

Fixed Income Insights

MONTHLY REPORT - JULY 2023 | EUROZONE EDITION

FOR PROFESSIONAL INVESTORS ONLY

Long Italian IL govts underpinned by lower inflation and recovery in risk appetite

The Eurozone economy moved into a ‘technical recession’ as Q1 2023 growth contracted. Inflation fell and wage inflation softened, though labour markets stayed at historical lows. Improved risk appetite underpinned long Italian governments. Gilts and JGBs underperformed on higher inflation and a weak yen. Credit outperformed.

Macro and policy backdrop – Wide dispersion in inflation and de-synchronised cycles predominate

Differing Covid policies helped de-synchronise G7 cycle, as QT shrank liquidity. Services more buoyant. (pages 2-3).

Yields, curves and spreads – Structural flattening continues, US Treasuries range-trade, and credit finds sweet spot

Deep curve inversion continues, as investors focus on re-investment risk. IG begins to benefit from relative value. (pages 4-5).

Sovereign and climate bonds – Euro green bonds dominate the Global Green index

Euro green bonds dominate currency weights in the Global Green index at 68.3%, in contrast to the low USD weight (18%). (page 6).

Performance – Currency moves dominated Q2, led by weak yen, while Euro HY credit gained YTD

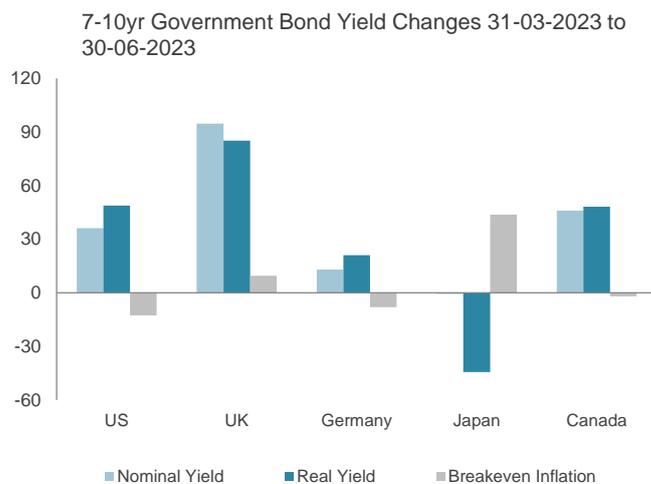
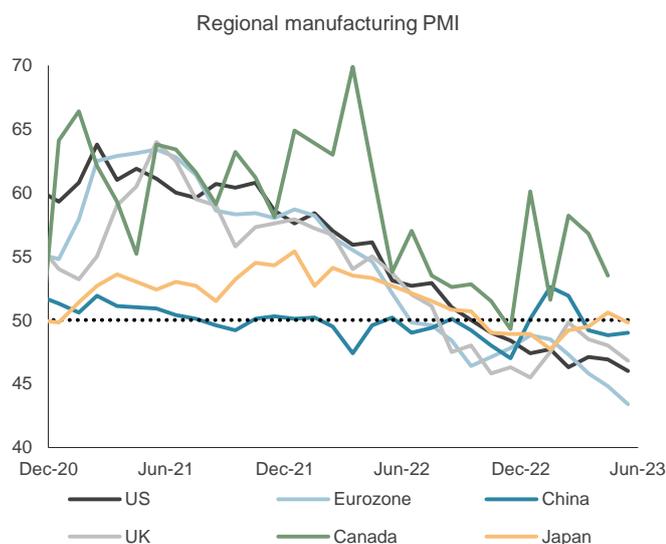
JGBs lost up to 8%, on currency weakness in Q2. Long Bunds and euro credits gained up to 7% (Bunds IL) YTD. (pages 7-8).

Appendix (from page 10)

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

Chart 1: Since the post-Covid rebound, manufacturing sectors were squeezed by G7 tightening moves and demand shifting to services.

Chart 2: Nominal and real yield increases in the UK, US and Germany in Q2, and higher Japanese breakevens stood out.



Source: FTSE Russell. All data as of June 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

The ECB need to further tighten policy raises the possibility of Eurozone growth turning negative in 2023 and estimates being revised down, after the region entered a ‘technical recession’ in Q1. Euro strength and US dollar weakness reflect different monetary policy phases. Easing of global supply chain pressures help services to rebound, but PMI stay weak.

G7 growth forecasts reflect policy tightening and its impact, though service sectors are more robust than tradeable goods, and interest rate sensitive sectors like housing. The Eurozone entered into a ‘technical recession’ after the economy contracted in Q4 22 and Q1 2023 (by 0.1%). ‘Higher for longer’ rates suggest current 0.6% growth estimates could be revised lower (Chart 1).

The US dollar fell 2-3% June, as markets priced in a Fed policy pause, after softer US data for May, and a less hawkish tone on the labour market from Fed Chairman Powell. Further easing from the PBoC weakened the renminbi, while the euro, sterling and Canadian dollar rallied on higher inflation and rates. Yen weakness continues as the BoJ retains curve control (Chart 2).

Chart 3 shows the breakdown in the negative correlation between the US dollar and commodity prices since the Ukraine shock in 2022. The higher US dollar was accompanied by higher (and not weaker) commodity prices, complicating G7 inflation control.

Global supply chain pressures have eased considerably in 2022-23, since the Covid lockdowns ended in Asia, and shipping costs fell sharply as Chart 4 shows. This may reflect the impact of consumer demand shifting towards services.

Chart 1: Eurozone GDP contracted in the last two consecutive quarters (technical recession), suggesting ‘higher rate for longer’ heightens the risk of negative growth in 2023, unlike estimates.

Latest Consensus Real GDP Forecasts (% , June 2023)			
	2022	2023	2024
US	2.1	1.2	0.6
UK	4.1	0.2	0.8
Eurozone	3.3	0.6	1.0
Japan	1.6	1.1	1.2
China	3.0	5.4	5.0
Canada	3.5	0.7	1.4

Chart 2: The dollar fell in June, on the Fed policy pause, after softer US inflation. The renminbi also fell on PBoC easing. But the euro and sterling gained on the 25bp and 50bp tightening moves.

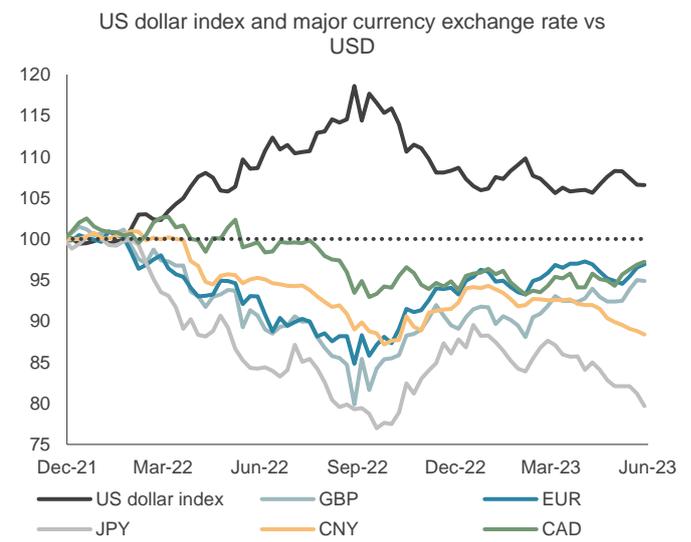
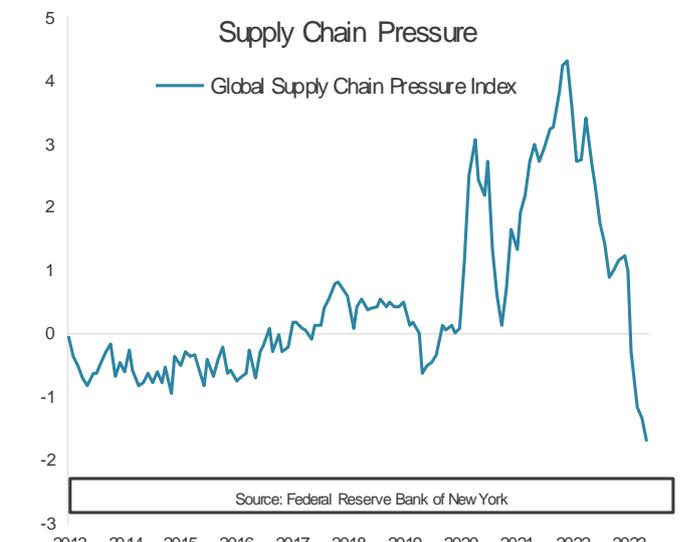
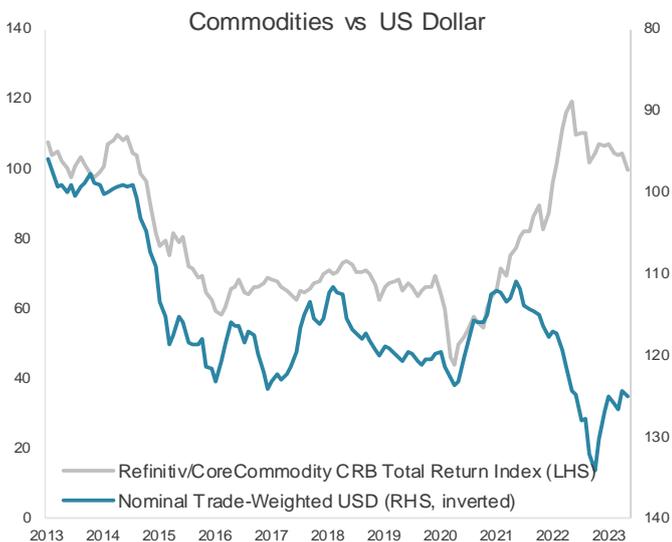


Chart 3. Negative correlation between commodity prices and the US dollar broke down after the Ukraine shock in 2022, and the Fed began tightening monetary policy.

Chart 4. Global supply chain pressures eased considerably in 2022-23 due to lower shipping costs and a shift in demand away from goods, as lockdowns are lifted, with services rebounding.



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Financial Conditions and Monetary Policy Settings

The ECB's restrictive policies, together with lower energy prices, began to impact inflation levels in Q2, notably in Spain, the first Eurozone nation to reach the ECB's inflation target. However, labour markets stayed tight and unemployment at historical lows, prompting another ERB rate increase to 4%. G7 central banks' balance sheets contracted further, ex Japan.

Eurozone wage inflation has lagged declining HICP and only now cooled a little as Chart 1 shows. The labour market remains tight and unemployment at a historical low of 6.5% y/y in June, suggesting companies are labour hoarding during the slowdown.

The decline in HICP to 5.5% y/y in June (Chart 2) mostly reflected the drop in energy prices, as core inflation of 5.4% y/y (up from 5.3% y/y in May) remained close to its March peak (5.7% y/y). Spain was the first European nation to reach the ECB's 2% inflation target. However, the slow pace of disinflation may delay rate cuts until 2024-25.

Monetary policy has diverged materially, both within the G7 and including China, reflecting dispersion in inflation rates. The Fed's pause on rates was in stark contrast to the ECB and BoC's 25bp and BoE's 50bp increases in June. The PBoC's easing in the cost of credit reinforces earlier easing measures, with Chinese inflation near zero (Chart 3).

Chart 4 shows G7 central banks' balance sheets have declined in most countries, except in Japan, which has been adding to its bond portfolio under yield curve control. The ECB's balance sheet contraction was boosted by the unwinding of TLTROs in 2022.

Chart 1: Eurozone wage growth fell a little, suggesting some relief to tight labour markets currently at historical 6.5% lows. HICP inflation eased to 5.5% y/y in June, but not core CPI, up 5.4% y/y.

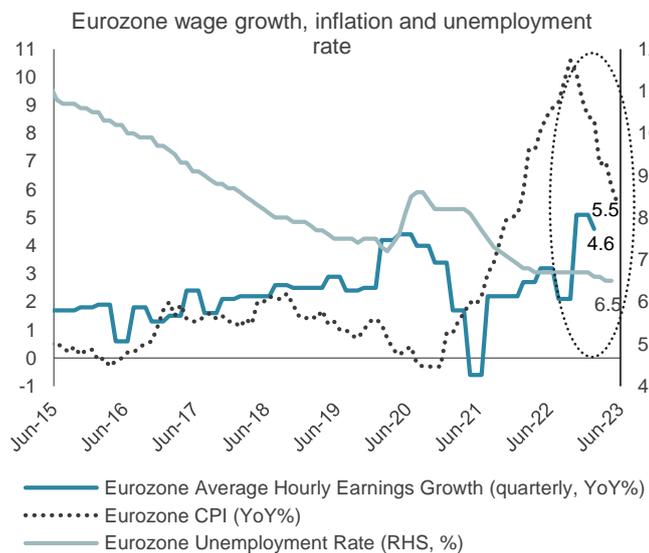


Chart 2: Except in Japan, G7 inflation is gradually falling, thanks to lower energy prices and higher rates. Even in Eurozone, HICP fell to 5.5% y/y, but core inflation remains sticky, close to its March peak.

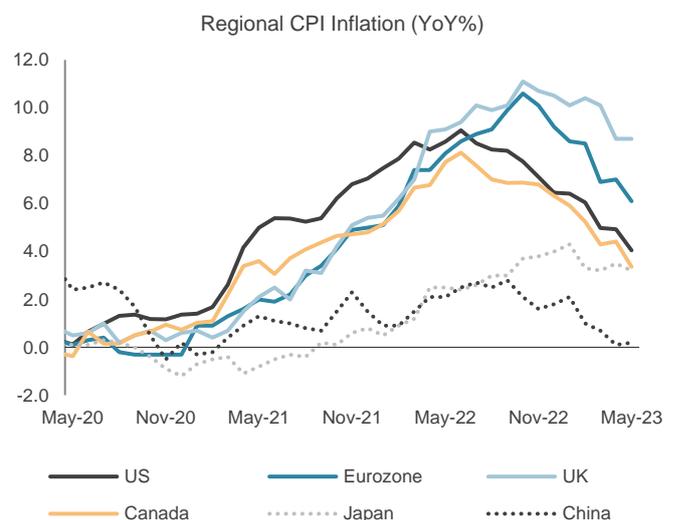


Chart 3: The ECB raised its main refinancing rate by 0.25% to 4.0% in June, as core inflation rose, despite some encouraging signs of lower wage inflation and headline inflation.

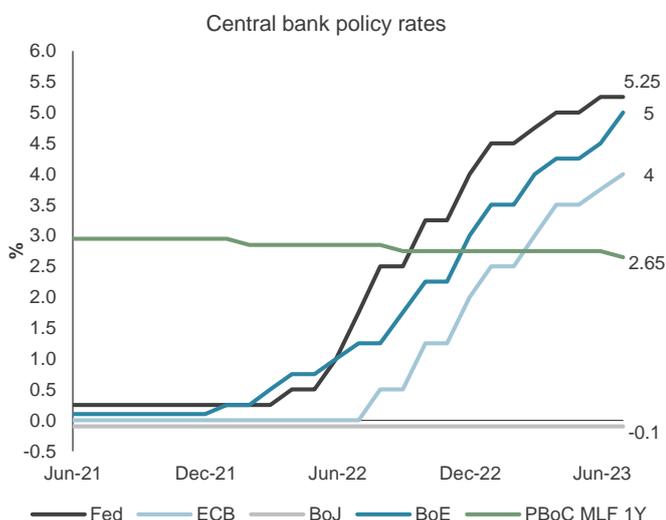
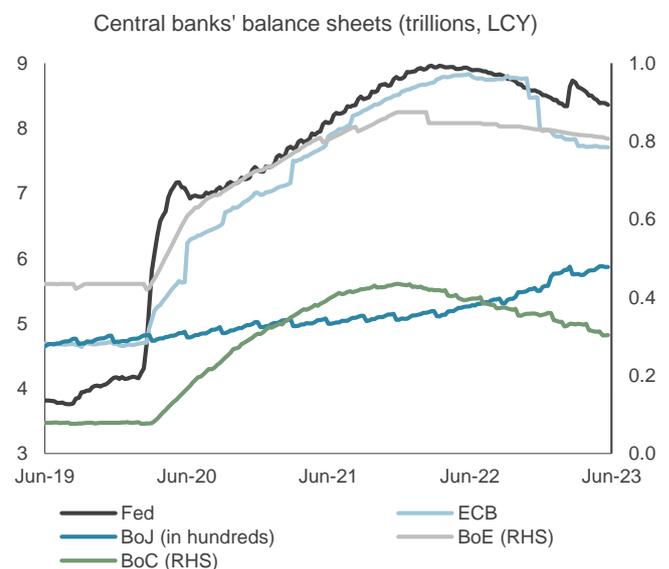


Chart 4: The ECB ended the reinvestment of maturing securities on June 30 under APP, leaving only PEPP to run until 2024. G7 central banks' balance sheets are now falling, except in Japan.



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Global Yields, Curves and Spread Analysis

Chart 1: G7 7-10yr yields edged higher in June. The biggest move was in gilts, which spiked on higher inflation and the BoE's 50bp rise. Bund yields range traded after a well flagged ECB 25bp hike. Euro yields range traded after a well flagged ECB 25bp hike.

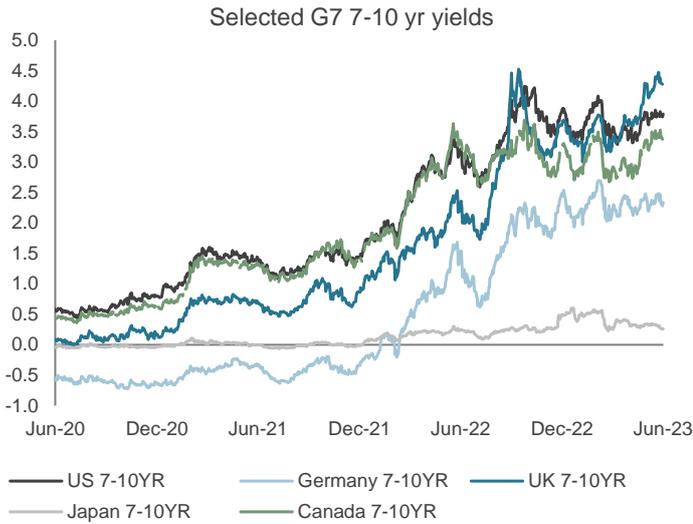


Chart 2: Real yields generally tracked nominals a little higher in June, but the biggest increase was in UK inflation linked. US and UK real yields remain close to the cycle highs of 2022.



Chart 3: Deep inversion of G7 yield curves continues, led by the US 10s/2s, and the March steepening after the banking crisis reversed. BoJ curve control continues to keep the JGB curve positively sloped.

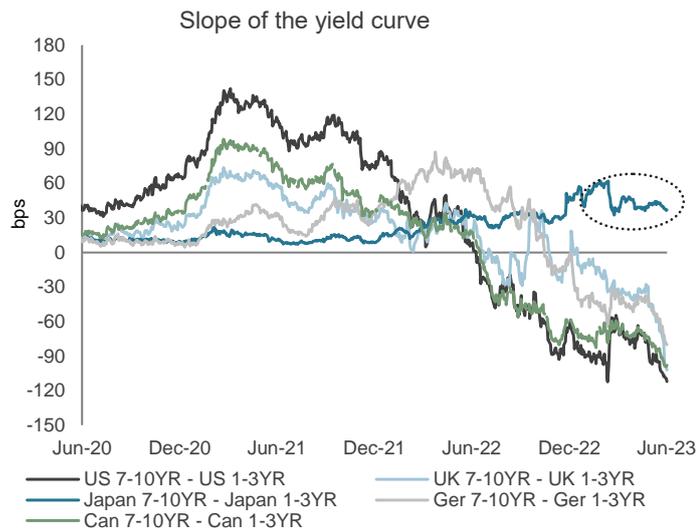


Chart 4: It is a similar story with inversion in long maturities, with Japan the exception. With yields near 15-year highs, investor concern over re-investment risks may be keeping curves inverted.

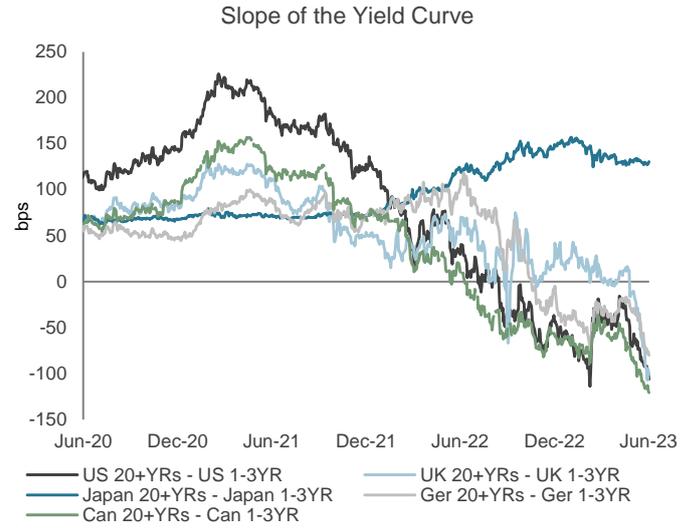


Chart 5: Inflation breakevens moved higher in the UK and Japan in June, while remaining stable near 2% elsewhere. This is in line with persistently higher inflation in the UK and Japan.

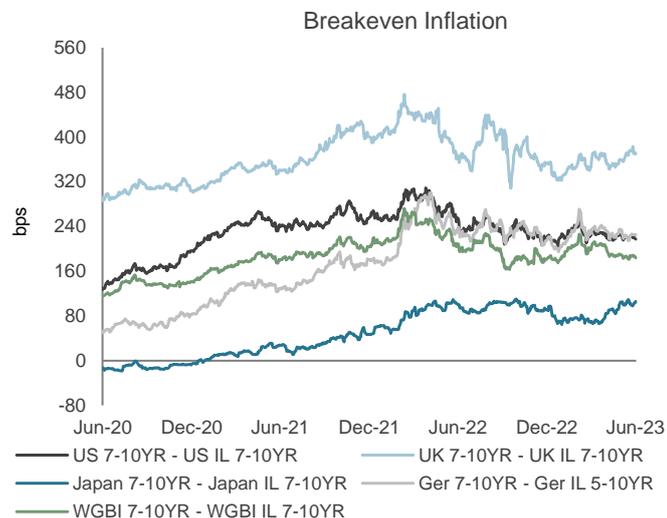


Chart 6: Global inflation breakevens of all tenors have converged near 2%, after a period of much higher short-dated breakevens. There is little evidence of inflation expectations de-stabilising.



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Yield Spread and Credit Spread Analysis

Chart 1: US sovereign spreads widened versus Japan in Q2, but fell sharply versus the UK, after the spike in gilt yields, taking them to new post-Covid lows. Spreads widened versus Bunds.

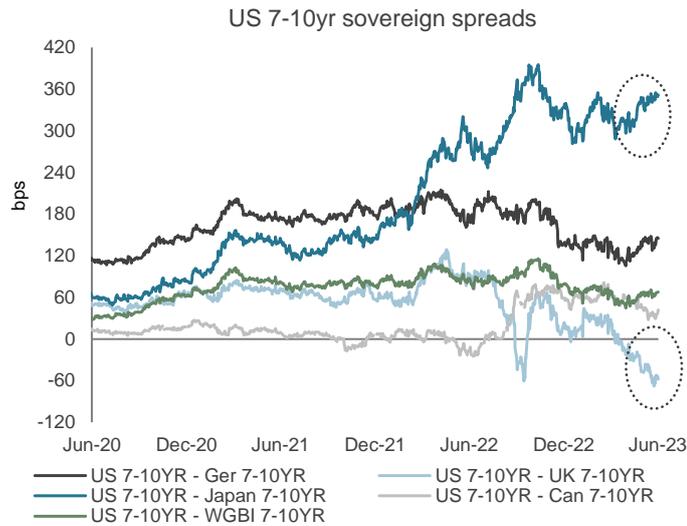


Chart 2: Italy 7-10 year spreads have tightened sharply in Q2, helped by lower energy prices, political stability, and support from the ECB's transmission protection instrument.

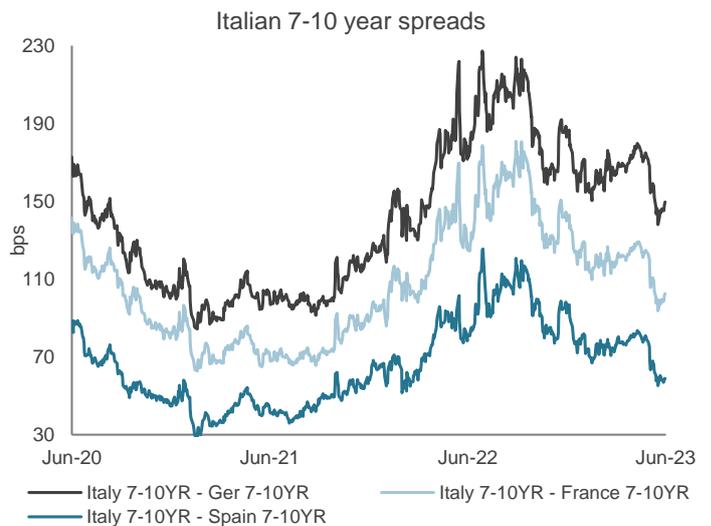


Chart 3: EM spreads remain at, or near post-Covid lows, reflecting early counter-inflation action by EM than the G7, reduced re-financing risks in EM debt, and favourable external accounts.

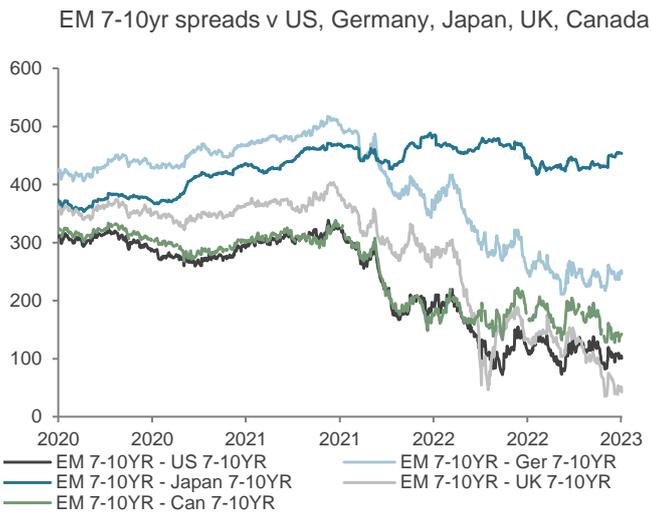


Chart 4: Chinese sovereign spreads tightened further in June, after the PBoC eased rates, and some G7 central banks raised rates. Very low inflation gives the PBoC room to ease rates further.

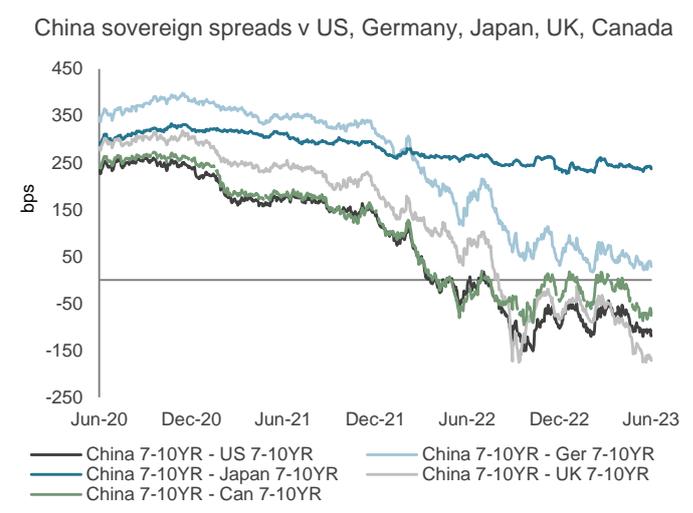


Chart 5: High yield spreads edged wider in June, led by Eurozone spreads, but they remain below Covid levels. US IG credits fell in June, perhaps reflecting the fact spreads are relatively high vs HY.

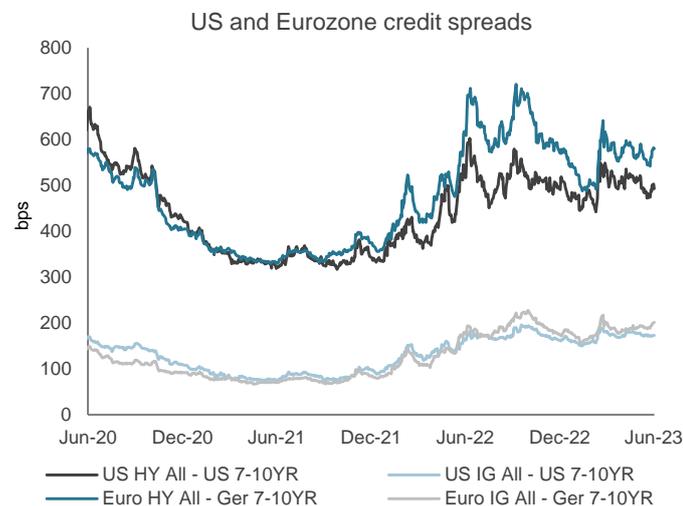


Chart 6: Chinese \$ HY spreads tightened in early June before backing up to 6000bps, after defaults by property developers and a lack of new property stimulus measures. Restructurings made little progress.



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Sovereign and Climate Bonds Analysis

Chart 1: With yields surging in the UK, while near zero in Japan, and Japan's climate-WGBI weight falling, overall WGBI spreads narrowed sharply versus climate WGBI in June, led by 1-3 yrs.

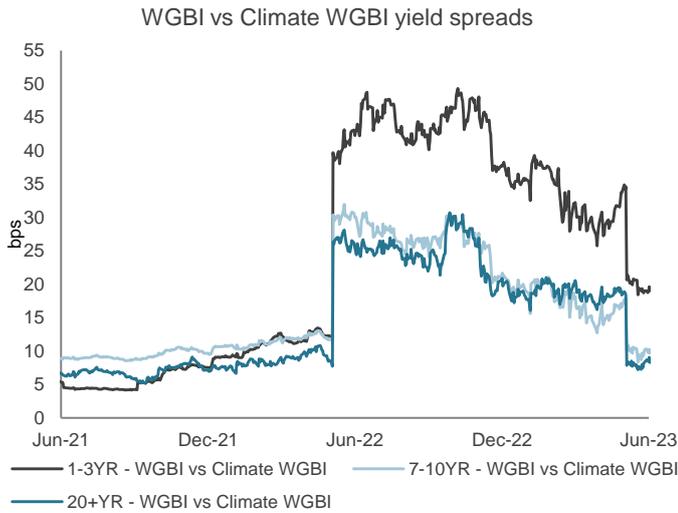


Chart 2: Both a decrease in Japan's overweight in Climate WGBI vs WGBI and an increase in UK's overweight were notable in the June re-weighings, after the UK issued more green gilts.

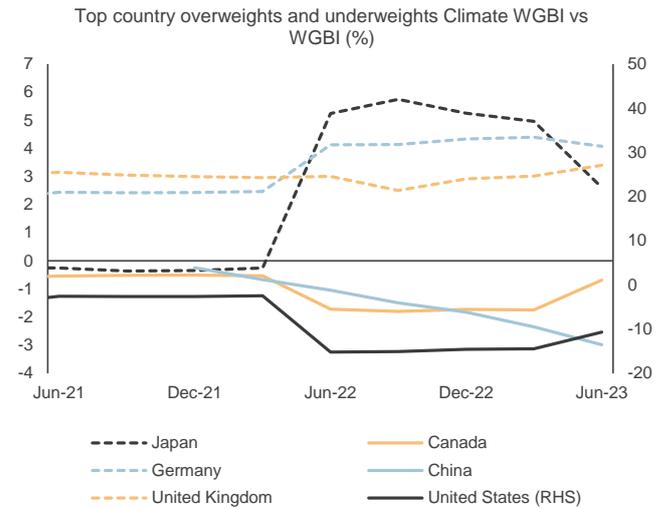


Chart 3: Within IG credit, green corporates are underweight in higher-rated sectors of AAA/AA vs global peers, and overweight most in the BBB sector (54.7% vs 51.4%).

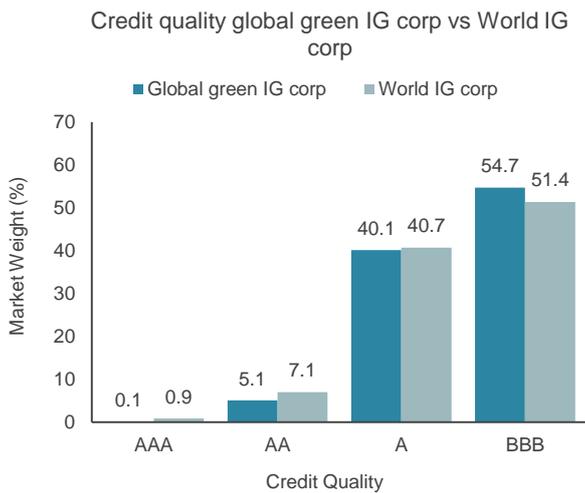


Chart 4: The opposite is seen in HY – higher rated BB bonds have a much larger share compared with global peers, 89.2% vs 54.5%, suggesting better credit quality for HY green corporates.

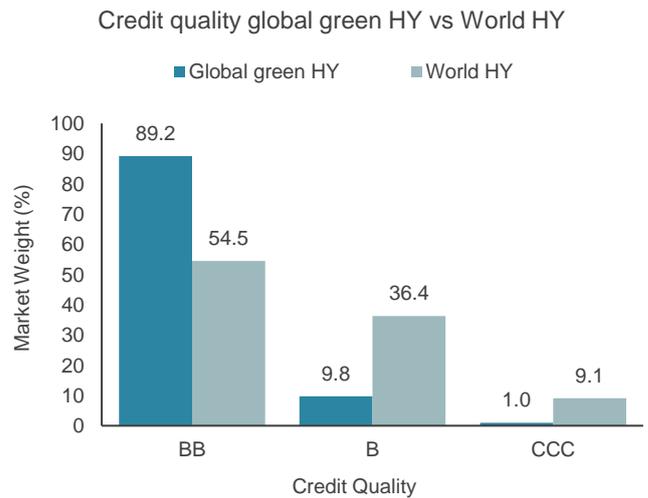


Chart 5: Euro green bonds dominate currency weights in the Global Green index at 68.3%, in contrast to the low USD weight (18%). This is reversed in WorldBIG with a USD weight of 55%.

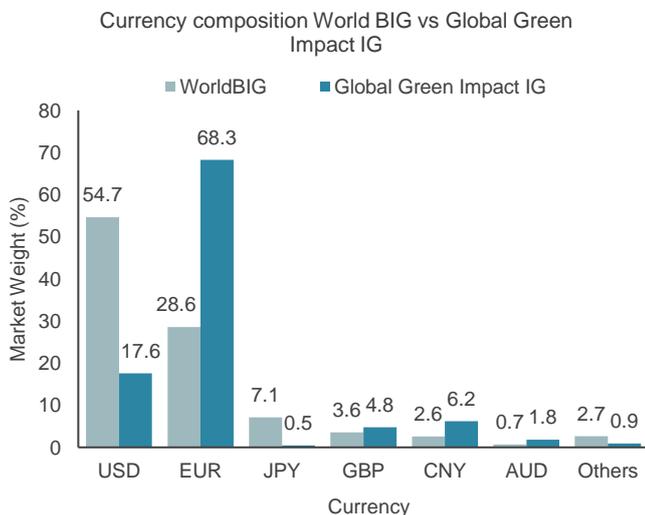
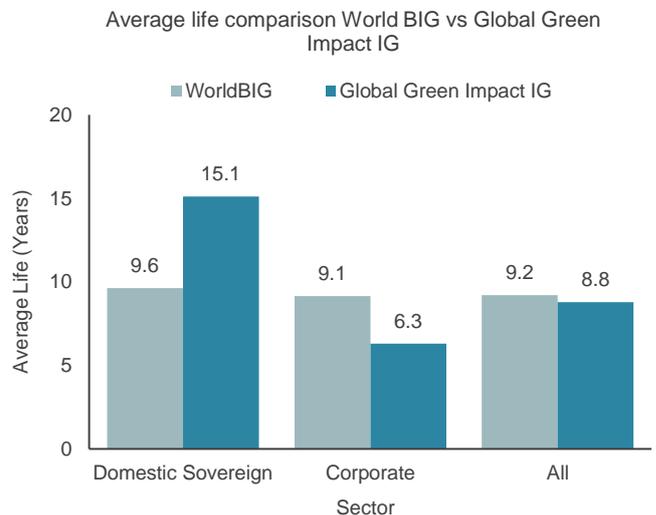


Chart 6: Breakdown of Global Green & WorldBIG indices shows differences in average life for different components. Corporates offset the Sovereign impact in boosting Global Green average life.



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Global Sovereign Bond Returns – 3M and YTD % (EUR & LC, TR) as of June 30, 2023

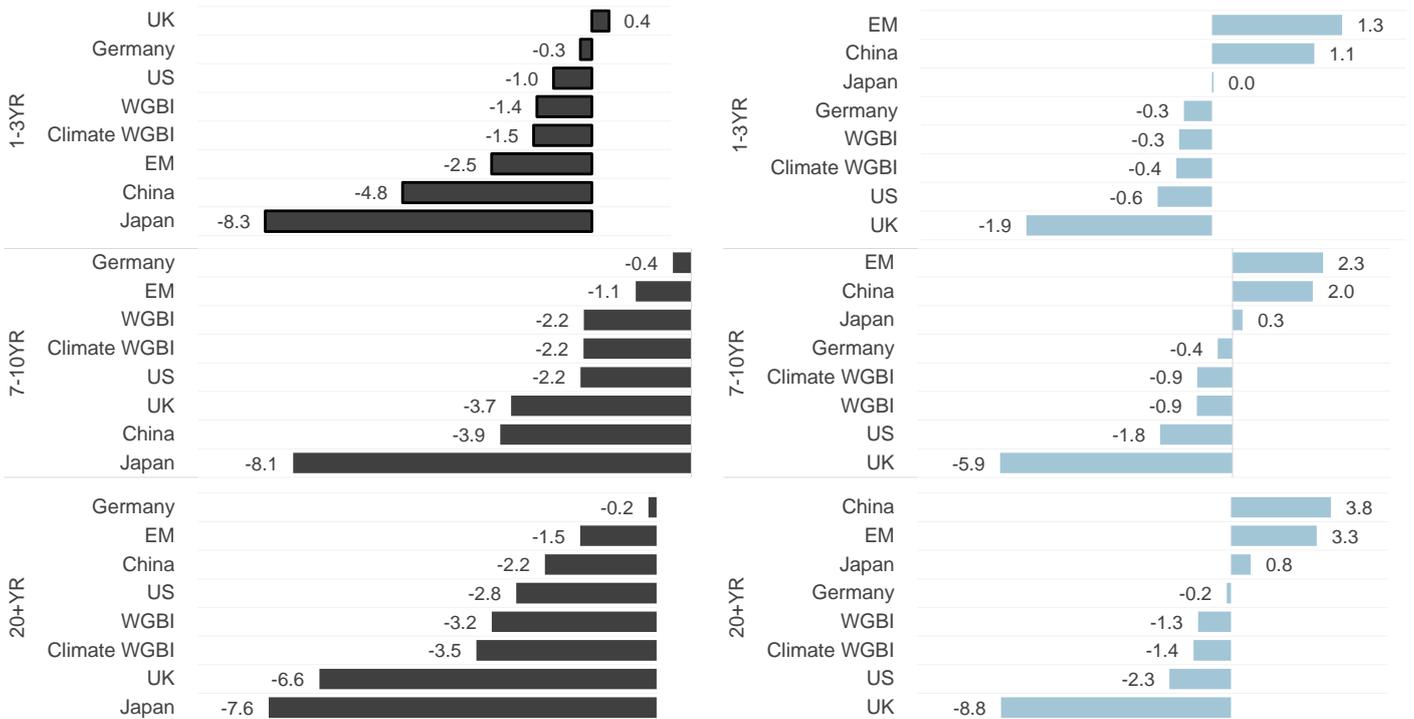
Most government bonds returns were lower in the last three months, driven by higher inflation and rates. Currency moves affected overseas returns in euros. 10/2s UK gilts underperformed most in local terms, but losses were reduced by sterling strength (see page 14). The yen depreciation versus euro turned modest JGB returns into deep losses.

3M returns show the impact of severe yen weakness with the currency falling 8% versus euro, even though JGB returns were modestly positive in yen terms. Long JGBs lost 8% in Q2 as a result.

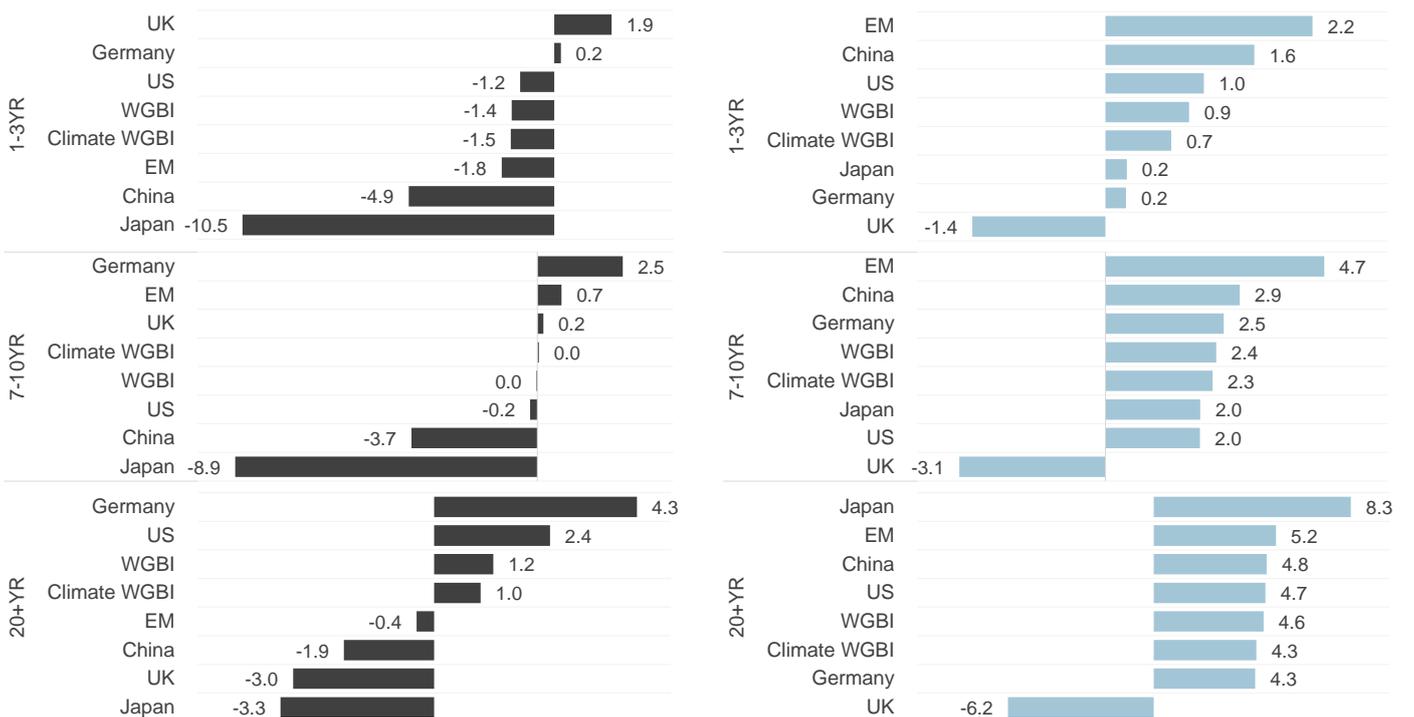
German government bonds have gained 4% since January as inflation eased, while short JGBs lost 11% in euros.

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) as of June 30, 2023

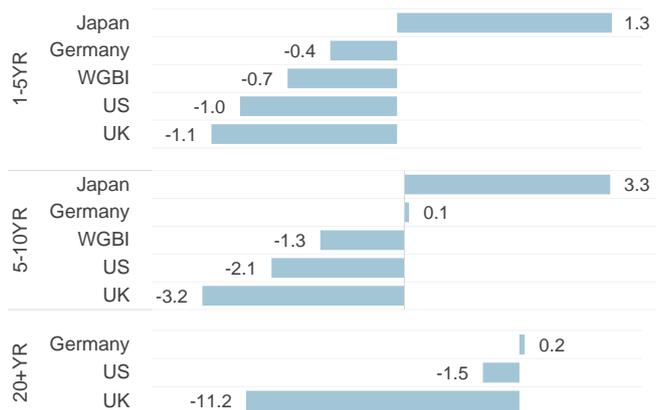
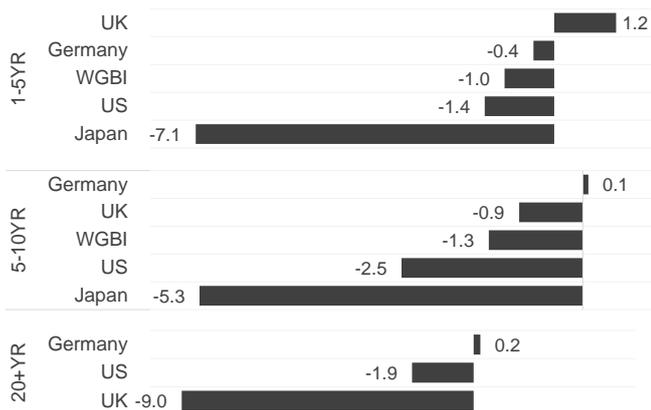
As with conventionals, JGB and longer UK IL were the weakest 3M performers, reflecting higher UK rates and yen weakness, and lost 5-9% in euros. Bund and short UK IL were strongest on 3M, and Bund IL YTD. Euro and US HY credits outperformed YTD, with gains of 3-7%, aided by the risk rally.

High inflation and base rate increases depressed long UK IL on 3M, and YTD, notably underperforming due to ultra-long duration. But sterling strength helped shorter UK index linked (IL) perform well in euros.

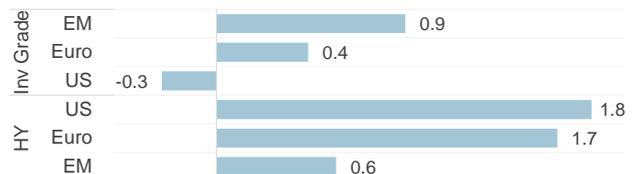
Credit has generally performed well YTD, led by euro credits, with the stronger correlation of HY to equities a factor. Investment grade UK and US credits lost 9% and 2% respectively in euros in Q2, as the BoE and Fed tightened further.

INFLATION LINKED BONDS

3M EUR 3M LCY

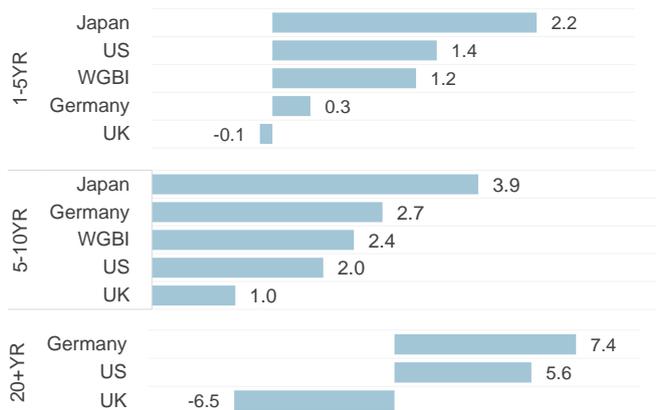
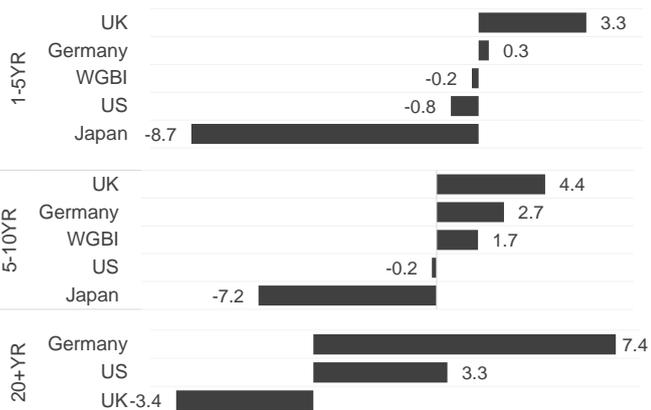


CORPORATE BONDS

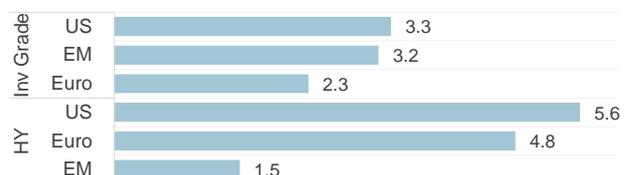
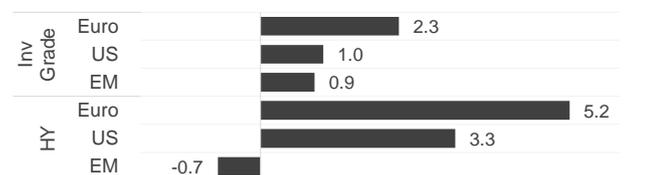


INFLATION LINKED BONDS

YTD EUR YTD LCY



CORPORATE BONDS



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Top and Bottom Bond Returns – 3M & YTD % (USD,TR) as of June 30, 2023

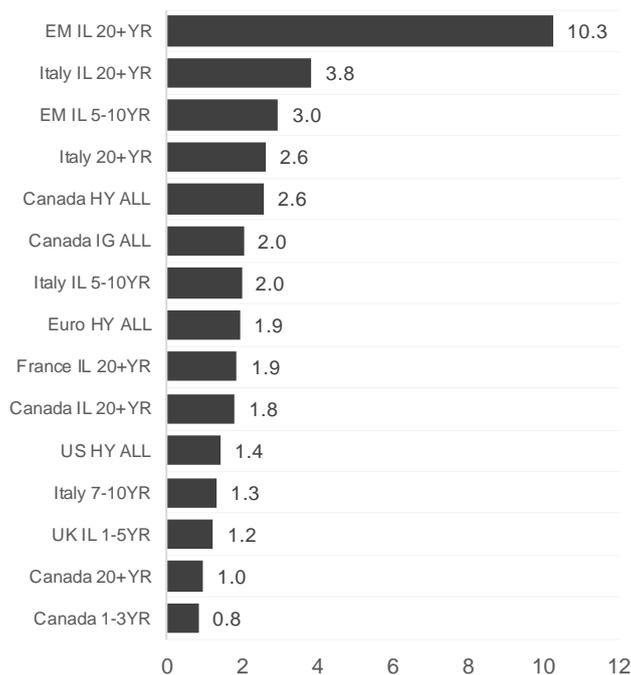
Long Italian inflation linked (IL) and EM IL showed the best returns on 3M of 2-10% and 11-17% YTD. Pronounced yen weakness drove negative JGB returns of up to 8% in Q2 and up to 11% since January in euros. Canadian credits gained.

Currencies have been big drivers of fixed income returns in 2023, reflecting differences in inflation and policy cycles. EM inflation-linked performed strongly, after early counter-inflation tightening. Canadian HY also benefited from short duration and the risk rally.

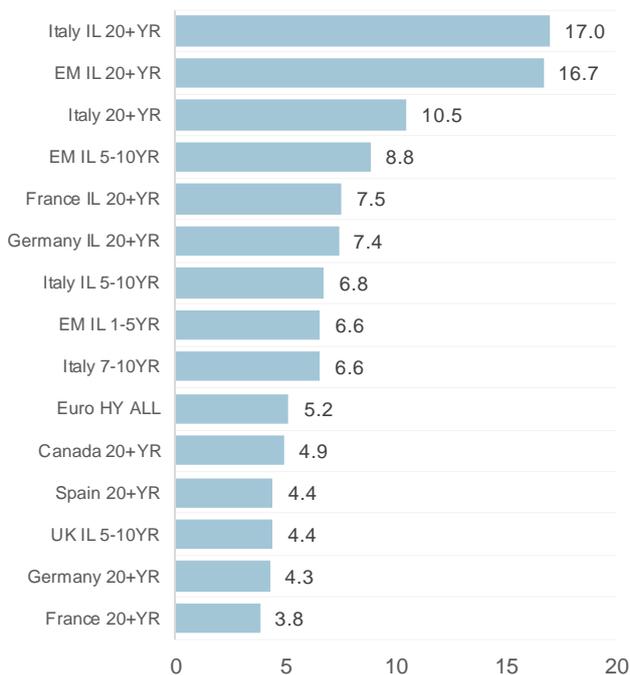
YTD, yen, renminbi and Swedish kroner weakness drove negative returns of 4-11% in euro terms. In contrast, long Eurozone govts benefited from spread convergence as risk appetite recovered, and inflation fell, even if the ECB continues to raise rates.

3M EUR YTD EUR

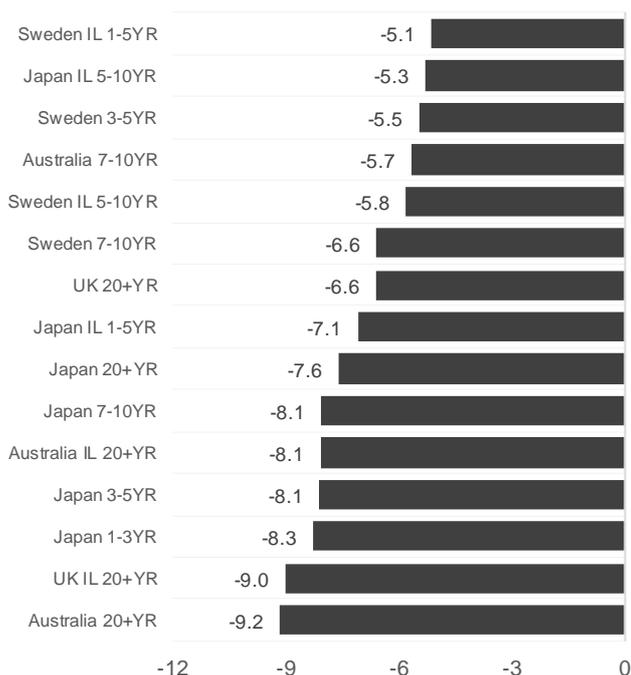
Top 15



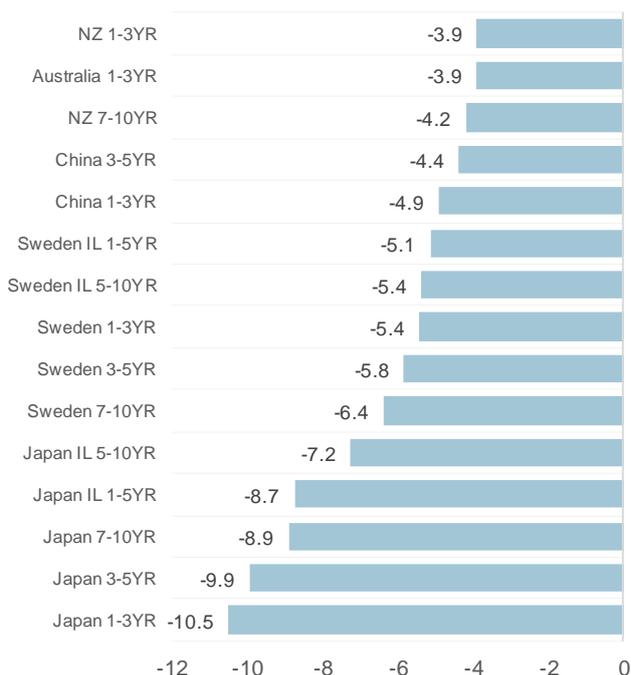
Top 15



Bottom 15



Bottom 15



Source: FTSE Russell. All data as of June 30, 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) – June 30, 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	-0.56	-0.98	1.04	-1.16	1.04	-1.16	0.16	-4.02
	7-10YR	-1.84	-2.25	2.01	-0.21	2.01	-0.21	-3.31	-7.35
	20+YR	-2.35	-2.75	4.73	2.45	4.73	2.45	-8.47	-12.29
	IG All	-0.27	-0.68	3.30	1.05	3.30	1.05	1.46	-2.78
	HY All	1.84	1.41	5.55	3.25	5.55	3.25	9.06	4.50
UK	1-3YR	-1.91	0.44	-1.42	1.93	-1.42	1.93	-2.68	-2.37
	7-10YR	-5.90	-3.65	-3.11	0.17	-3.11	0.17	-12.55	-12.27
	20+YR	-8.80	-6.62	-6.17	-2.99	-6.17	-2.99	-26.94	-26.71
EUR	IG All	0.45	0.45	2.31	2.31	2.31	2.31	0.17	0.17
	HY All	1.67	1.94	4.78	5.16	4.78	5.16	9.23	9.30
Japan	1-3YR	0.01	-8.29	0.23	-10.50	0.23	-10.50	0.03	-9.90
	7-10YR	0.25	-8.07	2.02	-8.90	2.02	-8.90	0.33	-9.63
	20+YR	0.76	-7.61	8.34	-3.25	8.34	-3.25	0.03	-9.90
China	1-3YR	1.05	-4.80	1.58	-4.90	1.58	-4.90	2.76	-9.25
	7-10YR	2.04	-3.87	2.86	-3.71	2.86	-3.71	4.51	-7.71
	20+YR	3.83	-2.19	4.78	-1.91	4.78	-1.91	8.19	-4.46
EM	1-3YR	1.34	-2.54	2.20	-1.78	2.20	-1.78	4.22	-4.32
	7-10YR	2.29	-1.13	4.65	0.71	4.65	0.71	7.78	-1.29
	20+YR	3.29	-1.50	5.17	-0.37	5.17	-0.37	9.45	-1.10
	IG All	0.92	0.50	3.15	0.91	3.15	0.91	2.82	-1.48
	HY All	0.59	0.17	1.50	-0.71	1.50	-0.71	6.41	1.97
Germany	1-3YR	-0.29	-0.29	0.22	0.22	0.22	0.22	-2.40	-2.40
	7-10YR	-0.38	-0.38	2.52	2.52	2.52	2.52	-6.29	-6.29
	20+YR	-0.16	-0.16	4.29	4.29	4.29	4.29	-13.40	-13.40
Italy	1-3YR	-0.08	-0.08	0.98	0.98	0.98	0.98	-1.03	-1.03
	7-10YR	1.31	1.31	6.57	6.57	6.57	6.57	-1.21	-1.21
	20+YR	2.61	2.61	10.52	10.52	10.52	10.52	-6.39	-6.39
Spain	1-3YR	-0.31	-0.31	0.56	0.56	0.56	0.56	-2.18	-2.18
	7-10YR	-0.12	-0.12	3.17	3.17	3.17	3.17	-4.52	-4.52
	20+YR	0.04	0.04	4.43	4.43	4.43	4.43	-9.23	-9.23
France	1-3YR	-0.32	-0.32	0.51	0.51	0.51	0.51	-2.46	-2.46
	7-10YR	-0.28	-0.28	2.62	2.62	2.62	2.62	-5.42	-5.42
	20+YR	0.34	0.34	3.83	3.83	3.83	3.83	-10.88	-10.88
Sweden	1-3YR	-0.34	-4.73	0.24	-5.41	0.24	-5.41	-0.67	-9.70
	7-10YR	-2.30	-6.60	-0.77	-6.37	-0.77	-6.37	-5.29	-13.89
	20+YR					0.00	0.00	0.00	0.00
Australia	1-3YR	-1.52	-2.53	0.10	-3.88	0.10	-3.88	0.66	-6.63
	7-10YR	-4.70	-5.67	1.95	-2.11	1.95	-2.11	0.74	-6.56
	20+YR	-8.22	-9.17	2.34	-1.74	2.34	-1.74	-4.75	-11.64
NZ	1-3YR	-0.14	-2.62	1.43	-3.88	1.43	-3.88	0.75	-4.87
	7-10YR	-1.74	-4.19	1.11	-4.19	1.11	-4.19	-1.57	-7.06
Canada	1-3YR	-1.00	0.83	0.58	0.75	0.58	0.75	0.57	-6.05
	7-10YR	-2.54	-0.74	1.43	1.60	1.43	1.60	2.25	-4.48
	20+YR	-0.87	0.96	4.75	4.93	4.75	4.93	3.60	-3.22

Source: FTSE Russell. All data as of June 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 Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

Appendix – Global Bond Market Returns % (EUR & LC, TR) – June 30, 2023

Inflation-Linked Bond Returns

Top 15% Bottom 15%

Green highlight indicates top 15%, red indicates bottom 15%.

		3M		6M		YTD		12M	
		Local	EUR	Local	EUR	Local	EUR	Local	EUR
US	1-5YR	-0.96	-1.37	1.36	-0.85	1.36	-0.85	-0.71	-4.85
	5-10YR	-2.11	-2.51	2.04	-0.18	2.04	-0.18	-1.73	-5.83
	20+YR	-1.49	-1.90	5.58	3.28	5.58	3.28	-5.97	-9.89
UK	1-5YR	-1.14	1.23	-0.11	3.28	-0.11	3.28	1.01	1.33
	5-10YR	-3.20	-0.88	0.99	4.41	0.99	4.41	-4.18	-3.88
	20+YR	-11.15	-9.02	-6.53	-3.36	-6.53	-3.36	-29.11	-28.88
EUxUK	1-5YR	-0.41	-0.41	0.31	0.31	0.31	0.31	-2.06	-2.06
	5-10YR	0.07	0.07	2.74	2.74	2.74	2.74	-1.92	-1.92
	20+YR	0.21	0.21	7.40	7.40	7.40	7.40	-5.61	-5.61
Japan	1-5YR	1.32	-7.10	2.19	-8.74	2.19	-8.74	3.21	-7.04
	5-10YR	3.26	-5.31	3.88	-7.23	3.88	-7.23	4.33	-6.03
EM	1-5YR	1.29	0.33	6.05	6.58	6.05	6.58	13.75	9.55
	5-10YR	2.81	2.96	6.67	8.85	6.67	8.85	17.24	15.03
	20+YR	6.56	10.25	9.69	16.70	9.69	16.70	14.96	20.34
Germany	1-5YR	-0.41	-0.41	0.31	0.31	0.31	0.31	-2.06	-2.06
	5-10YR	0.07	0.07	2.74	2.74	2.74	2.74	-1.92	-1.92
	20+YR	0.21	0.21	7.40	7.40	7.40	7.40	-5.61	-5.61
Italy	1-5YR	-0.01	-0.01	1.41	1.41	1.41	1.41	1.56	1.56
	5-10YR	1.97	1.97	6.76	6.76	6.76	6.76	4.55	4.55
	20+YR	3.84	3.84	16.99	16.99	16.99	16.99	2.61	2.61
Spain	1-5YR	-0.43	-0.43	0.78	0.78	0.78	0.78	0.36	0.36
	5-10YR	0.04	0.04	2.76	2.76	2.76	2.76	0.83	0.83
France	1-5YR	-0.36	-0.36	0.53	0.53	0.53	0.53	-2.61	-2.61
	5-10YR	-0.17	-0.17	2.63	2.63	2.63	2.63	-1.74	-1.74
	20+YR	1.86	1.86	7.54	7.54	7.54	7.54	-2.58	-2.58
Sweden	1-5YR	-0.78	-5.14	0.54	-5.13	0.54	-5.13	2.77	-6.57
	5-10YR	-1.48	-5.81	0.30	-5.36	0.30	-5.36	-2.71	-11.55
Australia	1-5YR	-1.11	-2.12	2.79	-1.30	2.79	-1.30	4.14	-3.40
	5-10YR	-2.76	-3.75	4.26	0.11	4.26	0.11	6.14	-1.54
	20+YR	-7.14	-8.09	5.42	1.23	5.42	1.23	4.34	-3.22
NZ	5-10YR	-0.62	-3.09	4.15	-1.31	4.15	-1.31	6.62	0.67
	20+YR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada	20+YR	-0.05	1.80	-0.43	-0.26	-0.43	-0.26	3.51	-3.31

Source: FTSE Russell. All data as of June 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 Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

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

Global Bond Yields

Top 15% Bottom 15%

Green highlight indicates top 15%, red indicates bottom 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	5.01	4.31	3.85	3.95	2.45	1.72	1.68	5.53	8.61
	3M Ago	4.20	3.72	3.49	3.76	1.44	1.17	1.53	5.25	8.45
	6M Ago	4.54	4.13	3.88	4.11	2.09	1.68	1.82	5.50	9.00
	12M Ago	2.96	3.03	2.97	3.28	-0.04	0.64	1.14	4.74	8.86
UK	Current	5.36	5.04	4.38	4.35	1.78	0.72	0.90		
	3M Ago	3.79	3.55	3.43	3.80	0.00	-0.27	0.35		
	6M Ago	3.50	3.65	3.69	3.92	-0.68	0.15	0.49		
	12M Ago	1.94	1.73	2.01	2.51	-2.87	-1.70	-0.71		
Japan	Current	-0.10	-0.01	0.29	1.21	-1.64	-0.87			
	3M Ago	-0.09	0.02	0.30	1.22	-1.30	-0.51			
	6M Ago	0.03	0.15	0.48	1.50	-1.22	-0.54			
	12M Ago	-0.09	-0.02	0.21	1.19	-0.99	-0.67			
China	Current	2.09	2.33	2.66	3.08					
	3M Ago	2.31	2.56	2.84	3.25					
	6M Ago	2.28	2.53	2.85	3.26					
	12M Ago	2.19	2.47	2.82	3.34					
EM	Current	3.67	4.04	4.79	4.42	4.15	4.07	4.86	5.95	
	3M Ago	3.62	4.37	4.69	4.52	2.59	3.67	5.15	5.77	
	6M Ago	3.78	4.38	4.95	4.61	2.79	3.04	5.15	5.92	
	12M Ago	3.64	4.35	4.87	4.82	3.61	3.71	5.26	5.08	
Germany	Current	3.17	2.66	2.37	2.36	0.96	0.19	-0.06		
	3M Ago	2.69	2.36	2.24	2.33	-0.02	-0.12	-0.15		
	6M Ago	2.56	2.53	2.54	2.51	0.40	0.34	0.18		
	12M Ago	0.56	0.32	0.64	1.07	-2.33	-1.57	-1.07		
Italy	Current	3.79	3.71	3.87	4.25	1.74	1.78	1.70		
	3M Ago	3.27	3.43	3.88	4.34	0.45	1.50	1.74		
	6M Ago	3.34	3.72	4.38	4.72	1.16	2.19	2.18		
	12M Ago	1.34	1.90	2.69	3.18	-2.47	0.29	1.01		
France	Current	3.21	2.94	2.85	3.19	0.88	0.47	0.55		
	3M Ago	2.83	2.66	2.70	3.17	-0.29	0.05	0.53		
	6M Ago	2.85	2.82	2.97	3.30	0.15	0.44	0.77		
	12M Ago	0.81	0.85	1.25	2.02	-2.47	-1.28	-0.34		
Sweden	Current	3.43	2.94	2.61		1.18	0.91			
	3M Ago	2.85	2.56	2.25		0.09	0.32			
	6M Ago	2.80	2.65	2.37		-0.24	0.25			
	12M Ago	1.74	1.55	1.38		-1.59	-1.45			
Australia	Current	4.17	3.99	4.02	4.36	1.04	1.47	1.85		
	3M Ago	3.03	3.00	3.27	3.82	0.01	0.82	1.43		
	6M Ago	3.43	3.62	4.01	4.37	0.60	1.45	1.88		
	12M Ago	2.92	3.18	3.38	3.79	-0.41	0.75	1.51		
NZ	Current	5.08	4.67	4.61	4.77	1.53	2.15			
	3M Ago	4.78	4.37	4.23	4.37	1.04	1.72			
	6M Ago	5.00	4.62	4.46	4.54	1.54	2.06			
	12M Ago	3.54	3.77	3.89	4.29	0.39	1.65			
Canada	Current	4.34		3.34	3.13			1.54	5.36	
	3M Ago	3.58		2.87	3.03			1.28	5.00	
	6M Ago	3.90		3.30	3.31			1.33	5.27	
	12M Ago	3.08		3.21	3.18			1.23	4.83	

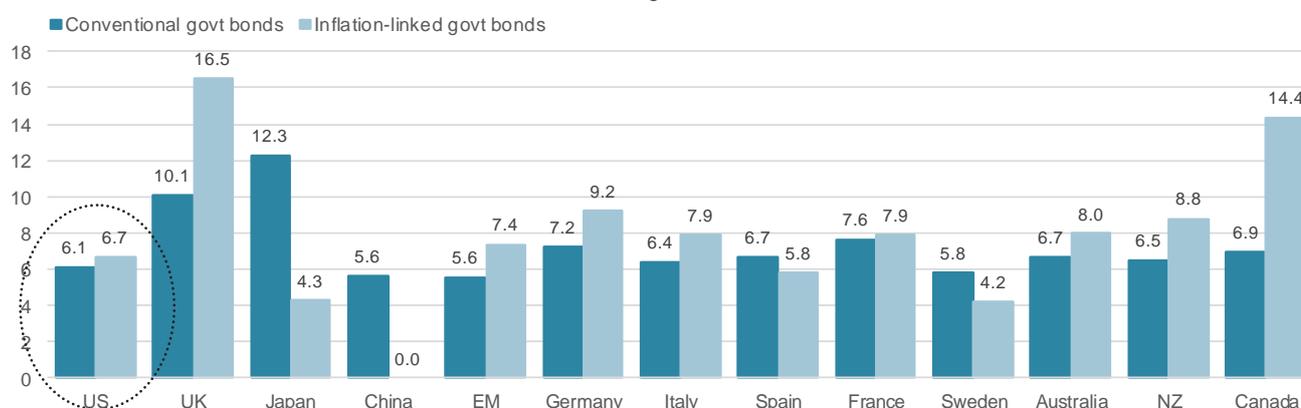
Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors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

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

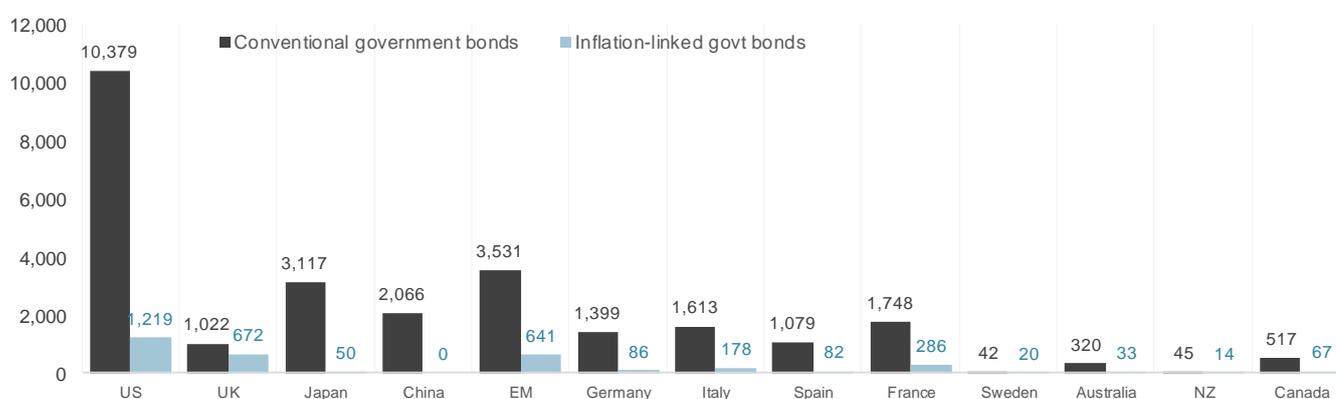
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.5	17.5	6.1	2,282.7	1,053.3	1,291.9	10,379.5	7.0	21.6	6.7	401.0	124.4	1219.3
UK	3.5	7.4	18.6	10.1	137.6	150.1	296.1	1,021.6	6.7	28.1	16.5	129.6	258.3	672.2
Japan	3.9	7.9	24.0	12.3	345.7	360.9	698.4	3,117.1	7.2		4.3	17.8		49.7
China	3.7	7.6	17.6	5.6	494.9	311.8	243.2	2,066.2						
EM	3.5	7.0	15.9	5.6	776.12	619.98	343.05	3,530.8	5.5	13.9	7.4	136.5	167.1	640.8
Germany	3.8	7.7	20.5	7.2	294.31	230.26	155.36	1,399.1	7.3	22.0	9.2	42.0	19.2	86.5
Italy	3.7	7.3	16.4	6.4	304.59	265.68	154.27	1,613.1	8.1	26.5	7.9	55.2	5.7	178.1
Spain	3.6	7.4	17.2	6.7	218.31	192.38	108.40	1,078.9	6.9		5.8	22.5		81.8
France	3.9	7.8	20.5	7.6	304.76	295.56	211.53	1,747.8	6.8	24.6	7.9	102.7	21.7	286.1
Sweden	3.9	7.8		5.8	13.15	8.61		42.0	5.9		4.2	9.4		20.3
Australia	3.7	7.8	17.6	6.7	50.66	87.55	15.00	319.7	7.3	22.5	8.0	9.5	2.6	32.7
NZ	4.0	7.7	17.2	6.5	9.23	10.46	2.29	44.6	6.4		8.8	3.1		13.7
Canada		7.3	18.9	6.9		186.00	88.00	517.4		14.4	14.4		67.0	67.0

	Investment grade bonds					High Yield						
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
US	11.0	8.8	7.4	6.7	7.2	74.0	451.3	2,591.1	3,292.0	6,408.4	4.0	1,162.9
Euro	6.4	4.9	4.7	4.3	4.5	9.5	186.1	1,160.6	1,445.9	2,802.1	3.1	418.8
EM		5.9	4.9	5.1	5.1		45.08	222.29	330.9	598.2	3.3	191.2

Average Duration



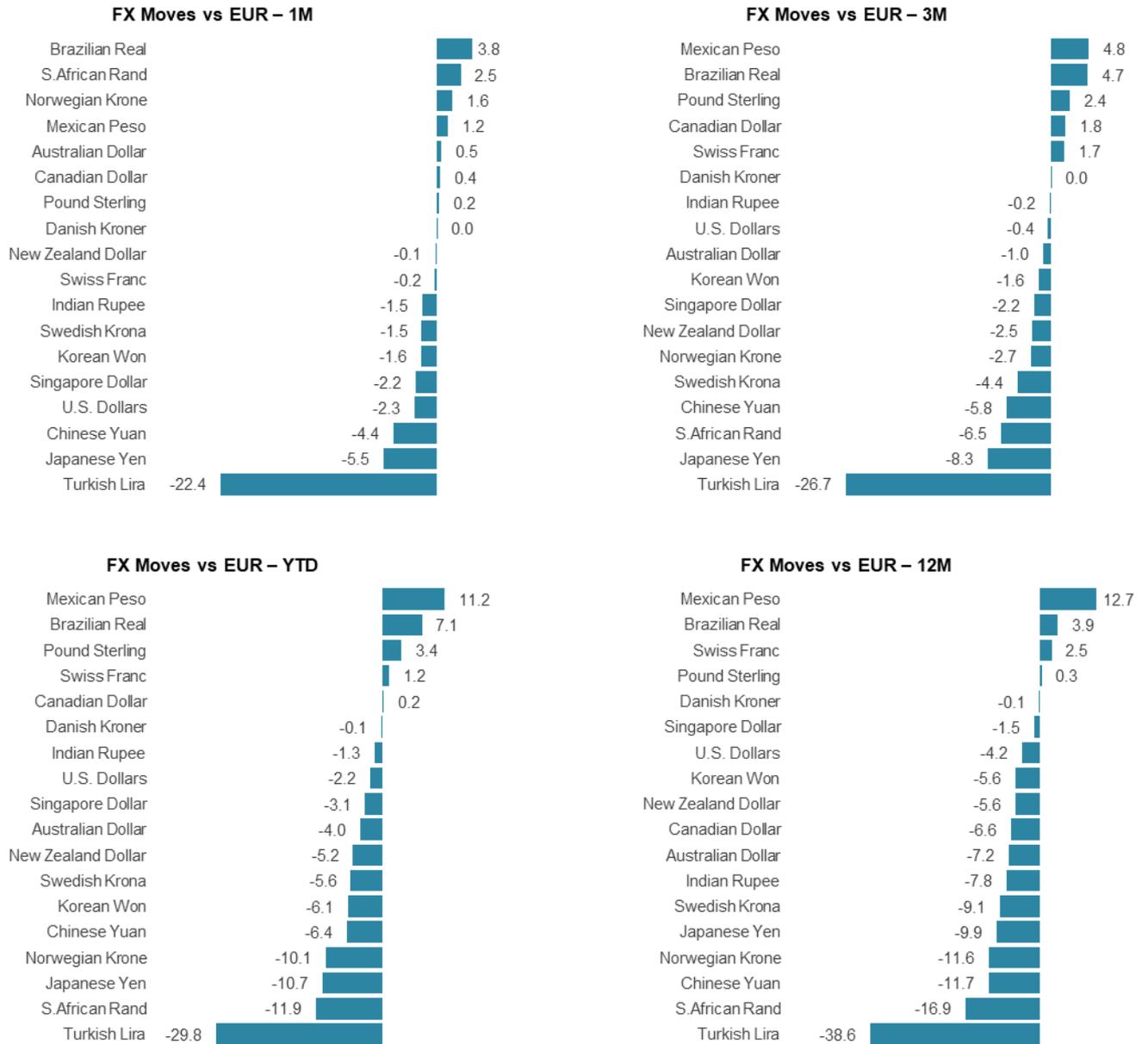
Total Market Value (USD Billions)



Data as of 2023-06-30

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



Source: FTSE Russell and Refinitiv. All data as of June 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 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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