

Fixed Income Insights

MONTHLY REPORT - JULY 2023 | US EDITION

FOR PROFESSIONAL INVESTORS ONLY

Fed pause suggests rates near cyclical peak as relative value favors US credit

Service sectors are stronger than manufacturing globally, and strongest in Asia, post-Covid. The Fed's pause suggests most duration risk may be behind US Treasuries, though easing awaits lower core inflation. Gilts and JGBs underperformed on higher inflation and a weak yen. Credit outperformed, helped by yield levels.

Macro and policy backdrop – wide dispersion in inflation and de-synchronized cycles predominate, as Fed pauses

Differing Covid policies helped de-synchronize 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 – Sovereign re-weighting drives WGBI spreads tighter versus climate-WGBI

Japan's reduced overweight in Climate WGBI and an increase in UK's overweight notable in the June re-weightings, after the UK issued more green gilts (page 6).

Performance – Gilt yield spike and currency moves dominated Q2, led by weak yen and RMB. Credit outperformed.

JGBs lost up to 8%, on currency weakness. Gilts fell sharply but sterling strength reduced losses. (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: Although growth is weak overall, US has become a 2-speed economy as services outperform manufacturing since 2021-22.

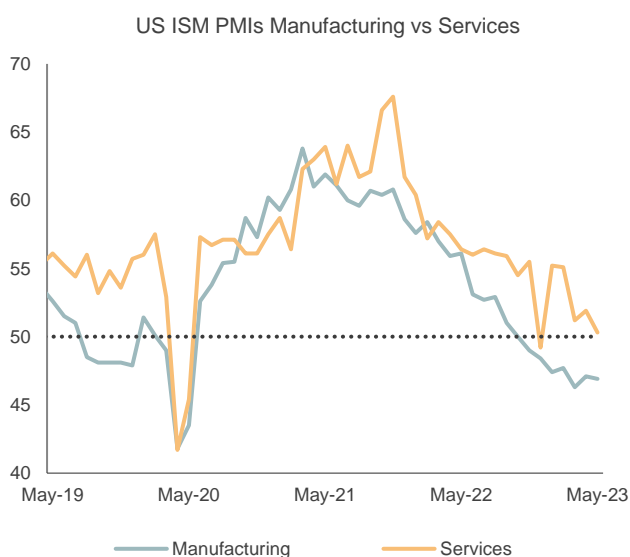
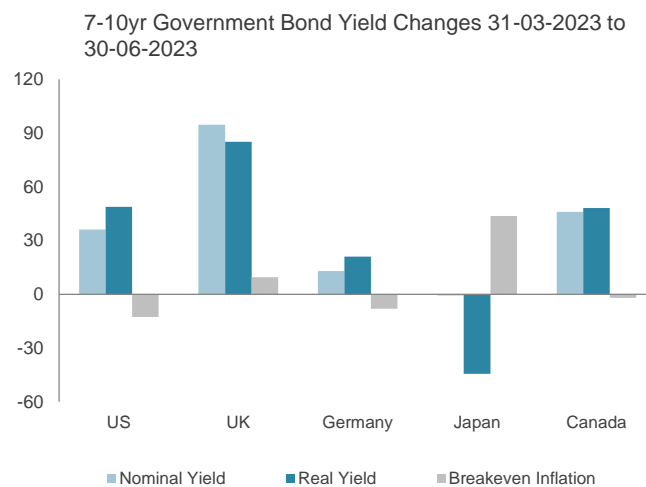


Chart 2: Nominal and real yield increases in the UK, US and Canada in Q2, and higher Japanese breakevens stood out.



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

Evidence of a de-synchronized G7 cycle is manifest in divergent growth and inflation, due to different Covid timing and lockdown policy, but also energy shock differences. Disinflation in shelter costs helped the Fed pause rate hikes in June, alongside easing in supply-chain pressures and commodity prices. Japan's rebound post-Covid has gathered pace.

G7 growth forecasts reflect policy tightening in 2022 and its impact, although service sectors are now more robust than tradeable goods, and interest rate sensitive sectors like housing, and commercial real estate the weakest. Overall, Europe was hit hardest by the 2022 energy shock and the Eurozone is in technical recession after Q1's contraction, and the UK close to recession (Chart 1).

US inflation fell to 4% y/y, in May, the 11th straight monthly decline since the peak of 9.1% in June 2022, helped by weak energy prices. Core inflation is stickier, and remains at 5.3% y/y, and the Fed's core PCE deflator at 4.7% y/y. The UK is a global outlier on (higher) inflation, as Chart 2 shows, and China on low inflation, which allowed the PBoC to ease policy again in June.

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 (Baltic Dry index) as Chart 4 shows. This may reflect the impact of consumer demand shifting towards services, as sectors like tourism re-open in Asia post-lockdown.

Chart 1: Growth forecasts show the impact of policy tightening, ex China and Japan. Services are propping up US growth as manufacturing is recessionary, and boosting Japanese growth.

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: Headline US inflation continues to fall, though core inflation is stickier at around 5%, reflecting shelter costs, which have scope to fall further. The UK & China remain global outliers.

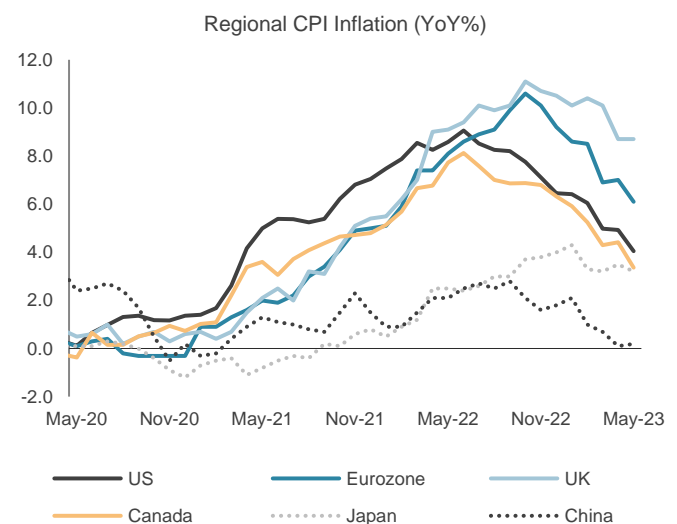
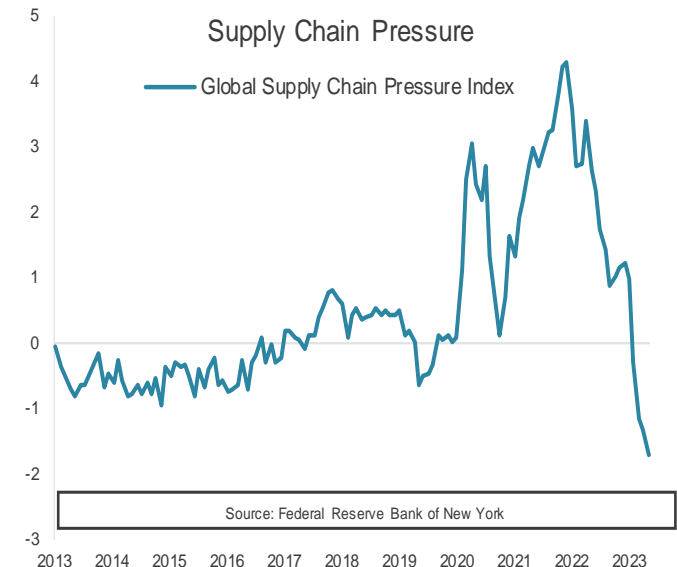


Chart 3: Negative correlation between commodity prices and the US dollar broke down after the Ukraine shock in 2022, and the Fed began tightening monetary policy.



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

Tight labor markets remain a challenge for the G7, but policy divergence continues, and Fed Chair Powell was less hawkish at June's FOMC. Higher core inflation drove the BoE's 50bp increase in June, but lower inflation explains the Fed pause, and PBoC rate cut in June. QT programs continue to shrink G7 liquidity and financial conditions, except in Japan.

Although the US labor market remained buoyant in May, Fed Chairman Powell took a less hawkish view at the June FOMC, suggesting lower US inflation was achievable without a typical cyclical surge in unemployment. Average hourly earnings slowed to 4.3% in May 2023, from 5.5% in May 2022, still well above pre-Covid levels, but now nearer a CPI inflation of 4.1% (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 labor market from Fed Chairman Powell. Further easing from the PBOC weakened the renminbi, while sterling and Canadian dollar rallied on higher UK inflation and rates. Yen weakness continues as the BoJ retains curve control (Chart 2).

Monetary policy has diverged materially, both within the G7 and including China, reflecting dispersion in inflation rates, as Chart 3 shows. The Fed's pause on rates was in stark contrast to the BoE's 50bp increase, after poor UK inflation data, taking base rates to 5%. The PBoC's easing in the cost of credit reinforces earlier easing measures, with Chinese inflation near zero.

Central bank balance sheets continue to contract, apart from the BoJ, as G7 liquidity shrinks. Chart 4 shows the Fed's balance sheet contraction resumed in Q2. The ECB's balance sheet contraction was boosted by the unwinding of TLTROs in 2022.

Chart 1: US wage inflation has eased from the highs, despite unemployment near cycle-lows, at 3.7%, helped by inflation falling sharply in 2023, to 4.1% y/y.

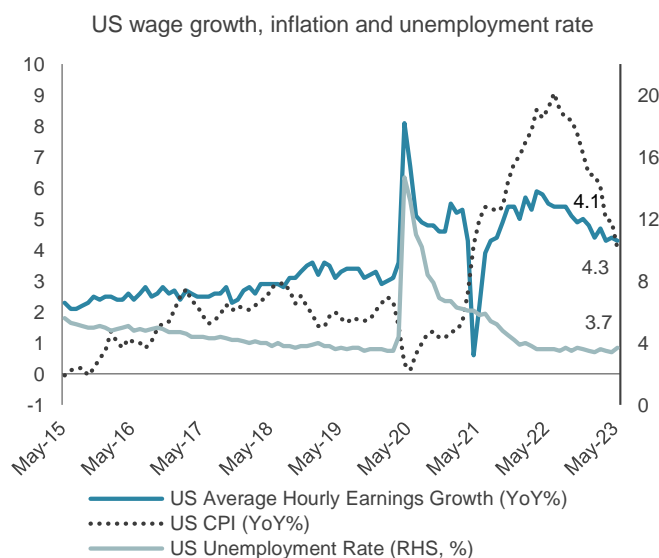


Chart 2: The dollar fell in June, on the Fed policy pause, after softer US inflation. The renminbi also fell on PBoC easing, but sterling gained on the UK's 50bp tightening move.

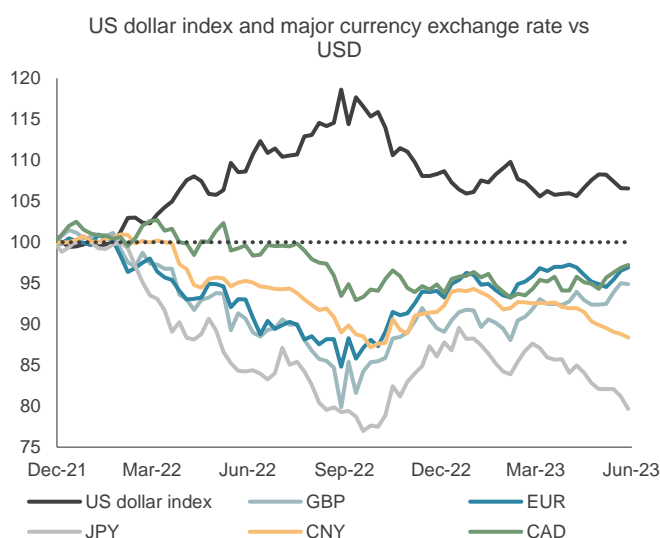


Chart 3: Policy rates diverged further in June, reflecting different inflation. The Fed pause and ECB tightening move were well flagged, but the 50bp BoE hike suggests a more hawkish stance.

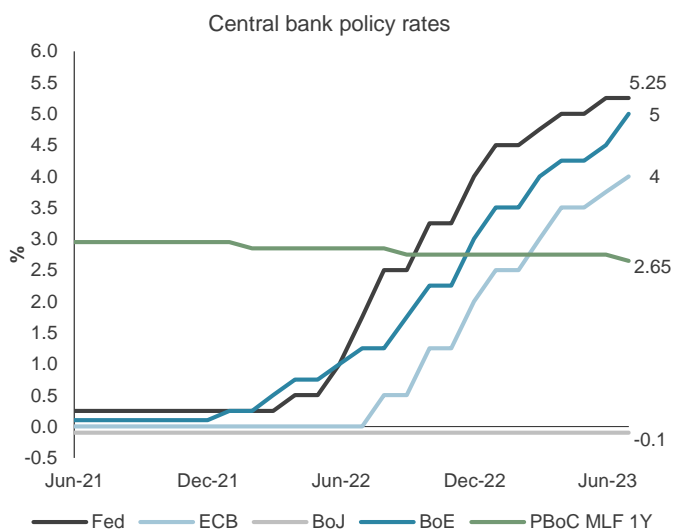
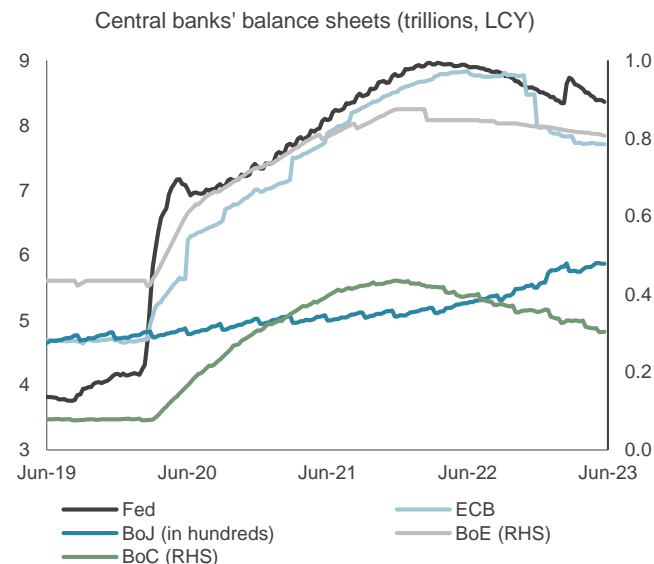


Chart 4: The Fed's balance sheet unwound March's emergency lending, but the ECB's balance sheet has contracted most since 2022. The BoJ continues with QE, but for how much longer?



Source: FTSE Russell and Refinitiv. Chart 2 sourced from Federal Reserve. 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.

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 rate move. Treasury yields range traded after the Fed policy pause.

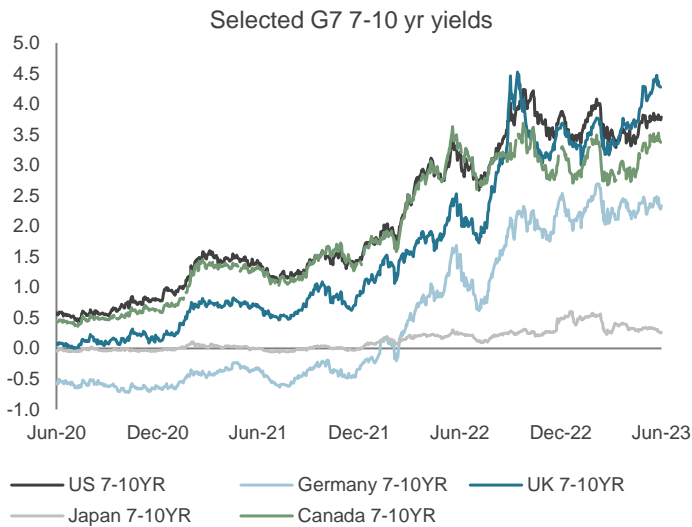


Chart 2: Real yields generally tracked nominals a little higher in June, but the biggest increase was in UK inflation linked. US and UK real yields remain close to the cycle highs of 2022.

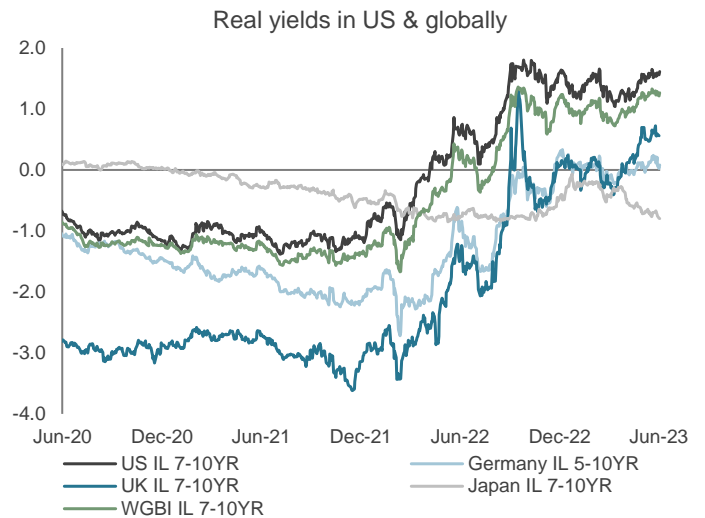


Chart 3: Deep inversion of G7 yield curves continues, led by the US 10s/2s, and the March steepening after the banking crisis reversed. BoJ curve control continues to keep the JGB curve positively sloped.

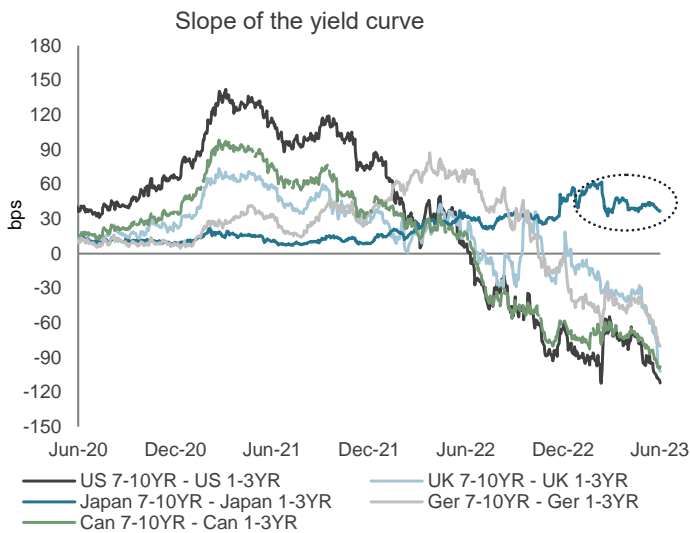


Chart 4: It is a similar story with inversion in long maturities, with Japan the exception. With yields near 15-year highs, investor concern over re-investment risks may be keeping curves inverted.

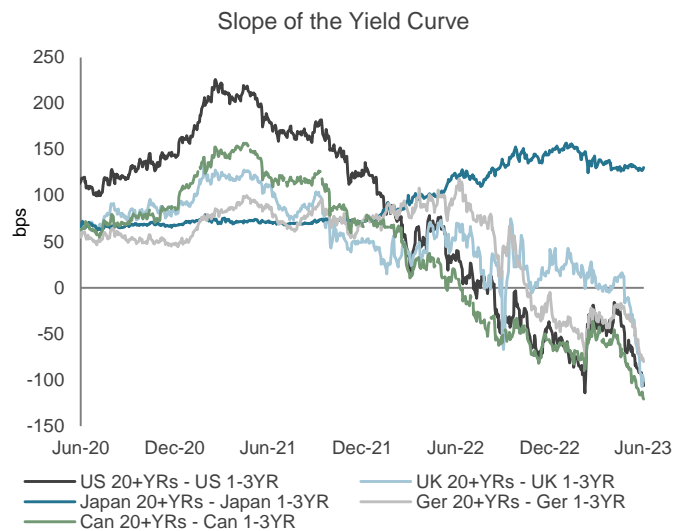


Chart 5: Inflation breakevens moved higher in the UK and Japan in June, while remaining stable near 2% elsewhere. This is in line with persistently higher inflation in the UK and Japan.

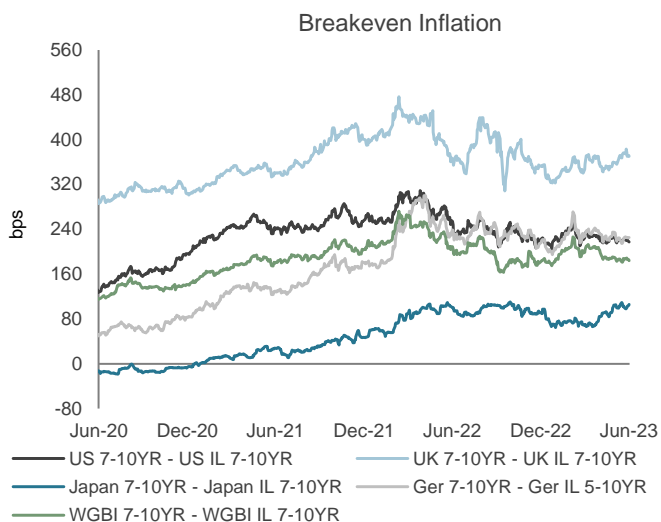


Chart 6: Global inflation breakevens of all tenors have converged near 2%, after a period of much higher short-dated breakevens. There is little evidence of inflation expectations de-stabilizing.



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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.

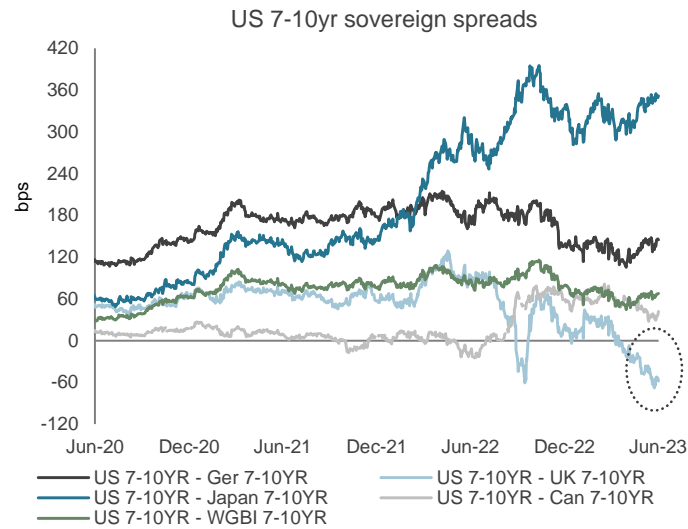


Chart 2: Peripheral Eurozone spreads fell, with Italy a strong performer, helped by lower energy prices, political stability, and support from the ECB's transmission protection instrument.

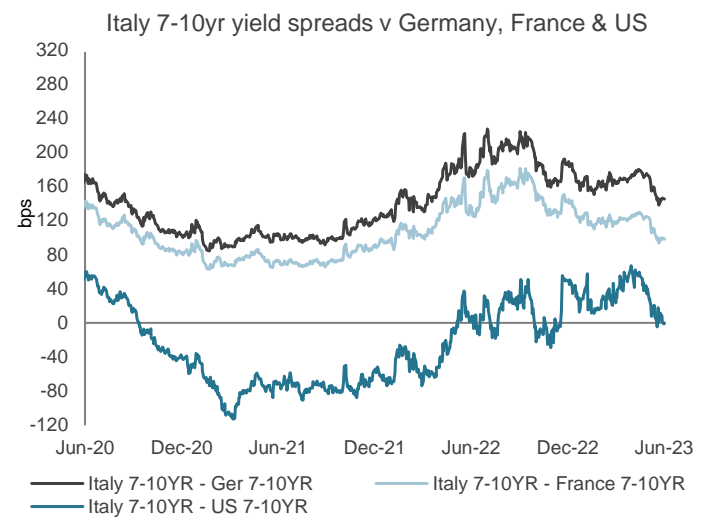


Chart 3: EM spreads remain at, or near post-Covid lows, reflecting early counter-inflation action by EM than the G7, reduced re-financing risks in EM debt, and favorable external accounts.

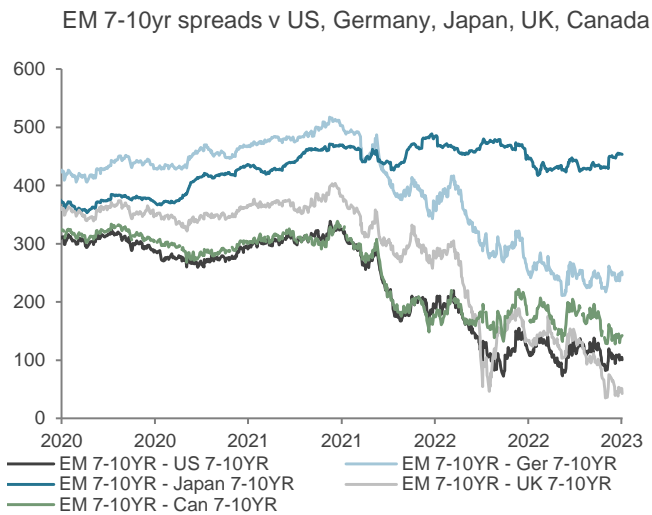


Chart 4: Chinese sovereign spreads tightened further in June, after the PBoC eased rates, and some G7 central banks raised rates. Very low inflation gives the PBoC room to ease rates further.

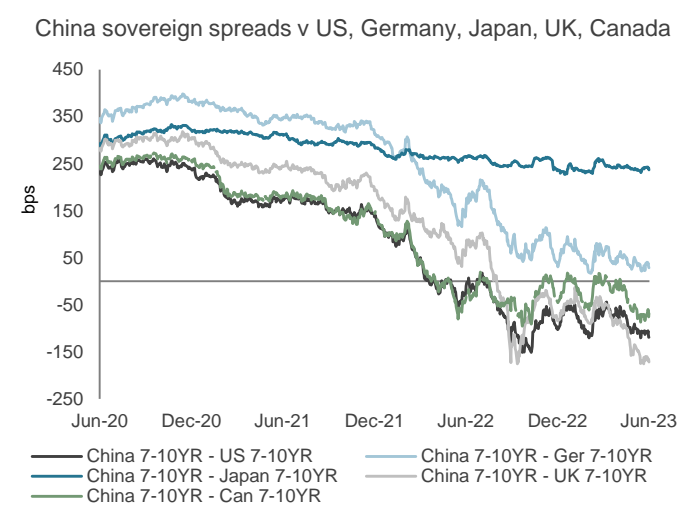


Chart 5: High yield spreads edged wider in June, led by Eurozone spreads, but they remain below Covid levels. US IG credits fell in June, perhaps reflecting the fact spreads are relatively high vs HY.

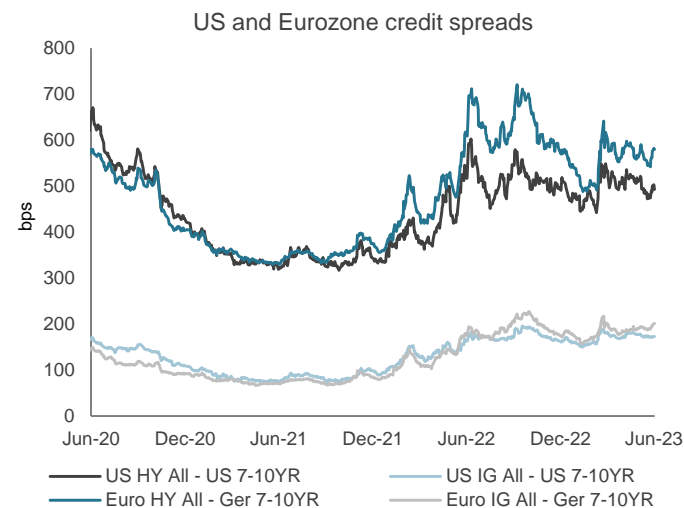


Chart 6: Chinese \$ HY spreads tightened in early June before backing up to 6000bps, after defaults by property developers and a lack of new property stimulus measures. Restructurings made little progress.



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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 years.

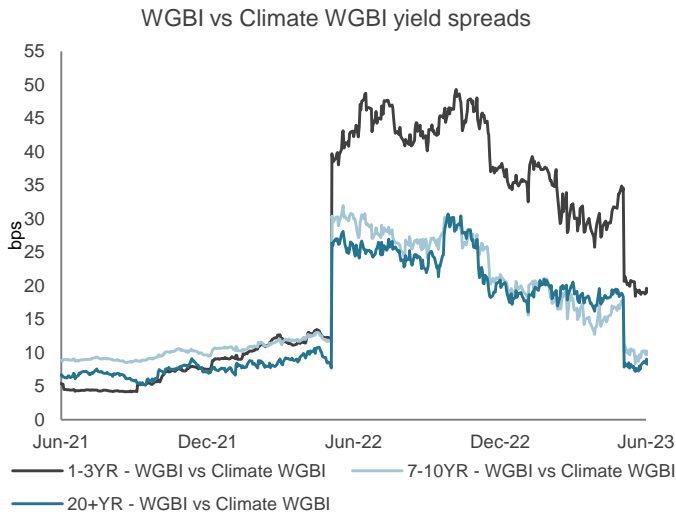


Chart 2: Both a decrease in Japan's overweight in Climate WGBI vs WGBI and an increase in UK's overweight were notable in the June re-weightings, after the UK issued more green gilts.

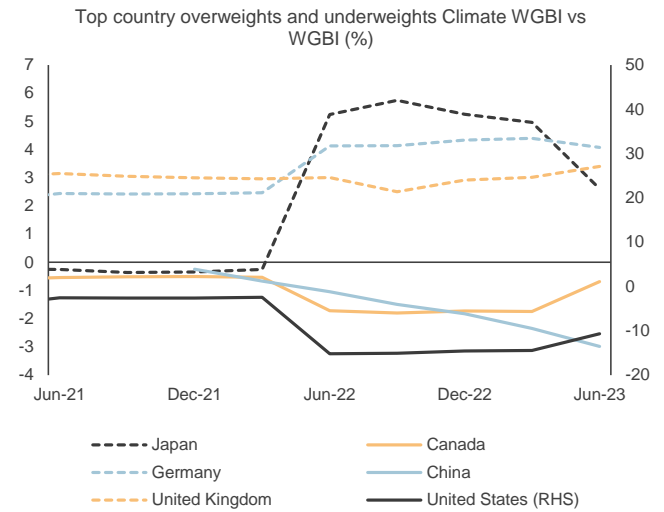


Chart 3: Within IG credit, green corporates are underweight in higher-rated sectors of AAA/AA vs global peers, and overweight most in the BBB sector (54.7% vs 51.4%).

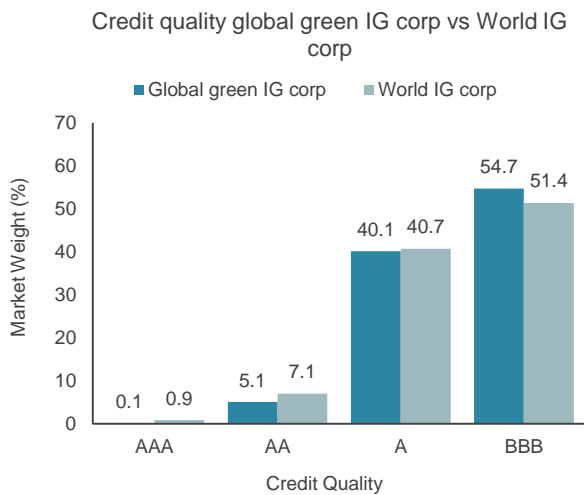


Chart 4: The opposite is seen in HY – higher rated BB bonds have a much larger share compared with global peers, 89.2% vs 54.5%, suggesting better credit quality for HY green corporates.

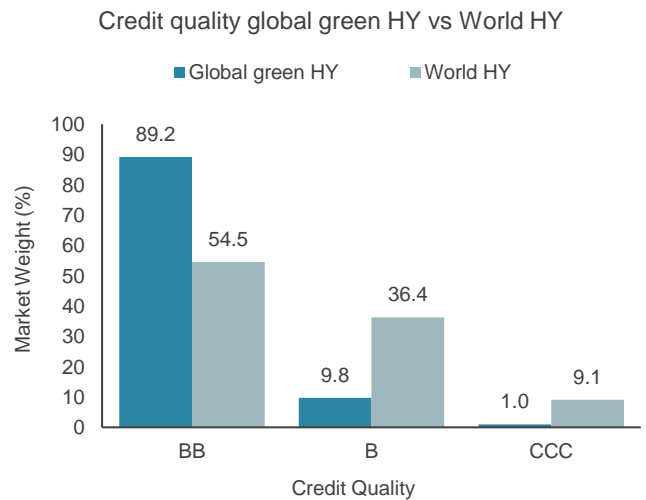


Chart 5: Euro green bonds dominate currency weights in the Global Green index at 68.3%, in contrast to the low USD weight (18%). This is reversed in WorldBIG with a USD weight of 55%.

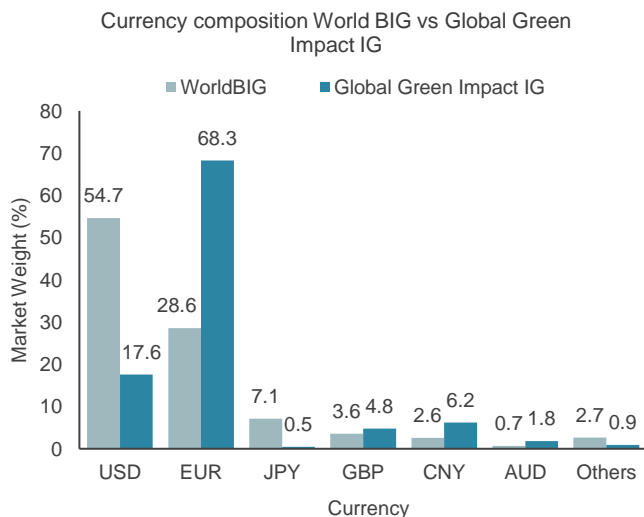
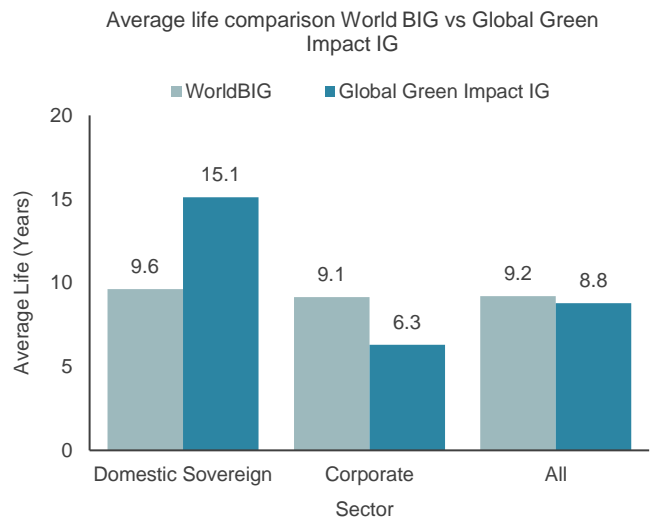


Chart 6: Breakdown of Global Green & WorldBIG indices shows differences in average life for different components. Corporates offset the Sovereign impact in boosting Global Green average life.



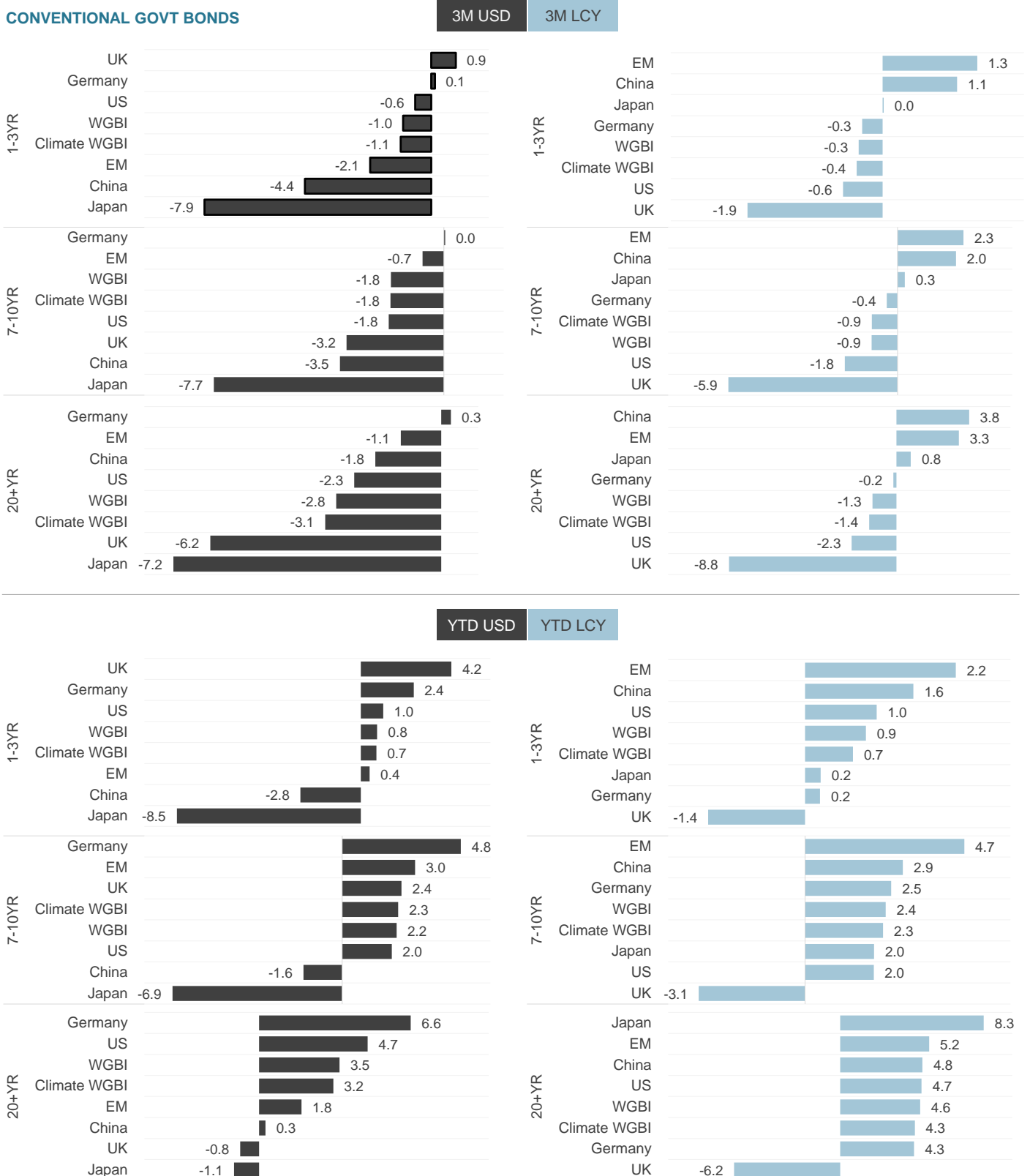
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Global Sovereign Bond Returns – 3M and YTD % (USD & LC, TR) as of June 30, 2023

Sovereign bonds fell on 3M overall, led by long gilts and mid to long JGBs, which lost 6-8% in US dollars. Higher inflation and rates drove gilts lower, even if sterling reduced losses. Renminbi weakness turned Chinese bond returns negative. Bunds and short gilts performed best YTD and JGBs were weakest, reflecting the weak yen, and Euro & GBP strength.

3M returns show the impact of severe yen weakness with the currency falling 9% versus the dollar, even though JGB returns were positive in yen terms. In contrast, sterling strength turned short gilt returns positive by 1% in dollar terms.

YTD, G7 yields have fallen, apart from gilts, as curves inverted further and inflation fell, with Bunds and US Treasuries up 5-7%.



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Global Inflation-Linked Bond Returns – 3M & YTD % (USD, 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 US dollars. Bund and short UK IL were strongest, gaining 1-2% on 3M, and Bund IL 10% YTD, helped by euro strength. Euro and US HY credits outperformed YTD, with gains of 5-8%, aided by the risk rally.

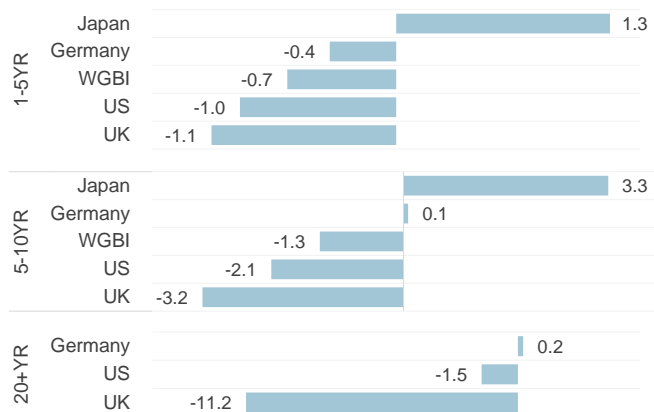
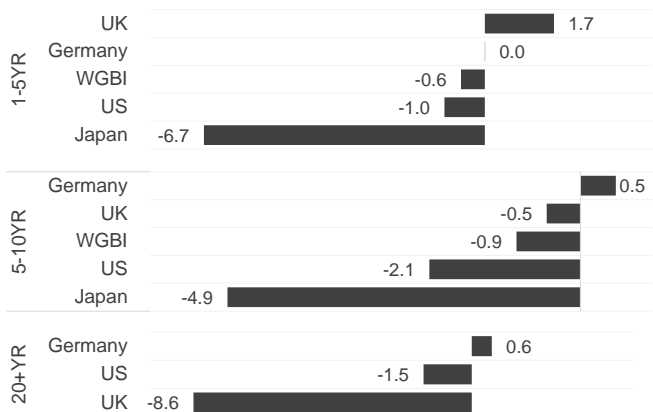
High inflation and base rate increases depressed long UK IL on 3M, and YTD, notably underperforming due to ultra-long duration. But sterling strength helped shorter UK index linked (IL) perform well, and with US Tips and Bunds, make gains of 5-10% YTD in USD.

Credit has generally performed well YTD, led by euro credits, with the stronger correlation of HY to equities a factor. Investment grade US credit fell a little on 3M, as the closer correlation with US Treasuries contributed, and the Fed tightened further.

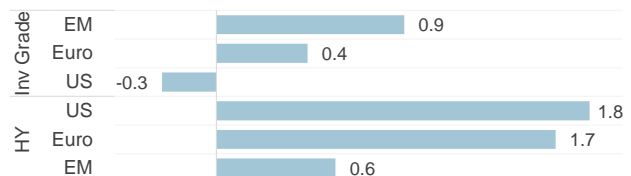
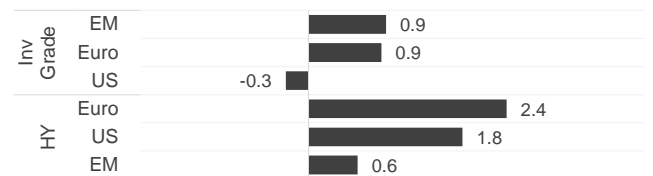
INFLATION LINKED BONDS

3M USD

3M LCY



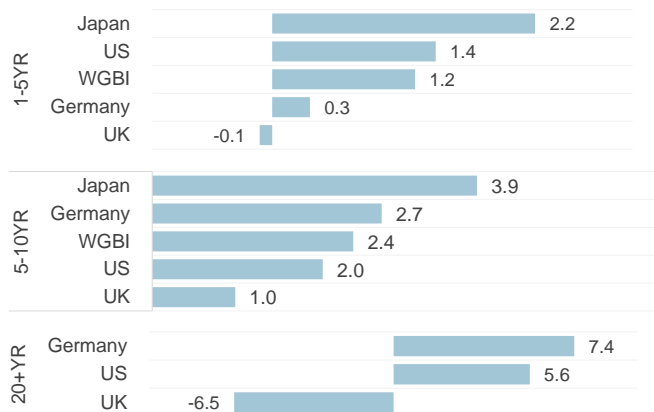
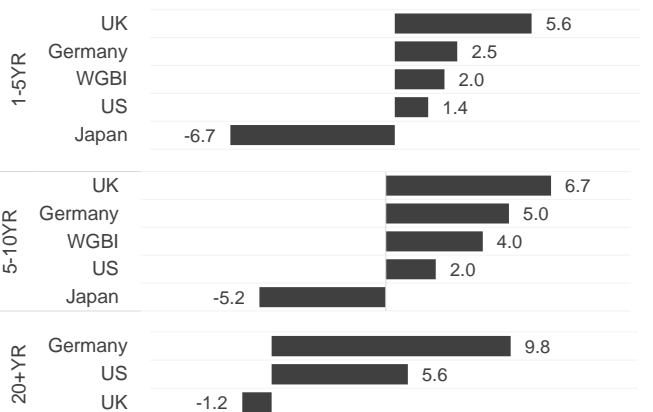
CORPORATE BONDS



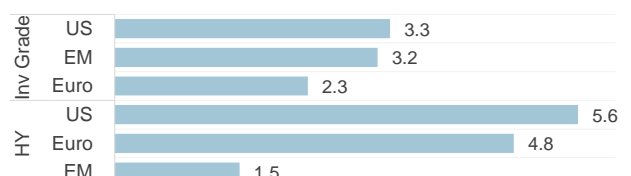
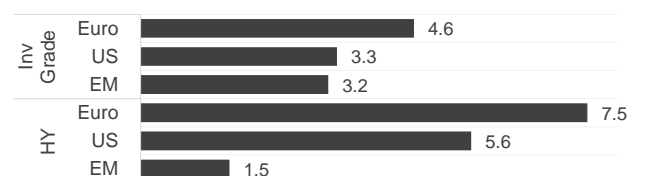
INFLATION LINKED BONDS

YTD USD

YTD LCY



CORPORATE BONDS



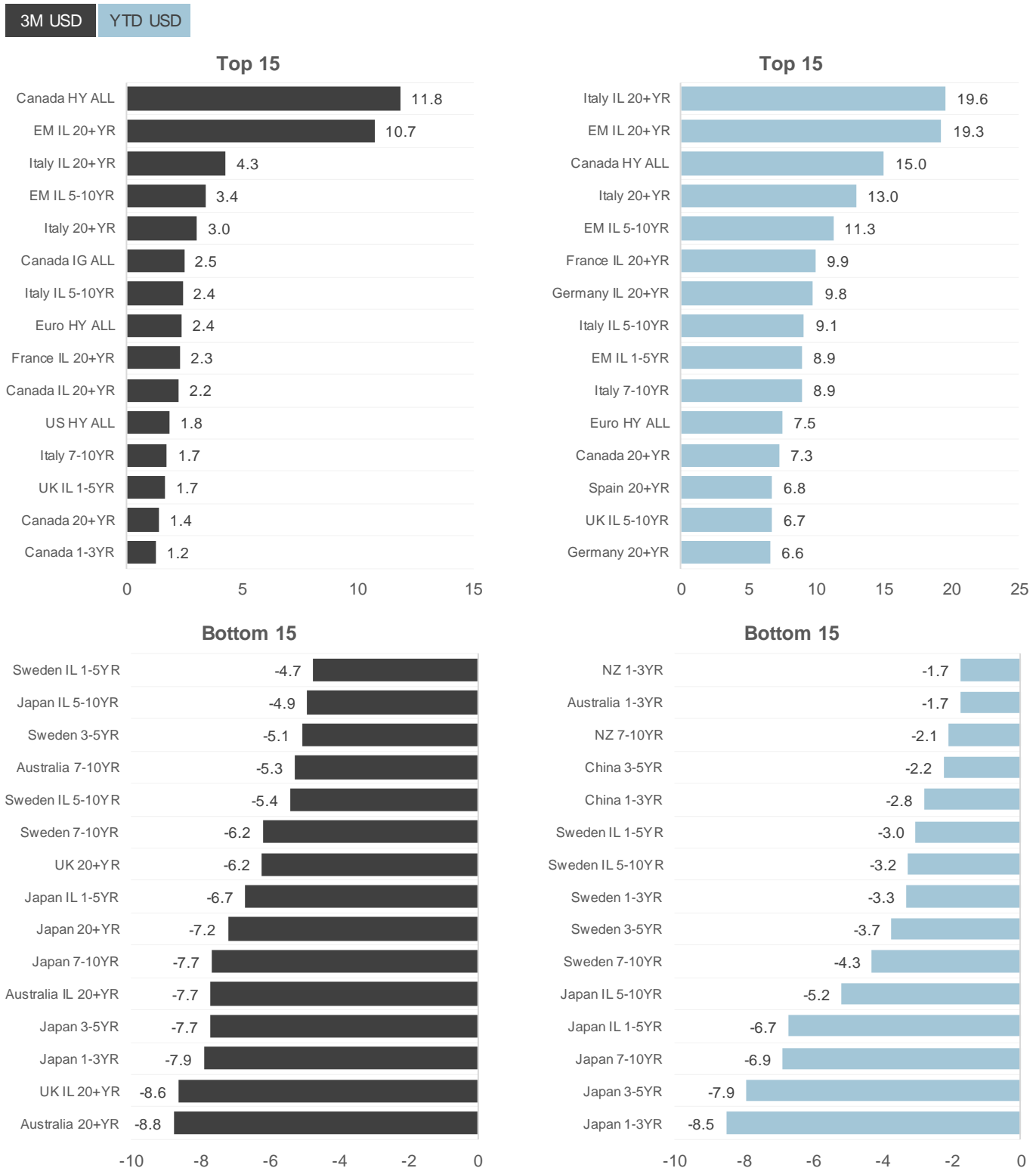
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Top and Bottom Bond Returns – 3M & YTD % (USD, TR) as of June 30, 2023.

Canadian HY credit, long Italian inflation linked (IL) and EM IL showed the best returns on 3M of 4-12%, and YTD of 15-20%, in US dollar terms. The stronger euro helped boost returns throughout the Eurozone. The Canadian dollar was boosted by the BoC's surprise rate increase in June. Pronounced yen weakness drove negative JGB returns of up to 9%.

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 2-9% in US dollar 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.



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

Appendix – Global Bond Market Returns % (USD & 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	USD	Local	USD	Local	USD	Local	USD
US	1-3YR	-0.56	-0.56	1.04	1.04	1.04	1.04	0.16	0.16
	7-10YR	-1.84	-1.84	2.01	2.01	2.01	2.01	-3.31	-3.31
	20+YR	-2.35	-2.35	4.73	4.73	4.73	4.73	-8.47	-8.47
	IG All	-0.27	-0.27	3.30	3.30	3.30	3.30	1.46	1.46
	HY All	1.84	1.84	5.55	5.55	5.55	5.55	9.06	9.06
UK	1-3YR	-1.91	0.86	-1.42	4.19	-1.42	4.19	-2.68	1.88
	7-10YR	-5.90	-3.25	-3.11	2.40	-3.11	2.40	-12.55	-8.45
	20+YR	-8.80	-6.23	-6.17	-0.83	-6.17	-0.83	-26.94	-23.51
EUR	IG All	0.45	0.87	2.31	4.59	2.31	4.59	0.17	4.54
	HY All	1.67	2.36	4.78	7.50	4.78	7.50	9.23	14.06
Japan	1-3YR	0.01	-7.90	0.23	-8.50	0.23	-8.50	0.03	-5.97
	7-10YR	0.25	-7.69	2.02	-6.87	2.02	-6.87	0.33	-5.69
	20+YR	0.76	-7.22	8.34	-1.10	8.34	-1.10	0.03	-5.97
China	1-3YR	1.05	-4.40	1.58	-2.79	1.58	-2.79	2.76	-5.30
	7-10YR	2.04	-3.47	2.86	-1.57	2.86	-1.57	4.51	-3.69
	20+YR	3.83	-1.78	4.78	0.27	4.78	0.27	8.19	-0.29
EM	1-3YR	1.34	-2.13	2.20	0.41	2.20	0.41	4.22	-0.16
	7-10YR	2.29	-0.71	4.65	2.95	4.65	2.95	7.78	3.01
	20+YR	3.29	-1.09	5.17	1.84	5.17	1.84	9.45	3.21
	IG All	0.92	0.92	3.15	3.15	3.15	3.15	2.82	2.82
	HY All	0.59	0.59	1.50	1.50	1.50	1.50	6.41	6.41
Germany	1-3YR	-0.29	0.13	0.22	2.45	0.22	2.45	-2.40	1.86
	7-10YR	-0.38	0.04	2.52	4.80	2.52	4.80	-6.29	-2.20
	20+YR	-0.16	0.26	4.29	6.61	4.29	6.61	-13.40	-9.63
Italy	1-3YR	-0.08	0.34	0.98	3.23	0.98	3.23	-1.03	3.29
	7-10YR	1.31	1.74	6.57	8.94	6.57	8.94	-1.21	3.10
	20+YR	2.61	3.04	10.52	12.97	10.52	12.97	-6.39	-2.32
Spain	1-3YR	-0.31	0.11	0.56	2.80	0.56	2.80	-2.18	2.09
	7-10YR	-0.12	0.29	3.17	5.46	3.17	5.46	-4.52	-0.36
	20+YR	0.04	0.46	4.43	6.75	4.43	6.75	-9.23	-5.27
France	1-3YR	-0.32	0.09	0.51	2.74	0.51	2.74	-2.46	1.79
	7-10YR	-0.28	0.14	2.62	4.90	2.62	4.90	-5.42	-1.30
	20+YR	0.34	0.76	3.83	6.15	3.83	6.15	-10.88	-7.00
Sweden	1-3YR	-0.34	-4.33	0.24	-3.30	0.24	-3.30	-0.67	-5.76
	7-10YR	-2.30	-6.21	-0.77	-4.28	-0.77	-4.28	-5.29	-10.14
	20+YR					0.00	0.00	0.00	0.00
Australia	1-3YR	-1.52	-2.12	0.10	-1.74	0.10	-1.74	0.66	-2.56
	7-10YR	-4.70	-5.28	1.95	0.07	1.95	0.07	0.74	-2.48
	20+YR	-8.22	-8.79	2.34	0.45	2.34	0.45	-4.75	-7.79
NZ	1-3YR	-0.14	-2.21	1.43	-1.74	1.43	-1.74	0.75	-0.73
	7-10YR	-1.74	-3.78	1.11	-2.05	1.11	-2.05	-1.57	-3.01
Canada	1-3YR	-1.00	1.25	0.58	2.99	0.58	2.99	0.57	-1.96
	7-10YR	-2.54	-0.32	1.43	3.86	1.43	3.86	2.25	-0.32
	20+YR	-0.87	1.38	4.75	7.26	4.75	7.26	3.60	1.00

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 % (USD & 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	USD	Local	USD	Local	USD	Local	USD
US	1-5YR	-0.96	-0.96	1.36	1.36	1.36	1.36	-0.71	-0.71
	5-10YR	-2.11	-2.11	2.04	2.04	2.04	2.04	-1.73	-1.73
	20+YR	-1.49	-1.49	5.58	5.58	5.58	5.58	-5.97	-5.97
UK	1-5YR	-1.14	1.65	-0.11	5.58	-0.11	5.58	1.01	5.74
	5-10YR	-3.20	-0.47	0.99	6.74	0.99	6.74	-4.18	0.31
	20+YR	-11.15	-8.64	-6.53	-1.21	-6.53	-1.21	-29.11	-25.79
EUxUK	1-5YR	-0.41	0.01	0.31	2.55	0.31	2.55	-2.06	2.21
	5-10YR	0.07	0.49	2.74	5.03	2.74	5.03	-1.92	2.36
	20+YR	0.21	0.63	7.40	9.79	7.40	9.79	-5.61	-1.50
Japan	1-5YR	1.32	-6.71	2.19	-6.71	2.19	-6.71	3.21	-2.99
	5-10YR	3.26	-4.92	3.88	-5.17	3.88	-5.17	4.33	-1.94
EM	1-5YR	1.29	0.75	6.05	8.95	6.05	8.95	13.75	14.32
	5-10YR	2.81	3.39	6.67	11.27	6.67	11.27	17.24	20.04
	20+YR	6.56	10.72	9.69	19.30	9.69	19.30	14.96	25.58
Germany	1-5YR	-0.41	0.01	0.31	2.55	0.31	2.55	-2.06	2.21
	5-10YR	0.07	0.49	2.74	5.03	2.74	5.03	-1.92	2.36
	20+YR	0.21	0.63	7.40	9.79	7.40	9.79	-5.61	-1.50
Italy	1-5YR	-0.01	0.41	1.41	3.67	1.41	3.67	1.56	5.99
	5-10YR	1.97	2.40	6.76	9.14	6.76	9.14	4.55	9.10
	20+YR	3.84	4.27	16.99	19.59	16.99	19.59	2.61	7.08
Spain	1-5YR	-0.43	-0.01	0.78	3.02	0.78	3.02	0.36	4.73
	5-10YR	0.04	0.46	2.76	5.05	2.76	5.05	0.83	5.23
France	1-5YR	-0.36	0.06	0.53	2.76	0.53	2.76	-2.61	1.63
	5-10YR	-0.17	0.25	2.63	4.91	2.63	4.91	-1.74	2.54
	20+YR	1.86	2.29	7.54	9.94	7.54	9.94	-2.58	1.67
Sweden	1-5YR	-0.78	-4.75	0.54	-3.02	0.54	-3.02	2.77	-2.50
	5-10YR	-1.48	-5.42	0.30	-3.25	0.30	-3.25	-2.71	-7.69
Australia	1-5YR	-1.11	-1.71	2.79	0.90	2.79	0.90	4.14	0.81
	5-10YR	-2.76	-3.35	4.26	2.34	4.26	2.34	6.14	2.75
	20+YR	-7.14	-7.71	5.42	3.48	5.42	3.48	4.34	1.00
NZ	5-10YR	-0.62	-2.69	4.15	0.89	4.15	0.89	6.62	5.06
	20+YR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canada	20+YR	-0.05	2.23	-0.43	1.96	-0.43	1.96	3.51	0.91

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	

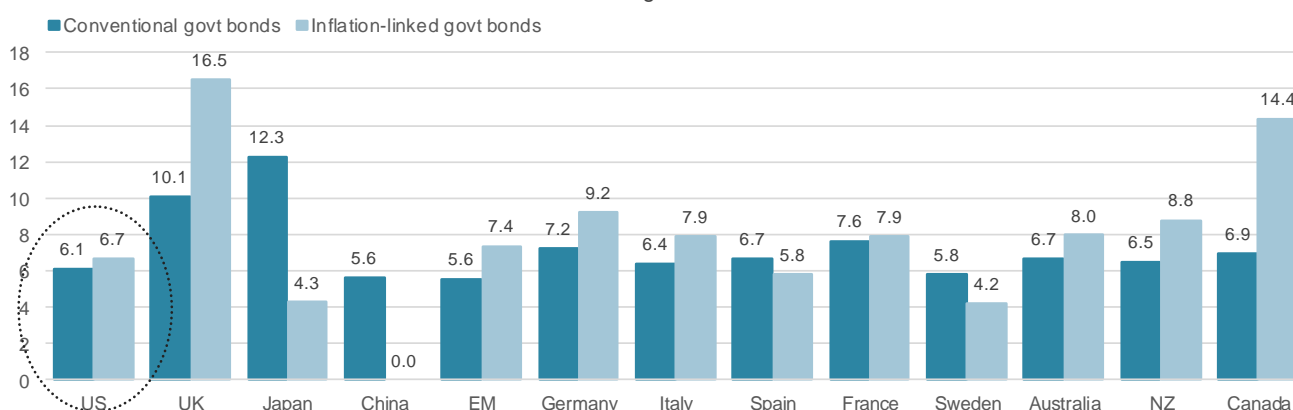
Source: FTSE Russell. All data as of June 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors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

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

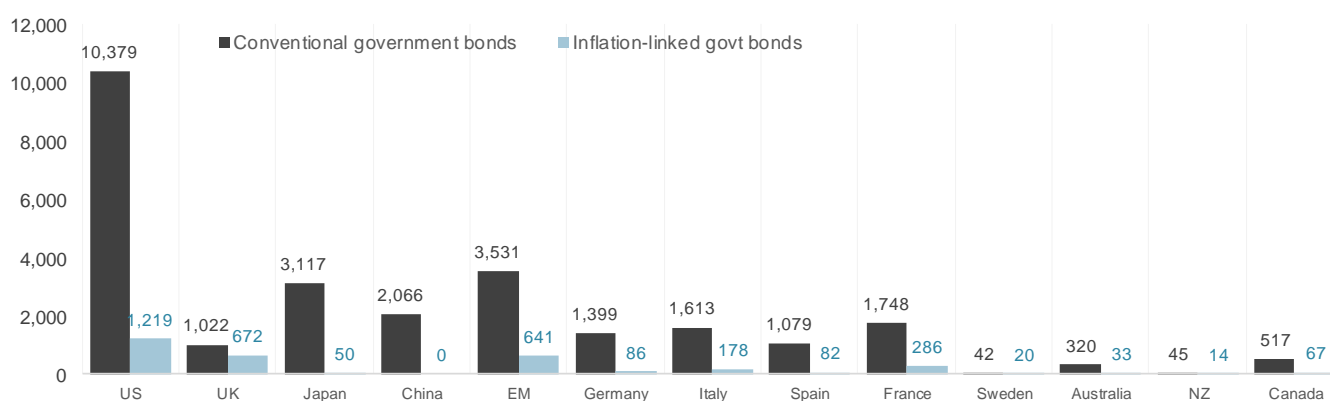
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
US	3.7	7.5	17.5	6.1	2,282.7	1,053.3	1,291.9	10,379.5	7.0	21.6	6.7	401.0	124.4	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



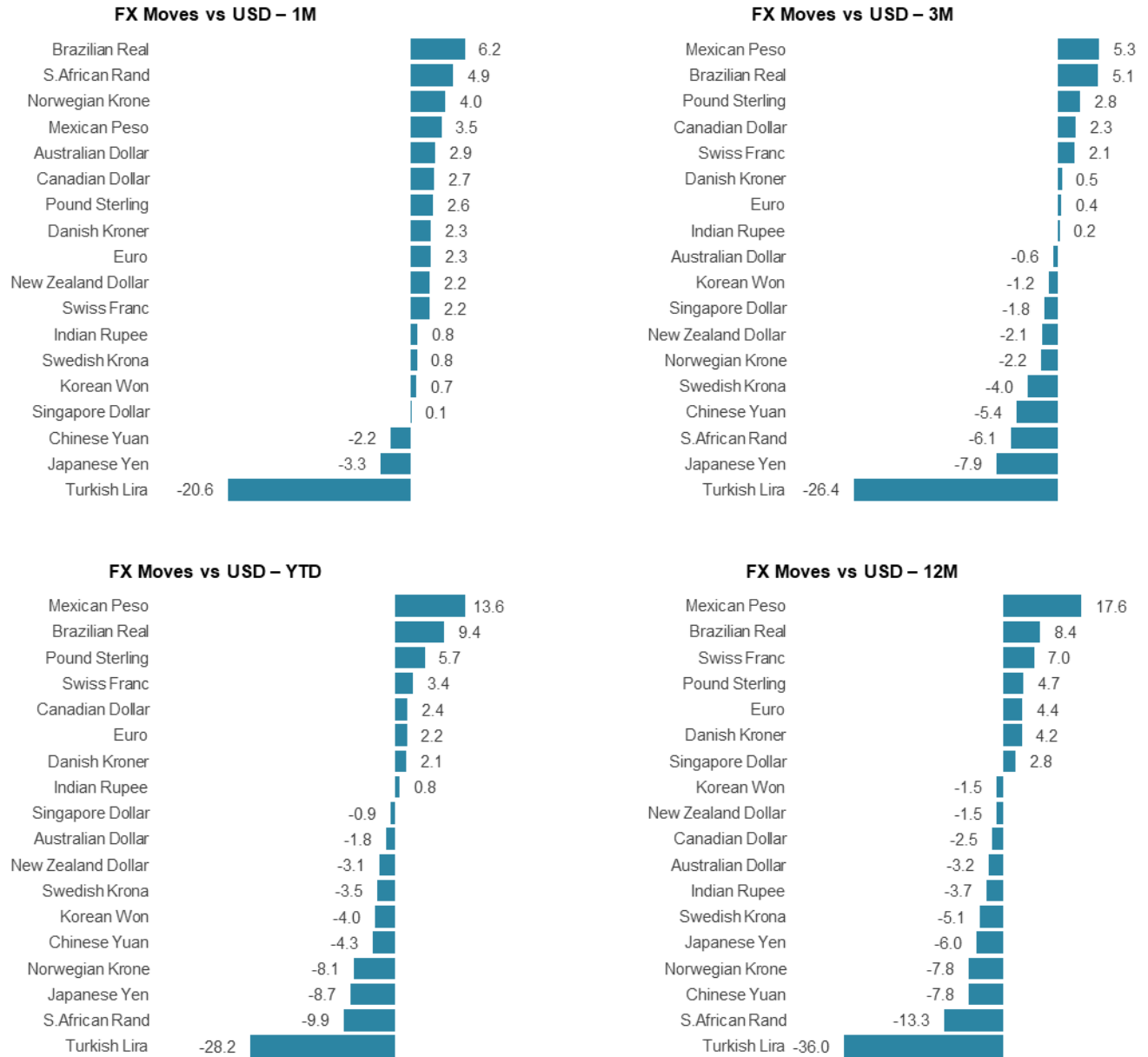
Total Market Value (USD Billions)



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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