

Fixed Income Insights

MONTHLY REPORT - FEBRUARY 2024 | JAPAN EDITION

FOR PROFESSIONAL INVESTORS ONLY

BoJ pivot awaits confirmation in spring wage round

Central bank caution and an inflation uptick drove a long end sell-off in January, as markets re-assessed how quickly rates will fall. Japan's services activity rebounded strongly, but the improvement was uneven and largely driven by tourism. BoJ remains cautious about a radical policy shift, awaiting wage growth confirmation.

Macro and policy backdrop – Tight labour market fuel wage increases

The BoJ is expected to hold rates steady in Q1, awaiting the outcome of the "Shunto" or spring wage negotiation. The BoJ hopes wage hikes extend to small and mid-size companies in 2024, as evidence of a tighter labour market emerge. (pages 2-3)

Yields, curves and spreads - Modest bear steepening as curves adjust to central bank caution

In a reversal of the Q4 rally, the long end sold off in most markets, with sovereign spreads fairly stable. (pages 4-5)

Credit and MBS analysis – Credit spreads tightened further as govt yields rose, and credit proved a safer haven

A surge in corporate issuance did not prevent credit spreads edging in again, though mainly on higher govt yields. (page 6)

Sovereign and climate bonds – Green bonds recover after duration-led sell-off in sovereigns in 2022-23

Extra duration drove a sharp sell-off in Green Sovereigns, as yields rose, but Green credit held up well. (page 7)

Performance – Longs gave up some Q4 gains in January. Long Chinese government and EM high yield led gains Long UK linked fell 5.7% in yen in January, amidst a broad sell-off in longs. China, credit & EM outperformed. (pages 8-9)

Appendix (from page 10)

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

Chart 1: Yields backed up across the G7 in January, led by the UK, after policy caution, though 7-10-year yields moved less than longs.

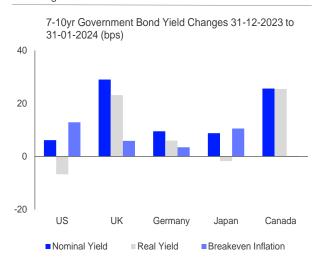
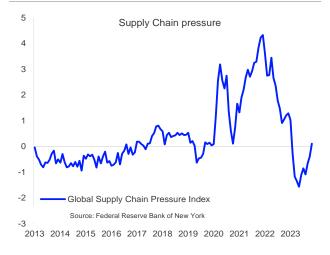


Chart 2: Pressure on supply chain costs from disruption to trade routes in the Red Sea has proved modest to date and may reflect weaker global growth. However, this may be a timing issue.



Macroeconomic Backdrop - Growth and Inflation Expectations

After 2023's soft landing for growth and inflation, IMF's January forecasts for 2024 reflect the same narrative, though European growth remains very weak. Despite Japanese core inflation slowing, core-core inflation stayed close to the 2% target, as inflation ticked up elsewhere. A tightening labour market may increase wage settlements for 2024. Manufacturing activity remained weak, but services PMI increased to 53.1 in January, largely boosted by tourism.

The IMF's January forecasts for 2024 (Chart 1) show a significant upgrade to US growth to 2.1%, after 2023's soft landing, and China, to 4.6% from 4.2%, though forecasts elsewhere are largely unchanged or a little weaker (Eurozone, Japan and Canada). An unchanged UK forecast suggests little expectation of significant fiscal stimulus ahead of the forthcoming election. Growth in Japan is expected to slow in 2024, to 0.9%, with consumption weakening due to inflation outpacing income rises.

Inflation mostly ticked up in December, as energy prices stabilised (Chart 2). Most central banks are forecasting a rebound in inflation in H1 2024, reflecting less favourable base effects, and pass through of labour cost increases. The BoJ became more convinced of sustainable price increases, judging by its core-core (less fresh food and energy) inflation forecast remaining anchored at 1.9% – very close to the 2% target.

Japan's core inflation (less fresh food) y/y continued to fall in December to 2.3% (Chart 3), taking pressure off the central bank to end curve control soon. In addition, slower earnings growth also provided reasons for the BoJ to hold rates unchanged. Unemployment fell to 2.4% in December, improving the prospects for faster wage increases in the spring wage negotiation.

Japan's manufacturing PMI has stayed below 50 since June, despite edging up to 48 in January, reflecting weak domestic demand. Services PMI rose to 53.1 from 50.8 in November, supported by new business growth, but is weaker than levels seen H1 2023 during the rebound from the Covid Lockdown (a record high of 55.9 in May).

Chart 1: IMF forecasts show a significant upgrade to US and China growth forecasts for 2024. Japanese forecasts have weakened a little, as some 2023 stimuli – exports and a weak yen – may fade in 2024.

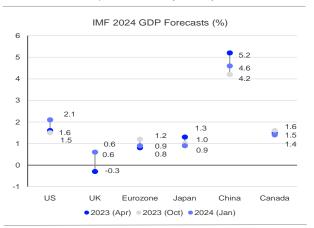


Chart 3: Both inflation and earnings growth data implied less pressure on the BoJ to pivot quickly. Japan's labour market showed more signs of tightness, which may help to negotiate higher wages in April.

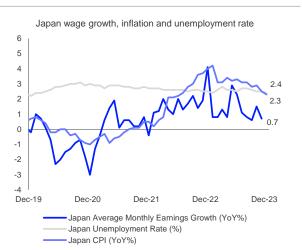


Chart 2: Inflation ticked higher in December and may prove stickier above 2% than markets presume. Japan's core-core inflation forecast stabilised at 1.9%, raising hopes of sustainable inflation in the long term.

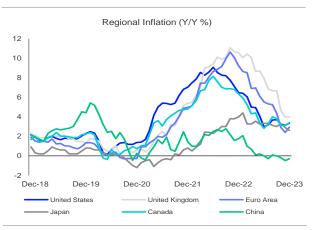
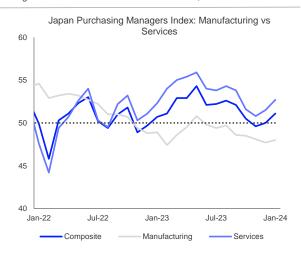


Chart 4: Japanese composite PMI improved to 51.1 in January, helped by the services sector. Manufacturing activities remained weak, with only one reading above the 50 threshold out of 15 months, due to soft demand.



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

Financial Conditions and Monetary Policy Settings

G7 financial conditions continued to ease, even though bond yields rose, in January. Credit spreads tightened further, mainly because govt bond yields rose (see page 5). The US dollar stabilised after the sharp sell-off in Q4, as the Fed cautioned on early rate cuts, as did other central banks. Yield curves in Japan normalised from a flat 10s/2s curve, but a potential drop-off of negative policy rate in 2024 adds risk to the shape of the curve, although a loosened curve control may offset the impact.

Chart 1 shows significant loosening in US financial conditions in recent months, despite higher Fed funds and the tightening spike on the US regional banking crisis in March 2023. Lower Treasury yields, tighter credit spreads, strong US equities and the weaker US dollar were the main drivers. In fact, conditions are now easier than when the Fed began raising rates in March 2022, on both the Chicago and St Louis Fed indices. This may help explain the soft landing in the economy to date.

The US dollar clawed back some of the Q4 losses in January, as rate differentials improved after Fed caution on imminent rate cuts, as Chart 2 shows. The yen's Q4 rally also reversed after lower Japanese inflation in December cast doubt on an early end to curve control. Sterling drew support from higher December inflation data and the prospect of higher UK energy price re-sets in Q1.

G7 policy rates have remained broadly stable for some months, as central banks await the full impact of the 2022-23 tightening, and disinflation continued until late-Q4. But the threat of supply-chain disturbances, after disruption to shipping in the Red Sea, and its impact on inflation, may delay policy easing. The case for a rapid easing cycle, like Covid and GFC easing, remains unclear.

Japanese yield curves have materially steepened since 2016, despite some pull backs on the Covid shock (Chart 4). Improved inflation expectations (since 2022) and growth drove the curve to normalise. But these developments took place in response to large-scale stimulus measures, and are likely distorted by yield curve control (introduced in September 2016). The curve path is uncertain in 2024 if negative short rates are abandoned and curve control is relaxed or abandoned, even if initial steepening in 10s/2s is likely.

Chart 1: US financial conditions have continued to loosen in Q1, and have returned to pre-Fed tightening levels, despite higher short rates, and Fed caution on the speed of policy easing.

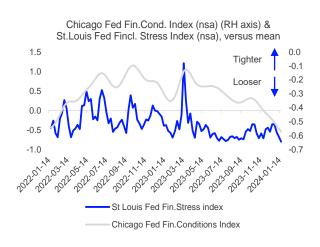


Chart 3: Despite market expectations of curve control ending, the BoJ remains cautious about a radical policy shift. Other G7 central banks are on hold, awaiting more disinflation and the impact of 2022-23 tightening.

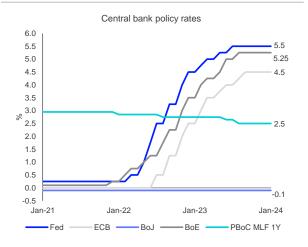


Chart 2: The US dollar recovered in January, after Fed caution on rate cuts, lower Japanese inflation and ECB discussion of easing. Yen gave up most Q4 gains as prospects receded of an early end to curve control.

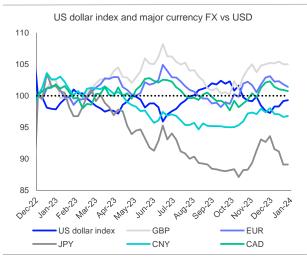
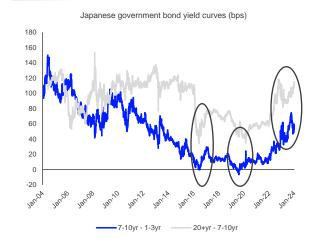


Chart 4: Both 10s/2s and 20s/10s yield curves have steepened in Japan, as inflation and growth expectations heightened. But 10s/2s remains flatter vs pre GFC, as 10-year yield restricted by the curve control policy.



Global Yields, Curves and Breakevens

Chart 1; Yields backed up across the board in January, with JGB yields moving least, thanks to BoJ curve control. The markets that had rallied most in Q4 suffered some of the biggest losses, as inflation edged up.

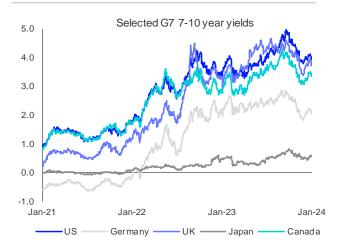


Chart 3: Yield curves bear steepened in January, as 7-10 year yields rose more than shorter dates, though the moves were modest, and curves remain deeply inverted, apart from JGB curve control.

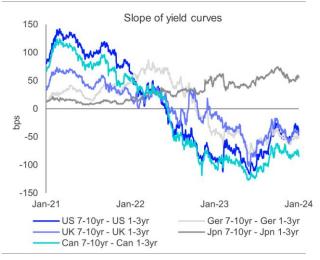


Chart 5: Inflation breakevens mostly ticked higher, led by the US, after the inflation uptick in December data. Breakevens tend to be directionally correlated with nominal yields, and tracked nominal yields higher in Jan.

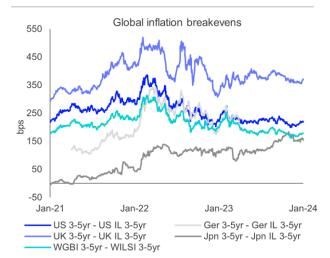


Chart 2: 7-10 year real yields also increased in January, though US Tips moved less. UK linkers gave up more ground after the strong Q4 rally. BoE caution on rates weighed on UK gilts.



Chart 4: It was a similar story at the long end, taking yield curves back to positive gradients in the UK and US, in January. There was further steepening in long JGBs, as the market reversed some of the Q4 gains.

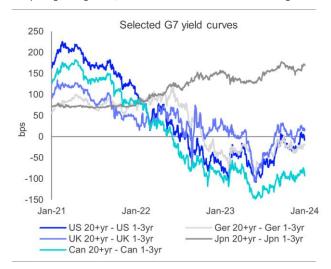
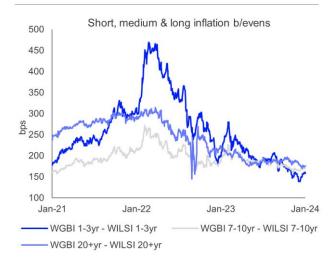


Chart 6: Globally, inflation breakevens have converged below 2%, despite a modest uptick in January. The Chart shows shorter breakevens are more sensitive to short term moves in spot inflation.



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Yield Spread and Credit Spread Analysis

Chart 1:US spreads widened versus Japan in January, but were stable elsewhere with yields in most markets increasing, as central banks proved cautious about the possibility of near-term rate cuts.

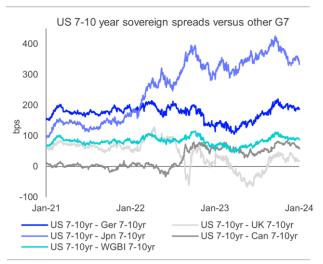


Chart 3:EM spreads tightened versus the G7 in January, helped by the decline in Chinese yields, and the high weighting of China in the EMGBI index. Spreads have steadily tightened in EM since the early days of Covid.

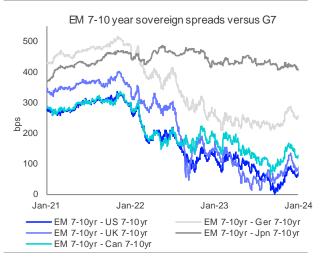


Chart 5: Credit spreads tightened a little in January, but mainly due to the rise in govt bond yields. A surge in corporate issuance restricted tightening in spreads. High yield spreads have converged more than IG in 2023/24.

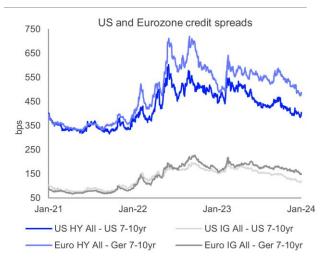


Chart 2:.Italian spreads held up well during the market sell-offs in January, widening mainly against Japan, where curve control continues. The support pledged by the ECB on peripheral spreads helped.

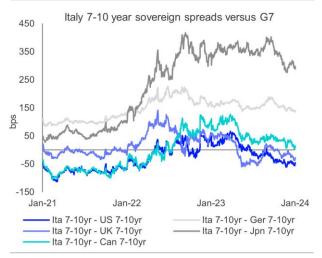


Chart 4: China's yield correlation with G7 yields has remained low since the Covid crisis first erupted in 2020. Chinese yields fell steadily since then, versus the rising G7 trend. Only JGB yields have remained stable.

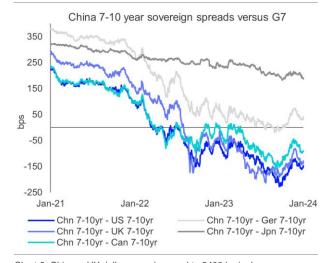
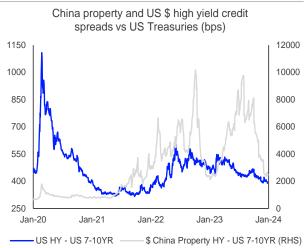


Chart 6: Chinese HY dollar spreads eased to 2400 bp in January, as US Treasury yields rose. But the number of issues within Chinese HY property has fallen to less than 20, compared with over 140 in 2020.



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Credit sector and MBS analysis

Ghart 1: Energy and bank sector spreads have proved most volatile since Covid, and fell to post-Covid lows in January, helped by higher oil prices. Most sector spreads tightened, as govt. yields rose in January.

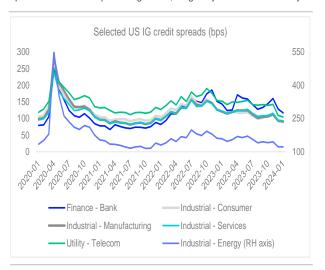


Chart 3: UK credit spreads have broadly tracked Eurozone spreads since Covid. Insurance spreads normalised since the 2022 spike, but consumer spreads tightened most, despite the spending slowdown.

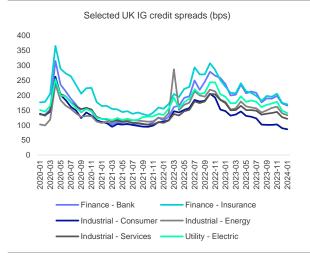


Chart 5: RMBS spreads have widened relative to IG credit, as the Fed has run down its RMBS holdings. Higher US yields also reduce mortgage refis and increase RMBS duration, so spreads tend to be cyclical, and fell in Q4.

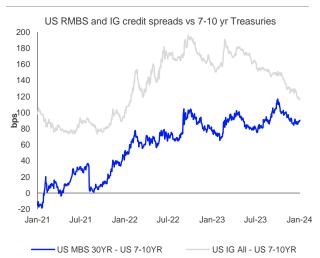


Chart 2: The Ukraine shock effect on Eurozone insurance spreads has largely unwound, though spreads remain above pre-Ukraine levels. Despite heavy IG issuance in January, spreads still edged in.

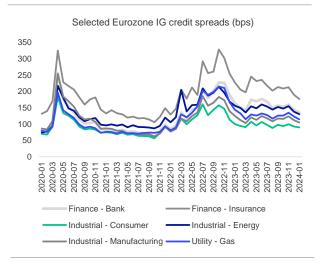


Chart 4: Interest rate sensitive sectors like real estate benefitted from the Fed pivot in December, and spreads are finally narrowing, despite the structural issues for commercial real estate (like working from home).

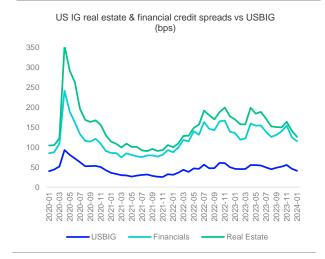
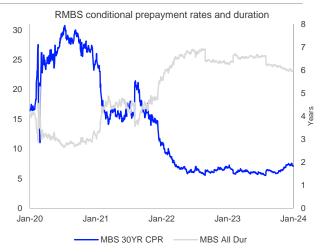


Chart 6. The inverse relationship between RMBS duration and prepayment rates is shown below. Higher rates make it unattractive to refinance mortgages, so RMBS duration increases as yields rise.



Sovereign and Climate Bonds Analysis

Chart 1: The underperformance of Green Sov. bonds was driven by their extra duration, and heavy issuance in 2021-22. However, Green Sovereign bonds outperformed in the Q4 rally, thanks to extra duration.



Chart 3:The long duration of Green Sovereign bonds caught many investors out during the bond market sell-off in 2022-23. Duration fell more in Green Sovereigns relative to straight sovs., as prices fell.

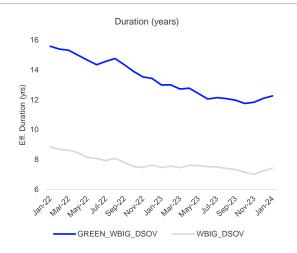


Chart 5: European sovereigns tend to dominate Green sovereign Issuance, as they seek to fill out a Green yield curve. The issues tend to be large, like the recent £10bn Green Gilt 2053 re-opening.

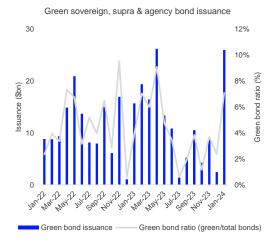


Chart 2: Relative returns in Green IG Corporates have been closer to other IG Corporates since 2022, reflecting similar duration (Chart 4). Spread narrowing during Q4's rally helped Green Corporates outperform.

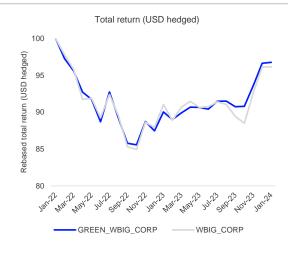


Chart 4: Unlike Sovereigns, Green IG corporates have shorter duration than other IG corporates, though the duration differential is more modest than in Sovereigns.

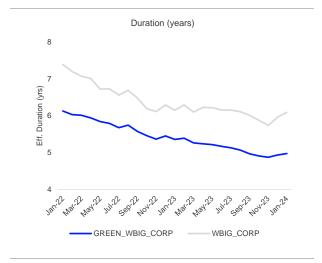
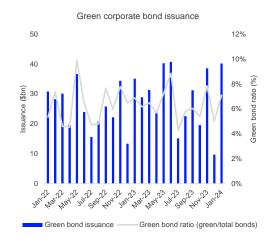


Chart 6: The ratio of green bond issuance to total bond issuance has rebounded to 7%, after falling to only 4% in July 2023. January 2024's Green issuance of about \$40bn was close to a monthly record.



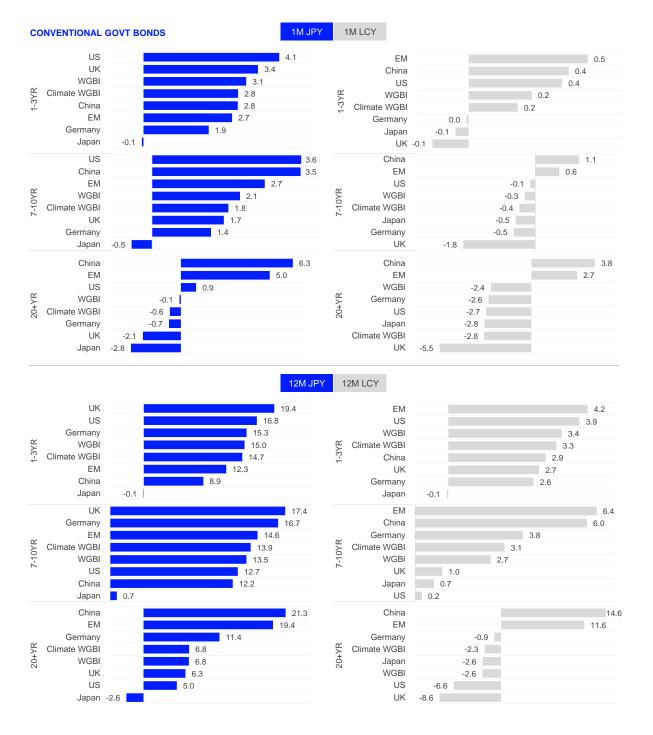
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Global Sovereign Bond Returns - 1M and 12M % (JPY & LC, TR)

Government bonds fell in January, after inflation ticked higher, and central bank caution on easing, following the powerful Q4 rally. Longer maturities fell most, led by gilts and JGBs, but shorts gained up to 4.1% in JPY terms. China and EM bonds showed their defensive qualities on both 1M and 12M. 12M returns show JGBs underperforming on yen weakness.

Only China and EM managed gains in local currency terms in January, proving safe havens as G7 bonds fell back. Rising geopolitical tensions in the middle east failed to drive a flight to quality in government bonds, perhaps because oil prices rebounded a little. Returns in JPY terms were boosted by a weaker yen, in overseas markets.

12M returns show similar gains in JPY terms, driven by currency effects, after the Q4 rally in gilts, Treasuries and WGBI. Short gilts, Treasuries and Bunds outperformed among G7 sovereign bonds. Improved foreign buying of EM government bonds, including Chinese government bonds, may have helped drive 12M returns of up to 21%.

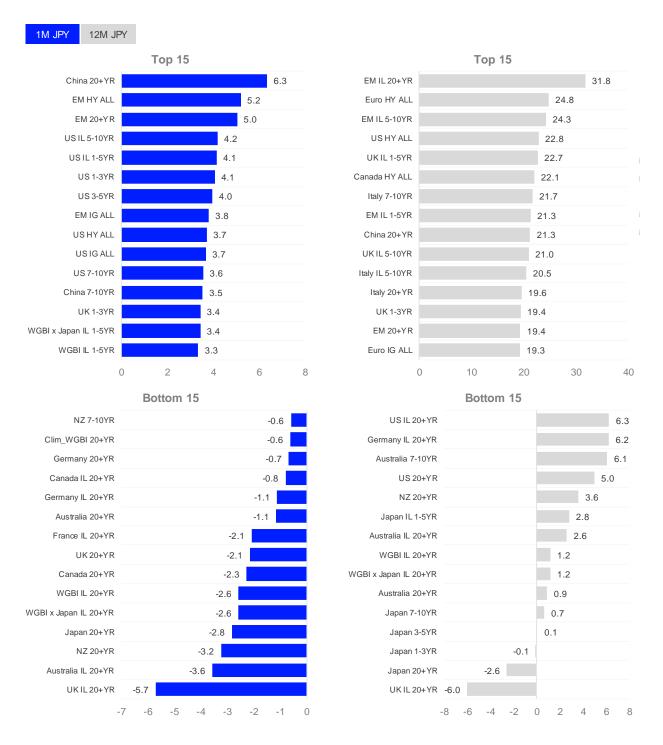


Top and Bottom Bond Returns - 1M & 12M % (JPY, TR)

For yen investors, yen weakness helped returns in overseas markets with US government bonds gaining about 4%, though sterling strength was not sufficient to reverse losses in UK bonds, of 5.7%. Over 12M, riskier EM and high yield bonds outperformed strongly, while JGBs and longer bonds in major G7 and Australasian markets lagged.

Chinese and EM bonds were among top performers in January, helped by lower interest rates in China. Shorter Treasuries and TIPs, and US corporates gained up to 4.2%, largely driven by a stronger US dollar vs yen (see page 13). Longer UK linkers were the weakest in January, with losses of 5.7%, despite a stronger sterling.

EM inflation-linked, HY and Italian bonds were consistently strong outperformers over 12M. Top 12M JPY returns of 19-32% are substantial, as G7 currencies gained 12-16% over the period. JGBs remained near the bottom of the returns list, with long UK linkers.



Appendix - Global Bond Market Returns % (JPY & LC, TR) - January 31, 2024

Government Bond Returns

Top 15% Bottom 15%

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

		3	М	61	VI	Y	ΓD	1:	2M
		Local	YEN	Local	YEN	Local	YEN	Local	YEN
US	1-3YR	2.54	-1.03	3.29	6.26	0.36	4.06	3.95	16.84
	7-10YR	8.55	4.77	2.38	5.34	-0.13	3.56	0.24	12.67
	20+YR	16.67	12.61	-1.63	1.21	-2.72	0.86	-6.61	4.97
	IG All	10.48	6.64	4.81	7.84	-0.01	3.67	4.37	17.31
	HY All	8.40	4.63	5.96	9.02	0.03	3.71	9.29	22.85
UK	1-3YR	1.96	3.28	3.78	5.68	-0.14	3.43	2.73	19.44
	7-10YR	6.32	7.70	6.08	8.01	-1.80	1.71	0.95	17.38
	20+YR	11.02	12.45	2.09	3.96	-5.53	-2.15	-8.59	6.28
EUR	IG All	5.27	4.42	4.95	6.38	0.12	2.08	6.09	19.27
	HY All	7.14	6.54	7.68	9.22	1.02	3.18	10.58	24.80
Japan	1-3YR	0.13	0.13	-0.07	-0.07	-0.05	-0.05	-0.05	-0.05
	7-10YR	2.32	2.32	-0.12	-0.12	-0.49	-0.49	0.66	0.66
	20+YR	2.62	2.62	-6.65	-6.65	-2.82	-2.82	-2.57	-2.57
China	1-3YR	0.96	-0.68	1.23	3.67	0.39	2.82	2.93	8.89
	7-10YR	2.35	0.69	2.98	5.46	1.09	3.54	6.04	12.17
	20+YR	7.67	5.93	7.71	10.31	3.82	6.34	14.63	21.27
EM	1-3YR	1.49	0.01	1.90	3.67	0.46	2.65	4.19	12.28
	7-10YR	4.35	2.58	2.91	4.08	0.60	2.69	6.38	14.63
	20+YR	7.51	5.74	5.80	7.45	2.75	5.03	11.62	19.38
	IG All	7.30	3.57	3.81	6.80	0.11	3.80	4.99	18.01
	HY All	7.88	4.12	5.77	8.82	1.45	5.19	4.32	17.26
Germany	1-3YR	1.53	0.71	2.17	3.56	-0.01	1.95	2.57	15.31
	7-10YR	5.68	4.82	4.10	5.52	-0.54	1.41	3.78	16.68
	20+YR	15.62	14.68	4.58	6.00	-2.58	-0.67	-0.93	11.38
Italy	1-3YR	2.27	1.44	2.85	4.25	0.20	2.16	3.90	16.80
	7-10YR	8.48	7.60	5.22	6.66	0.23	2.19	8.28	21.73
	20+YR	15.92	14.98	4.91	6.33	-0.29	1.67	6.38	19.59
Spain	1-3YR	1.83	1.01	2.61	4.01	0.16	2.12	3.14	15.95
	7-10YR	6.97	6.10	5.24	6.67	-0.36	1.59	5.52	18.63
	20+YR	15.46	14.53	5.71	7.15	-1.77	0.15	2.89	15.67
France	1-3YR	1.81	0.98	2.50	3.90	-0.03	1.93	2.92	15.71
	7-10YR	6.49	5.63	4.66	6.09	-0.51	1.44	4.16	17.10
	20+YR	17.25	16.30	6.32	7.77	-2.38	-0.47	0.67	13.18
Sweden	1-3YR	1.73	6.18	2.41	7.15	-0.01	1.12	2.25	16.46
	7-10YR	6.85	11.52	4.49	9.33	-1.16	-0.04	1.45	15.55
	20+YR								
Australia	1-3YR	2.52	3.32	2.65	3.61	0.36	0.81	2.53	8.11
	7-10YR	8.29	9.13	2.75	3.70	-0.07	0.38	0.62	6.11
	20+YR	17.46	18.37	1.45	2.40	-1.59	-1.15	-4.32	0.89
NZ	1-3YR	2.48	4.68	3.19	5.00	0.09	0.89	3.79	11.12
	7-10YR	8.99	11.33	3.56	5.38	-1.39	-0.60	1.19	8.33
Canada	1-3YR	2.41	2.71	3.22	4.62	-0.24	2.09	2.69	15.28
	7-10YR	6.15	6.46	3.25	4.65	-1.44	0.85	0.03	12.29
	20+YR	11.39	11.72	1.73	3.11	-4.50	-2.27	-3.12	8.76

Global Bond Yields

Top 15% Bottom 15%

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

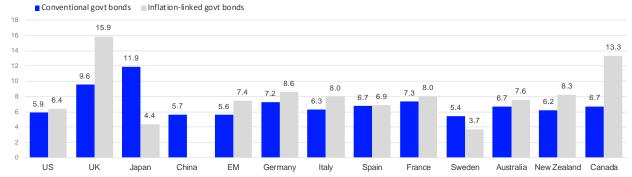
		Conve	entional go	vernment l	oonds	Inflat	ion-linked b	onds	Inv Grade	High Yld
		1-3YR	3-5YR	7-10YR	20+YR	1-5YR	5-10YR	20+YR	All Mat	All Mat
US	Current	4.33	3.93	3.93	4.31	1.98	1.64	2.01	5.14	7.97
	3M Ago	5.17	4.87	4.90	5.19	2.82	2.50	2.64	6.38	9.46
	6M Ago	5.01	4.33	3.97	4.11	2.44	1.72	1.80	5.50	8.34
	12M Ago	4.35	3.74	3.46	3.71	1.85	1.32	1.54	5.01	8.22
UK	Current	4.21	3.73	3.75	4.39	0.16	0.21	1.25		
	3M Ago	4.67	4.45	4.43	4.91	0.65	0.71	1.51		
	6M Ago	5.04	4.69	4.25	4.39	1.86	0.65	1.00		
	12M Ago	3.42	3.19	3.24	3.68	0.12	-0.18	0.29		
Japan	Current	0.04	0.20	0.59	1.73	-1.65	-0.83			
•	3M Ago	0.09	0.34	0.83	1.82	-1.55	-0.65			
	6M Ago	-0.04	0.08	0.50	1.40	-1.70	-0.74			
	12M Ago	-0.02	0.11	0.52	1.50	-1.20	-0.37			
China	Current	2.07	2.22	2.46	2.70					
	3M Ago	2.27	2.42	2.67	3.08					
	6M Ago	2.08	2.34	2.66	3.04					
	12M Ago	2.30	2.59	2.87	3.31					
EM	Current	3.34	3.81	4.64	4.17	4.38	4.41	5.03	5.56	9.29
	3M Ago	3.71	4.43	5.00	4.55	4.20	4.73	5.46	6.68	11.30
	6M Ago	3.58	4.17	4.80	4.41	3.05	4.07	4.88	5.93	11.51
	12M Ago	3.59	4.46	4.87	4.58	1.69	3.49	5.31	5.52	10.25
Germany	Current	2.57	2.07	2.06	2.38	0.81	0.20	0.27		
	3M Ago	3.09	2.66	2.70	3.05	0.90	0.45	0.65		
	6M Ago	3.09	2.60	2.41	2.53	0.60	0.07	0.01		
	12M Ago	2.59	2.78	2.59	2.57	0.22	0.08	0.03		
Italy	Current	2.96	2.93	3.47	4.21	1.08	1.58	1.94		
	3M Ago	3.77	3.88	4.45	5.06	1.77	2.35	2.53		
	6M Ago	3.60	3.55	3.86	4.35	1.30	1.64	1.69		
	12M Ago	3.17	3.93	4.28	4.57	0.70	1.63	1.82		
France	Current	2.62	2.34	2.52	3.13	0.44	0.37	0.78		
	3M Ago	3.21	3.01	3.23	3.88	0.93	0.78	1.28		
	6M Ago	3.15	2.90	2.90	3.35	0.58	0.37	0.60		
	12M Ago	2.71	2.94	2.89	3.22	-0.07	0.23	0.63		
Sweden	Current	2.68	2.21	2.18		1.26	0.76			
	3M Ago	3.43	3.05	2.94		1.34	1.30			
	6M Ago	3.33	2.83	2.57		0.96	0.74			
	12M Ago	2.50	2.53	2.28		-0.07	0.20			
Australia	Current	3.69	3.60	3.97	4.42	1.04	1.39	1.81		
7 100 01 0110	3M Ago	4.49	4.48	4.87	5.33	1.47	2.04	2.53		
	6M Ago	4.02	3.86	4.03	4.40	1.03	1.47	1.79		
	12M Ago	3.17	3.03	3.32	3.83	0.12	0.93	1.54		
NZ	Current	4.89	4.44	4.55	4.87	1.72	2.39			
-	3M Ago	5.49	5.37	5.55	5.69	2.47	3.05			
	6M Ago	5.21	4.80	4.70	4.87	1.94	2.39			
	12M Ago	4.67	4.17	4.10	4.34	1.01	1.70			
Canada	Current	3.99		3.35	3.30	<u> </u>	-	1.70	4.94	7.04
Janaua	3M Ago	4.55		4.08	3.93			0.00	5.88	8.32
	6M Ago	4.55		3.58	3.34			1.78	5.49	7.60
	12M Ago	3.68		2.91	3.00			1.20	4.83	6.99

Appendix - Duration and Market Value (USD, Bn) as of January 31, 2024

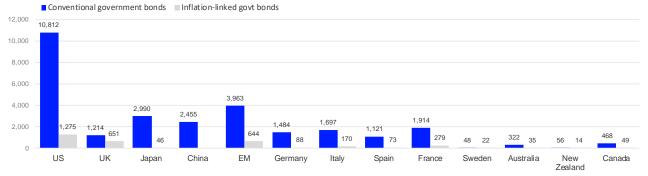
			Conv	entional go	vernment	bonds			Inflation-linked government bonds					
		Dura	ition		Market Value					Duration		Market Value		
					3-5YR				5-10YR			5-10YR		
US	3.7	7.3	16.9	5.9	2,559.5	1,136.5	1,323.2	10,812.1	6.9	21.1	6.4	420.8	125.3	1,275.1
UK	3.6	7.7	18.4	9.6	161.3	161.0	330.4	1,213.7	6.9	26.9	15.9	113.1	243.8	651.1
Japan	3.9	8.1	23.6	11.9	353.5	358.8	629.6	2,989.9	7.1		4.4	19.7		45.9
China	3.7	7.6	17.8	5.7	571.3	374.7	282.9	2,454.8						
EM	3.6	6.9	16.1	5.6	837.4	704.8	389.0	3,963.4	6.1	13.7	7.4	102.7	172.4	644.2
Germany	3.8	7.5	20.6	7.2	350.7	237.0	177.2	1,484.4	6.9	21.4	8.6	44.2	18.7	88.4
Italy	3.7	7.2	16.3	6.3	307.2	278.1	150.0	1,697.0	7.4	26.0	8.0	62.7	5.4	169.6
Spain	3.7	7.6	17.9	6.7	208.3	200.6	104.5	1,120.6	7.8		6.9	47.7		72.8
France	3.8	7.5	20.0	7.3	325.1	301.8	235.6	1,913.6	6.3	24.2	8.0	109.0	21.2	279.4
Sweden	4.1	7.7		5.4	6.9	14.0		47.9	6.8		3.7	5.5		22.2
Australia	3.6	7.6	17.0	6.7	47.5	92.1	20.7	321.7	6.8	22.1	7.6	10.3	2.8	34.8
New Zealand	3.5	7.3	16.9	6.2	10.9	15.7	2.8	56.0	5.9		8.3	3.2		13.8
Canada	3.6	7.5	19.8	6.7	60.3	112.4	67.4	468.4	6.7	20.5	13.3	8.3	19.9	49.1

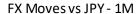
Investment grade bonds												High Yield	
			Duration					Duration	MktVal				
						AAA							
US	10.5	8.5	7.2	6.6	7.0	76.8	454.5	2729.7	3479.0	6739.9	3.8	1035.8	
Europe	5.6	4.8	4.6	4.2	4.4	11.0	204.6	1248.0	1529.7	2993.4			
EM		5.9	4.8	5.2	5.1		37.9	221.5	309.4	568.9	3.3	183.5	

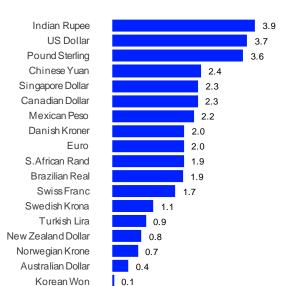
Average Duration



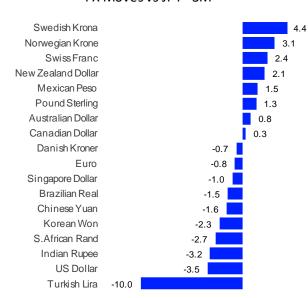
Total Market Value (USD Billions)



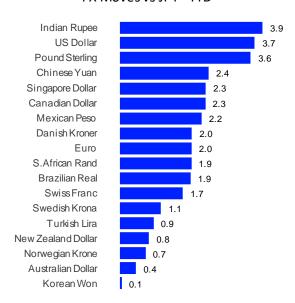




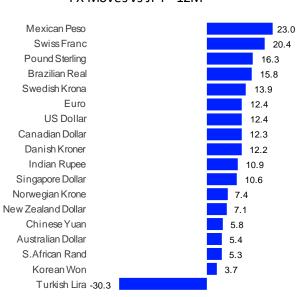
FX Moves vs JPY - 3M



FX Moves vs JPY - YTD



FX Moves vs JPY - 12M



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

Global Investment Research Market Maps



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