

# Fixed Income Insights

MONTHLY REPORT – APRIL 2024 | JAPAN EDITION

FOR PROFESSIONAL INVESTORS ONLY

## BoJ pivots as expected, with little initial impact on JGBs or yen performance

A strong wage round helped the BoJ pivot away from negative interest rates and formal curve control in March. JGBs remain the weakest 12M performers and reacted little to the policy pivot, as the move was well discounted and the BoJ did not exclude further bond purchases. The yen weakened further despite higher interest rates.

### Macro and policy backdrop – The BoJ made a modest pivot after a stronger wage round was confirmed

The BoJ moves to accommodative financial conditions after raising interest rate and ending the curve control. (pages 2-3)

### Yields, curves and spreads – Curves revert to bear inversion in Q1 after brief bull steepening in Q4

As markets reduce easing expectations, 10s/2s curves re-invert. End of BoJ curve control has little initial impact. (pages 4-5)

### Credit and MBS analysis – Spreads tighten further, and IG spreads converge on RMBS despite agency guarantee

Higher govt bond yields in Q1 and the risk rally drove spreads tighter. Fed RMBS divestment weighs on RMBS. (page 6)

### High yield credit analysis – CCC credits have outperformed in the 2023-24 rally

HY spreads have returned to pre-Covid levels, after a period of high volatility, and strong performance in 2023-24. (page 7)

### Sovereign and climate bonds – SI bonds broadly tracked parent indices in Q1, though Green WBIG outperformed

Green WBIG recovery continues. The most striking sovereign SI outperformer in 2023-24 has been the EM index. (page 8)

### Performance – China and EM outperformed in Q1 and 12M, as JGBs lagged on yen weakness

Longer Chinese and EM bonds led gains in JPY and LCY. JGBs remained the weakest 12M performers, despite a weaker kroner dragging Swedish bond returns in March. (pages 9-10)

### Appendix (from page 11)

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

Chart 1: Treasuries range-traded in March as the market scaled backed easing expectations. JGBs stabilised after YCC ended.

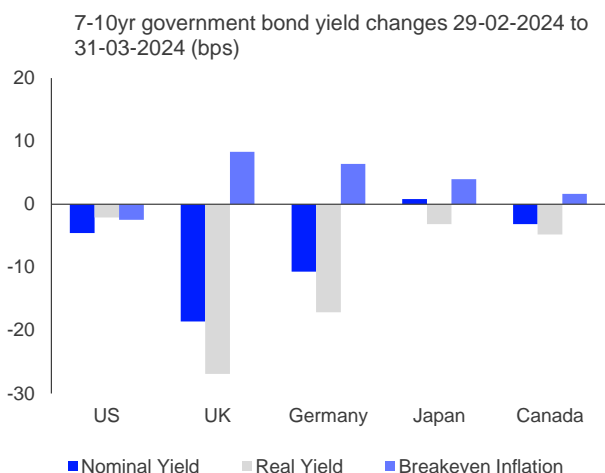
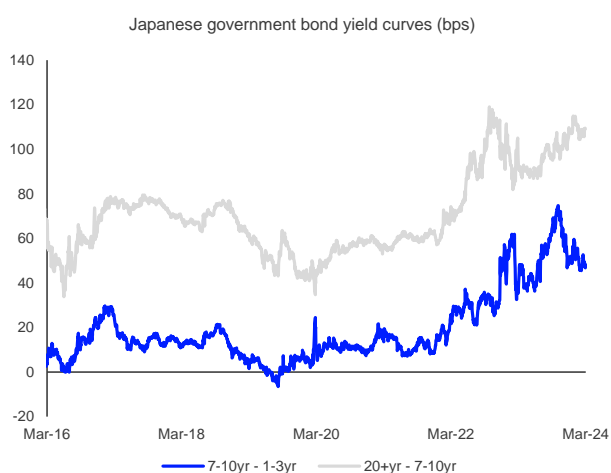


Chart 2: JGB yield curves moved to discount the end of formal curve control and negative rates in advance of the announcement.



Source: FTSE Russell and LSEG. All data as of March 31, 2024. 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.

# Macroeconomic Backdrop – Growth and Inflation Expectations

Japan's economy shows resilient growth, and Consensus forecasts remain positive. Base effects drove February's inflation higher at 2.8% yy in Japan. Higher wage growth is likely to continue, following the spring wage negotiations for fiscal 2024. Post-Covid correlations of asset returns appear less predictable, as shown by the relationship between US real yields and the gold price.

Japan's economic recovery has been moderate and gradual, helped by pent-up demand and government supportive measures. Other positive development have been in corporate profits and business sentiment, and private consumption (despite price increases). Meanwhile, Japan's growth outlook faces headwinds, given its high dependence on exports and global demand for production.

Japan's core CPI (less fresh food) y/y growth rose to 2.8% in February, from 2.0%, the first uptick in four months, reflecting pass-through effects. Higher inflation was partially due to the base effects of gasoline and energy subsidies, with the end-date for these govt subsidies still unknown. Service sector inflation held up well at 2.2%, helped by wage growth. Expectation of a virtuous cycle between wage and price increases keeps longer-term inflation expectation on an upward trend, and helps explain the BoJ policy shift.

Japan's unemployment rate rose to 2.6% in February (Chart 3), as the Bank of Japan confirmed employment and wage growth had improved moderately, although the pace of increase may slow down subject to labour supply. Total cash earnings increased 2% y/y, but the spring wage negotiations, or Shunto, resulted in a wage hike of 5+% for fiscal 2024, the highest for over 30 yrs, which bodes well for higher inflation. Wage increases have led to moderate inflation in the services sector.

Chart 4 shows that the reliable negative correlation between real yields on US TIPS and the gold price has become less reliable since Covid, with the gold price continuing to rise despite TIPS real yields increasing in 2023-24. Changes in the correlations of asset returns has been a notable feature since the post-Covid inflation shock emerged in 2021 (also see "A marriage of inconvenience? The remarkable harmony between stocks and bonds", FTSE Russell, April 2023).

Chart 1: Consensus GDP forecasts continue to show weaker growth in 2024, after the 2022-23 policy tightening. Japan's economy has seen improvements in multiple sectors, despite the uncertain global recovery.

Consensus Real GDP Forecasts (Avg., %, March 2024)			
	2023	2024	2025
US	2.5	2.1	1.7
UK	0.1	0.3	1.2
Eurozone	0.5	0.5	1.3
Japan	1.9	0.7	1.0
China	5.2	4.6	4.5
Canada	1.1	0.5	2.0

Chart 3: Japan's labour supply was constrained, with high participation ratios of women and seniors. Cash earnings growth rose to 2% y/y, in line with prospects of more wage increases as agreed in Shunto 2024.

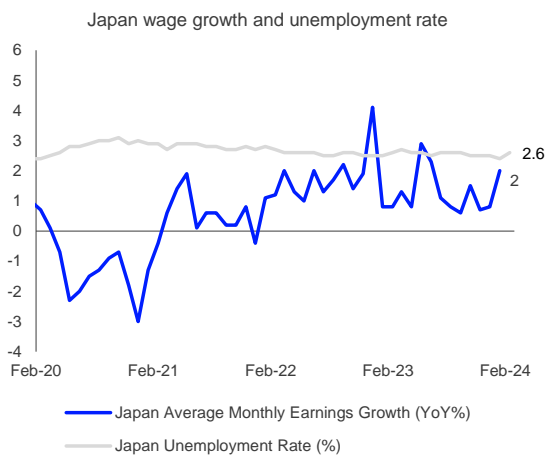


Chart 2: Disinflation has slowed in Q1, though the picture is not uniform, reflecting different inflation dynamics and growth dispersion. Japan's inflation rose on increased wage growth.

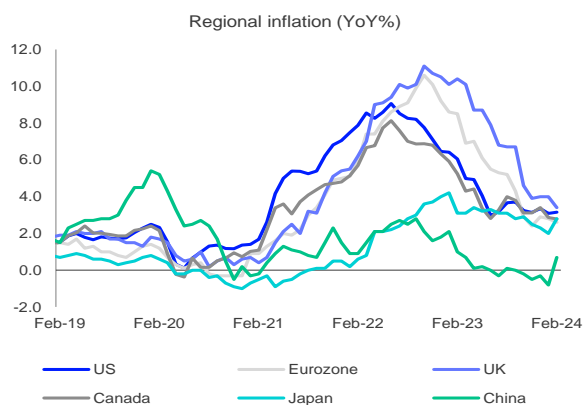


Chart 4: The gold price has reached new highs in 2023-24, despite the surge in US real yields, and the negative correlation of the pre-Covid era has broken down. This may reflect geo-political uncertainty, or a new era?



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# Financial Conditions and Monetary Policy Settings

Healthy money supply growth and expanding balance sheets helped maintain accommodative financial conditions in Japan, alongside a weaker yen. The Bank of Japan finally tightened monetary policy moderately in March, raising policy interest rates to zero to 0.1% and removing yield curve control, after the 2024 Shunto wage negotiation. But the move was discounted and perceived as less hawkish than it appears, as JGB QE purchases will continue, if needed, to stabilise 10-yr bond yields.

Japan's M2 y/y growth stayed at about 2.5% in February, as Chart 1 shows, stronger than below-zero M2 growth, in the US, UK, and Eurozone. Stable and smooth money supply growth should help the BoJ sustain accommodative financial conditions and higher inflation in Japan.

Diminishing prospects of early Fed easing, and buoyant growth helped the dollar rally in the second half of March, with a break above the Y150 level. The BoJ decision to end negative rates and curve control on March 19 was well discounted, with no sign of when tightening might begin, and "broadly the same amount" of JGB purchases as before. Adverse rate differentials weigh on the CNY, as the PBoC eases policy, though the shift to fiscal stimulus in China reduces pressure on monetary policy to stimulate growth (Chart 2).

The Bank of Japan raised its short-term policy interest rate to a range of 0 to 0.1%, from -0.1 to 0%, ending its negative rate policy since 2016. It also discontinued the yield curve control, acknowledging the achievements that have been made by these large-scale monetary easing measures. But the central bank remains cautious about economic activity and prices, expecting to maintain accommodative financial conditions to support a sustained economic recovery.

In contrast to the balance sheet reduction by other G7 central banks, the BoJ's holding of JGBs remain high, and the central bank will continue JGB purchases to prevent a rapid rise in long-term interest rates. The upper bound of 1% as a reference for 10-year JGB yields has now been removed, but the BoJ will maintain accommodative financial conditions in the near term.

Chart 1: Japan's M2 y/y growth has picked up since January, in line with accommodative financial conditions as expected by the BoJ. Japan's M2 growth outperformed its peers.

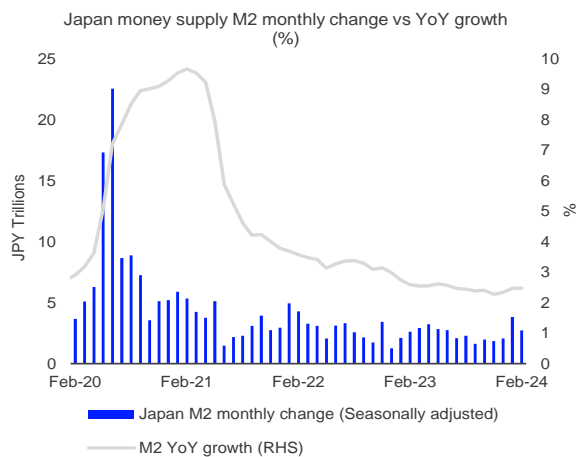


Chart 2: The US dollar edged higher in March, helped by stronger data and Fed caution. Yen and CNY weakness reflect rate differentials. Sterling dipped on lower inflation but is still underpinned by higher relative inflation.

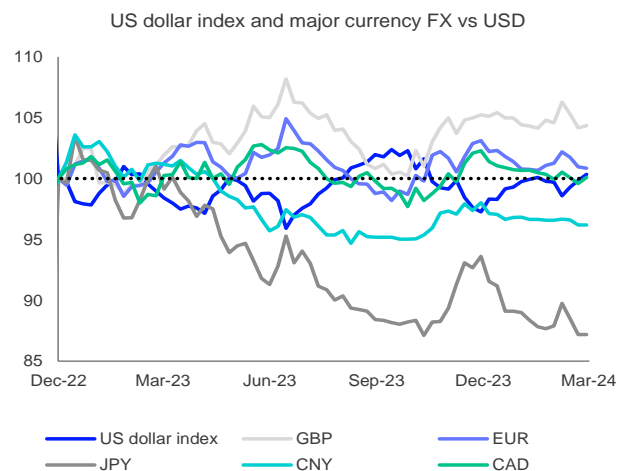


Chart 3: Central banks remain on hold, even if growth is very weak in Europe, and inflation near targets. The BoJ made a pivot in March, after the wage talk, ending negative interest rates and yield curve control.

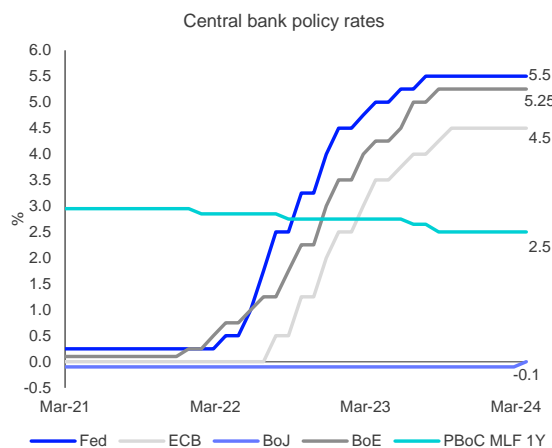
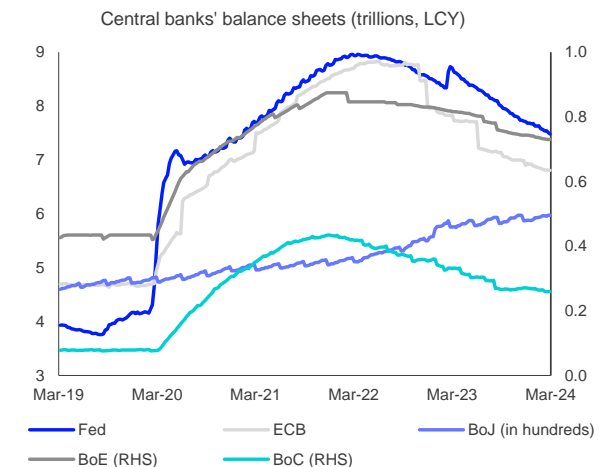


Chart 4: The BoJ's balance sheet size may stay high for longer, as JGB purchases will be conducted with about the same amount as previously, to avoid a rapid surge in 10-year JGB yields, after the YCC ended.



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# Global Yields, Curves and Breakevens

Chart 1: G7 7-10 year yields were rangebound in March, but higher in Q1, as the market re-priced central bank easing prospects. UK gilt and US Treasury yields backed up more in Q1, after falling sharply in Q4.

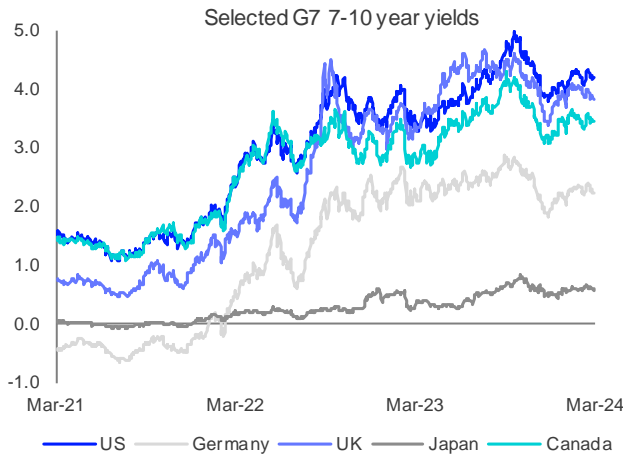


Chart 2: Real yields broadly tracked nominals in Q1, with inflation breakevens remaining stable. Stronger US growth data pushed Tips real yields higher. Real yields remain below the 2023 cycle highs.

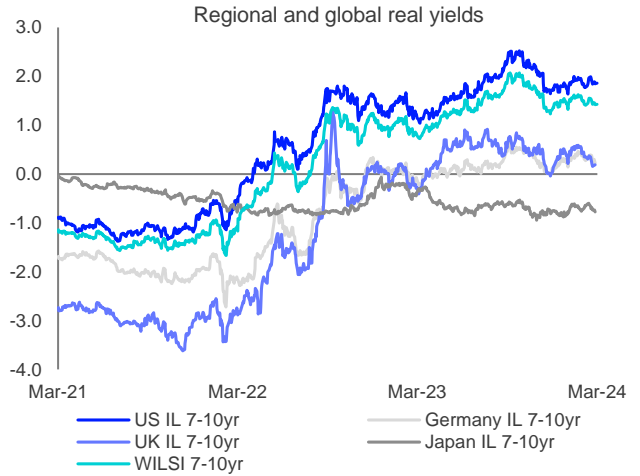


Chart 3: "Higher for longer" returned as the dominant G7 fixed income narrative, and curves remained deeply inverted, as markets scaled back easing expectations. JGBs reacted little to the end of curve control.

Chart 4: Longer dated curves are less inverted than 10s/2s, with the exception of Canada, and UK longs now show a tiny yield pick-up over 1-3 yrs. Re-investment risk may have kept curves flat in 2023-24.

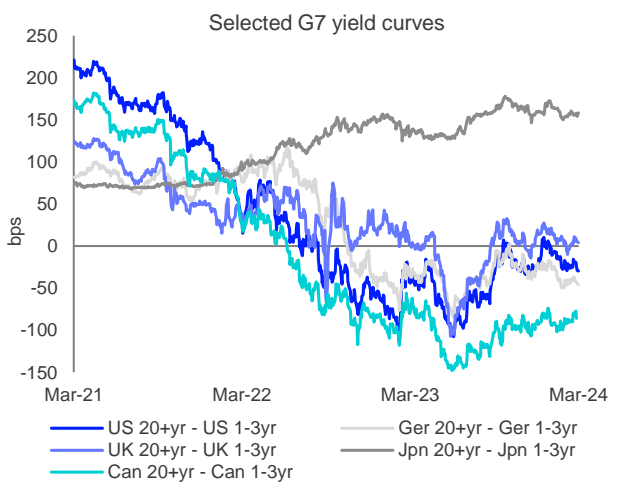
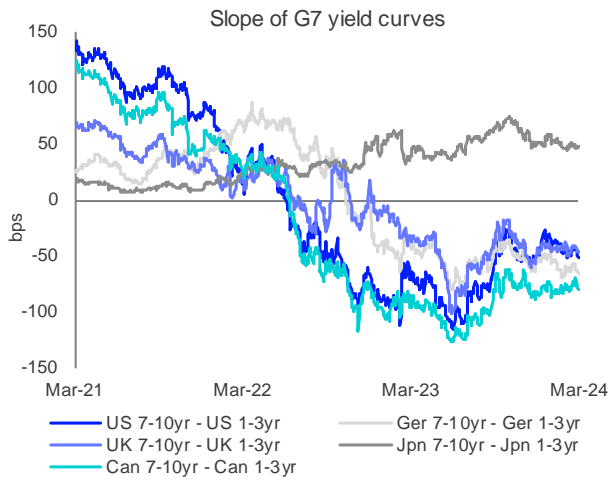
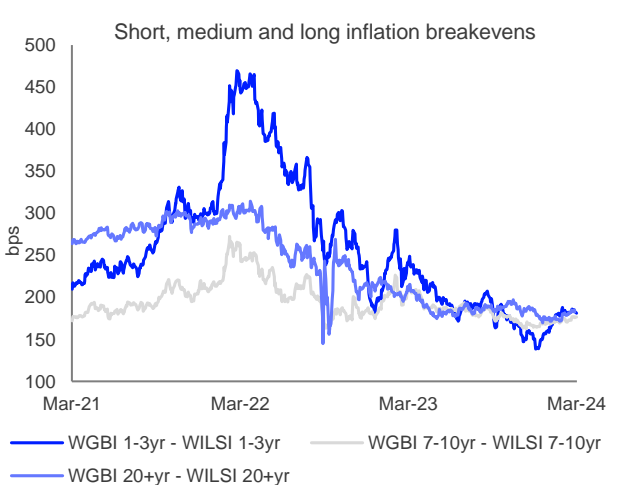
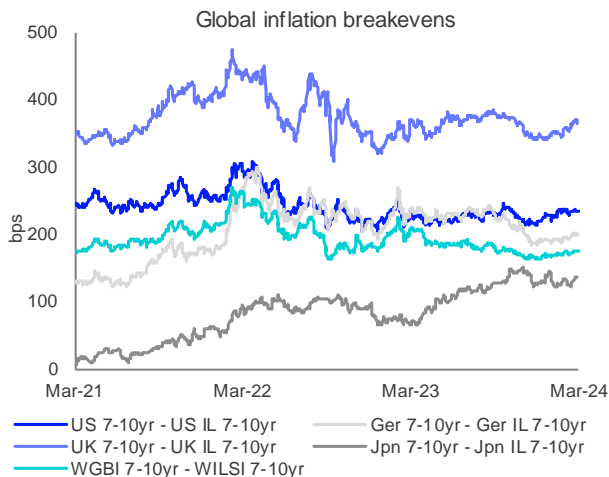


Chart 5: G7 7-10 year inflation breakevens backed up modestly in Q1, after dipping in Q4 2023, after the Fed pivot. This is the normal pro-cyclical pattern whereby breakevens rise when yields rise, and vice versa.

Chart 6: Inflation breakevens of all maturities have converged just below 2%, globally, which is strong evidence that inflation expectations have not de-stabilized and entered a new and higher regime.



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# Yield Spread and Credit Spread Analysis

Chart 1: US sovereign spreads remain cyclical, rising sharply during the Fed tightening cycle in 2022-23, but falling since the Fed pivot in December. Recent doubts about Fed easing pushed spreads a bit wider.

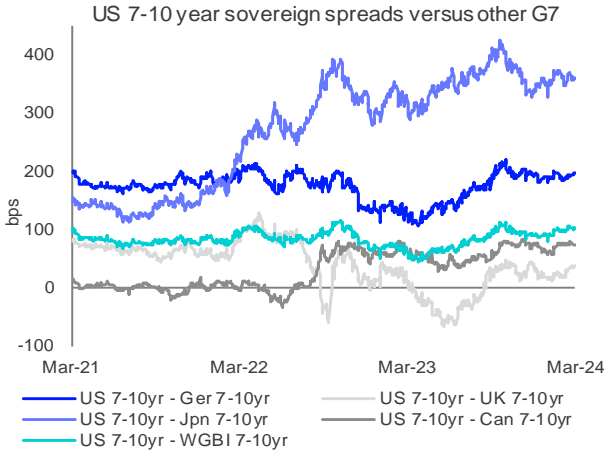


Chart 2: The ECB's TPI (transmission protection instrument) helped stabilize Italian spreads in 2022, which peaked around 200 bp v Bunds. The risk rally has also helped BTP spreads tighten in 2023-24.

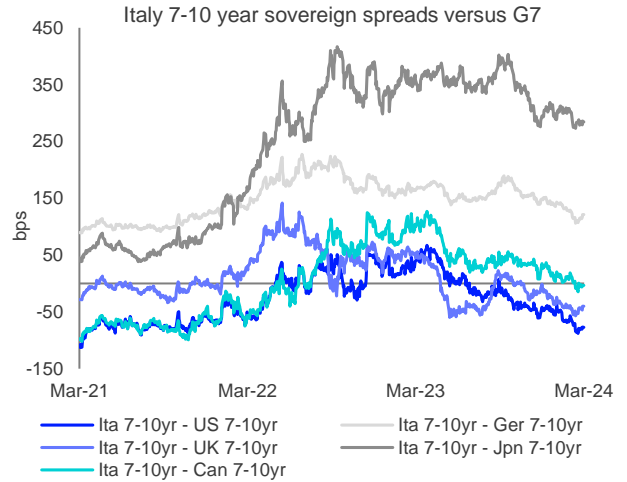


Chart 3: EM spreads widened during the Q4 rally in G7 gov. bonds but the back-up in yields in Q1 has caused spreads to tighten again. EM spreads have fallen the most in 2022-24, during the G7 tightening cycle.

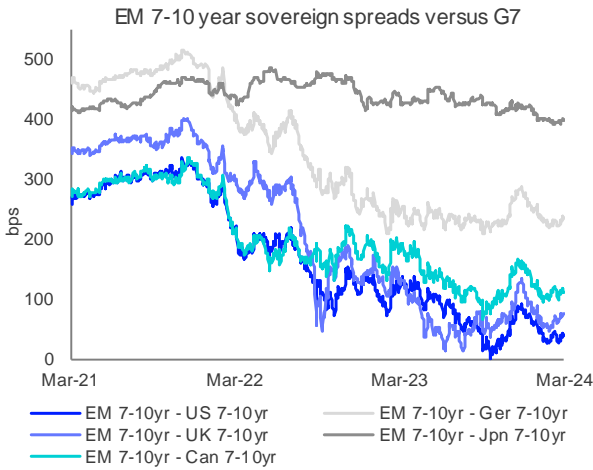


Chart 4: Chinese spreads remain near multi-decade lows versus the G7, after the PBOC eased rates during the period of rising G7 rates. Spreads have moved less versus JGBs, reflecting curve control in Japan.

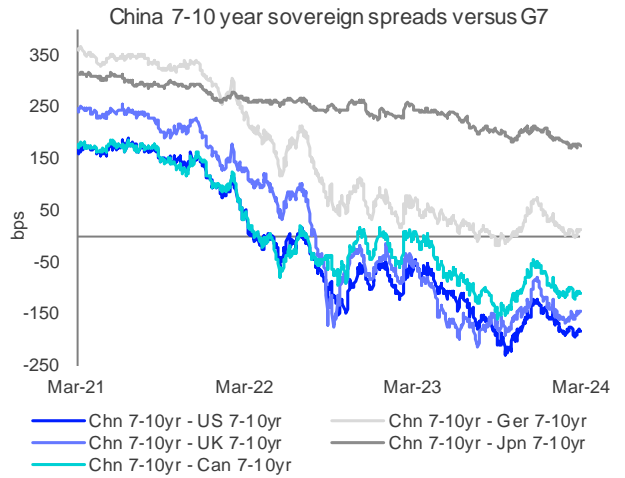


Chart 5: High yield (HY) spreads have tightened by over 200 bp since 2022, driven by the risk rally, with US HY spreads now close to pre-Ukraine shock levels. Eurozone spreads narrowed less after a bigger energy shock.

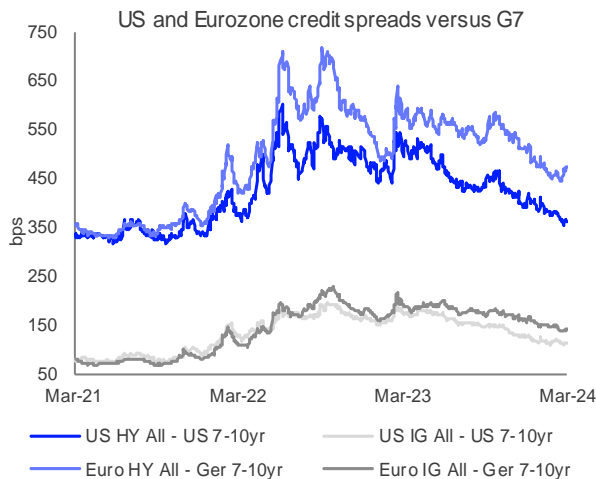
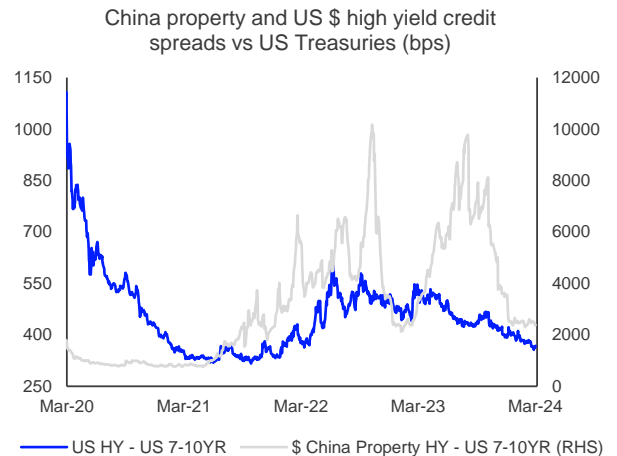


Chart 6: Both US and Chinese \$ HY spreads tightened in Q1, as US gov. yields backed up. China's property spreads reflect mixed performance – both rises and falls – as sector support was accompanied by further defaults.



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# Investment Grade Credit and RMBS analysis

Chart 1: As the risk rally continued in March, US IG spreads narrowed again, though partly due to a modest back-up in US Treasury yields. HY continues to outperform IG credits, due to closer correlation with equities.

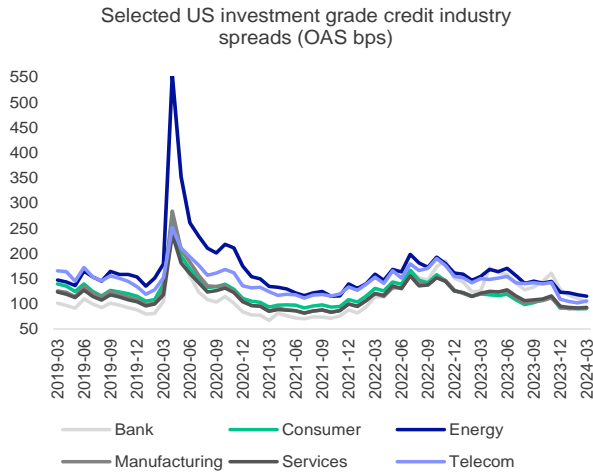


Chart 2: US real estate and financial spreads have been tightening since mid-2023, helped by a slightly steeper yield curve, receding recession risk and low mortgage defaults (helped by high employment).

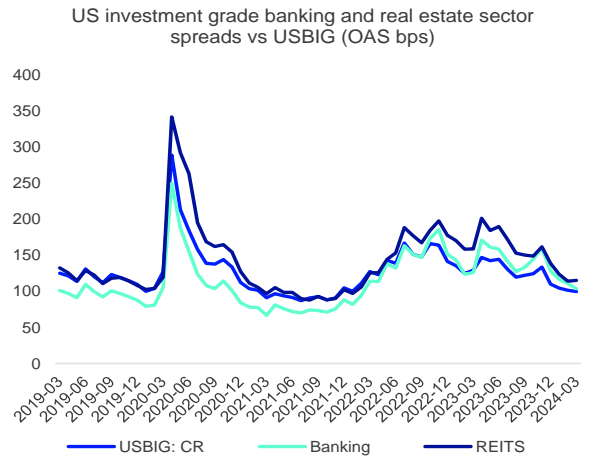


Chart 3: Eurozone spreads tightened again, though the Q1 move was driven by the back-up in Bund yields, with IG yields mostly unchanged. The insurance sector has unwound the 2022 Ukraine spike in spreads.

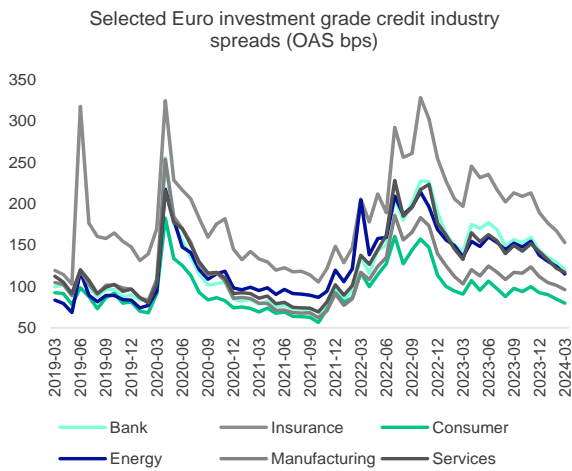


Chart 4: UK IG credit spreads have normalised at pre-Covid levels, though absolute yields are much higher. Spread tightening was largely uniform across sectors, helped by slightly higher gilt yields in Q1 and the risk rally.

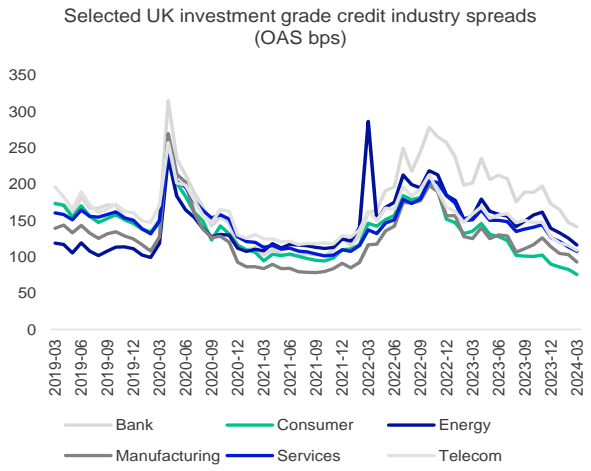


Chart 5: IG credit spreads have almost converged on RMBS spreads, despite the agency guarantee supporting RMBS. RMBS run-offs of up to \$35bn monthly from the Fed's balance sheet, with no re-investment, is a factor here.

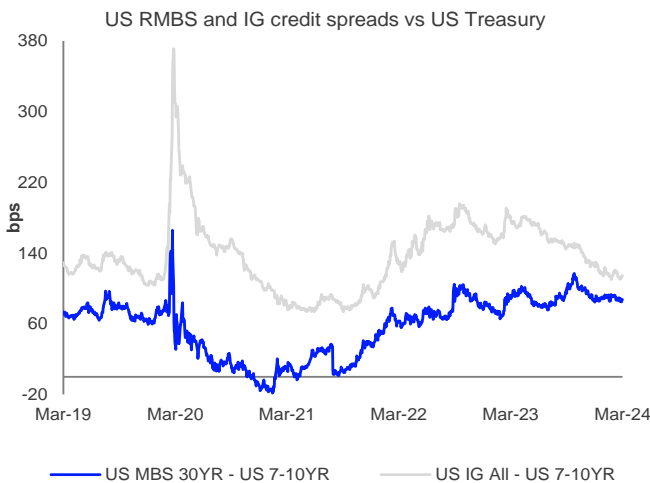
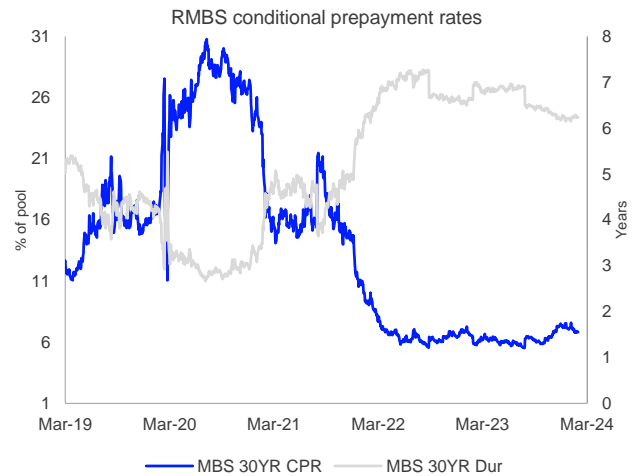


Chart 6: Low RMBS prepayment rates have pre-dominated since the Fed hiked rates in 2022-23, and the incentive to refinance mortgages disappeared. This has led to housing market turnover at low levels.



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# High Yield Credit Analysis

Chart 1: US HY sector performance shows manufacturing performing strongly, despite the manufacturing recession, closely followed by financial and consumer issues. Energy remains the most volatile sector.

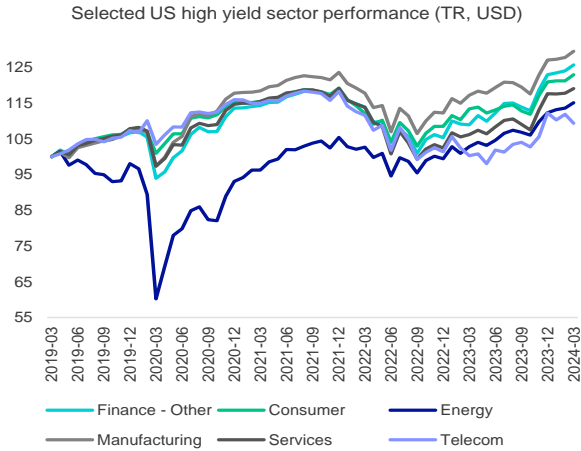


Chart 2: US HY sectors show financials have a low weighting, with cross-overs like Prefs. and AT1 not included in straight HY indices. Services, manufacturing and energy dominate HY sector weights.

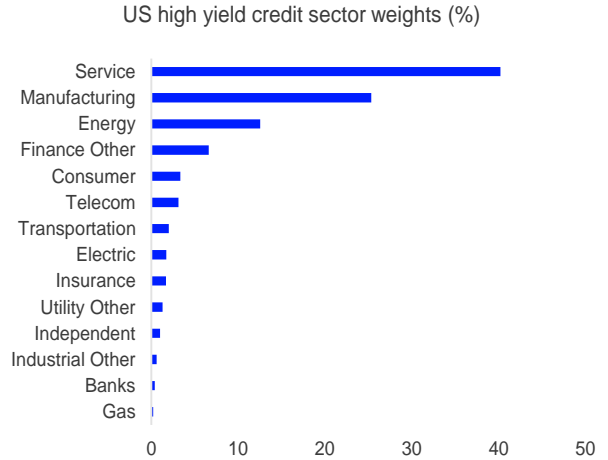


Chart 3: Reflecting the risk rally, CCC issues have outperformed in the year since Q1 2023, though they suffered the largest drawdowns in Covid, and the early stages of Fed tightening in H1 2022.

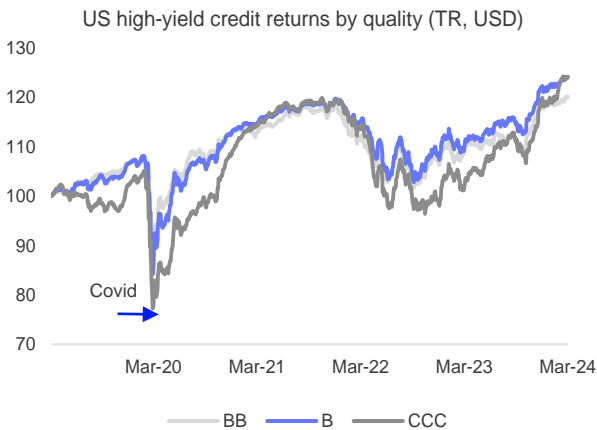


Chart 4: Higher quality BB spreads have remained more stable since pre-Covid. Spreads have mean-reverted to pre-Covid levels, after a period of high volatility, and strong performance in 2023-24.

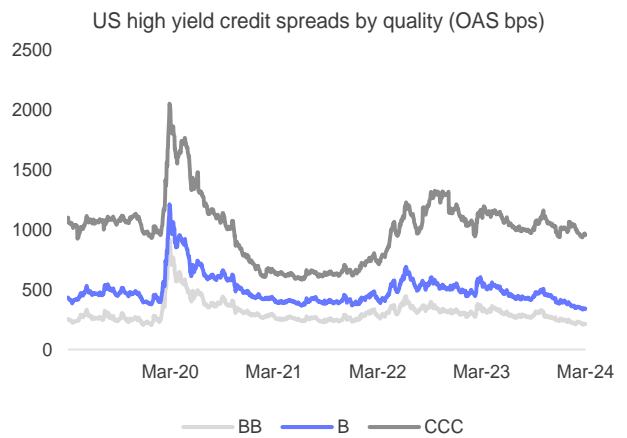


Chart 5: Expected cash flows and default risks can dominate performance of HY credit, causing duration to be less predictable than IG. US HY duration has fallen since the Fed began raising rates.

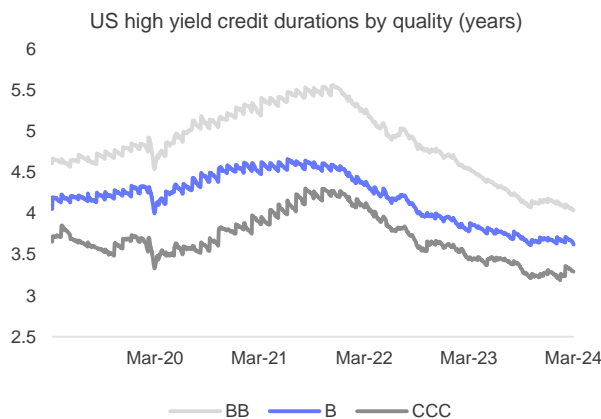
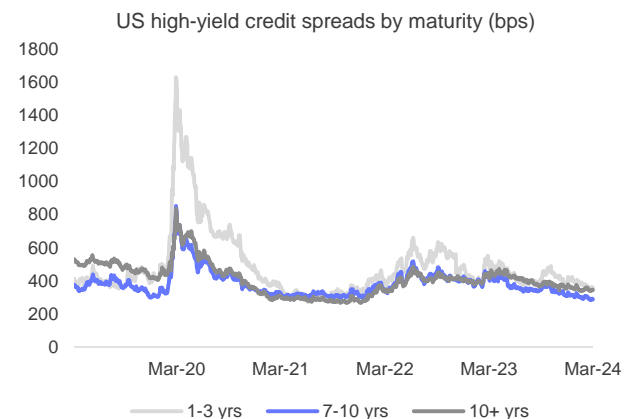


Chart 6: The sell-off on the outbreak of Covid drove short-dated HY spreads out most, reflecting higher yield sensitivity to a change in price and lower credit quality in short duration bonds. Spreads converged in 2023-24.



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# Sovereign and Climate Bonds Analysis

Chart 1: SI sovereign performance shows the extra duration in the ESGWGBI, over the last 5 years, when yields backed up in 2022-23. Heavy weightings in Europe drove climate WGBI outperformance in 2023.

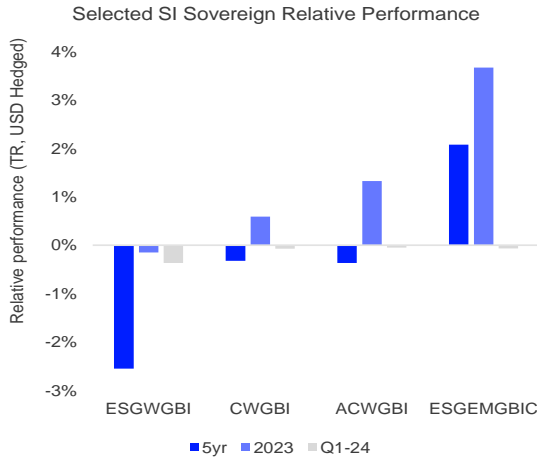


Chart 2: Compared to sovereign bonds, SI corporates outperformed a little in Q1. The Green WBIG showed a modest 0.2% relative gain, though the PAB (Paris aligned benchmark) lost 0.1%.

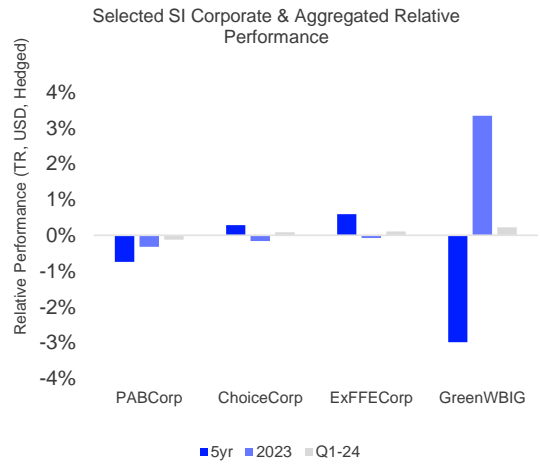


Chart 3: The most striking SI outperformer in 2023-24 has been the EM index, reflecting high weightings of Poland (25%), Hungary (10%) and Malaysia (9%). Longer duration drove underperformance of ESGWGBI.

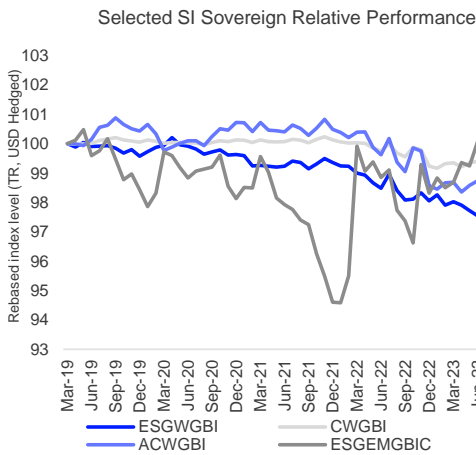


Chart 4: The Green WBIG index fell sharply in the 2022-23 bond sell-off, due to its extra duration versus parent WBIG. But the higher European sovereign weighting drove outperformance in 2023-24.

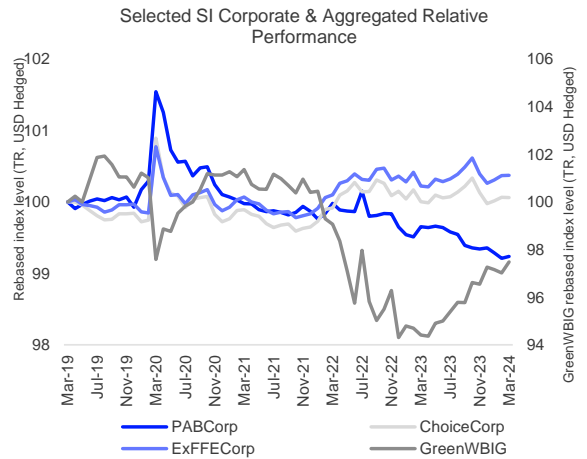


Chart 5: Recent outperformance by the EM ESG index is reflected in spreads as well. Yields fell in the climate WGBI relative to WGBI partly because of the high European weighting, which increased in Q1, 2022.

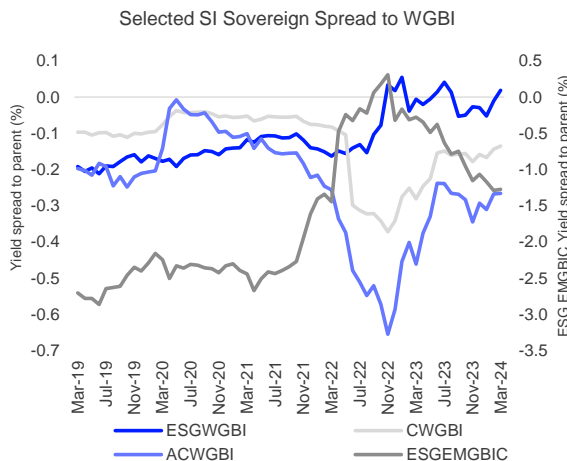
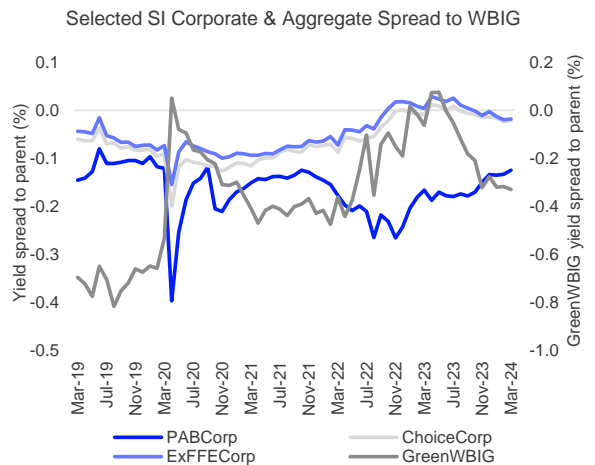


Chart 6: Heavy issuance as yields rose removed the "greenium" spread in 2022 in Green WBIG, but this returned in 2023-24. Yield spreads may not map precisely to performance because of index duration differences.



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# Global Sovereign Bond Returns – 3M and 12M % (JPY & LC, TR)

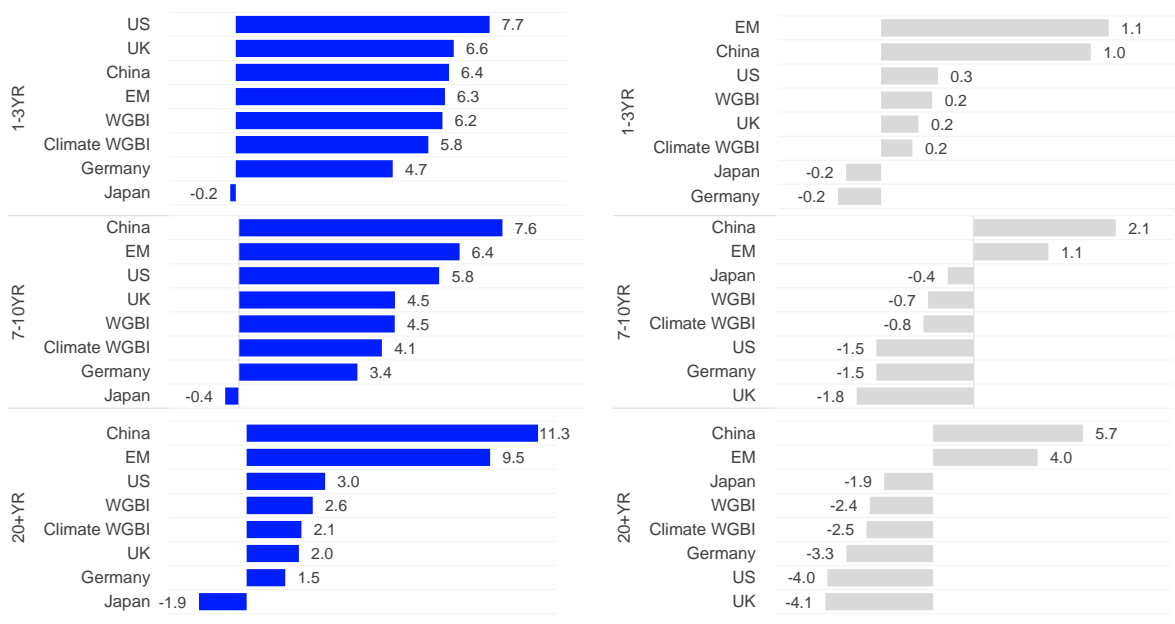
Conventional government bonds mostly showed positive returns in yen terms, for Q1, except JGBs. Stronger data and a stall in G7 disinflation caused re-assessment of policy easing prospects. Chinese and EM government bonds led gains on 3M and 12M. In contrast, JGBs lost most in yen, and local currency terms, by up to 9.1% over 12M.

G7 sovereign bonds stabilised in March, though showed losses for Q1 in longer bonds. China and EM outperformed in Q1, led by longs. Bond returns in yen terms were boosted by currency effects, as the yen fell below the Y150 level versus the US dollar.

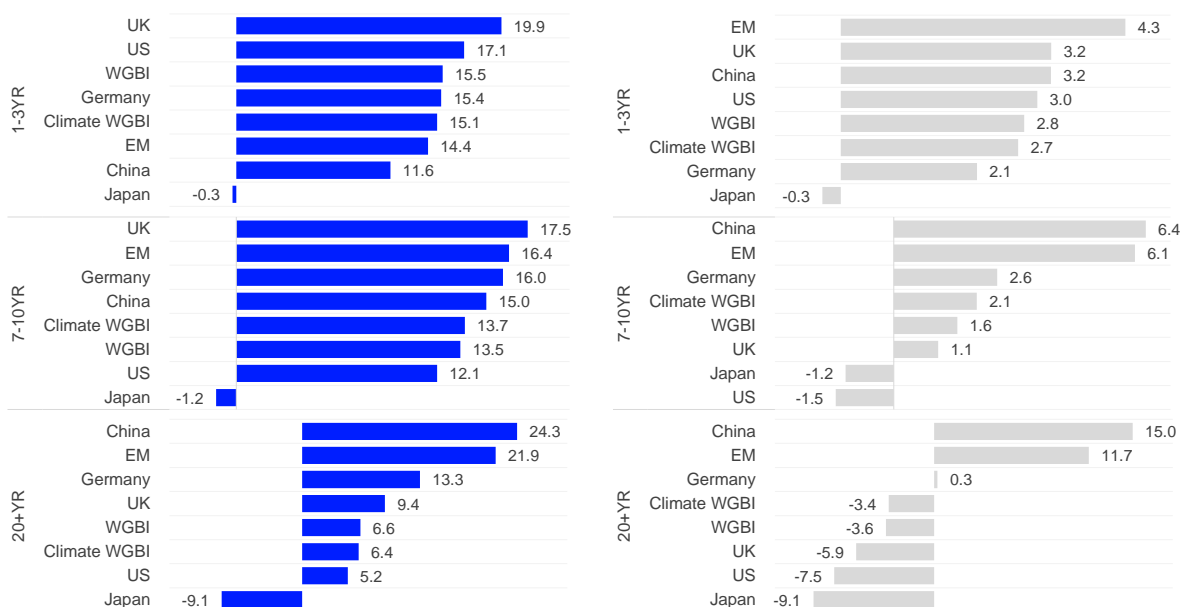
Shorter UK gilts outperformed on 12M in yen, boosted by sterling strength, gaining up to 20%. PBoC easing and disinflation boosted China government bond returns on 3M and 12M, despite expanding fiscal stimulus in 2024.

## CONVENTIONAL GOVT BONDS

3M JPY 3M LCY



12M JPY 12M LCY



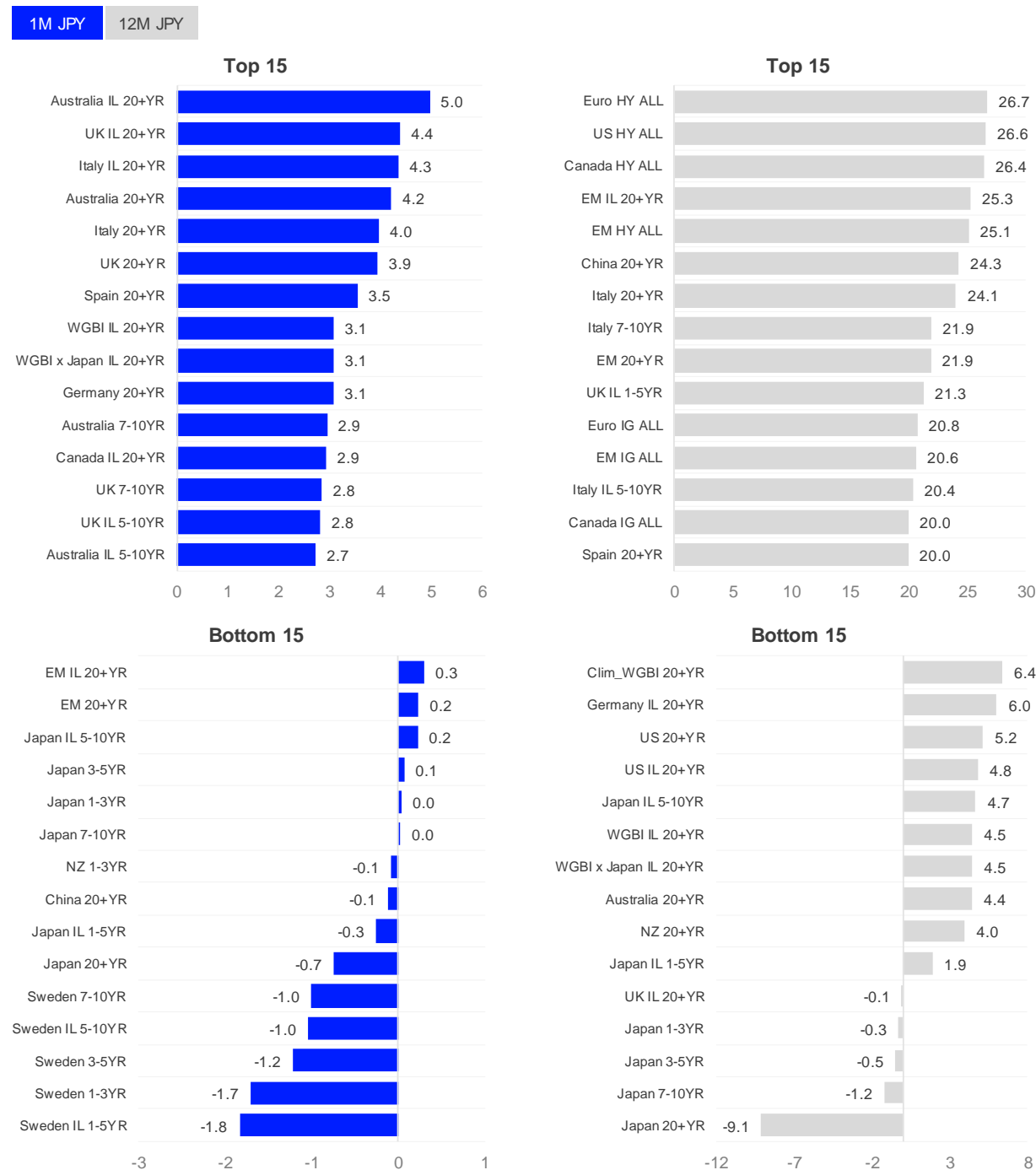
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# Top and Bottom Bond Returns – 1M & 12M % (JPY, TR)

Some Top 15 March performers gained up to 5%, helped by the risk rally. Swedish bonds dominated the Bottom 15 list for March, as the kroner weakened. High yield credit remained the strongest 12M performers, followed by EM and IG credit. JGBs and long UK linkers were again the weakest 12M performers, driven by the UK's long duration and the weak yen.

Australian, UK, and Italian bonds led gains in March, helped by stronger currencies against the yen. The ECB's transmission protection instrument (introduced in 2022) and the risk rally helped peripheral Eurozone bond returns on both 1M and 12M. Gilts rallied on lower UK inflation in March.

Climate WGBI longs crept into the Bottom 15 on 12M, with long Bund linkers, not helped by long duration. But 12M returns were almost positive in yen terms, helped by a weaker yen. Only JGBs show losses over 12M, with a slight loss in long UK linkers.



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## Appendix – Global Bond Market Returns % (JPY & LC, TR) – March 31, 2024

### Government Bond Returns

Top 15% Bottom 15%

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

		3M		6M		YTD		12M	
		Local	JPY	Local	JPY	Local	JPY	Local	JPY
<b>US</b>	1-3yr	0.28	7.65	2.81	4.27	0.28	7.65	2.98	17.10
	7-10yr	-1.47	5.78	5.02	6.51	-1.47	5.78	-1.46	12.05
	20+yr	-4.01	3.05	8.81	10.36	-4.01	3.05	-7.52	5.16
	IG All	-0.43	6.89	7.85	9.38	-0.43	6.89	4.51	18.84
	HY All	1.66	9.14	8.72	10.26	1.66	9.14	11.33	26.60
<b>UK</b>	1-3yr	0.18	6.58	2.75	7.86	0.18	6.58	3.19	19.89
	7-10yr	-1.77	4.50	6.09	11.36	-1.77	4.50	1.13	17.49
	20+yr	-4.09	2.03	11.07	16.59	-4.09	2.03	-5.87	9.36
<b>Euro</b>	IG All	0.42	5.40	6.02	9.69	0.42	5.40	6.82	20.75
	HY All	1.80	7.00	7.72	11.63	1.80	7.00	11.75	26.72
<b>Japan</b>	1-3yr	-0.17	-0.17	-0.10	-0.10	-0.17	-0.17	-0.28	-0.28
	7-10yr	-0.39	-0.39	1.16	1.16	-0.39	-0.39	-1.21	-1.21
	20+yr	-1.86	-1.86	-1.24	-1.24	-1.86	-1.86	-9.10	-9.10
<b>China</b>	1-3yr	1.03	6.43	1.76	4.29	1.03	6.43	3.19	11.57
	7-10yr	2.14	7.60	3.86	6.45	2.14	7.60	6.37	15.01
	20+yr	5.57	11.22	9.34	12.08	5.57	11.22	14.86	24.20
<b>EM</b>	1-3yr	1.12	6.30	2.31	4.93	1.12	6.30	4.31	14.38
	7-10yr	1.13	6.36	4.87	7.22	1.13	6.36	6.10	16.37
	20+yr	3.84	9.41	8.38	10.97	3.84	9.41	11.55	21.85
	IG All	0.81	8.22	6.79	8.30	0.81	8.22	6.09	20.64
	HY All	4.11	11.76	9.40	10.95	4.11	11.76	10.05	25.14
<b>Germany</b>	1-3yr	-0.21	4.73	1.79	5.31	-0.21	4.73	2.06	15.37
	7-10yr	-1.47	3.41	5.33	8.97	-1.47	3.41	2.62	16.00
	20+yr	-3.29	1.50	13.32	17.24	-3.29	1.50	0.26	13.33
<b>Italy</b>	1-3yr	0.18	5.37	2.90	6.68	0.18	5.37	3.44	17.18
	7-10yr	1.36	6.60	10.65	14.71	1.36	6.60	8.24	22.61
	20+yr	3.63	8.99	20.23	24.65	3.63	8.99	10.44	25.10
<b>Spain</b>	1-3yr	0.13	5.31	2.41	6.17	0.13	5.31	2.65	16.28
	7-10yr	-0.06	5.11	8.13	12.10	-0.06	5.11	5.31	19.29
	20+yr	0.38	5.58	17.41	21.72	0.38	5.58	6.42	20.55
<b>France</b>	1-3yr	-0.28	4.88	2.07	5.82	-0.28	4.88	2.33	15.92
	7-10yr	-1.39	3.50	6.07	9.73	-1.39	3.50	3.28	16.74
	20+yr	-2.60	2.44	15.21	19.44	-2.60	2.44	3.31	17.02
<b>Sweden</b>	1-3yr	0.00	1.98	2.14	6.09	0.00	1.98	2.56	14.00
	7-10yr	-2.08	-0.14	6.41	10.52	-2.08	-0.14	1.73	13.07
<b>Australia</b>	1-3yr	0.87	3.54	2.73	5.32	0.87	3.54	2.24	13.25
	7-10yr	0.96	3.63	6.26	8.94	0.96	3.63	-0.80	9.88
	20+yr	-0.66	1.98	10.06	12.86	-0.66	1.98	-6.40	3.70
<b>New Zealand</b>	1-3yr	0.78	2.55	3.91	5.26	0.78	2.55	3.91	13.34
	7-10yr	-0.69	1.05	8.43	9.84	-0.69	1.05	2.17	11.44
	20+yr	-4.16	-2.48	13.44	14.91	-4.16	-2.48	-4.70	3.95
<b>Canada</b>	1-3yr	0.38	5.00	3.04	4.40	0.38	5.00	2.97	17.11
	7-10yr	-1.94	2.57	6.25	7.66	-1.94	2.57	-1.36	12.18
	20+yr	-5.60	-1.64	11.54	12.57	-5.60	-1.64	-3.05	9.83

Source: FTSE Russell and LSEG. All data as of March 31, 2024. 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 March 31, 2024

### Global Bond Yields

Top 15% Bottom 15%

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

		Conventional government bonds				Inflation-linked bonds			Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	4.73	4.32	4.21	4.43	2.08	1.86	2.12	5.35	7.83
	3M Ago	4.37	3.92	3.87	4.14	2.20	1.72	1.96	5.11	7.79
	6M Ago	5.16	4.71	4.59	4.82	2.72	2.29	2.37	6.06	8.91
	12M Ago	4.20	3.72	3.49	3.76	1.44	1.17	1.53	5.25	8.43
UK	Current	4.31	3.88	3.85	4.35	0.08	0.14	1.07		
	3M Ago	3.94	3.45	3.46	4.07	-0.02	-0.02	0.91		
	6M Ago	4.73	4.46	4.35	4.81	0.55	0.53	1.39		
	12M Ago	3.79	3.42	3.35	3.70	0.04	-0.29	0.36		
Japan	Current	0.12	0.27	0.60	1.70	-1.43	-0.84			
	3M Ago	0.00	0.13	0.50	1.60	-1.67	-0.81			
	6M Ago	0.01	0.21	0.66	1.61	-1.75	-0.70			
	12M Ago	-0.09	0.08	0.37	1.28	-0.84	-0.38			
China	Current	1.90	2.13	2.38	2.62					
	3M Ago	2.18	2.33	2.58	2.90					
	6M Ago	2.24	2.42	2.70	3.06					
	12M Ago	2.31	2.56	2.82	3.22					
EM	Current	3.30	3.91	4.60	3.90	4.92	4.70	5.38	5.66	8.81
	3M Ago	3.44	3.95	4.70	4.34	4.27	4.23	4.82	5.57	10.03
	6M Ago	3.58	4.52	5.05	4.51	3.27	4.48	5.32	6.43	11.01
	12M Ago	3.62	4.39	4.67	4.48	3.48	4.05	5.17	5.77	11.18
Germany	Current	2.89	2.38	2.23	2.43	0.78	0.24	0.26		
	3M Ago	2.48	1.97	1.96	2.25	0.92	0.16	0.16		
	6M Ago	3.21	2.78	2.75	2.97	0.87	0.44	0.52		
	12M Ago	2.69	2.35	2.25	2.37	0.16	-0.06	-0.11		
Italy	Current	3.27	3.12	3.44	4.05	1.00	1.39	1.70		
	3M Ago	2.99	2.88	3.45	4.17	1.23	1.62	1.88		
	6M Ago	3.94	4.03	4.50	5.02	1.68	2.31	2.43		
	12M Ago	3.27	3.38	3.90	4.43	1.00	1.72	1.91		
France	Current	2.98	2.65	2.70	3.18	0.57	0.42	0.73		
	3M Ago	2.49	2.23	2.43	3.00	0.56	0.32	0.64		
	6M Ago	3.33	3.14	3.26	3.79	0.82	0.75	1.12		
	12M Ago	2.83	2.57	2.70	3.28	-0.06	0.16	0.60		
Sweden	Current	2.93	2.40	2.33		1.55	0.88			
	3M Ago	2.59	2.04	2.01		1.12	0.59			
	6M Ago	3.50	3.18	2.98		1.42	1.28			
	12M Ago	2.85	2.52	2.26		0.75	0.62			
Australia	Current	3.75	3.61	3.92	4.36	1.11	1.37	1.78		
	3M Ago	3.71	3.63	3.90	4.30	0.85	1.27	1.61		
	6M Ago	4.14	4.10	4.43	4.86	1.30	1.78	2.24		
	12M Ago	3.03	3.32	3.55	4.10	0.41	1.06	1.65		
NZ	Current	4.91	4.41	4.53	4.91	1.87	2.29			
	3M Ago	4.71	4.24	4.31	4.60	1.45	2.12			
	6M Ago	5.63	5.35	5.32	5.54	2.50	2.89			
	12M Ago	4.78	4.44	4.40	4.55	1.33	1.96			
Canada	Current	4.01		3.44	3.38			1.65	4.92	6.73
	3M Ago	3.73		3.10	3.04			1.45	4.77	7.07
	6M Ago	4.70		4.07	3.88			2.22	5.90	7.93
	12M Ago	3.58		2.87	3.03			1.28	5.00	7.37

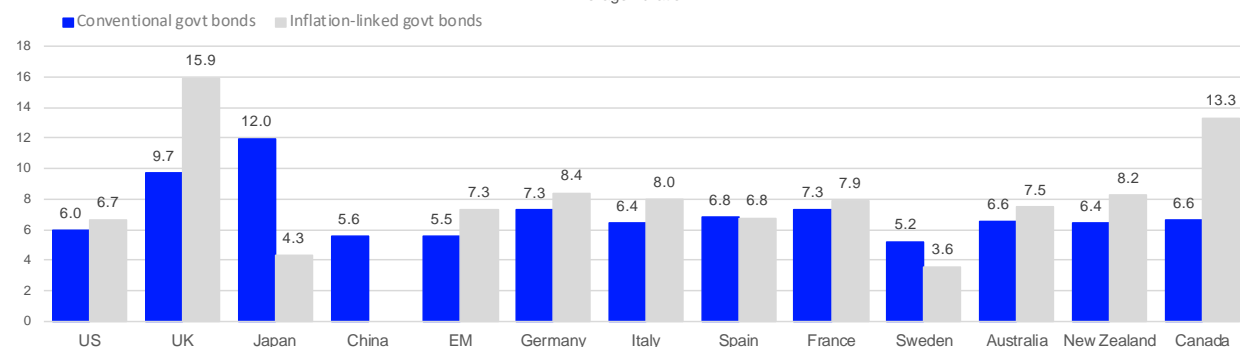
Source: FTSE Russell and LSEG. All data as of March 31, 2024. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Duration and Market Value (USD, Bn) as of March 31, 2024

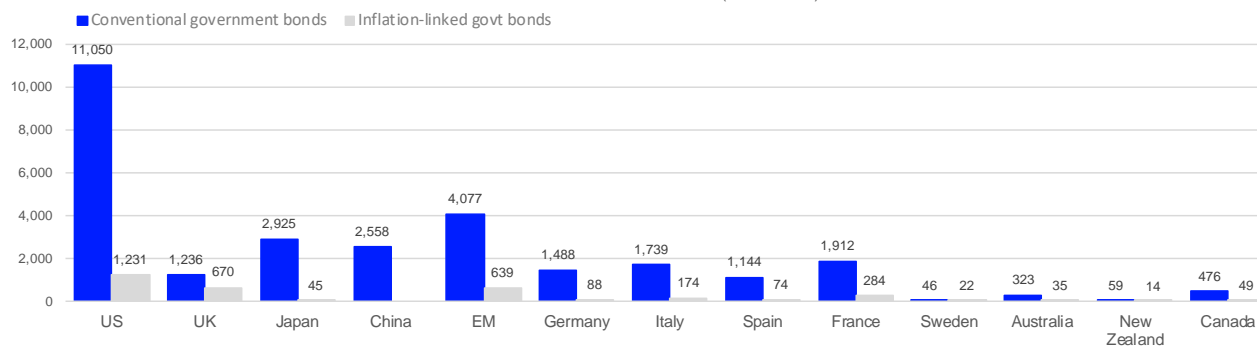
	Conventional government bonds								Inflation-linked government bonds					
	Duration				Market Value				Duration			Market Value		
	3-5YR	7-10YR	20+YR	Overall	3-5YR	7-10YR	20+YR	Total	5-10YR	20+YR	Overall	5-10YR	20+YR	Total
<b>US</b>	3.7	7.3	16.8	<b>6.0</b>	2,611.1	1,098.3	1,320.3	<b>11,050.4</b>	7.1	21.7	<b>6.7</b>	396.7	112.3	<b>1,231.5</b>
<b>UK</b>	3.8	7.5	18.6	<b>9.7</b>	174.8	191.5	321.2	<b>1,235.8</b>	6.8	26.9	<b>15.9</b>	117.6	255.4	<b>670.1</b>
<b>Japan</b>	3.8	8.1	23.6	<b>12.0</b>	345.2	369.6	627.7	<b>2,924.9</b>	7.1		<b>4.3</b>	19.7		<b>44.8</b>
<b>China</b>	3.7	7.5	17.9	<b>5.6</b>	569.0	388.9	297.9	<b>2,558.5</b>						
<b>EM</b>	3.5	6.9	16.4	<b>5.5</b>	858.3	709.4	390.0	<b>4,077.4</b>	6.0	13.4	<b>7.3</b>	105.7	163.0	<b>638.8</b>
<b>Germany</b>	3.8	7.8	20.5	<b>7.3</b>	344.6	193.0	186.8	<b>1,487.7</b>	6.7	21.2	<b>8.4</b>	43.7	18.6	<b>87.7</b>
<b>Italy</b>	3.7	7.1	16.7	<b>6.4</b>	318.3	282.0	161.7	<b>1,739.4</b>	7.2	25.9	<b>8.0</b>	64.5	5.8	<b>174.0</b>
<b>Spain</b>	3.7	7.4	17.8	<b>6.8</b>	224.6	203.2	113.8	<b>1,144.5</b>	7.7		<b>6.8</b>	47.8		<b>74.2</b>
<b>France</b>	3.8	7.4	19.6	<b>7.3</b>	336.2	316.4	245.6	<b>1,911.6</b>	6.1	24.1	<b>7.9</b>	111.2	21.6	<b>283.5</b>
<b>Sweden</b>	3.9	7.6		<b>5.2</b>	6.6	13.2		<b>45.7</b>	6.6		<b>3.6</b>	5.3		<b>21.5</b>
<b>Australia</b>	3.5	7.4	17.0	<b>6.6</b>	47.6	92.3	20.6	<b>323.2</b>	6.7	22.0	<b>7.5</b>	10.3	2.8	<b>34.6</b>
<b>New Zealand</b>	3.3	7.2	16.0	<b>6.4</b>	11.1	15.9	5.2	<b>58.7</b>	5.8		<b>8.2</b>	3.2		<b>13.9</b>
<b>Canada</b>	3.5	7.3	19.5	<b>6.6</b>	58.9	110.6	67.4	<b>475.6</b>	6.5	20.5	<b>13.3</b>	8.2	20.1	<b>49.0</b>

	Investment grade bonds										High Yield	
	Duration					Market Value					Duration	MktVal
	AAA	AA	A	BBB	Overall	AAA	AA	A	BBB	Overall		
<b>US</b>	10.7	8.3	7.1	6.5	7.0	72.3	458.7	2767.5	3473.8	6772.4	3.8	1061.1
<b>Europe</b>	5.5	4.9	4.6	4.2	4.4	10.8	221.7	1227.3	1545.0	3004.8		
<b>EM</b>		5.8	4.8	5.2	5.1		38.9	220.4	305.5	564.8	3.4	179.0

Average Duration



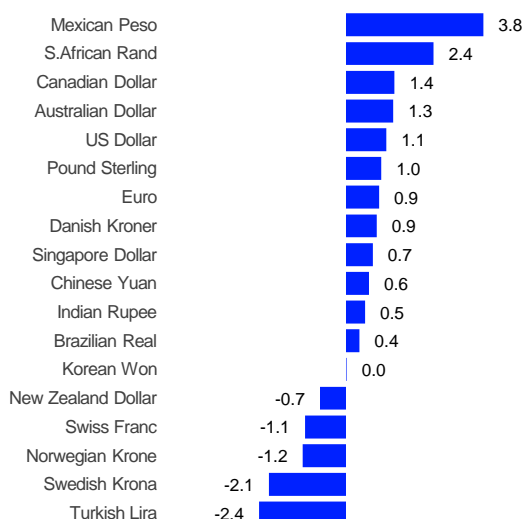
Total Market Value (USD Billions)



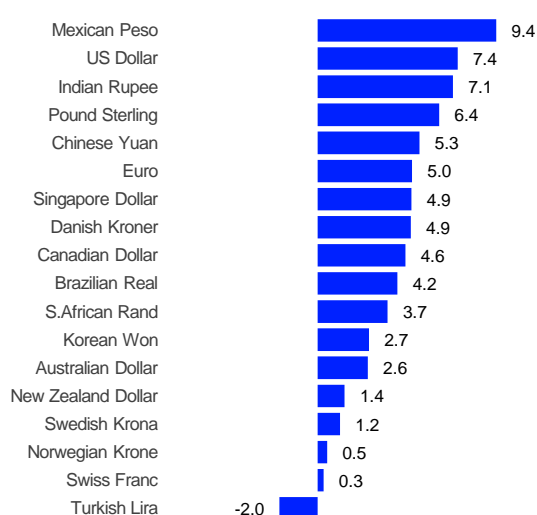
Source: FTSE Russell and LSEG. All data as of March 31, 2024. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix Glossary for list of indices used for each market. For professional investors only.

## Appendix – Foreign Exchange Returns % as of March 31, 2024

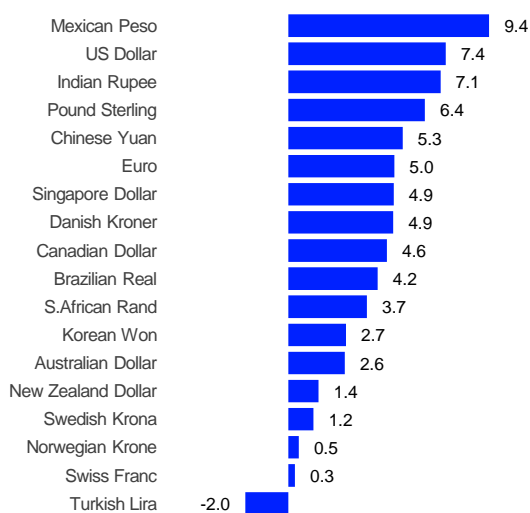
### FX Moves vs JPY - 1M



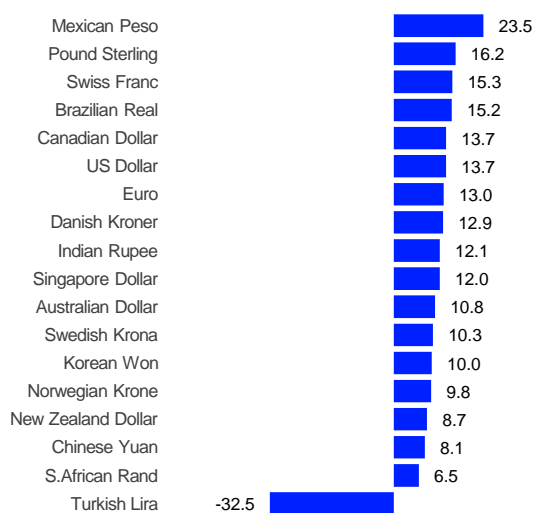
### FX Moves vs JPY - 3M



### FX Moves vs JPY - YTD



### FX Moves vs JPY - 12M



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## Appendix - Glossary

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### **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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