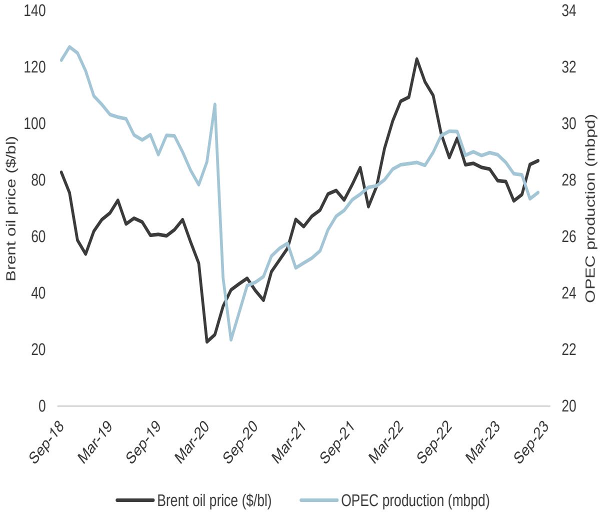


Chart 2: Oil prices have generally been demand-driven since Covid, but recent OPEC supply cuts have led to a notable price rebound.



Source: FTSE Russell. All data as of September 30, 2023. Past performance is no guarantee of future results. This report should not be considered 'research' for the purposes of MIFID II. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix for list of indices used for each market.

Macroeconomic Backdrop – Growth and Inflation Expectations

G7 growth generally remains weak, after the policy tightening in 2022-23, although robust consumers and high levels of employment have enabled soft landings to date. UK and European growth is weaker, as central banks and energy prices squeeze growth. Fiscal policy may become more active in 2023-24, even if debt levels reduce room for manoeuvre. UK inflation fell further in Q3, but from high levels and second round inflation risks from the labour market remain.

IMF growth forecasts have been upgraded modestly in 2022/23, as Chart 1 shows, mainly due to consumer spending, as consumers spent Covid windfalls, led by the US (Chart 1). UK GDP continues to avoid contraction, but grew just 0.2% in Q2, and 0.5% in H1, mainly due to household consumption, with a drag from net trade. Higher rates, the rebound in oil prices, de-globalisation and weak net trade remain major headwinds.

Chart 2 shows a mixed inflation picture in the August data, on less favourable base effects and higher energy prices, with “easy” disinflation gains complete (from base effects & lower energy prices). UK inflation fell in August (to 6.7% y/y) mainly on weaker food prices, but higher energy prices and wage inflation pressures present 2nd round inflation risks. Chinese deflation risks remain.

Debt/GDP ratios are much higher than pre-GFC, including the UK; the legacy of Covid and GFC fiscal support (Chart 3). At least higher inflation rates have reduced the real value of debt burdens. With G7 monetary policy focused on restoring inflation to 2% target levels, more active fiscal policy may arise to enhance infrastructure, and prevent recessions, like the US Inflation Reduction Act. However, the UK government recently scaled back de-carbonisation targets, and made clear early tax cuts are unlikely.

Meanwhile, the UK labour market remains the biggest challenge for the BoE’s inflation control, with little sign of average earnings growth slowing, and ongoing labour shortages (Chart 4). UK wage inflation stayed at 7.8% y/y (excluding bonuses) in the three months to July, with private sector wage growth at 8.1% y/y. With little sign of labour militancy easing as inflation rates ease, the obvious risk is that wage bargainers adapt to higher inflation rates, jeopardising the low inflation regime.

Chart 1: IMF growth forecasts have edged higher for 2023, despite more G7 policy tightening. A further upgrade is likely in Q4, with the likely exception of China. Weaker Eurozone & UK growth also a feature.

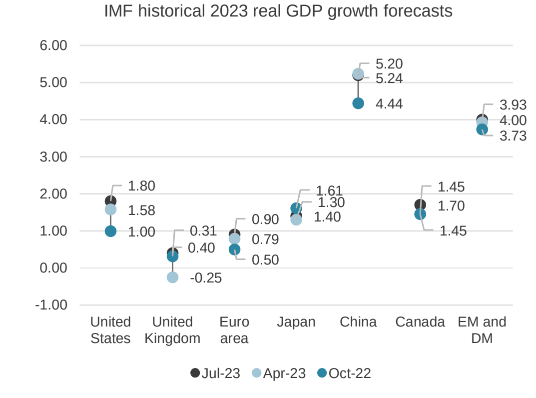


Chart 2: August inflation data was mixed, but higher energy prices and base effects caused higher US and Canadian inflation. Dispersion fell, but remains high, with UK inflation at 6.7%, and Chinese inflation near zero

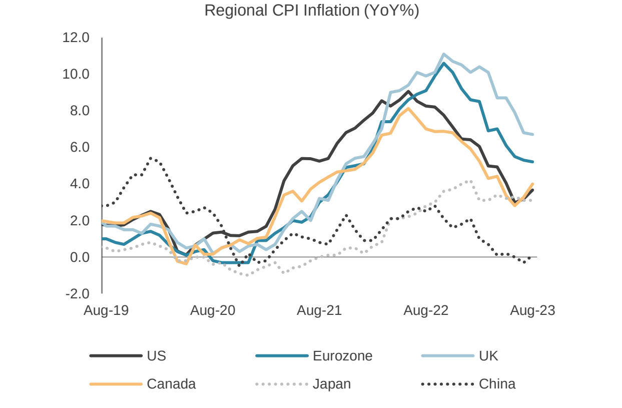


Chart 3: Debt/GDP ratios show the impact of Covid, govt furlough schemes, and fiscal support. Although more active fiscal policy may emerge in some countries, the UK authorities remain reluctant to reduce taxation as yet.

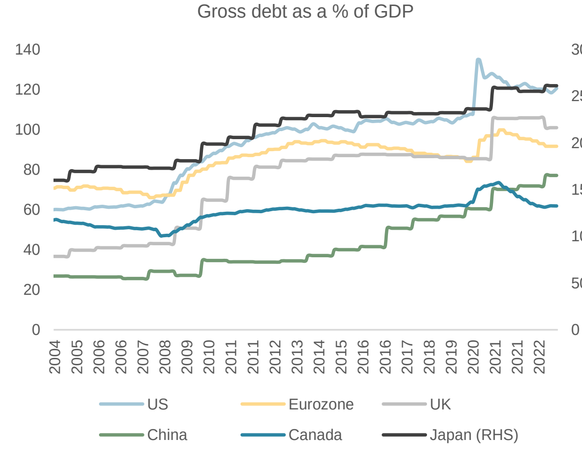
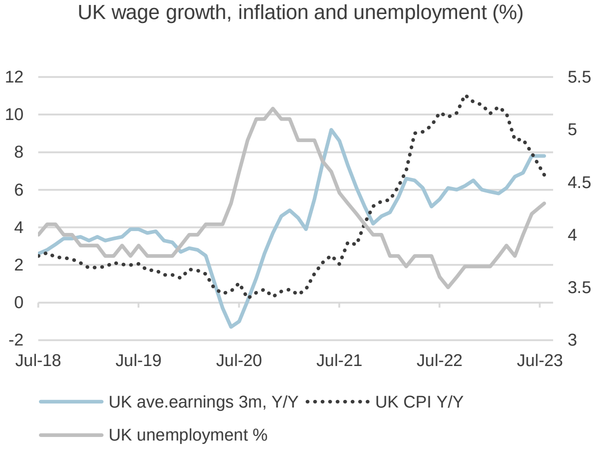


Chart 4: UK wage inflation remains elevated, at 7.8% y/y in the three months to July, despite headline inflation falling back to 6.7% y/y. So, the decision to leave UK rates at 5.25% was a market surprise.



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Financial Conditions and Monetary Policy Settings

Financial conditions eased in the risk rally in 2023, notably via credit spreads narrowing, reducing the impact of higher short rates. Sterling fell back in September, following the MPC policy pause, though the BoE vote was very close. A faster target reduction in BoE gilt holdings reflects more redemptions in 2023-24 but short rates remain the key policy variable.

UK credit spreads have tightened in 2023, as risk has rallied after the spike in spreads on Trussonomics and the Ukraine war in 2022, as Chart 1 shows. Positive credit index performance also shows the UK spread narrowing has partly been driven by corporate yields falling, and not just an increase in gilt yields (also see Chart 1 on page 6).

Sterling weakened about 3% versus the strong US dollar in September, after the BoE's dovish 5-4 vote to leave rates unchanged. Although the UK's trade deficit in goods has widened steadily since Brexit, it is offset by a large surplus in services, and rate differentials remain the key driver of sterling (Chart 4). The yen rally on the flexing of BoJ curve control proved short-lived in Q3.

The policy pause from the Fed was no surprise in September, though the BoE decision to do so was, given previous concern about second round inflation effects. However, after 14 consecutive UK rate increases, to 5.25%, time to assess the impact of previous tightening moves may be needed. Meanwhile, the BoJ seems in no hurry to abandon zero rates, as it seeks sustained inflation above target, and the PBoC appears prepared to cut rates faster to fight deflation risks.

QT programmes continue in the G7, aside from Japan, reflecting different inflation objectives. The ECB's balance sheet contraction is fastest, due to the combination of LTROs unwinding and debt run-offs. As expected, the BoE announced a larger reduction of £100bn in gilt holdings in 2023-24, to £658bn in total, down 13%, partly due to higher gilt redemptions. There is little evidence of major disruption to the gilt market from these sales, and UK policy rates remain the key instrument of inflation control.

Chart 1: UK investment grade credit spreads tightened significantly since the peak in Q4, 2022, reducing the impact of higher UK policy rates on financial conditions. This is reflected in credit performance.

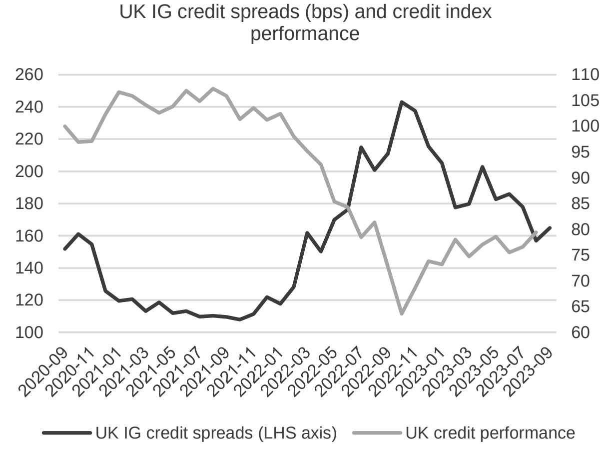


Chart 2: Currencies remain strongly correlated with short rate differentials with the yen and renminbi near 2023 lows in September, after the PBoC cut rates. Sterling fell back on the BoE policy pause.

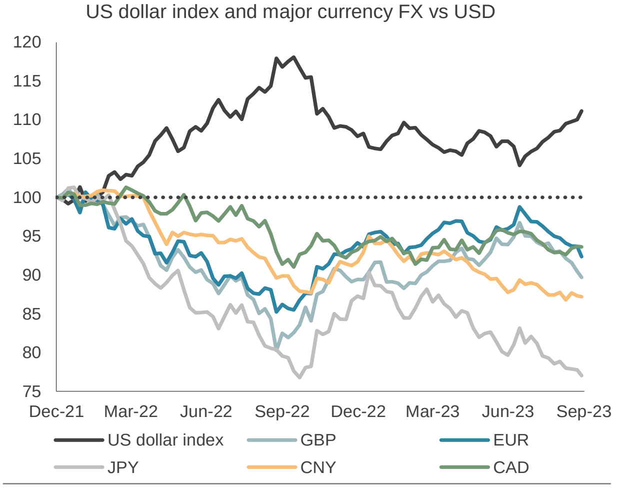


Chart 3: The Fed, BoC and the BoE held rates unchanged in September, after 500-525bp of tightening in 2022-23, but did not preclude further moves in Q4. The PBoC used the room available to ease rates further.

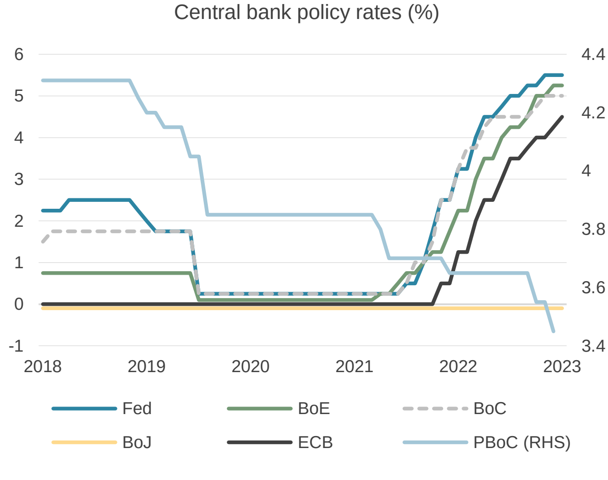
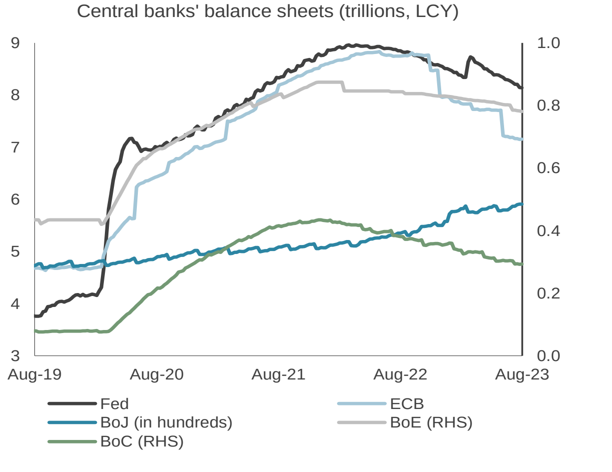


Chart 4: The BoE raised the target reduction in gilt holdings in 2023-24 to £100bn (vs £80bn in 22-23), partly due to higher gilt redemptions. The ECB's QT shows the fastest balance sheet contraction in the G7.



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Global Yields, Curves and Breakevens

Chart 1: September saw a further increase in G7 7-10-year yields, led by the Eurozone and Canada, where yields hit new cycle highs. JGB yields edged higher, though the 1% 10-yr yield ceiling is intact.

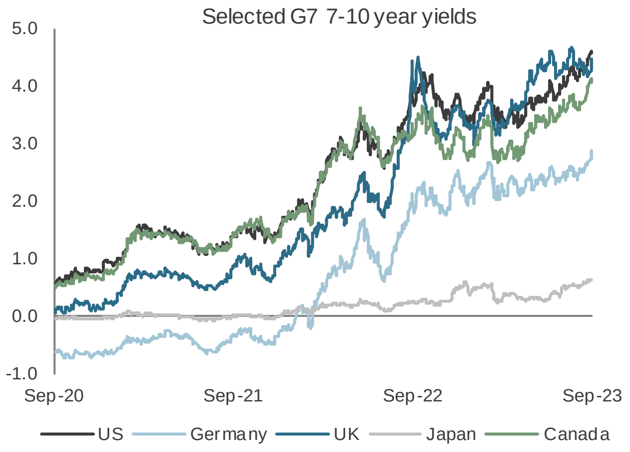


Chart 2: Real yields increased to new cycle highs in the US and Eurozone, but UK linkers rallied on better inflation data, and the BoE policy pause. JGB real yields edged higher with nominal yields.

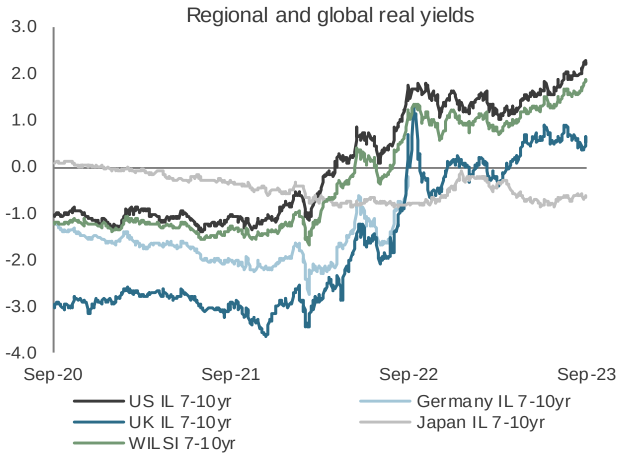


Chart 3: Yield curves dis-inverted further in September, with the front end helped by policy pauses (except the ECB). Curves remain deeply inverted, apart from JGBs, due to the BoJ's curve control.

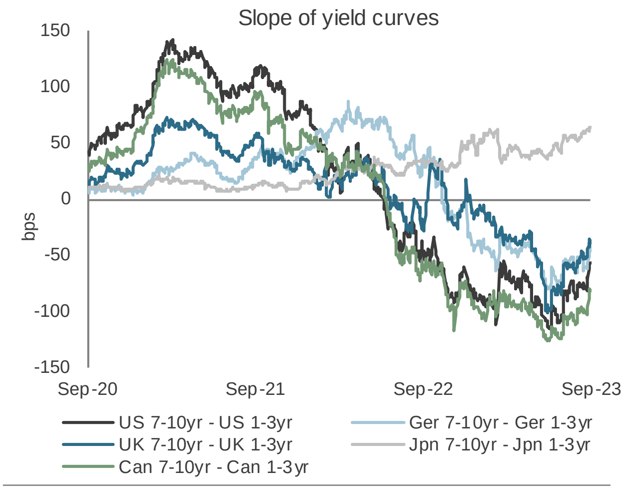


Chart 4: There were bigger dis-inversion moves in longer maturities versus shorts, led by the UK, after the surprise BoE policy pause caused short yields to ease. Long end JGB yields also increased.

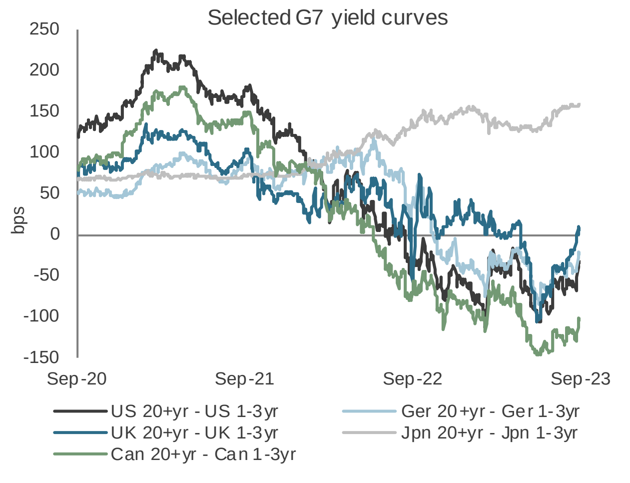


Chart 5: Breakevens increased in the UK, on the BoE policy pause, but moved little overall in September, including WGBI breakevens. JGB breakevens edged higher, as the BoJ retained zero rates.

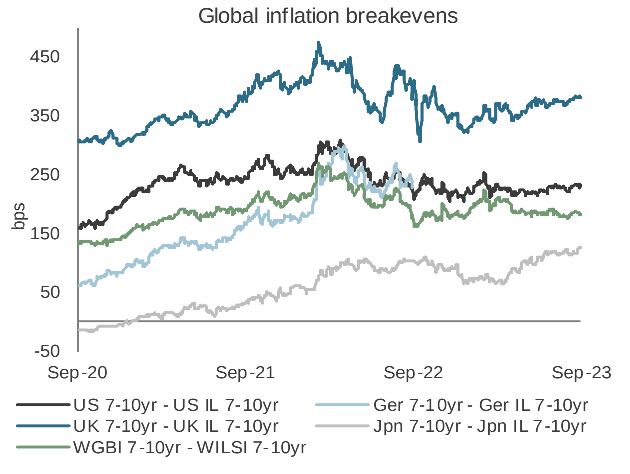
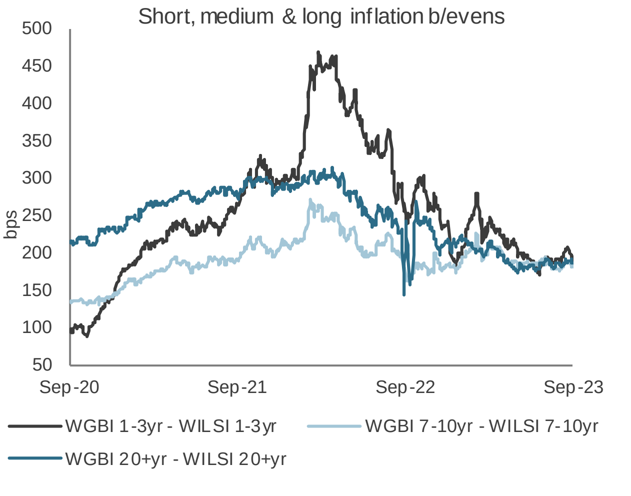


Chart 6: Global inflation breakevens of all tenors remain stable around 2%. Despite the oil price rebound in September, there is little evidence of inflation expectations de-stabilising.



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Yield Spread and Credit Spread Analysis

Chart 1: US spreads generally increased in September, though moved less vs Canada. UK gilt yields traded through US Treasuries again in September, reversing the pattern of recent months.

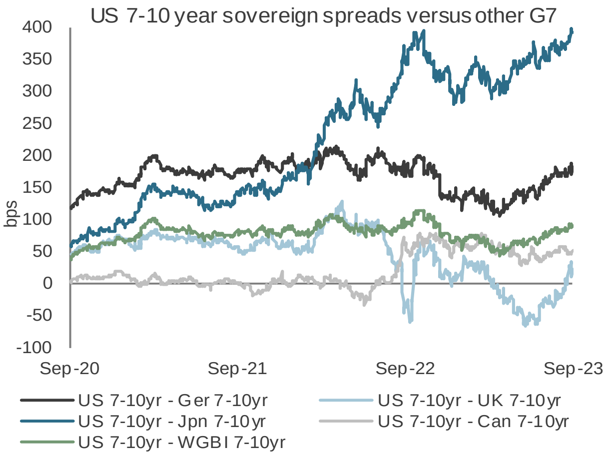


Chart 2: 7-10-year Italian spreads edged out in September versus G7 markets, driven by higher Bund yields, further ECB policy tightening and failure to reach agreement on new EU fiscal rules.

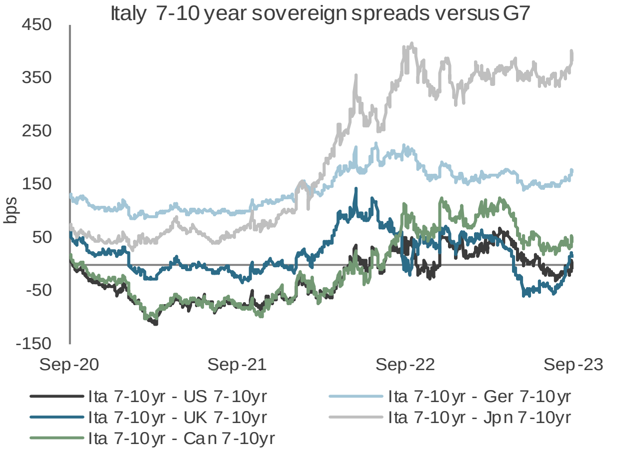


Chart 3: EM sovereign spreads remain near post-Covid lows, helped by early counter-inflation policy, in advance of DM. EM spill-over effects from G7 tightening have been far less than previous cycles.

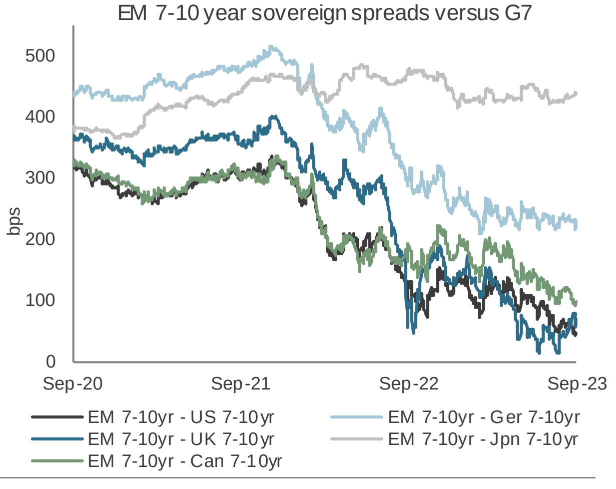


Chart 4: The PBoC's latest policy easing drove Chinese spreads to, or near, cyclical lows. The correlation of Chinese yields to the G7 remains very low, and de-globalisation may reduce this further.

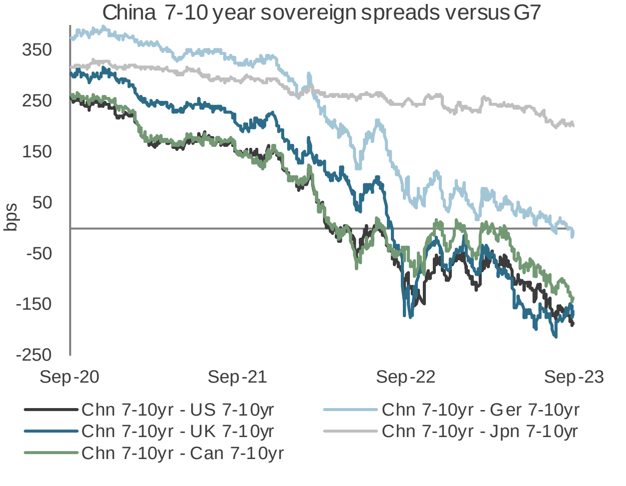


Chart 5: High yield credit spreads continue to grind lower, helped by investor risk appetite, and low default rates. IG spreads are now relatively more attractive, having fallen far less since the 2022 spike.

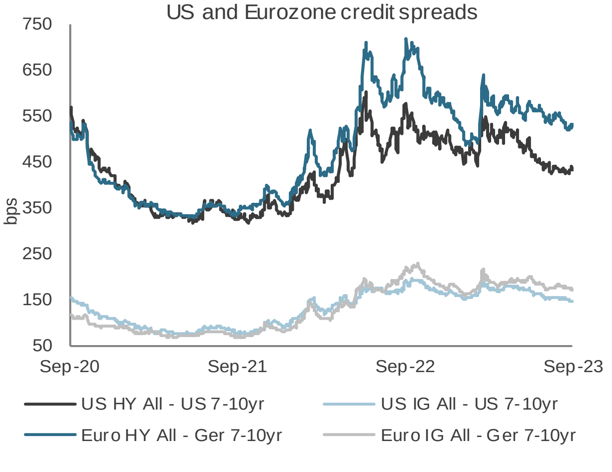
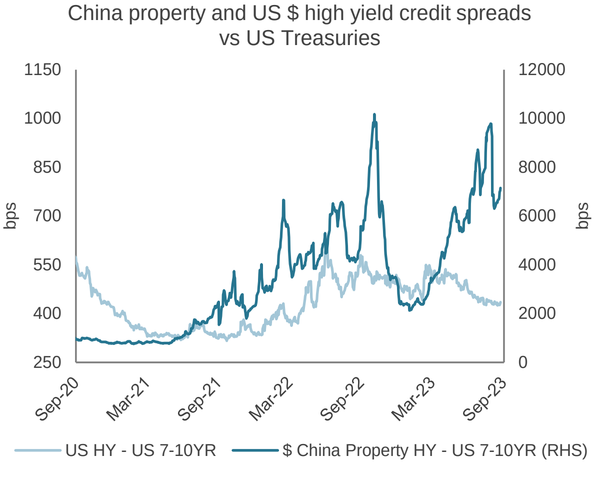


Chart 6: Chinese $ HY spreads eased in September from record highs, as Country Garden escaped from a potential default. Easier mortgage policies may also have helped to narrow spreads.



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Credit sector and MBS analysis

Chart 1: 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.

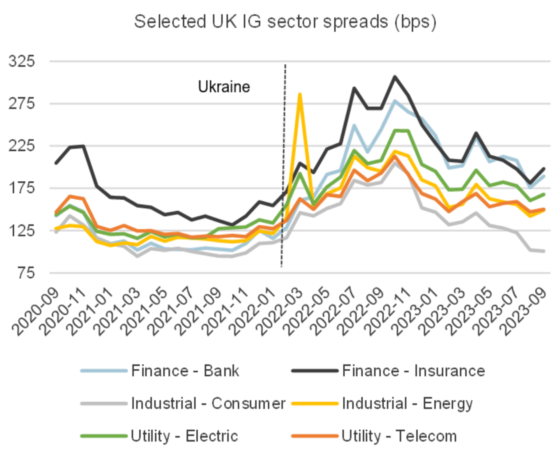


Chart 2: Euro credit sector spreads show the impact of the Ukraine war on insurance, though spreads narrowed in 2023. Consumer credits outperformed, and bank spreads narrowed on higher rates.

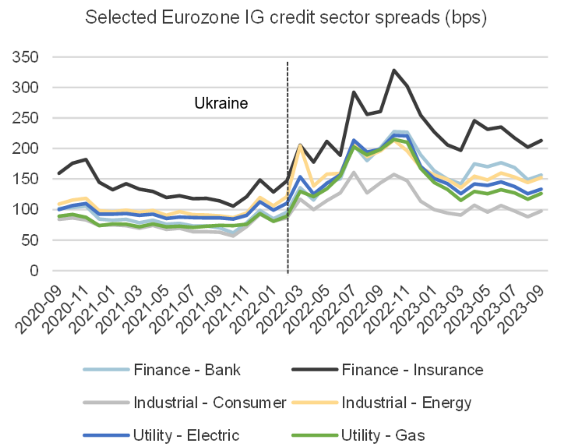


Chart 3: US credit sector spreads show signs of a recovery in commercial real estate, since the Q1 banking crisis, and Tech outperformance on AI. Industrials benefitted from the growth pick-up.

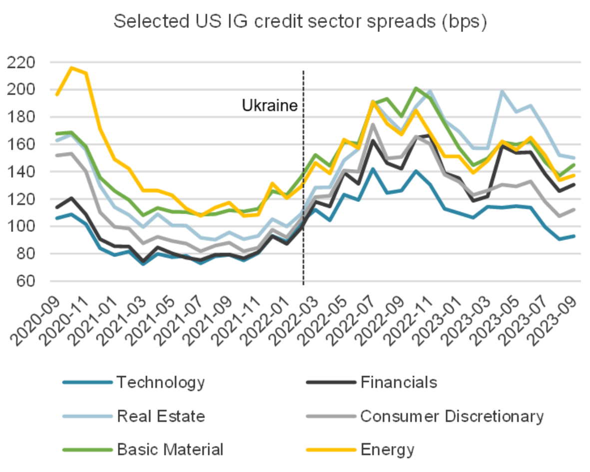


Chart 4: US agency-MBS traded through 7-10-yr Treasuries in the early Covid period, driven by aggressive Fed QE. Negative convexity in MBS and higher Fed rates have caused MBS spreads to rise.

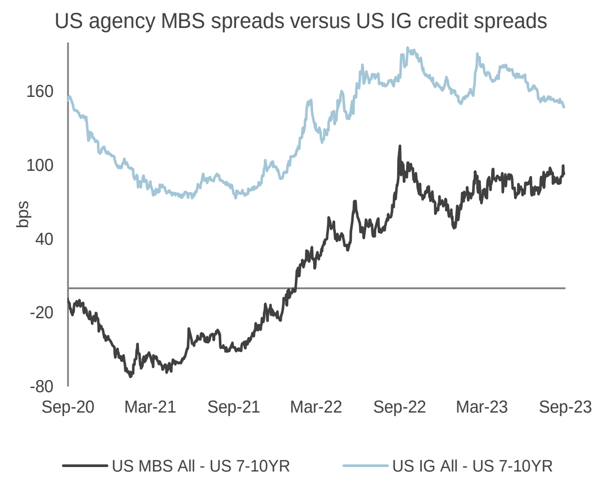


Chart 5:.MBS prepayments and mortgage refinancings have collapsed since the Fed tightening began, due to the increase in US Treasury yields and mortgage coupons in 2022-23.

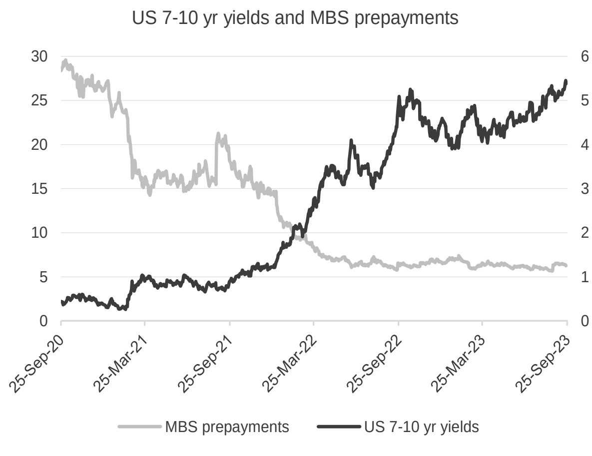
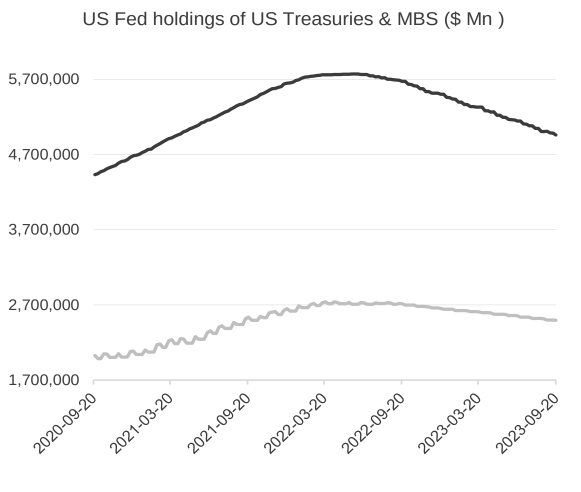


Chart 6: Fed holdings of MBS have been reduced at a slower pace than US Treasuries, since QT began in 2022. This reflects slow MBS prepayments for low coupons, and the Fed's coupon stack.



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Sovereign and Climate Bonds Analysis

Chart 1: Climate WGBI outperformed WGBI during the years of very low yields, helped by extra duration, but this reversed in 2022, when duration squeezed returns hard. This has stabilised in 2023.

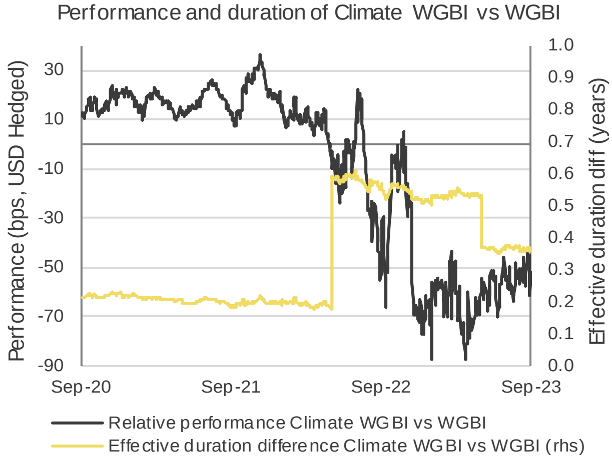


Chart 2: US underweight in the Climate WGBI fell in July's re-weighting, reducing the duration difference vs WGBI. China's 15% underweight prevented lower Chinese yields impacting Climate-WGBI significantly.

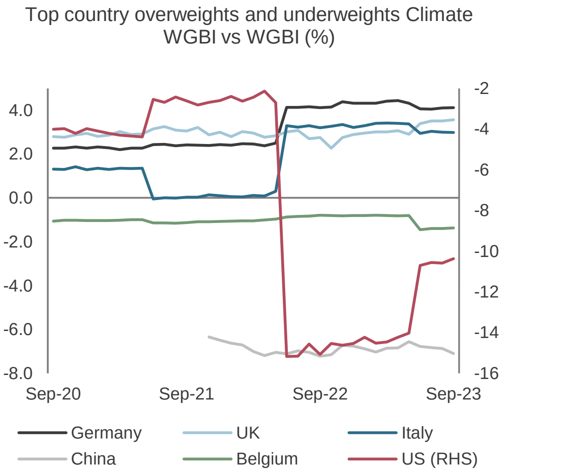


Chart 3: Climate WGBI yields remain below WGBI, though the differential narrowed after the increase in JGB yields since curve control was eased, due to Japan's high weight in the Climate WGBI.

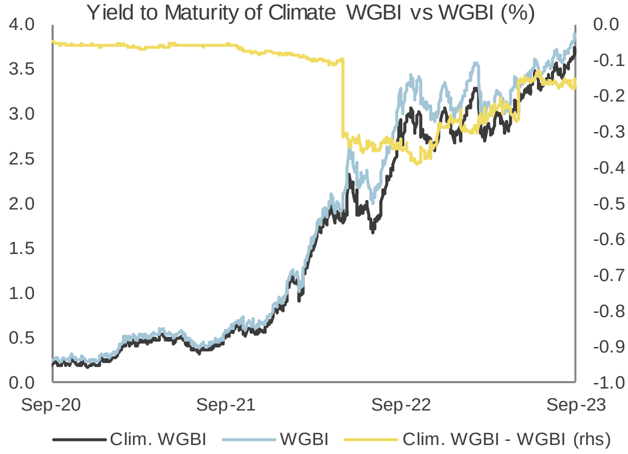


Chart 4: Climate WGBI's higher weighting in the Eurozone gives the index higher AAA weight, with Bunds rated AAA, but the lower US weighting in Climate WGBI means the AA weight is notably lower.

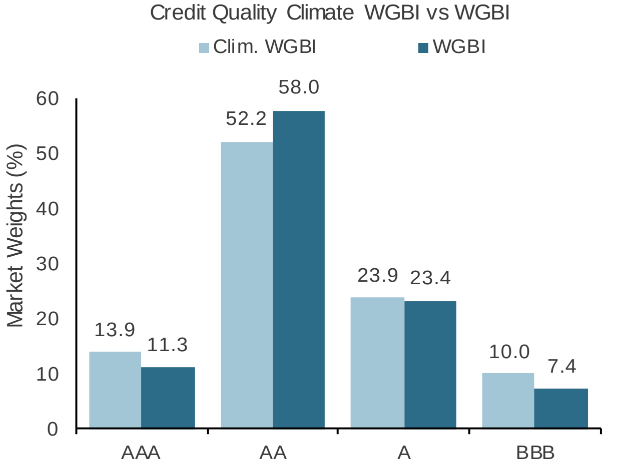


Chart 5: Although curves dis-inverted a little in August, with longer yields rising, yields remain close to 3% in both WGBI and climate WGBI in 2023, eliminating most of the "greenium" in climate WGBI.

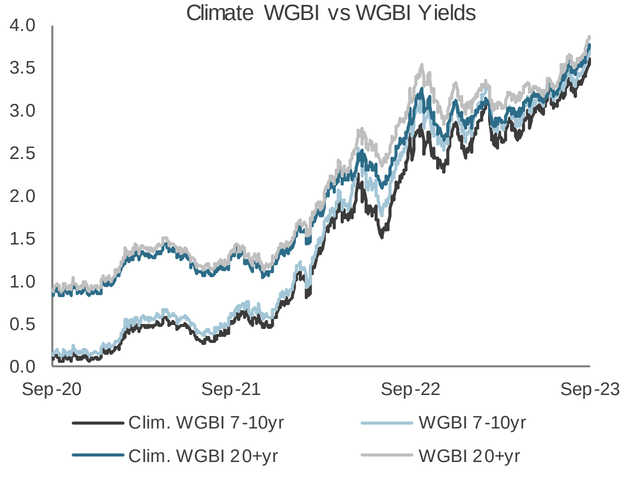
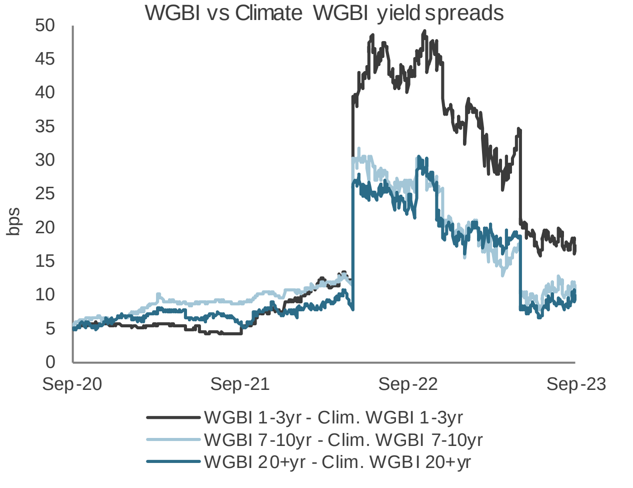


Chart 6: The "greenium" or yield discount on Climate-WGBI increased when Japan's weight increased, and the US fell, in 2022. But this may unwind further as BoJ curve control is eased, and JGB yields rise further.



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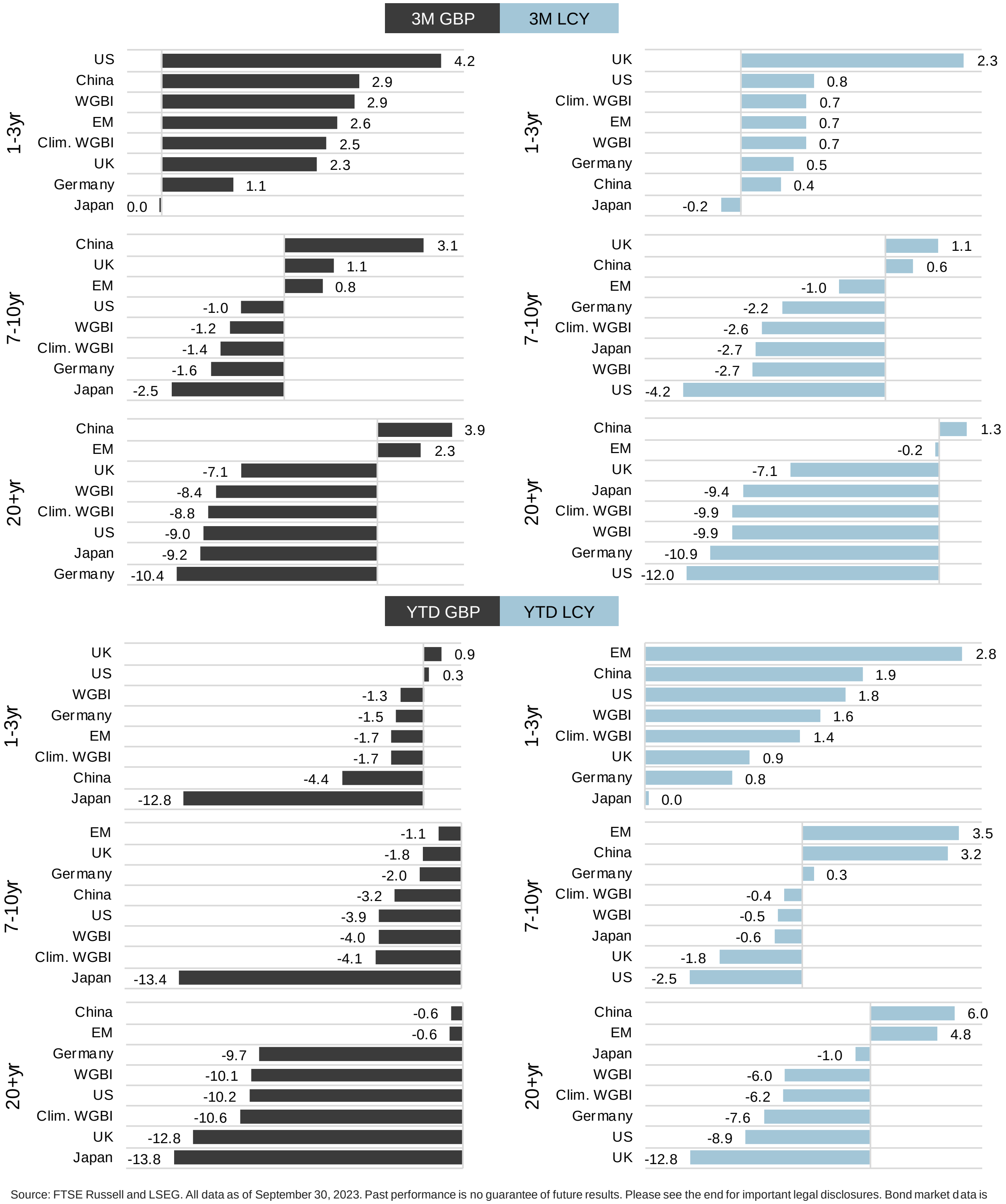
Global Bond Market Returns – 3M & YTD % (GBP, LC, TR)

Longer conventional bonds fell in Q3, as "higher for longer" rates proved a dominant narrative, after hawkish central bank signalling, despite policy pauses. Bunds fell most, in sterling terms, but short gilts rallied on unchanged rates. YTD, long bonds were weakest, led by JGBs. China and EM bonds were best performers, helped by rate cuts and stronger currencies.

Long G7 sovereigns fell 7-10% in Q3, in sterling, led by long Bunds, JGBs and Treasuries. Curves dis-inverted as short bonds held up well, with short Treasuries gaining 4% and WGBI 3%, in sterling. Chinese bonds rallied as the PBoC cut rates further, gaining 3-4%.

YTD returns show similar losses in longs, including long gilts, but with JGBs losing 13-14% in all maturities, reflecting yen weakness.

CONVENTIONAL GOVT BONDS



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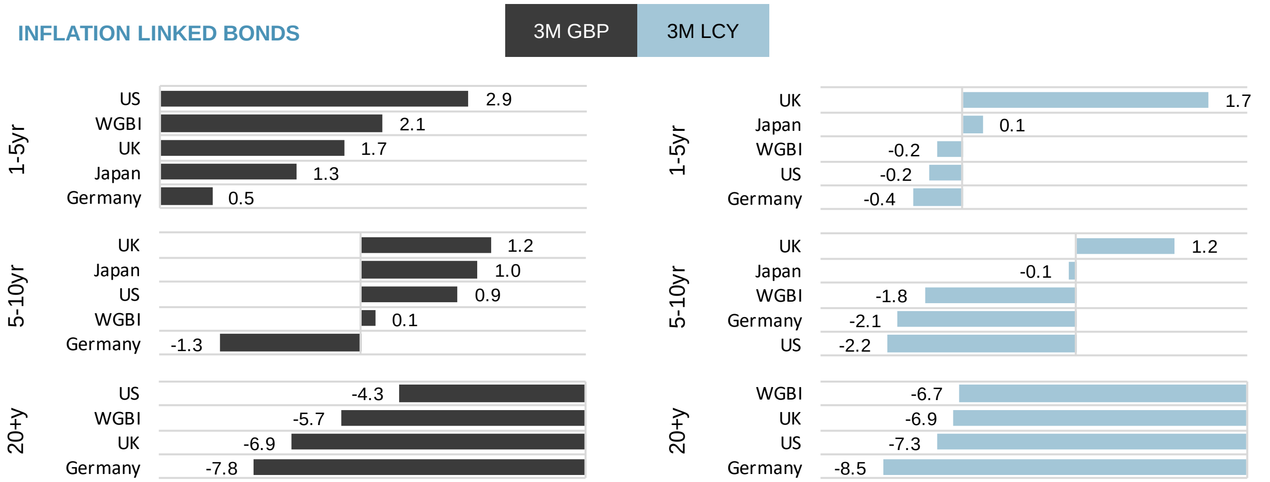
Global Inflation-Linked Bond Returns – 3M & YTD % (GBP, LC, TR)

Longer inflation-linked bonds also show losses on 3M in sterling terms, like conventional bonds, with Bunds weakest, losing 8%. Shorter maturities were far more resilient, and modest sterling weakness boosted overseas returns. HY credit outperformed, on 3M and YTD, with 5% gains YTD in US and Euro credits. Higher govt yields dragged IG returns lower.

Long Bund, UK and US linkers all lost 4-8% in Q3, as duration and higher rates had their impact, with losses of 8-18% YTD.

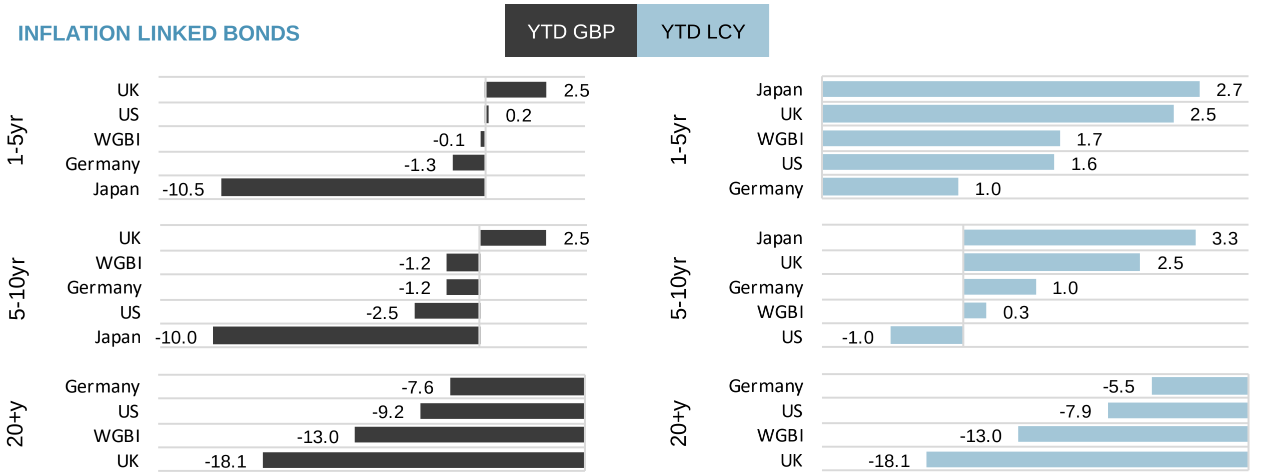
HY credit's correlation to equities, as a risk asset, low default rates and a soft landing for global growth drove outperformance.

INFLATION LINKED BONDS

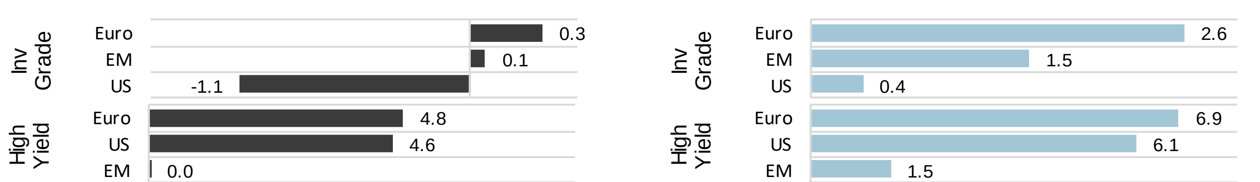


CORPORATE BONDS

INFLATION LINKED BONDS



CORPORATE BONDS



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

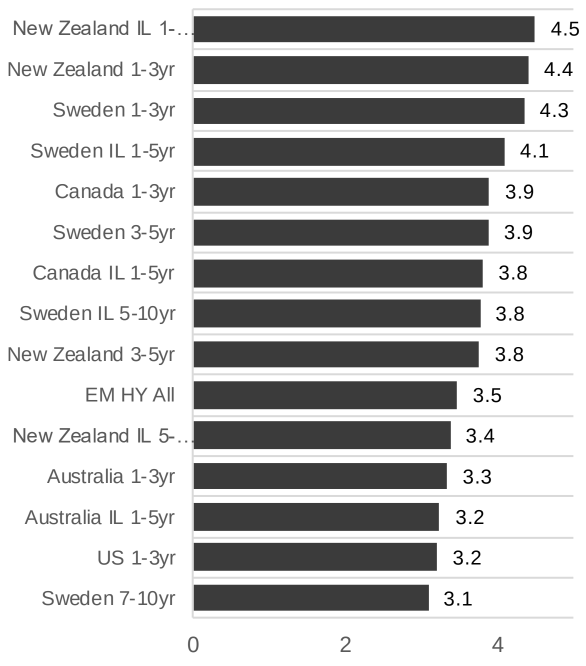
Long conventional bonds and linkers fell sharply in September, as yields spiked, led by Eurozone longs, with losses of 4-13% in sterling terms. Modest sterling weakness reduced losses in overseas markets. Euro HY credit and shorter UK gilts recovered from September 2022 sell-offs, with 4-10% y/y returns, but long Treasuries and Canada fell sharply on 12M. EM inflation linked bonds remain strong performers.

Real yields rose abruptly in long government bonds in September, as yield curves dis-inverted further, in signs of capitulation by bond bulls, and despite policy pauses, apart from the ECB. Australasian bonds rallied, helped by modest currency recoveries.

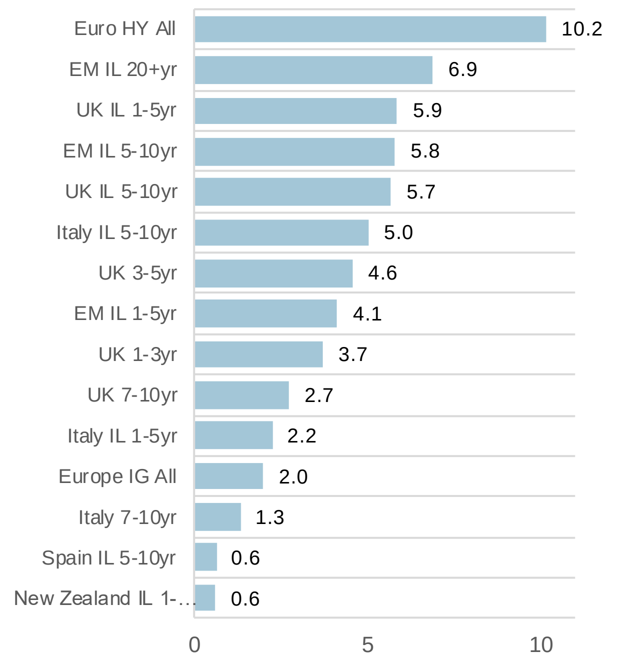
It is a similar story on 12M, with longs underperforming led by US Treasuries and Canadian govt bonds, with losses of up to 20%.

1M GBP | 12M GBP

Top 15



Top 15



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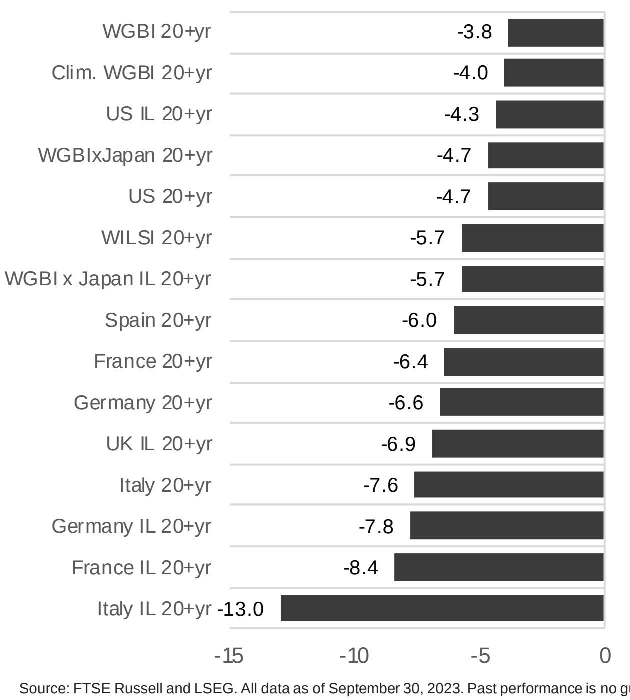

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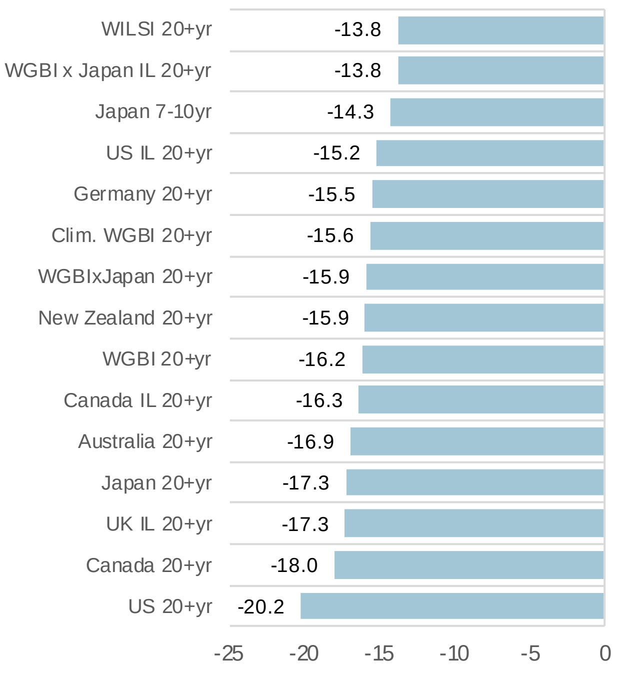

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Government Bond Returns

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

		3M		6M		YTD		12M	
		Local	GBP	Local	GBP	Local	GBP	Local	GBP
US	1-3yr	0.76	4.16	0.29	1.16	1.78	0.31	2.42	-7.41
	7-10yr	-4.19	-0.95	-5.52	-4.71	-2.50	-3.91	-2.14	-11.53
	20+yr	-12.02	-9.04	-13.40	-12.66	-8.86	-10.17	-11.77	-20.23
	IG All	-2.40	0.89	-2.13	-1.29	0.37	-1.08	3.66	-6.28
	HY All	0.81	4.22	3.66	4.55	6.11	4.58	10.34	-0.25
UK	1-3yr	2.32	2.32	0.28	0.28	0.94	0.94	3.71	3.71
	7-10yr	1.10	1.10	-5.21	-5.21	-1.85	-1.85	2.74	2.74
	20+yr	-7.08	-7.08	-16.16	-16.16	-12.81	-12.81	-13.25	-13.25
Euro	IG All	0.37	0.90	1.07	-0.36	2.63	0.34	4.07	2.00
	HY All	2.09	2.57	4.18	2.88	6.91	4.78	12.18	10.16
Japan	1-3yr	-0.21	-0.02	-0.20	-10.62	0.03	-12.83	-0.13	-12.51
	7-10yr	-2.70	-2.51	-2.71	-12.87	-0.62	-13.40	-2.14	-14.28
	20+yr	-9.37	-9.19	-8.44	-18.00	-1.03	-13.76	-5.54	-17.25
China	1-3yr	0.41	2.94	1.44	-3.51	1.94	-4.38	2.24	-8.89
	7-10yr	0.59	3.12	2.44	-2.56	3.24	-3.16	3.55	-7.73
	20+yr	1.32	3.87	4.98	-0.15	6.01	-0.56	5.47	-6.01
EM	1-3yr	0.44	3.83	0.95	1.82	2.70	1.22	5.68	-4.46
	7-10yr	-2.42	0.88	-0.81	0.04	-0.28	-1.72	6.64	-3.59
	IG All	-1.55	1.78	-0.30	0.56	1.54	0.07	4.96	-5.11
	HY All	0.01	3.39	1.25	2.12	1.51	0.04	10.04	-0.52
Germany	1-3yr	0.54	1.07	0.15	-1.26	0.78	-1.47	-0.20	-2.19
	7-10yr	-2.16	-1.65	-2.62	-3.99	0.25	-1.98	-2.48	-4.43
	20+yr	-10.90	-10.43	-11.29	-12.54	-7.59	-9.65	-13.81	-15.52
Italy	1-3yr	0.57	1.10	0.39	-1.03	1.59	-0.67	1.86	-0.17
	7-10yr	-3.44	-2.94	-2.24	-3.61	2.89	0.60	3.38	1.32
	20+yr	-10.34	-9.87	-7.78	-9.08	-1.07	-3.28	-4.33	-6.24
Spain	1-3yr	0.53	1.06	0.18	-1.23	1.11	-1.15	0.44	-1.57
	7-10yr	-2.43	-1.92	-2.57	-3.94	0.60	-1.65	-0.90	-2.88
	20+yr	-9.39	-8.92	-8.76	-10.05	-5.38	-7.49	-8.97	-10.79
France	1-3yr	0.55	1.08	0.12	-1.29	1.09	-1.16	-0.04	-2.03
	7-10yr	-2.33	-1.82	-2.63	-4.00	0.19	-2.04	-2.28	-4.23
	20+yr	-10.32	-9.85	-10.18	-11.45	-7.21	-9.28	-11.94	-13.69
Sweden	1-3yr	0.79	4.09	0.27	-3.07	1.00	-4.54	0.75	-5.96
	7-10yr	-1.99	1.22	-4.75	-7.93	-2.91	-8.23	-3.63	-10.05
Australia	1-3yr	0.83	1.46	-0.55	-3.14	1.16	-5.11	2.15	-7.96
	7-10yr	-2.97	-2.37	-6.78	-9.20	-0.14	-6.33	-0.01	-9.91
	20+yr	-9.16	-8.59	-15.21	-17.41	-5.17	-11.05	-7.81	-16.93
New Zealand	1-3yr	-0.05	2.19	-0.11	-2.75	1.57	-4.90	1.19	-3.30
	7-10yr	-4.45	-2.31	-6.20	-8.68	-3.04	-9.22	-4.03	-8.29
	20+yr	-11.60	-9.62	-15.48	-17.71	-12.52	-18.10	-12.03	-15.93
Canada	1-3yr	0.67	1.99	-0.02	1.33	1.25	0.00	1.73	-6.70
	7-10yr	-3.97	-2.71	-6.86	-5.60	-3.55	-4.74	-3.39	-11.40
	20+yr	-10.85	-9.69	-12.82	-11.65	-8.57	-9.69	-10.61	-18.02

Source: FTSE Russell and LSEG. All data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indexes. See Appendix Glossary for list of indexes used for each market. For professional investors only.

Inflation-Linked Bond Returns

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

		3M		6M		YTD		12M	
		Local	GBP	Local	GBP	Local	GBP	Local	GBP
US	1-5yr	0.38	3.77	-0.38	0.48	1.64	0.17	2.61	-7.24
	5-10yr	-2.64	0.65	-4.40	-3.58	-1.03	-2.47	0.30	-9.32
	20+yr	-11.48	-8.49	-13.16	-12.41	-7.92	-9.25	-6.20	-15.20
UK	1-5yr	2.47	2.47	1.33	1.33	2.47	2.47	5.86	5.86
	5-10yr	1.37	1.37	-1.97	-1.97	2.48	2.48	5.69	5.69
	20+yr	-11.62	-11.62	-22.54	-22.54	-18.14	-18.14	-17.29	-17.29
Japan	1-5yr	0.52	0.71	1.58	-9.02	2.66	-10.54	3.15	-9.64
	5-10yr	-0.70	-0.50	2.11	-8.55	3.25	-10.03	2.78	-9.96
EM	1-5yr	3.45	3.89	4.18	1.86	9.52	7.14	13.45	4.13
	5-10yr	0.28	0.87	2.11	1.15	6.63	6.23	12.77	5.80
	20+yr	-3.42	-2.75	2.60	5.29	5.00	9.11	8.10	6.88
Germany	1-5yr	0.43	0.96	0.11	-1.30	0.96	-1.29	1.39	-0.63
	5-10yr	-1.91	-1.40	-1.49	-2.87	1.01	-1.25	1.26	-0.76
	20+yr	-12.13	-11.67	-10.76	-12.02	-5.48	-7.59	-7.52	-9.36
Italy	1-5yr	0.23	0.76	0.32	-1.09	1.83	-0.45	4.32	2.24
	5-10yr	-3.84	-3.33	-1.57	-2.96	2.91	0.62	7.17	5.03
	20+yr	-17.54	-17.11	-12.32	-13.55	-2.96	-5.12	0.57	-1.44
Spain	1-5yr	0.19	0.71	0.03	-1.38	1.23	-1.03	1.84	-0.20
	5-10yr	-1.93	-1.42	-1.53	-2.91	0.98	-1.27	2.66	0.61
France	1-5yr	-0.20	0.33	-0.39	-1.79	0.60	-1.65	1.21	-0.81
	5-10yr	-2.01	-1.50	-1.61	-3.00	0.93	-1.32	1.63	-0.39
	20+yr	-12.59	-12.13	-10.62	-11.88	-6.32	-8.41	-5.91	-7.79
Sweden	1-5yr	0.98	4.29	0.01	-3.33	1.51	-4.06	3.44	-3.46
	5-10yr	-0.59	2.67	-2.62	-5.86	-0.38	-5.84	-0.17	-6.82
Australia	1-5yr	0.80	1.43	-0.10	-2.70	3.91	-2.53	7.21	-3.39
	5-10yr	-1.08	-0.46	-3.02	-5.54	3.93	-2.52	7.26	-3.36
	20+yr	-8.18	-7.61	-13.07	-15.33	-1.77	-7.86	3.43	-6.80
New Zealand	5-10yr	-3.70	-1.55	-3.45	-6.00	1.29	-5.16	3.39	-1.20
Canada	20+yr	-10.32	-9.15	-11.32	-10.12	-15.06	-16.10	-8.78	-16.35

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

Global Bond Yields

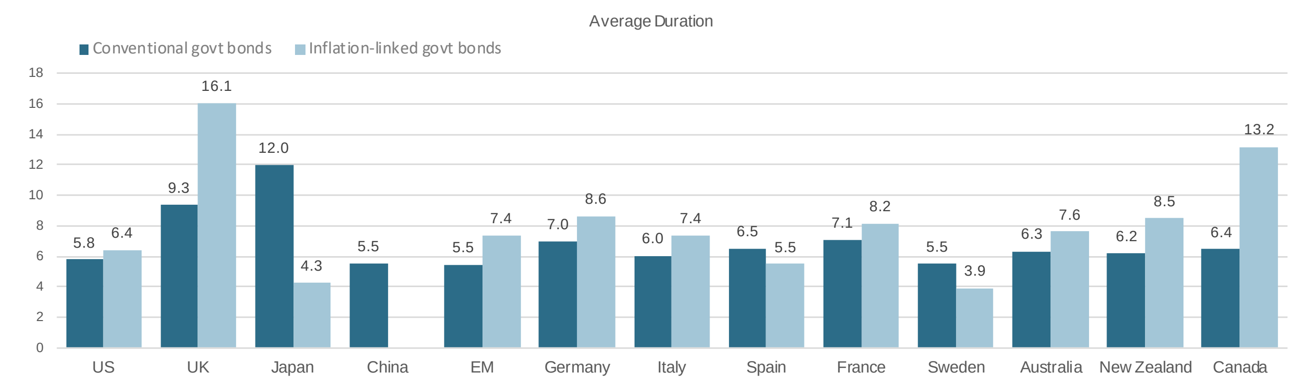
Green highlight indicates highest 15%, red indicates lowest 15%

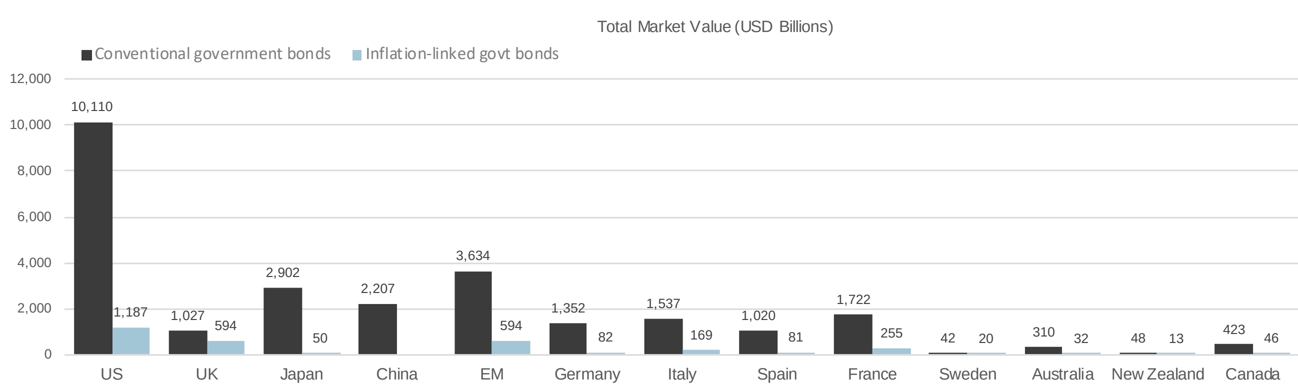
		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	5.16	4.71	4.59	4.82	2.72	2.29	2.37	6.06	8.93
	3M Ago	5.02	4.31	3.88	4.01	2.48	1.77	1.75	5.58	8.67
	6M Ago	4.25	3.82	3.58	3.87	1.52	1.26	1.58	5.38	8.76
	12M Ago	4.26	4.13	3.80	3.89	2.02	1.75	1.87	5.70	9.59
UK	Current	4.73	4.46	4.35	4.81	0.55	0.53	1.39		
	3M Ago	5.32	4.97	4.35	4.35	1.73	0.70	0.93		
	6M Ago	3.70	3.45	3.35	3.75	-0.03	-0.30	0.34		
	12M Ago	4.45	4.44	4.16	3.86	-0.87	0.12	0.41		
Japan	Current	0.01	0.21	0.66	1.61	-1.75	-0.70			
	3M Ago	-0.11	-0.01	0.28	1.17	-1.61	-0.89			
	6M Ago	-0.10	0.01	0.25	1.20	-1.39	-0.59			
	12M Ago	-0.07	0.02	0.27	1.27	-1.34	-0.77			
China	Current	2.24	2.42	2.70	3.06					
	3M Ago	2.12	2.34	2.69	3.09					
	6M Ago	2.33	2.57	2.84	3.25					
	12M Ago	2.06	2.41	2.78	3.19					
EM	Current	8.32	7.12	7.13		3.27	4.48	5.32	6.43	11.01
	3M Ago	8.74	6.87	6.54		4.20	4.12	4.92	5.94	11.85
	6M Ago	7.98	7.08	6.62		2.30	3.49	5.18	5.81	11.35
	12M Ago	8.72	7.89	7.34		2.62	3.47	5.23	6.09	13.31
Germany	Current	3.21	2.78	2.75	2.97	0.87	0.44	0.52		
	3M Ago	3.15	2.65	2.38	2.39	0.87	0.15	-0.07		
	6M Ago	2.62	2.32	2.24	2.34	-0.06	-0.10	-0.10		
	12M Ago	1.71	1.91	2.10	2.14	-0.44	-0.08	-0.06		
Italy	Current	3.94	4.03	4.50	5.02	1.68	2.31	2.43		
	3M Ago	3.76	3.70	3.87	4.26	1.64	1.75	1.68		
	6M Ago	3.17	3.38	3.87	4.36	0.41	1.52	1.80		
	12M Ago	2.99	3.59	4.29	4.45	-0.28	2.08	2.17		
France	Current	3.33	3.14	3.26	3.79	0.82	0.75	1.12		
	3M Ago	3.20	2.93	2.85	3.21	0.75	0.41	0.57		
	6M Ago	2.75	2.62	2.70	3.17	-0.35	0.08	0.56		
	12M Ago	1.97	2.21	2.53	3.00	-0.65	0.20	0.65		
Sweden	Current	3.50	3.18	2.98		1.42	1.28			
	3M Ago	3.45	2.94	2.63		1.17	0.92			
	6M Ago	2.78	2.50	2.20		0.07	0.25			
	12M Ago	2.38	2.50	2.28		-0.71	-0.24			
Australia	Current	4.14	4.10	4.43	4.86	1.30	1.78	2.24		
	3M Ago	4.05	3.87	3.90	4.24	0.95	1.37	1.78		
	6M Ago	2.98	2.95	3.25	3.80	-0.02	0.82	1.45		
	12M Ago	3.49	3.69	3.91	4.15	0.75	1.54	2.00		
New Zealand	Current	5.63	5.35	5.32	5.54	2.50	2.89			
	3M Ago	4.99	4.59	4.56	4.72	1.37	1.99			
	6M Ago	4.70	4.28	4.17	4.40	1.01	1.70			
	12M Ago	4.15	4.18	4.20	4.51	1.11	2.03			
Canada	Current	4.88	4.37	4.07	3.85	2.35	2.29	2.13		
	3M Ago	4.68	3.93	3.44	3.22	2.00	1.66	1.54		
	6M Ago	3.86	3.20	2.93	3.07	1.09	1.11	1.39		
	12M Ago	3.81	3.50	3.19	3.11	1.51	1.29	1.47		

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

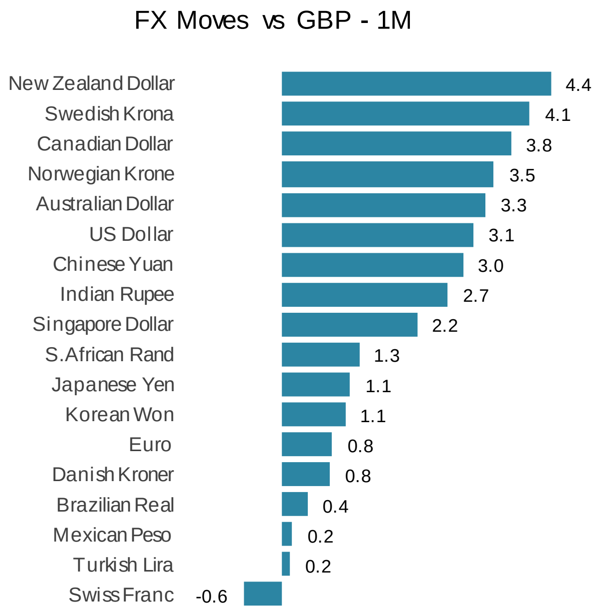
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.4	16.6	**5.8**	2,336.3	1,016.5	1,147.5	**10,110.2**	7.0	21.2	**6.4**	374.4	114.8	**1,186.8**
UK	3.4	7.5	17.9	**9.3**	129.3	178.5	272.7	**1,026.8**	6.9	27.2	**16.1**	97.3	220.6	**593.8**
Japan	3.9	8.0	23.7	**12.0**	347.2	333.9	626.2	**2,901.5**	7.3		**4.3**	19.1		**50.1**
China	3.7	7.5	17.6	**5.5**	450.8	347.6	252.7	**2,207.1**						
EM	3.6	6.9	15.8	**5.5**	738.7	655.5	345.3	**3,633.5**	5.8	13.4	**7.4**	105.8	159.9	**594.1**
Germany	3.8	7.6	20.3	**7.0**	296.0	204.2	142.9	**1,351.8**	7.1	21.6	**8.6**	41.2	16.6	**82.5**
Italy	3.7	7.2	15.7	**6.0**	269.1	227.2	134.1	**1,537.0**	7.8	26.1	**7.4**	54.7	4.6	**168.6**
Spain	3.8	7.5	16.8	**6.5**	196.3	175.1	88.7	**1,020.2**	6.6		**5.5**	21.5		**80.6**
France	3.6	7.5	19.4	**7.1**	312.4	302.3	190.1	**1,721.8**	6.6	24.2	**8.2**	98.6	18.6	**254.5**
Sweden	3.6	7.5		**5.5**	13.2	8.4		**41.8**	5.7		**3.9**	9.4		**20.3**
Australia	3.4	7.6	17.1	**6.3**	49.8	83.6	13.6	**310.3**	7.1	22.1	**7.6**	9.4	2.4	**31.9**
New Zealand	3.7	7.5	16.1	**6.2**	9.7	13.1	2.2	**48.0**	6.2		**8.5**	3.0		**12.9**
Canada	3.5	7.5	19.1	**6.4**	54.8	106.8	56.8	**422.8**	6.8	20.4	**13.2**	7.9	18.0	**45.7**

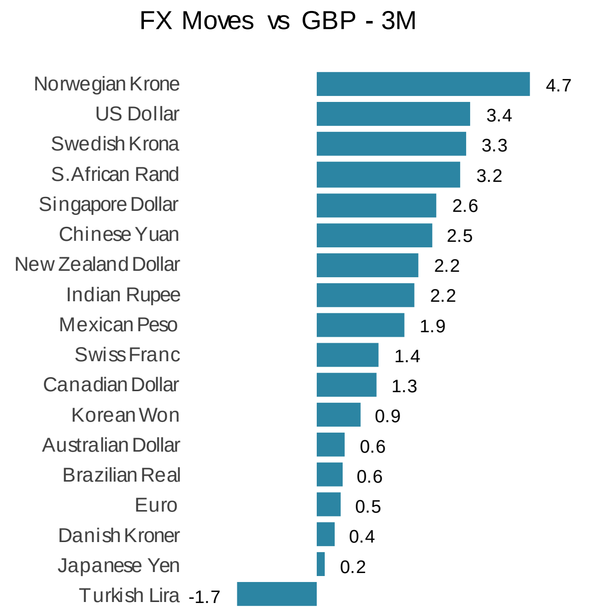
	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	10.2	8.1	6.9	6.4	6.8	68.6	431.6	2513.0	3216.0	6229.3	3.9	1012.6
Europe	5.7	4.7	4.5	4.2	4.4	11.0	177.5	1147.5	1381.6	2717.6		
EM		5.5	4.6	4.9	4.9		45.2	216.4	311.9	573.4	3.3	183.7

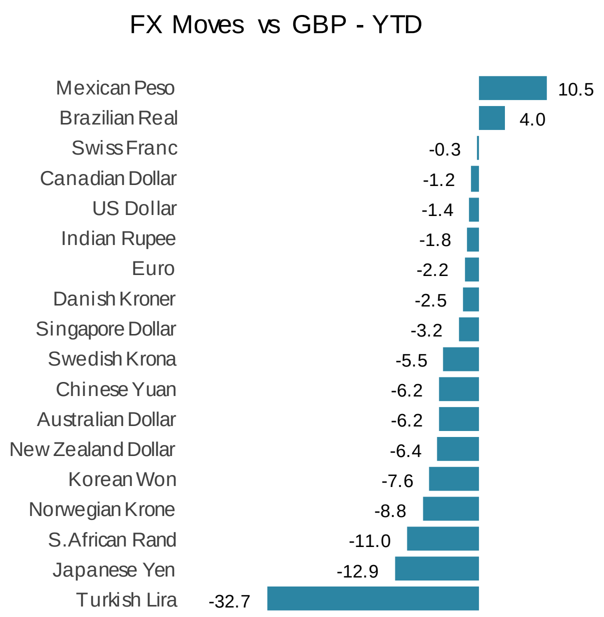


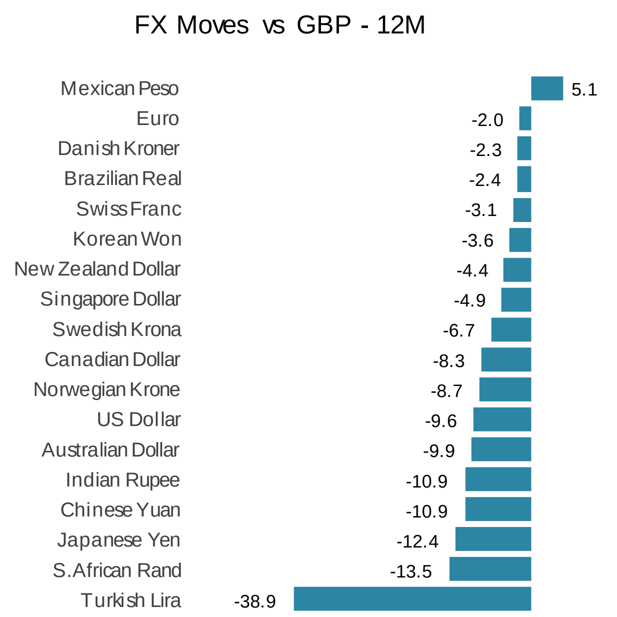


Appendix – Foreign Exchange Returns % as of September 30, 2023









Appendix - Glossary

Bond markets are based on the following indices:

FTSE World Government Bond Index (WGBI) for all global government bond markets

FTSE World Inflation-Linked Securities Index (WorldILSI) for all global inflation-linked bond markets

FTSE US Broad Investment-Grade Bond Index (USBIG®) for the US corporate bond market

FTSE US High-Yield Market Index for the US high yield bond market

FTSE Euro Broad Investment-Grade Bond Index (EuroBIG®) for the Euro-denominated corporate bond market

FTSE European High-Yield Market Index for the European high yield market

FTSE Chinese Government and Policy Bank Bond Index (CNGPBI) for the Chinese government bond market

FTSE Emerging Markets Inflation-Linked Securities Index (EMILSI) for the emerging markets inflation-linked bond market

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

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

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

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

List of Abbreviations used in charts:

IL = Inflation-linked bonds

IG = Investment-grade bonds

HY = High-yield bonds

BPS = Basis points

EM = Emerging market

LC = Local currency